

# VESTAVIA HILLS

### STORM WATER MANAGEMENT PROGRAM PLAN APRIL 2023

Prepared For City of Vestavia Hills 1032 Montgomery Hwy. Vestavia Hills, Alabama 35216

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#### **Signatory and Certification Requirements:**

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information the information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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### CONTENTS

| INTRODUCTION                                                                                    | 10   |
|-------------------------------------------------------------------------------------------------|------|
| Regulatory Overview                                                                             | 10   |
| MS4 Jurisdictional Boundary                                                                     | 11   |
| LEGAL AUTHORITY AND ENFORCEMENT                                                                 | 11   |
| STORM WATER COLLECTION SYSTEMS OPERATIONS                                                       | 16   |
| Structural Controls Map                                                                         | 16   |
| Structural Controls Inspection                                                                  | 16   |
| Standard Operating Procedure (SOP) for Structural Control Inspection and Maintenance Procedures | 16   |
| Stabilization and Re-Vegetation of Eroded Areas                                                 | 16   |
| Floatables, Litter, Sediment and Debris Removal                                                 | 17   |
| PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPACT                                   | 'S19 |
| Public Education and Public Involvement BMPs                                                    | 19   |
| Public Education                                                                                | 19   |
| Public Involvement                                                                              | 19   |
| Development and Implementation of the SWMPP                                                     | 19   |
| Targeted Pollutant Sources for Public Education                                                 | 19   |
| Reduction of Litter Floatables and Debris                                                       | 19   |
| Educating Individuals and Households on Reducing Storm Water Pollution                          | 20   |
| Community Involvement with the Storm Water Program                                              | 20   |
| General Public                                                                                  | 20   |
| General Public and Businesses, including Home-based and Mobile                                  | 20   |
| Homeowners, Landscapers, Property Managers, and City Personnel                                  | 21   |
| Engineers, CIty personnel, Review Staff, Land use Planners, Contractors, and Developers         | 21   |
| Evaluating the Effectiveness of the Public Education Program                                    | 21   |

| Public Activities Targeting Litter, Floatables and Debris Removal from area waterways | 22       |
|---------------------------------------------------------------------------------------|----------|
| ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)                                    | 23       |
| MS4 Map                                                                               | 23       |
| Ordinance/Regulatory Mechanism                                                        | 23       |
| Dry Weather Screening Program                                                         | 23       |
| Source Identification                                                                 | 24       |
| Illicit Discharge Elimination                                                         | 24       |
| ADEM Notification by the City                                                         | 24       |
| Illicit Discharge Reporting by the Public                                             | 25       |
| Personnel Training                                                                    | 25       |
| Ordinance/Regulatory Mechanism Availability                                           | 25       |
| CONSTRUCTION SITE STORM WATER RUNOFF CONTROL                                          | 26       |
| Ordinance/Regulatory Mechanism                                                        | 26       |
| Site Plan Reviews                                                                     | 26       |
| Construction Site Inspection Schedule                                                 | 26       |
| Training of MS4 Site Inspection Staff                                                 | 26       |
| Construction Site Inspection Checklist                                                | 26       |
| Enforcement Response Plan (ERP)                                                       | 27       |
| Construction Site Operator Training                                                   | 27       |
| POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPME<br>AND RE-DEVELOPMENT       | NT<br>28 |
| Ordinance/Regulatory Mechanism                                                        | 28       |
| LID/GI encouragement procedures                                                       | 28       |
| Inventory of Post-Construction Structural Controls                                    | 28       |
| SPILL PREVENTION AND RESPONSE                                                         | 29       |
| City Response Protocol                                                                | 29       |

| Spill Prevention/Spill Response Plan                          | 29      |
|---------------------------------------------------------------|---------|
| Personnel Spill Prevention/Response Training                  | 29      |
| POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPE      | RATIONS |
| Municipal Facilities Inventory                                |         |
| Strategy Evaluation                                           |         |
| Good Housekeeping Practices SOP                               |         |
| Inspection Plan                                               |         |
| Good Housekeeping Training Program                            | 30      |
| APPLICATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS (PHFs) |         |
| Application and Storage                                       |         |
| PHF Training Program                                          |         |
| OILS, TOXICS, AND HOUSEHOLD HAZARDOUS WASTE                   |         |
| Public education on proper disposal                           |         |
| Annual employee Training                                      | 33      |
| INDUSTRIAL STORM WATER RUNOFF                                 |         |
| Inventory of high risk Facilities                             | 34      |
| Inspection of high risk Facilities                            | 34      |
| MONITORING AND REPORTING                                      |         |
| Monitoring Locations                                          | 35      |
| Impaired Waterways                                            | 35      |
| Monitoring Parameters and Frequency                           |         |
| Sample Type, Collection and Analysis                          |         |
| OTHER REQUIREMENTS                                            |         |
| SWMPP Plan Review And Modification                            |         |
| Annual Report                                                 |         |

### LIST OF FIGURES

| Figure 1: MS4 Boundary        | 15 |
|-------------------------------|----|
| Figure 2: Structural Controls |    |
| Figure 3: Sampling Sites      |    |

## LIST OF TABLES

| Table 1: Municipal Facilities |
|-------------------------------|
|-------------------------------|

### **APPENDICES**

- Appendix A Storm Water Program Documents
- Appendix B Storm Water Collection Systems Operations
- Appendix C Illicit Discharge Detection and Elimination (IDDE)
- Appendix D Construction Site Storm Water Runoff Control
- Appendix E Post-Construction Stormwater Management
- Appendix F Spill Prevention and Response
- Appendix G Pollution Prevention/Good Housekeeping for Municipal Operations
- Appendix H Application of Pesticides, Herbicides, and Fertilizers (PHFs)
- Appendix I Industrial Storm Water Runoff

#### INTRODUCTION

#### REGULATORY OVERVIEW

The City of Vestavia Hills (City) was issued by the Alabama Department of Environmental Management (ADEM) a Municipal Separate Storm Sewer System (MS4) Individual Phase I Permit (ALS000017) on June 7, 2017 (**Appendix A**). Previously, the City was included as a Co-Permittee under permit number ALS00001. The current permit was issued and became effective on July 11, 2022.

As a condition of this permit, "The permittee is required to develop, revise, implement, maintain and enforce a storm water management program (SWMP) which shall include controls necessary to reduce the discharge of pollutants from its MS4 consistent with Section 402(p)(3)(B) of the Clean Water Act and 40 CFR Part 122.26. These requirements shall be met by the development and implementation of a storm water management program plan (SWMPP) which addresses the best management practices (BMPs), control techniques and systems, design and engineering methods, public participation and education, monitoring, and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP)".

Per the requirements of NPDES Permit Number ALS000017, BMPs, measurable goals, and responsibility designations are provided for each of the following program elements:

- Storm Water Collection System Operations
- Public Education and Public Involvement on Storm Water Impacts
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Re- Development
- Spill Prevention and Response
- Pollution Prevention/Good Housekeeping for Municipal Operations
- Application of Pesticides, Herbicides, and Fertilizers
- Oils, Toxics, and Household Hazardous Waste Control
- Industrial Storm Water Runoff

ADEM defines the fiscal year as October 1st to September 30th. Annual reports are required to be submitted to ADEM no later than January 31st following the previous fiscal year.

#### MS4 JURISDICTIONAL BOUNDARY

Vestavia Hills' MS4 boundary is bound to the north by the Cities of Homewood, Mountain Brook and Birmingham, to the south and west by the Cities of Hoover and Birmingham, and to the east by the Cities of Mountain Book, Irondale, Birmingham and Jefferson County. Approximately 20 square miles of residential, commercial, industrial, undeveloped lands, and streams make up the MS4 boundary. See **Figure 1: MS4 Boundary**.

There are two waterbodies, the Cahaba River and Patton Creek, which are considered impaired by the U.S. Environmental Protection Agency and ADEM within the MS4 boundary. The Cahaba River has a listed Total Maximum Daily Load (TMDL) for Siltation and Habitant Alteration as well as for Nutrients. Patton Creek has a listed Total Maximum Daily Load (TMDL) for Organic Enrichment and Dissolved Oxygen. Designated uses of this section of the Cahaba River include being listed as an Outstanding Water of Alabama (OAW) and Public Water Source (PWS). Designated use of Patton Creek is Fish and Wildlife (F&W).

#### LEGAL AUTHORITY AND ENFORCEMENT

Part II C of the permit requires the City to review and revise its ordinances and regulatory mechanisms as necessary to comply with the permit. In June 2022, the City adopted revisions to the City's Zoning code that included aspects to promote Low Impact Development and reduce stormwater runoff from redeveloping single family homes. Below is a summary of the current ordinances, municipal codes, and regulations related to the management of Vestavia Hills's MS4. These ordinances are found in **Appendix A**.

- Ordinance 2987, Erosion and Sedimentation Control Ordinance: Replaced previous Ordinance 2769. Controls sedimentation leaving construction sites. The ordinance describes the fees, regulations, and the requirements surrounding a land disturbing permit issuance.
- Ordinance 2988, Illicit Discharge Ordinance: Replaced previous Ordinance 2770. The ordinance defines and prohibits illicit connections and discharge to storm water conveyance system.
- Ordinance 2771, Post-Construction BMP Ordinance: The ordinance identifies and enforces post-construction storm water management standards on qualifying sites to prevent and minimize water quality impacts.

- **Post-Construction Storm Water Management Manual and Technical Memorandum:** Technical aspects of the City's Post-Construction Storm Water Management requirements. This document outlines the City's Engineering Departments guidelines for permit issuance for qualifying sites, water quality treatment requirements, and other aspects to enforce provisions of Ordinance 2771.
- Ordinance 3099, Zoning Ordinance: Replaces previous Ordinance Numbers 2331, 2331-A, 2331-B and Appendix A. Dictates land use, maximum developable area, buffers, landscaping, parking, tree preservation, conservation subdivisions, and other manners in the development of land. This now also clearly defines Impervious Surfaces and amends definition of Buildable Areas to limit imperviousness. This tool assists the City's ability to preserve drainage sensitive areas, manage storm water runoff, and promote low-impact developments.
- **Subdivision Regulations:** Adopted by the Planning and Zoning Commission pursuant to Alabama law and carry the force of a City Ordinance. This document addresses design requirements for residential and commercial storm water infrastructure and dictates storm water management requirements.
- **Public Works Manual and Engineering Design Standards:** Adopted by the Planning and Zoning Commission, and provides additional engineering design requirements for public storm water infrastructure.
- Ordinance 2916, Flood Damage Prevention Ordinance: Replaced previous Ordinance 2429. Promotes public health, safety and general welfare by controlling construction and construction practices in and around the floodplain as well as controlling the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters.
- Ordinance 2262, Property Maintenance Code: Institutes and establishes enforcement of litter, rubbish, garbage, abandoned vehicles, and others items in effort to promote and protect interest of public health, safety and general welfare.
- Ordinance 2378, Standard Operating Procedure (SOP) Manual: Adopted in 2011 and details guidelines for addressing many activities associated with the program elements.

The following table reflects which City department is responsible for implementing or coordinating BMPs for each separate program element:

| DEPARTMENT                                         | RESPONSIBILITIES                                                                                   |  |  |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------|--|--|
| Storm Water Collection Systems Operations          |                                                                                                    |  |  |
| Engineering/JCDH                                   | Maintain map of City owned/maintained structural controls                                          |  |  |
| Engineering                                        | Semi-annual inspection of new and existing structural controls                                     |  |  |
| Engineering                                        | Develop SOP, inspection checklist, and maintenance procedures                                      |  |  |
| Public Works                                       | Stabilize and re-vegetate eroded areas as needed                                                   |  |  |
| Public Works                                       | Remove floatable, litter, sediment, and debris from structural controls                            |  |  |
|                                                    | Public Education and Public Involvement on Storm Water Impacts                                     |  |  |
| Administration                                     | Seek and consider public input in the development and implementation of the SWMPP                  |  |  |
| Administration                                     | Identify targeted pollutant sources                                                                |  |  |
| Administration/Public<br>Works                     | Post litter signage                                                                                |  |  |
| Administration                                     | Educate individuals and households on reducing storm water pollution                               |  |  |
| Administration                                     | Encourage community involvement in the storm water program                                         |  |  |
| Administration                                     | Evaluate the effectiveness of the public education program                                         |  |  |
| Administration Organize annual cleanup             |                                                                                                    |  |  |
| Illicit Discharge Detection and Elimination (IDDE) |                                                                                                    |  |  |
| JCDH                                               | Develop MS4 map of outfalls                                                                        |  |  |
| Administration                                     | Develop applicable ordinances and other regulatory mechanisms                                      |  |  |
| JCDH                                               | Screen at least 15% of the outfalls during dry weather conditions                                  |  |  |
| City Personnel                                     | Identify illicit discharge source                                                                  |  |  |
| Code Enforcement Officer /<br>Administration       | Eliminate illicit discharges                                                                       |  |  |
| Engineering                                        | Notify ADEM of a suspected illicit discharge entering the MS4 from an adjacent MS4                 |  |  |
| Administration/Engineering                         | Receive complaints and investigate illicit discharges reported by the public                       |  |  |
| Administration                                     | Educate employees on detecting an IDDE, tracing the source of and eliminating illicit<br>discharge |  |  |
| Administration                                     | Make publicly available ordinances and regulatory mechanisms                                       |  |  |
|                                                    | Construction Site Storm Water Runoff Control                                                       |  |  |
| Administration/Engineering                         | Develop applicable ordinances and other regulatory mechanisms                                      |  |  |
| Engineering/Inspections                            | Perform site plan reviews                                                                          |  |  |
| Engineering/Inspections                            | Complete monthly qualifying site inspections                                                       |  |  |
| Engineering                                        | Train inspection staff                                                                             |  |  |
| Engineering/Inspections                            | Provide construction site inspection checklist                                                     |  |  |
| Administration                                     | Document Enforcement Response Plan (ERP) actions                                                   |  |  |
| Administration/<br>Engineering/Inspections         | Provide construction site operator education                                                       |  |  |

| DEPARTMENT                                                                     | RESPONSIBILITIES                                                 |  |  |
|--------------------------------------------------------------------------------|------------------------------------------------------------------|--|--|
| Post-Construction Storm Water Management in New Development and Re-Development |                                                                  |  |  |
| Engineering                                                                    | Develop applicable ordinances and other regulatory mechanisms    |  |  |
| Administration/Engineering/Inspections                                         | Encourage the application of LID/GI practices                    |  |  |
| Engineering                                                                    | Inventory post-construction structural controls                  |  |  |
|                                                                                | Spill Prevention and Response                                    |  |  |
| Fire                                                                           | Follow City response protocol                                    |  |  |
| Fire                                                                           | Follow spill prevention/spill response plan                      |  |  |
| Fire/Administration                                                            | Educate employees on spill prevention/spill response             |  |  |
| Pollution Pre                                                                  | vention/Good Housekeeping for Municipal Operations               |  |  |
| All Departments                                                                | Inventory municipal facilities                                   |  |  |
| All Departments                                                                | Evaluate strategy for trash removal                              |  |  |
| All Departments                                                                | Follow good housekeeping practices SOP                           |  |  |
| All Departments                                                                | Complete municipal inspections                                   |  |  |
| Administration                                                                 | Educate employees on good housekeeping                           |  |  |
| Application of Pesticides, Herbicides, and Fertilizers(PHFs)                   |                                                                  |  |  |
| Parks and Recreation/Contractors                                               | Document application and storage of PHFs                         |  |  |
| Administration                                                                 | Educate employees on PHFs usage and storage                      |  |  |
| Oils, T                                                                        | oxics, and Household Hazardous Waste Control                     |  |  |
| Administration                                                                 | Educate public on proper disposal                                |  |  |
| Administration                                                                 | Educate employees on oils, toxics, and household hazardous waste |  |  |
|                                                                                | Industrial Storm Water Runoff                                    |  |  |
| Administration/JCDH                                                            | Inventory high risk facilities                                   |  |  |
| JCDH                                                                           | Inspect high risk facilities                                     |  |  |
|                                                                                | Monitoring and Reporting                                         |  |  |
| JCDH                                                                           | Monitor locations                                                |  |  |
| JCDH                                                                           | Review identified impaired waterways                             |  |  |
| JCDH                                                                           | Monitor parameters and frequency                                 |  |  |
| JCDH                                                                           | JCDH Perform sampling and analysis                               |  |  |
| Other Requirements                                                             |                                                                  |  |  |
| All Departments                                                                | Perform SWMPP plan review and modification                       |  |  |
| JCDH                                                                           | Prepare annual report for submittal                              |  |  |



Figure 1: MS4 Boundary

#### STORM WATER COLLECTION SYSTEMS OPERATIONS

#### STRUCTURAL CONTROLS MAP

The City currently has four city-owned structural controls within the MS4 boundary limits (see **Figure 2: Structural Controls**). The City will monitor the addition of any City owned/ maintained structural controls.

#### **Responsible Departments: Engineering/JCDH**

#### STRUCTURAL CONTROLS INSPECTION

As stated in the permit, all existing and new structural controls owned/maintained by the Permittee shall be inspected using a standard inspection form found in **Appendix B** on a semiannual basis, at a minimum. Maintenance activities will also be documented using the provided maintenance form found in **Appendix B**. The completed forms should be uploaded to the Storm Water Online Activity Record (SOAR) program. A city inspector and/or a contractor will perform inspections. Any deficiencies or maintenance recommendations listed on the inspection form in regards to the structural control will be addressed and documented by Public Works.

#### **Responsible Department: Engineering**

## STANDARD OPERATING PROCEDURE (SOP) FOR STRUCTURAL CONTROL INSPECTION AND MAINTENANCE PROCEDURES

The standard operating procedure for structural control inspection and maintenance is found in **Appendix B**.

#### **Responsible Department: Engineering**

#### STABILIZATION AND RE-VEGETATION OF ERODED AREAS

During the inspection of the structural controls, areas of erosion will be documented. The Public Works Department will receive a copy of the inspection documentation noting the eroded areas and will stabilize and re-vegetate these areas. Activities are to be documented and submitted as described.

#### **Responsible Department: Public Works**

#### FLOATABLES, LITTER, SEDIMENT AND DEBRIS REMOVAL

All floatables, litter, sediment, and/or debris found during the structural inspection will be documented. The Public Works Department will receive a copy of the inspected documentation and will address the noted items. Public Works will also complete documentation of the estimated amounts of floatables, litter, sediment and debris removed during maintenance activities and upload to SOAR.

#### **Responsible Department: Public Works**



Figure 2: Structural Controls

# PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPACTS

#### PUBLIC EDUCATION AND PUBLIC INVOLVEMENT BMPS

#### PUBLIC EDUCATION

The City will provide public education information via its stormwater webpage and distribution of stormwater brochures. In November 2022, the City initiated "Only Rain in the Drain" targeted to educate landscape maintenance hazards and detrimental impacts of leaves and yard debris being disposed in the stormwater collection system (see **Appendix G**).

#### PUBLIC INVOLVEMENT

The City activities for public involvement include a litter clean-up and a household hazardous waste collection event.

#### DEVELOPMENT AND IMPLEMENTATION OF THE SWMPP

The City seeks public input on the SWMPP by posting the draft SWMPP on its website for comments. Notification announcements will be made at council meetings. The Council-approved SWMPP for the upcoming year will then be posted on the website and be submitted yearly.

#### **Responsible Department: Administration**

#### TARGETED POLLUTANT SOURCES FOR PUBLIC EDUCATION

The City discusses targeted pollutant sources in the section of the SWMPP titled "Community Involvement with the Storm Water Program".

#### REDUCTION OF LITTER FLOATABLES AND DEBRIS

Litter signage is maintained throughout the City. Signage will be updated as necessary to properly address these issues. Administration approves of the messages and Public Works installs the signs and/or labels.

#### **Responsible Departments: Administration/Public Works**

## EDUCATING INDIVIDUALS AND HOUSEHOLDS ON REDUCING STORM WATER POLLUTION

Information describing Vestavia Hills's Storm Water Program is posted on the City's website. The information includes general information about the storm water permit with links and brochures about different ways to reduce storm water pollution in relation to the different community segments. These same brochures on storm water issues are placed at City Hall for public pickup. These materials will be updated as needed.

#### **Responsible Department: Administration**

#### COMMUNITY INVOLVEMENT WITH THE STORM WATER PROGRAM

#### GENERAL PUBLIC

The City has a storm water page on its website and placed brochures containing information in City facilities that inform the general public of:

- General impacts litter has on waterbodies and ways to reduce the litter
- General impacts of storm water on surface water from impervious surfaces
- Source control BMPs in areas of pet waste, home vehicle maintenance, landscaping and rain water reuse.
- Impacts of illicit discharges and how to report them.

These materials will be updated as needed.

#### **Responsible Department: Administration**

#### GENERAL PUBLIC AND BUSINESSES, INCLUDING HOME-BASED AND MOBILE

The City has a storm water page on its website and placed in City facilities brochures containing information on the following business-related topics:

- Information on BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
- Impacts of illicit discharges and how to report them.

These materials will be updated as needed.

#### HOMEOWNERS, LANDSCAPERS, PROPERTY MANAGERS, AND CITY PERSONNEL

The City has a storm water page on its website and placed brochures containing educational information in City facilities that inform homeowners, landscapers, and property managers on the following topics:

- Landscape or yard care techniques that protect water quality.
- BMPs and storage of pesticides, herbicides, and fertilizers.
- BMPs for carpet cleaning and auto repair and maintenance
- Detention/retention pond maintenance.
- General impacts of storm water from impervious surfaces into surface water.

These materials will be updated as needed.

#### **Responsible Department: Administration**

## ENGINEERS, CITY PERSONNEL, REVIEW STAFF, LAND USE PLANNERS, CONTRACTORS, AND DEVELOPERS

The City has a storm water page on its website and also placed in City facilities brochures to inform engineers, contractors and developers on the following topics:

- Impacts of increased storm water flows into receiving waterbodies.
- Technical standards for construction site sediment and erosion control
- Stormwater treatment and flow control BMPS
- Run-off reduction techniques and low impact development (LID)/green infrastructure practices and maintenance. Specifically addressing site design, pervious pavement, alternative parking lot design, retention of forests and mature trees.

These materials will be updated as needed.

#### **Responsible Department: Administration**

#### EVALUATING THE EFFECTIVENESS OF THE PUBLIC EDUCATION PROGRAM

The City will on a continuing basis evaluate the effectiveness of the public education program by monitoring and reporting the number of visitors to the storm water page and the number of brochures that are picked up from City facilities on an annual basis.

## PUBLIC ACTIVITIES TARGETING LITTER, FLOATABLES AND DEBRIS REMOVAL FROM AREA WATERWAYS

Currently the City is planning to host or participate in a cleanup annually. The tonnage collected by the City will be included in the Annual Report.

#### ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

#### MS4 MAP

Maps of the major outfalls and waters of the State within the MS4 boundary that receive discharge from the major outfalls can be found in **Appendix C**. Also, a list of the major outfalls' latitude and longitude coordinates can be found in **Appendix C**.

JCDH will update the MS4 map and provide a list of location coordinates annually on behalf of the City.

#### **Responsible Department: JCDH**

#### ORDINANCE/REGULATORY MECHANISM

Ordinance 2988 addresses illicit discharges as required by the City's Permit.

#### **Responsible Department: Administration**

#### DRY WEATHER SCREENING PROGRAM

Dry weather screening of at least 15% of the major outfalls will be performed annually with 100% of the major outfalls screened at least once per the five-year permit period. This work will be completed by JCDH. Currently there are no priority outfalls identified within the MS4 boundary, but if illicit discharges are identified during the dry weather inspections, those outfalls will be screened on an annual basis. JCDH shall use the EPA's guidance manual, *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October 2004, for the main source of investigative techniques and guidance for the dry weather screening process. Outfalls will be field inspected after a minimum of 72 hours of dry weather. Data sheets found in **Appendix C** will be filled out for each outfall inspected. The protocols for dry weather screening are in the Standard Operating Procedure Manual found in **Appendix A**.

#### SOURCE IDENTIFICATION

If during the dry weather screenings, Public Works' identification, or citizen complaint, an outfall is found to be discharging a liquid, the city inspector or JCDH personnel will traverse upstream of the discharge in an attempt to identify the source of the discharge. If the discharge source is unidentifiable, then a sample of the discharge shall be collected by JCDH and analyzed by a qualified lab. Based on the lab results, the outfall will be prioritized and scheduled for further investigation if needed.

#### **Responsible Departments: City Personnel**

#### ILLICIT DISCHARGE ELIMINATION

Once the source and responsible party of an illicit discharge has been identified, either the City will take action through **Ordinance 2988**.

#### Responsible Departments: Code Enforcement Officer/Administration

#### ADEM NOTIFICATION BY THE CITY

If a suspected illicit discharge enters the City's MS4 boundary from an adjacent MS4, the City will notify the adjacent MS4 and the ADEM Water Division within 48 hours of observing the suspected illicit discharge. The Standard Operating Procedure for this action is found in **Appendix C**.

#### **Responsible Department: Engineering**

#### ILLICIT DISCHARGE REPORTING BY THE PUBLIC

The City receives calls for illicit discharges at the City Hall phone number 205-978-0150 frequently. The City also receives notifications via the City's online "Action Center". There is also a phone number, 205-930-1999, listed on the City's website to report illicit discharges.

#### **Responsible Department: Administration/Engineering**

#### PERSONNEL TRAINING

City administrators, engineers, inspectors and laborers will be trained on IDDE identification and response annually.

#### **Responsible Department: Administration**

#### ORDINANCE/REGULATORY MECHANISM AVAILABILITY

The illicit discharge ordinance is found on the City's website at the link below:

https://vhal.org/community/stormwater-management/

#### CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

#### ORDINANCE/REGULATORY MECHANISM

**Ordinance 2987** addresses Construction Site Regulations as required by the City's Permit. The ordinance is found on the City's website at the link below:

#### https://vhal.org/community/stormwater-management/

#### **Responsible Department: Administration/Engineering**

#### SITE PLAN REVIEWS

According to **Ordinance 2987**, a BMP plan must be submitted to the City along with the permit application before any land disturbance. The City must either approve or disapprove the BMP plan within 14 days. Reasons for disapproval must be submitted to the applicant in writing. All revisions have an additional 14-day response time. Land disturbing activity may not be commenced prior to the issuance of the permit by the City.

#### **Responsible Department: Engineering/Inspections**

#### CONSTRUCTION SITE INSPECTION SCHEDULE

The City will perform a monthly inspection, at a minimum, on qualifying sites that have been issued land disturbance permits. Due to the Cahaba River's impaired status, Vestavia Hills's sites are categorized as "Priority Construction Sites". Erosion controls and best management practices will be inspected during these inspections. Deficiencies identified during an inspection will be subjected to enforcement procedures outlined in the Erosion Control Ordinance.

#### **Responsible Department: Engineering/Inspections**

#### TRAINING OF MS4 SITE INSPECTION STAFF

Personnel responsible for construction site inspections receive BMP training annually.

#### **Responsible Department: Engineering**

#### CONSTRUCTION SITE INSPECTION CHECKLIST

See **Appendix D** for the City's construction site inspection checklist.

#### **Responsible Department: Engineering/Inspections**

#### ENFORCEMENT RESPONSE PLAN (ERP)

An Enforcement Response Plan is included in **Ordinance 2987.** Documentation of formal enforcement actions and ADEM referrals is available via the SOAR program.

#### **Responsible Department: Administration**

#### CONSTRUCTION SITE OPERATOR TRAINING

The City provides construction site operator's informational materials regarding appropriate application and maintenance of erosion and sediment controls when they receive their permits from the Inspections Department. The City has a storm water page on its website and brochures at City facilities that inform the engineers, contractors and developers on:

- Impacts of increased storm water flows into receiving waterbodies.
- Run-off reduction techniques and low impact development (LID)/green infrastructure practices. Specifically addressing site design, pervious pavement, alternative parking lot design, retention of forests and mature trees.

These materials will be updated as needed.

#### **Responsible Departments: Administration/Engineering/Inspections**

# POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND RE-DEVELOPMENT

#### ORDINANCE/REGULATORY MECHANISM

**Ordinance 2771** addresses storm water design requirements for post-construction storm water management.

The Ordinance addresses the following:

- Procedures to develop, implement and enforce systems of appropriate structural and/or non-structural BMPs.
- Procedures to develop, implement and enforce performance standards.
- Procedures for encouragement of the utilization of LID/green infrastructure practices.
- Procedures to ensure compliance including sanctions and enforcement mechanisms.
- Procedures for post-construction inspections to include tracking and enforcement.
- Procedures to ensure adequate long-term operation and maintenance of BMPs.

The post-construction ordinance is found on the City's website at the link below:

https://vhal.org/community/stormwater-management/

#### **Responsible Department: Engineering**

#### LID/GI ENCOURAGEMENT PROCEDURES

Information detailing the importance of LID/GI is provided along with the City's land disturbance permit application. This also includes a statement acknowledging receipt of the information by the applicant.

#### **Responsible Department: Administration/Engineering/Inspections**

#### INVENTORY OF POST-CONSTRUCTION STRUCTURAL CONTROLS

The City is developing a list of privately-owned structural controls for those built after the codification of the new requirements. Currently the City has nine sites (See **Appendix E**). The City will update annually the list of privately-owned structural controls under the new requirements.

#### **Responsible Department: Engineering**

#### SPILL PREVENTION AND RESPONSE

#### CITY RESPONSE PROTOCOL

Vestavia Hills Fire Department is responsible for investigating, responding, and conducting response actions for any spill within the City's boundaries. Jefferson County's Emergency Management Agency (EMA) will additionally respond at the request of the City. Vestavia Hills's Fire and Rescue and EMA track the spills, the response, and the cleanup activities for all spills.

#### **Responsible Department: Fire**

#### SPILL PREVENTION/SPILL RESPONSE PLAN

The City's SOP for spill response is found in **Appendix F**.

#### **Responsible Department: Fire**

#### PERSONNEL SPILL PREVENTION/RESPONSE TRAINING

Vestavia Hills Fire Department is responsible for the training and certification of their personnel. An annual training will be provided to municipal personnel on spill prevention/response.

# POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

#### MUNICIPAL FACILITIES INVENTORY

See **Table 1: Municipal Facilities** for a list of facilities. The list will be reviewed annually and updated as needed.

#### **Responsible Departments: All Departments**

#### STRATEGY EVALUATION

City personnel pick up trash prior to it entering the MS4 and remove trash from the MS4. Volunteer organizations assist with removal of trash from waterbodies and the MS4. Trash collected is assessed and documented. The City also participates in a household hazardous waste collection event. An SOP for special events is located in **Appendix G**. These activities have been successful in removing and preventing trash from entering the MS4.

#### **Responsible Departments: All Departments**

#### GOOD HOUSEKEEPING PRACTICES SOP

The SOP detailing good housekeeping practices is found in the 2011 SWMA SOP Manual (**Appendix A**).

#### **Responsible Departments: All Departments**

#### **INSPECTION PLAN**

Annual inspections will be conducted for municipal facilities that have the potential to discharge pollutants via stormwater runoff. See **Appendix G** for the inspection checklist.

#### **Responsible Departments: All Departments**

#### GOOD HOUSEKEEPING TRAINING PROGRAM

City staff will be educated annually on good housekeeping practices. The SOP manual (**Appendix A**) contains procedures related to Good Housekeeping.

#### APPLICATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS (PHFS)

#### APPLICATION AND STORAGE

The Parks and Recreation Department keeps annual records of applied pesticides, herbicides, and fertilizers (PHFs). Each chemical used is applied per the labeling instructions. Safety Data Sheets (SDS) on each product are found in the chemical storage areas. City staff responsible for application of PHFs receive annual training in safe use, storage, and disposal of PHFs. All contractors contracted to apply pesticides or herbicides to City property shall provide proper certification and licensing before performing work. Also, contractors contracted to apply fertilizer must provide qualification in utilizing proper nutrient management practices.

City facilities that store PHFs will be inspected annually to determine proper storage, product labeling, and SDS accessibility (**Table 1: Municipal Facilities**). The SOP manual (**Appendix A**) contains procedures related to usage and storage of PHFs.

#### **Responsible Department: Parks and Recreation/Contractors**

#### PHF TRAINING PROGRAM

Necessary staff will be educated annually on proper PHF practices.

#### Table 1: Municipal Facilities

| Name                        | Address                  | Inspection                    |
|-----------------------------|--------------------------|-------------------------------|
| Public Works Shop           | 1281 Montgomery Hwy      | Yes. Vehicle/Equipment        |
|                             | Vestavia Hills 35216     | Maintenance and Storage       |
|                             | 1032 Montgomery Hwy,     | No. No potential to discharge |
|                             | Vestavia Hills, AL 35216 | pollutants.                   |
| Vestavia Hills Library in   | 1221 Montgomery Hwy,     | No. No potential to discharge |
| the Forest                  | Vestavia Hills, AL 35216 | pollutants.                   |
| City of Vestavia Hills Fire | 509 Montgomery Hwy,      | No. No potential to discharge |
| Station 1                   | Vestavia Hills, AL 35216 | pollutants.                   |
| City of Vestavia Hills Fire | 2925 Columbiana Road,    | No. No potential to discharge |
| Station 2                   | Vestavia Hills, AL 35216 | pollutants.                   |
| City of Vestavia Hills Fire | 3201 Morgan Drive,       | No. No potential to discharge |
| Station 3                   | Vestavia Hills, AL 35216 | pollutants.                   |
| City of Vestavia Hills Fire | 13041 Liberty Parkway,   | No. No potential to discharge |
| Station 4                   | Vestavia Hills, AL 35242 | pollutants.                   |
| City of Vestavia Hills Fire | 3241 Cahaba Heights Rd,  | No. No potential to discharge |
| Station 5                   | Vestavia Hills, AL 35243 | pollutants.                   |
| Civic Contor                | 1090 Montgomery Hwy,     | No. No potential to discharge |
| Civic Center                | Vestavia Hills, AL 35216 | pollutants.                   |
| Aquatic Complex at          | 720 Waldridge Road,      | Vac. Chamical Starage         |
| Wald Park                   | Vestavia Hills, AL 35216 | res. Chemical Storage         |
| New Merkel Community        | 2150 Hollis Crossing,    | No. No potential to discharge |
| Center                      | Vestavia Hills, AL 35243 | pollutants.                   |
| Cahaba Heights Baseball     | 4401 Dolly Ridge Road,   | No. No potential to discharge |
| Park                        | Vestavia Hills, AL 35216 | pollutants.                   |
| Sicard Hollow Athletic      | 4851 Sicard Hollow Road, | No. No potential to discharge |
| Complex (SHAC)              | Vestavia Hills, AL 35242 | pollutants.                   |
| Liberty Park Sports         | 4700 Sicard Hollow Road, | No. No potential to discharge |
| Complex                     | Vestavia Hills, AL 35242 | pollutants.                   |

#### OILS, TOXICS, AND HOUSEHOLD HAZARDOUS WASTE

#### PUBLIC EDUCATION ON PROPER DISPOSAL

The City has contact information on its webpage regarding where to report spills, illicit discharges and improper disposals. The webpage also includes a link to the website Earth911\_<u>http://earth911.com/</u> which provides local sites for recycling of oils, toxics and household hazardous waste. Brochures on oils, toxics, and household hazardous waste are on the City storm water webpage as well as placed in City facilities for public pick-up.

#### **Responsible Department: Administration**

#### ANNUAL EMPLOYEE TRAINING

Annual training on spill prevention is provided to City personnel.

#### INDUSTRIAL STORM WATER RUNOFF

#### INVENTORY OF HIGH RISK FACILITIES

The City maintains a list of industrial and high risk facilities within the city limits (**Appendix H**). The list of industrial facilities will be reviewed annually for accuracy and will be updated when necessary.

#### **Responsible Departments: Administration/JCDH**

#### INSPECTION OF HIGH RISK FACILITIES

JCDH will inspect these sites annually on behalf of the City. See **Appendix H** for the Industrial Inspection form.

#### MONITORING AND REPORTING

#### MONITORING LOCATIONS

JCDH will take grab samples annually on behalf of the City at the sites listed below. See **Figure 3: Sampling Sites** for a map of the sites.

The site locations are as follows:

| Water Body   | Latitude, Longitude   | Description                                        |
|--------------|-----------------------|----------------------------------------------------|
| Patton Creek | 33.410772, -86.810525 | Grab Sample                                        |
| Cahaba River | 33.481772, -86.712765 | Grab Sample as well as<br>Water Quality Sonde Site |

An hourly water quality sonde is installed on the Cahaba River and managed by the United States Geological Survey (USGS). The site's title is USGS 02423380 Cahaba River near Mountain Brook, AL (River Run Drive).

#### **Responsible Department: JCDH**

#### IMPAIRED WATERWAYS

The City will review the waterbodies listed in the latest final §303(d) list, annually. If a waterbody becomes listed that falls within the MS4 boundary, the SWMPP will be updated as needed.

#### MONITORING PARAMETERS AND FREQUENCY

Grab samples will be analyzed for the following parameters:

- a. E. coli
- b. Total Nitrogen (TN) (mg/l)
- c. Total Phosphorus (mg/l)
- d. Total Suspended Solids (TSS) (mg/l)
- e. Temperature
- f. pH/ORP
- g. Turbidity (NTU)
- h. Conductivity
- i. Dissolved Oxygen (mg/l)
- j. Ammonia Nitrogen (NH3-N) (mg/l)
- k. Biochemical Oxygen Demand (BOD) (mg/l)
- I. Chemical Oxygen Demand (COD) (mg/l)
- m. Hardness as CaCO3 (mg/l)
- n. Nitrate plus Nitrite Nitrogen (NO3+NO2-N) (mg/l)
- o. Oil and Grease (mg/l)
- p. Total Dissolved Solids (TDS) (mg/l)
- q. Total Kjeldahl Nitrogen (TKN) (mg/l)

The water quality sonde monitors the following parameters at least hourly:

- a. Temperature
- b. Turbidity (NTU)
- c. Conductivity
- d. Dissolved Oxygen
- e. Water level

#### **Responsible Department: JCDH**

#### SAMPLE TYPE, COLLECTION AND ANALYSIS

JCDH will collect grab samples and submit them to a certified laboratory for analysis.


Figure 3: Sampling Sites

# OTHER REQUIREMENTS

# SWMPP PLAN REVIEW AND MODIFICATION

This plan will be reviewed annually and updated as necessary.

# **Responsible Departments: All Departments**

# ANNUAL REPORT

The Annual Report will be compiled by JCDH for the City of Vestavia Hills.

# **Responsible Department: JCDH**

# **APPENDIX A**

Vestavia Hills Storm Water Program Documents



Alabama Department of Environmental Management adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 Post Office Box 301463 Montgomery, Alabama 36130-1463 (334) 271-7700 FAX (334) 271-7950

July 11, 2022

Certified Mail # 9489 0090 0027 6286 7974 49

Honorable Ashley Curry Mayor, City of Vestavia Hills 1032 Montgomery Highway Vestavia Hills, Alabama 35216

RE: Municipal Separate Storm Sewer System (MS4) Individual Phase I Permit NPDES Number ALS000017 City of Vestavia Hills MS4 Jefferson County (073)

Dear Mayor Curry:

The Alabama Department of Environmental Management has made a final determination to issue NPDES Permit No. ALS000017 to the City of Vestavia Hills for discharges from its MS4. The NPDES Permit Number ALS000017 will be effective July 11, 2022 and expire on July 10, 2027.

The Department notified the public of its tentative determination to issue NPDES Permit No. ALS000017 on May 23, 2022. Interested persons were provided the opportunity to submit comments on the Departments tentative decision through June 23, 2022. In accordance with ADEM Admin. Code r. 335-6-6-.21(7), a response to comments received during the public comment period are provided with the enclosed permit.

The City of Vestavia Hills is responsible for compliance with all provisions of the permit including, but not limited to, the performance of any monitoring, the submittal of any reports, and the preparation and implementation of any plans required by the permit.

If you have questions concerning this permit, please contact Cammie Ashmore either by email at <u>cammie.ashmore@adem.alabama.gov</u> or by phone at (334) 271-7795.

Sincerely,

Devin M. Jenkins, Chief UIC/MS4 Section Stormwater Management Branch Water Division

DMJ/cga File: FPER/49566 Enclosures: Permit

Response to Comments

cc: Mary Kuo, Environmental Protection Agency (via email) Christopher Brady, City of Vestavia Hills (via email)

Birmingham Branch 110 Vulcan Road Birmingham, AL 35209-4702 (205) 942-6168 (205) 941-1603 (FAX) Decatur Branch 2715 Sandlin Road, S.W. Decatur, AL 35603-1333 (256) 353-1713 (256) 340-9359 (FAX)



 Mobile Branch

 2204 Perimeter Road

 Mobile, AL 36615-1131

 (251) 450-3400

 (251) 479-2593 (FAX)

Mobile-Coastal 3664 Dauphin Street, Suite B Mobile, AL 36608 (251) 304-1176 (251) 304-1189 (FAX)





# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

| PERMITTEE:        | CITY OF VESTAVIA HILLS                                                   |
|-------------------|--------------------------------------------------------------------------|
| AREA OF COVERAGE: | CORPORATE BOUNDARIES OF THE CITY OF VESTAVIA HILLS                       |
| PERMIT NUMBER:    | ALS000017                                                                |
| RECEIVING WATERS: | WATERBODIES WITHIN THE CORPORATE BOUNDARIES OF<br>CITY OF VESTAVIA HILLS |

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, **Code of** Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, **Code of Alabama 1975**, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

ISSUANCE DATE: JULY 11, 2022

EFFECTIVE DATE: JULY 11, 2022

EXPIRATION DATE: JULY 10, 2027

Bey W. Witch

Alabama Department of Environmental Management

# Table of Contents

| Part I. Applicability                                                             | 4  |
|-----------------------------------------------------------------------------------|----|
| A. Permit Area                                                                    | 4  |
| B. Authorized Discharges                                                          | 4  |
| C. Prohibited Discharges                                                          | 4  |
| Part II. Storm Water Pollution Prevention & Management Programs                   | 5  |
| A. Storm Water Management Program                                                 | 5  |
| B. Storm Water Program Elements and Requirements                                  | 5  |
| 1. Storm Water Collections System Operations                                      | 5  |
| 2. Public Eduction and Public Involvement on Storm Water Impacts                  | 6  |
| 3. Illicit Discharge Detection and Elimination (IDDE)                             | 8  |
| 4. Construction Site Storm Water Runoff Control                                   | 9  |
| 5. Post-Construction Storm Water Management in New Development and Re-Development | 13 |
| 6. Spill Prevention and Response                                                  | 15 |
| 7. Pollution Prevention/Good Housekeeping for Municipal Operations                | 16 |
| 8. Application of Pesticides, Herbicides, and Fertilizers (PHFs)                  | 18 |
| 9. Oils, Toxics, and Household Hazardous Waste Control                            | 18 |
| 10. Industrial Storm Water Runoff                                                 | 19 |
| C. Legal Authority                                                                | 19 |
| D. SWMPP Plan Review and Modification                                             | 20 |
| E. Impaired Waters and Total Maximum Daily Loads (TMDLs)                          | 20 |
| F. Responsiblities of Permittee                                                   | 21 |
| III. Monitoring and Reporting                                                     | 22 |
| A. Monitoring Locations                                                           | 22 |
| B. Monitoring Parameters and Frequency                                            | 22 |
| C. Sample Type, Collection and Analysis                                           | 23 |
| IV. Annual Reporting Requirements                                                 | 23 |
| Part V. Standard and General Permit Conditions                                    | 24 |
| A. Certification and Signature of Reports                                         | 24 |
| B. Submittals                                                                     | 25 |
| C. Retention of Records                                                           | 25 |
| D. Duty to Comply                                                                 | 25 |

# Table of Contents (continued)

| E. Civil and Criminal Liability                                                | 25 |
|--------------------------------------------------------------------------------|----|
| F. Duty to Reapply                                                             | 26 |
| G. Need to Halt or Reduce an Activity Not a Defense                            | 26 |
| H. Duty to Mitigate                                                            | 26 |
| I. Bypass                                                                      | 26 |
| J. Upset                                                                       | 27 |
| K. Duty to Provide Information                                                 | 27 |
| L. Other Information                                                           | 27 |
| M. Signatory Requirements                                                      | 27 |
| N. Oil and Hazardous Substance Liability                                       | 28 |
| O. Property and Other Rights                                                   | 28 |
| P. Severability                                                                | 28 |
| Q. Compliance with Statutes and Rules                                          | 28 |
| R. Proper Operations and Maintenance                                           | 28 |
| S. Monitoring Records                                                          | 28 |
| T. Monitoring Methods                                                          | 29 |
| U. Right of Entry and Inspection                                               | 29 |
| V. Additional Monitoring by the Permittee                                      | 29 |
| W. Permit Modification, Revocation and Reissuance, Suspension, and Termination | 29 |
| X. Termination of Coverage for a Single Permittee                              |    |
| Y. Modification of Storm Water Mangament Program                               |    |
| Z. Changes in Monitoring Outfalls                                              |    |
| AA. Definitions                                                                |    |

# PART I Applicability

# A. Permit Area

This permit applies to the corporate boundaries of the City of Vestavia Hills that are regulated by the Permittee and discharge to the Permittee's Municipal Separate Storm Sewer System (MS4).

# B. Authorized Discharges

- 1. This permit authorizes all existing or new storm water point source discharges to waters of the State of Alabama from those portions of the MS4s owned or operated by the Permittee. Discharge of pollutants shall be reduced to the Maximum Extent Practicable (MEP), shall not cause, nor contribute to, violations of Alabama Water Quality Standards, and shall be in compliance with Total Maximum Daily Loads (TMDLs) where applicable.
- 2. This permit authorizes the following non-storm water discharges provided that they do not cause or contribute to a violation of water quality standards and provided that they have been determined not to be substantial contributor pollutants by the Permittee or the Department:
  - a. Water line flushing
  - b. Landscape irrigation (not consisting of treated, or untreated wastewater unless authorized by the Department)
  - c. Diverted stream flows
  - d. Uncontaminated ground water infiltration
  - e. Uncontaminated pumped groundwater
  - f. Discharges from potable water sources
  - g. Foundation and footing drains
  - h. Air conditioning drains
  - i. Irrigation water (not consisting of treated, or untreated, wastewater unless authorized by the Department)
  - j. Rising ground water
  - k. Springs
  - 1. Water from crawl space pumps
  - m. Lawn watering runoff
  - n. Individual residential car washing, to include charitable carwashes
  - o. Residual street wash water
  - p. Discharge or flows from firefighting activities (including fire hydrant flushing)
  - q. Flows from riparian habitats and wetlands
  - r. Dechlorinated swimming pool discharges
  - s. Discharges authorized and in compliance with a separate NPDES permit

# C. Prohibited Discharges

The following discharges are not authorized by this permit:

1. Discharges that are mixed with sources of non-storm water, unless such non-storm water discharges are in compliance with a separate NPDES permit or where those dischargers have been determined not to represent significant sources of pollution, as identified by, and in compliance with, Part I.B.2;

- 2. Discharges of materials resulting from a spill, except emergency discharges required to prevent imminent threat to human health or to prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharges; and
- 3. The discharge of sanitary wastewater through cross connections or other illicit discharges through the MS4 is prohibited.

# PART II Storm Water Pollution Prevention Management Programs

# A. Storm Water Management Program (SWMP)

- 1. The Permittee is required to develop, revise, implement, maintain and enforce a storm water management program (SWMP) which shall include controls necessary to reduce the discharge of pollutants from its MS4 consistent with Section 402(p)(3)(B) of the Clean Water Act and 40 CFR Part 122.26. These requirements shall be met by the development and implementation of a Storm Water Management Program Plan (SWMPP) which addresses the Best Management Practices (BMPs), control techniques and systems, design and engineering methods, public participation and education, monitoring, and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the MEP, protect water quality, and satisfy appropriate water quality provisions of the Clean Water Act.
- 2. The Permittee shall provide and maintain adequate finance, staff, equipment, and support capabilities necessary to implement the SWMPP and comply with the requirements of this permit.
- 3. The SWMPP must address the minimum program elements referenced in Part II.B. to include the following:
  - a. A map of the Permittee's MS4 corporate boundaries;
  - b. The BMPs that will be implemented for each control measure. Low impact development (LID)/green infrastructure (GI) shall be considered and actively encouraged where feasible. Information on LID/GI is available on the following websites:

http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf and http://epa.gov/nps/urban-runoff-low-impact-development;

- c. The measureable goals for each of the program elements outlined in Part II.B.;
- d. The proposed schedule including interim milestones, as appropriate, inspections, and the frequency of actions needed to fully implement each program element; and,
- e. The person and/or persons responsible for implementing or coordinating the BMPs for each separate program element.
- 4. Unless otherwise specified in this permit, the Permittee shall be in compliance with the conditions of this permit by the effective date.

# **B.** Storm Water Program Elements and Requirements

# 1. Storm Water Collection System Operations

- a. Structural Controls
  - i. For Permittee owned/maintained structural controls, the structural controls shall be operated in a manner to reduce the discharge of pollutants, to the MEP;

- ii. For Permittee owned/maintained structural controls, the Permittee shall include in the SWMPP and implement the following:
  - 1. A map of the structural controls and should be updated as needed;
  - 2. Inspection of existing and newly constructed structural controls on a semiannual basis, at a minimum;
  - 3. Implementation of standard operating procedures (SOPs) or inspection checklist for structural control inspections and maintenance procedures;
  - 4. Stabilization and re-vegetation of eroded areas as needed; and
  - 5. Removal of floatables, litter, sediment and debris, in structural controls, as needed.
- iii. The Permittee shall maintain an inventory of structural controls, and maintain a tracking system for inspections and maintenance of the control structures; and
- iv. The Permittee shall report each year in the Annual Report the following structural control information:
  - 1. The number of inspections performed on structural controls, to include follow-up inspections. The inspection documentation (i.e. checklist) shall be made available upon request;
  - 2. A summarization of the maintenance activities performed on structural controls;
  - 3. The estimated amount of floatable, litter, sediment and debris that was removed, if applicable;
  - 4. Copies of any contractual agreements for maintenance activities if not performed by the Permittee, if requested by the Department. The contractual agreement should specify maintenance activities performed and schedule; and
  - 5. Updated structural controls map of Permittee-owned structural controls added during the preceding year with geographic coordinates.

### 2. Public Education and Public Involvement on Storm Water Impacts

- a. The Permittee must further develop, revise, and implement a public education and outreach program to inform the community about the impacts from storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff to the MEP. The Permittee shall continuously implement this program in the areas served by the MS4. Each year, the Permittee shall implement a minimum of four (4) BMPs, which includes two (2) BMPs emphasizing public education and two (2) BMPs emphasizing public involvement.
- b. The Permittee shall include within the SWMPP a list of potential BMPs that the Permittee may implement regarding public education and public involvement. The SWMPP must address the following, at a minimum:
  - 1. Annually, seek and consider public input in the development, revision and implementation of the SWMPP;
  - 2. Identify targeted pollutant sources the Permittee's public education program is intended to address;
  - 3. Specifically address the reduction and removal of litter, floatables and debris from entering the MS4, that may include, but is not limited to the following:
    - a. Labeling storm drain inlets and catch basins with "no dumping" message; and

- b. Posting signs referencing local codes that prohibit littering and illegal dumping at designated public access points to open channels, creeks, and other relevant waterbodies
- 4. Inform and involve individuals and households about the steps they can take to reduce storm water pollution; and
- 5. Inform individuals and groups on how to become involved in the storm water program (with activities such as local stream and lake restoration activities). The target audiences and subject areas for the education program that are likely to have significant storm water impacts should include, but is not limited to, the following:
  - i. General Public
    - a. General impacts litter has on water bodies, how trash is delivered to streams via the MS4 and ways to reduce and remove the litter;
    - b. General impacts of storm water flows into surface water from impervious surface;
    - c. Source control BMPs in areas of pet waste, vehicle maintenance, landscaping and rain water reuse; and
    - d. Impacts of illicit discharges and how to report them.
  - ii. General Public and Businesses to include Home-Based and Mobile Businesses
    - a. BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials;
    - b. Impacts of illicit discharges and how to report them.
  - iii. Homeowners, Landscapers, Property Managers and City Personnel
    - a. Landscape or yard care techniques that protect water quality;
    - b. BMPs for use and storage of pesticides, herbicides and fertilizers;
    - c. BMPs for carpet cleaning and auto repair and maintenance; and
    - d. Storm water pond maintenance; and
    - e. General impacts of stormwater flows into surface waters from impervious surfaces.
  - iv. Engineers, City Personnel, Review Staff, Land Use Planners, Contractors and Developers
    - a. Impacts of increased storm water flows into receiving water bodies;b. Technical standards for construction site sediment and erosion control;
    - c. Storm water treatment and flow control BMPs: and
    - d. Run-off reduction techniques and low impact development (LID)/green infrastructure (GI) practices that may include, but not limited to: site design, pervious pavement, alternative parking lot design, retention of forests and mature trees to assist in storm water treatment and flow control BMPS, and maintenance required for LID/GI.
- 6. Evaluate the effectiveness of the public education and public involvement program. If the Permittee determines any portion of the program (including BMPs) to be ineffective, then the Permittee shall update the SWMPP to address the ineffectiveness; and
- 7. Organize and participate in activities that target the removal of litter, floatables, and debris from area waterways. The minimum number and the waterways these activities will target will be addressed in the SWMPP.
- c. The Permittee shall report each year in the Annual Report the following information:
  - 1) A description of the activities used to involve groups and/or individuals in the development, revision, and implementation of the SWMPP;

- 2) A description of the individuals and groups targeted and how many groups and/or individuals participated. If exact participation is not readily quantifiable, an estimation will be sufficient;
- A description of the BMPs implemented along with the quantity utilized (i.e., number of printed brochures, and the number distributed of newspaper copies, number of workshops hosted/attended, and the number of public service announcements, etc.);
- 4) Results of the evaluation as required in Part II.B.2.b.6.; and
- 5) A list of the activities required in Part II.B.2.b.7 and the estimated amount of litter, floatables and debris removed during each activity.
- d. The current SWMPP and latest Annual Report should be posted on the Permittee's website, if available, and within 30 days of submittal of the SWMPP to the Department.

### 3. Illicit Discharge Detection and Elimination (IDDE)

- a. The Permittee shall implement an ongoing program to detect and eliminate illicit discharges and improper disposal into the MS4, to the MEP. The program shall include, at a minimum, the following:
  - 1) The development and annual update of an MS4 map. An initial map shall be provided in the SWMPP with updates provided each year in the Annual Report. The map shall include, at a minimum, the following:
    - a. The latitude/longitude of all known major outfalls;
    - b. The names of all waters of the State within the MS4 area that receive discharges from these major outfalls; and
    - c. Structural BMPs owned, operated, or maintained by the Permittee, if applicable.
  - 2) To the extent allowable under State law, an ordinance or other regulatory mechanism that prohibits non-storm water discharges to the MS4. The ordinance or other regulatory mechanism shall:
    - a. Include escalating enforcement procedures and actions;
    - b. Require the removal of illicit discharges as expeditiously as practicable and the immediate cessation of improper disposal practices upon identification of responsible parties. Where the removal of illicit discharge within ten (10) working days is not possible, the ordinance shall require a schedule for removal of the discharge. In the interim, the ordinance shall require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4; and
    - c. Provide for the annual review of the IDDE ordinance and update as necessary.
  - 3) A dry weather screening program designed to detect and address non-storm water discharges to the MS4. This program must address, at a minimum, dry weather screening of fifteen (15) percent of the major outfalls at least once per year with all (100 percent) major outfalls screened at least once per five (5) years. Priority areas, as described by the Permittee in the SWMPP, will be dry weather screened on a more frequent schedule as outlined in the SWMPP. When determining priority areas consider criteria such as, but not limited to, areas with older infrastructure, mixed-use areas, areas with a history of past illicit discharges, areas with on-site sewage disposal system, or areas upstream of sensitive waterbodies.

If any flow, from an unidentified source, is observed during the dry weather screening of a major outfall, then the Permittee shall follow the sampling protocol as outlined in the SWMPP and developed in accordance with EPA's guidance manual, *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October, 2004.

- 4) Procedures for tracing the source of a suspect illicit discharge as outlined in the SWMPP. At a minimum, these procedures will be followed to investigate portions of the MS4 that, based on the results of the field screening or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water.
- 5) Procedures for eliminating an illicit discharge as outlined in the SWMPP;
- 6) Procedures to notify ADEM of a suspect illicit discharge entering the Permittee's MS4 from an adjacent MS4 as outlined in the SWMPP;
- 7) A mechanism for the public to report illicit discharges discovered within the Permittee's MS4 and procedures for appropriate investigation of such reports;
- 8) A training program for appropriate personnel on identification, reporting, and corrective action of illicit discharges. The SWMPP must address, at a minimum, the frequency of the training and identify the appropriate personnel by title to be trained during the permit cycle; and
- 9) The Permittee shall post on its website a copy of the ordinance or other regulatory mechanism or provide a hyperlink to the location of the ordinance or regulatory mechanism as required by Part II.B.3.a.2 of this Permit. The SWMPP shall also include a copy of the ordinance or other regulatory mechanism or provide a website location of the ordinance or regulatory mechanism.
- b. The Permittee shall report each year in the annual report the following information:
  - 1) Total number of major outfalls within the MS4, the number and location of major outfalls observed during the dry weather screening of the current year to include any follow-up screenings and the number of major outfalls observed in the priority area(s) identified by the Permittee. A list of the outfalls to be dry weather screened during the upcoming year shall also be included;
  - 2) Updated MS4 map(s) unless there are no changes to the map that was previously submitted. When there are no changes to the map, the Annual Report must state this;
  - 3) Copies of the IDDE ordinance or other regulatory mechanism or provide a hyperlink for the ordinance or regulatory mechanism location on the Permittee's website. When there are no changes to the ordinance or regulatory mechanism the Annual Report must state this;
  - 4) Date(s) of the training conducted for appropriate personnel; and
  - 5) The number of illicit discharges investigated, any associated sampling results, and the summary of corrective actions taken to include dates and timeframe of response.

# 4. Construction Site Storm Water Runoff Control

a. The Permittee shall further develop/revise, implement and enforce an ongoing program to reduce, to the maximum extent practicable, the pollutants in any storm

water runoff to the MS4 from qualifying construction sites. The program shall include the following, at a minimum:

- 1) Procedures to require all applicable construction sites to obtain coverage under ADEM NPDES General Permit ALR10000 or other applicable NPDES permits;
- 2) To the extent allowed under State law, an ordinance or other regulatory mechanism to require effective erosion and sediment controls on qualifying construction sites, as well as sanctions to ensure compliance, and to provide all other authorities needed to implement the requirements of Part II.B.5. of this permit. The ordinance or regulatory mechanism shall be posted on the Permittee's website, if applicable;
- Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- 4) Procedures for construction site plan review and approval to ensure the selection of effective erosion and sediment controls are consistent with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas published by the Alabama Soil and Water Conservation Committee (hereinafter the "Alabama Handbook") and are appropriate for site conditions. Site plan review may be prioritized based on criteria outlined in the Permittee's SWMPP and may include, but is not limited to, size and location within priority watersheds. The plan review process will also consider potential water quality impacts;
- 5) A mechanism for the public to report complaints regarding pollution discharges from construction sites;
- 6) Inspection of sites to verify use and proper maintenance of appropriate BMPs. Inspections of construction sites shall be performed in accordance with the frequency specified in the table below:

| Site                                                                                                               | Inspection Frequency                                      |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Priority Constructions Sites (Defined in Part V.AA.)                                                               | At a minimum, inspections must occur monthly              |
| Other sites determined by the Permittee or<br>Permitting Authority to be a significant threat to<br>water quality* |                                                           |
| All qualifying construction sites not meeting the criteria specified above.                                        | At a minimum, inspections must occur every two (2) months |
|                                                                                                                    |                                                           |

\*In evaluating the threat to water quality, the following factors must be considered, if applicable: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies including 303(d) or TMDL status; proximity to receiving waterbodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and other factors deemed relevant to the MS4.

- 7) Procedure to notify ADEM of construction sites that do not have an NPDES permit discovered during construction site inspections. The notification must provide, at a minimum, the specific location of the construction site, the name and contact information for the owner or operator, and a summary of the construction site deficiencies.
- 8) Inventory (or list) of the current, active qualified construction sites and updated as new, qualified construction sites are commenced and completed. The inventory must contain relevant contact information of the owner for each site (i.e., tracking

number, name, address, phone number, etc.), the size of the construction site including the amount of disturbed area, whether the site has submitted for permit coverage under the Alabama Construction General Permit, whether the qualified construction site is in a priority watershed, and the date the permittee approved the construction site plan. The Permittee must make this inventory (or list) available to the Department upon request.

- 9) Training for the Permittee's construction site inspection staff in the identification of appropriate construction best management practices (Example: QCI training in accordance with ADEM Admin Code. r. 335-6-12 or the Alabama Construction Site General Permit). Applicable MS4 site inspection staff shall be trained once per year;
- 10) Utilization of a construction site inspection checklist (paper and/or electronic);
- 11) Implementation of an Enforcement Response Plan (ERP), which sets out the Permittee's potential responses to violations through progressively stricter actions as needed to achieve compliance. The ERP must include a system for tracking formal actions and ADEM referrals. Types of enforcement actions may include, but not limited to the following:
  - a. Verbal Warnings—Verbal warnings are primarily consultative in nature and must specify the nature of the violation and required corrective action;
  - b. Written Notices—Written Notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action; and
  - c. Escalated Enforcement Measures—Citations, stop work orders, withholding plan approvals/authorizations, monetary penalties, or additional measures to address persistent non-compliance, repeat or escalating violations or incidents of major environmental harm.
- 12) A program to make available a list of education and training materials and resources to construction site operators in the appropriate application and maintenance of erosion and sediment controls; and
- 13) The Permittee shall post on its website the ordinance or other regulatory mechanism required by Part II.B.4.a.2.
- b. The Permittee shall include within the SWMPP the following information:
  - 1) A copy of the ordinance or regulatory mechanism or a hyperlink to the location of the ordinance or regulatory mechanism on the Permittee's website as required by Part II.B.4.a.2.;
  - 2) Procedures for site plan reviews required by Part II.B.4.a.4;
  - 3) A construction site inspection schedule meeting the requirements of Part II.B.4.a.6;
  - 4) Training program, to include frequency, of MS4 site inspection staff as required by Part II.B.4.a.9;
  - 5) A copy of the construction site inspection checklist and/or screenshot of electronic checklist as required by Part II.B.4.a.10;
  - 6) The ERP as required by Part II.B.4.a.11;
  - 7) Procedures and schedule for making available a list of education and training materials and resources to construction site operators in the appropriate application and maintenance of erosion and sediment controls required by Part II.B.4.a.12.
- c. The Permittee shall report each year in the Annual Report the following information:

- 1) A description of any completed or planned revision to the ordinance or regulatory mechanism required by Part II.B.4.a.2. and include the most recent copy or a hyperlink to the most recent copy of the ordinance or regulatory mechanism;
- 2) List of all active qualifying construction sites within the MS4 to include the inspections as required by Part II.B.4.a.6; and
- 3) A summary of the following:
  - a. Number of construction site inspections;
  - b. Number of formal enforcement actions and description of violations;
  - c. Number of construction site runoff complaints received; and
  - d. Number of new staff trained and follow-up training provided to existing staff.
- d. The Permittee shall maintain the following information and make it available upon request:
  - 1) Documentation of all inspections conducted of qualifying construction sites. The inspection documentation shall include, at a minimum, the following:
    - a. Facility type;
    - b. Inspection date;
    - c. Name and signature of inspector;
    - d. Location of construction project;
    - e. Owner/operator information (name, address, phone number, fax, and email);
    - f. Description of the condition of the storm water BMPs that may include, but not limited to, the quality of: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, and safety benches; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures; and
    - g. Photographic documentation of any issues and/or concerns.
  - 2) Documentation of enforcement actions taken at construction sites to include, at a minimum, the following:
    - a. Name of owner/operator;
    - b. Location of qualifying construction project;
    - c. Description of violation;
    - d. Required schedule for returning to compliance;
    - e. Description of enforcement response used, including escalated responses if repeat violations occur;
    - f. Accompanying documentation of enforcement responses (e.g. notices of non-compliance, notices of violations, etc.); and
    - g. Any referrals to different Departments or Agencies.
  - 3) Inventory of all qualified construction sites to include, at a minimum, the following:
    - a. Name of owner/operator;
    - b. Owner/operator contact information (address, phone number, fax, and/or email); and
    - c. Location of the qualifying construction site.
  - 4) Records of public complaints including:

- a. Date, time and description of the complaint;
- b. Location of subject construction sites; and
- c. Identification of any actions taken (i.e., inspections, enforcement, corrections). Identifying information must be sufficient to cross-reference inspection and enforcement records.
- 5) Educational and Training Documentation for Construction Site Operators
  - a. List of education and training materials and resources

#### 5. Post-Construction Stormwater Management in Qualifying New Development and Re-Development

The Permittee must further develop/revise and implement a program to address the discharge of pollutants in post-construction storm water runoff to the MS4 from new development and redevelopment. Post-Construction Stormwater Management refers to the activities that take place after construction occurs, and includes structural and non-structural controls including lowimpact development and green infrastructure practices to obtain permanent stormwater management over the life of the property's use. These post construction controls should be considered during the initial site development planning phase.

- a. The Permittee shall develop/revise and implement project review and enforcement procedures for qualifying new development and redevelopment projects, to the maximum extent practicable. These programs shall ensure that controls are in place to prevent or minimize water quality impacts. Specifically, the Permittee shall:
  - 1) Require landowners and developers to, the MEP, implement systems of appropriate structural and/or non-structural BMPs designed to reduce the discharge of pollutants, which may include, but is not limited to, the following:
    - a. Minimize the amount of impervious surfaces;
    - b. Preserve and protect ecologically sensitive areas that provide water quality benefits;
    - c. Provide vegetated buffers along waterways, and reduce discharges to surface waters from impervious surfaces such as parking lots;
    - d. Implement policies to protect trees, native soils and other vegetation; and
    - e. Minimize topsoil stripping and compacted soils where feasible.
  - 2) Require landowners and developers to develop and maintain Best Management Practices to ensure, to the MEP, that post-construction runoff mimics preconstruction hydrology of the site. A 1.1 inch rainfall over a 24-hour period preceded by a 72-hour antecedent dry period shall be the basis for the design and implementation of post construction BMPs;
  - 3) Encourage landowners and developers to incorporate the use of LID)/GI where feasible. Information on LID/GI is available on the following websites: http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf and <u>http://epa.gov/nps/urban-runoff-low-impact-development</u>. The Permittee shall include a narrative description in the SWMPP as to the means taken to implement the requirement to encourage landowners and developers to incorporate the use of LID/GI;
  - 4) To the extent allowed under State law, adopt or amend an ordinance or other regulatory mechanism to ensure the applicability and enforceability of post-construction BMPs at all new qualifying development and redevelopment

projects. The ordinance or regulatory mechanism shall be posted on the Permittee's website, if applicable;

- 5) Require the submittal of a post-construction BMP plan, for review, as outlined in the SWMPP. The post-construction BMP plan review process may be integrated with the construction plan review process under Section II.B.4.a.4;
- 6) Require the submittal of an 'as built' certification of the post-construction BMPs within 120 days of completion of project;
- 7) Perform and/or require the performance of, at a minimum, an annual postconstruction inspection to ensure that design standards are being met and require corrective actions to poorly functioning or inadequately maintained postconstruction BMPs. The Permittee shall document its post-construction inspection. Such documentation shall include, at a minimum:
  - a. Facility type
  - b. Inspection date
  - c. Name and signature of inspector
  - d. Site location
  - e. Owner information (name, address, phone number, fax, and email)
  - f. Description of the storm water BMP condition that may include the quality of: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, and safety benches; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures:
  - g. Photographic documentation of all critical storm water BMP components;
  - h. Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP; and
  - i. Maintenance agreements for long-term BMP operations and maintenance.
- 8) The Permittee shall maintain or require the developer/owner/operator to keep records of post-construction inspections, maintenance activities and make them available to the Department upon request;
- 9) Require and/or perform adequate long-term operation and maintenance of postconstruction BMPs, including one or more of the following, as applicable:
  - a. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; and/or
  - b. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or
  - c. Written conditions in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of structural and treatment control management practices; and/or
  - d. Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices.
- b. The Permittee shall include within the SWMPP the following information:
  - 1) A copy or link of the ordinance or other regulatory mechanism or hyperlink to the ordinance or other regulatory mechanism to the location on the Permittee's website as Part II.B.5.a.4.;

- 2) Procedures to develop, implement and enforce systems of appropriate structural and/or non-structural BMPs;
- 3) Procedures to develop, implement and enforce performance standards;
- 4) Narrative description as to the means taken to implement the requirement to encourage LID/GI practices;
- 5) Procedures to ensure compliance with the ordinance or regulatory mechanism, including the sanctions and enforcement mechanisms the Permittee will use to ensure compliance. If an ordinance or regulatory mechanism needs to be developed, then the Permittee must provide a timeline for the development of the ordinance and/or regulatory mechanism;
- 6) Procedures for post-construction inspections, to include tracking and enforcement;
- 7) Procedures to ensure adequate long-term operation and maintenance of BMPs; and,
- 8) Development of an inventory of post-construction structural controls. This inventory shall be updated annually, as needed.
- c. The Permittee shall report each year in the Annual Report the following information:
  - 1) Provide a hyperlink for the ordinance or regulatory mechanism location on the Permittee's website;
  - 2) A list of the post-construction structural controls installed and inspected during the permit year. The list shall include which post-construction structural controls installed are considered LID/GI, if applicable;
  - 3) Updated inventory of post-construction structural controls including those owned by the Permittee;
  - 4) Number of inspections performed on post-construction structural controls; and,
  - 5) Summary of enforcement actions, if applicable.

# 6. Spill Prevention and Response

- a. The Permittee shall further develop/revise and implement a program to prevent, contain, and respond to spills that may discharge into the MS4. The Permittee must, at a minimum:
  - 1) Investigate, respond, and conduct response actions or coordinate with other agencies that may provide response actions as outlined in the SWMPP;
  - 2) Track spills, response, and cleanup activities for all reportable spills that may discharge to the MS4;
  - 3) Use GIS or acceptable mapping scheme to identify spill locations, locations for inspections, and chronic problem areas;
  - 4) Implement a spill prevention/spill response plan;
  - 5) Provide training, annually at a minimum, of appropriate personnel in spill prevention and response procedures and techniques to mitigate pollutant discharges from spills to the MS4;
  - 6) Establish procedures to ensure that spills are able to be promptly reported to appropriate authority; and
  - 7) During the permit cycle, review any existing City Hazardous Material Contingency Plan, if applicable, and supplement wherever needed to address discharges to the MS4.
- b. The Permittee shall include within the SWMPP the following information:

- 1) List of agencies that the Permittee may coordinate response actions with regarding spills as required by Part II.B.6.a.1.;
- 2) The spill prevention/spill response plan as required by Part II.B.6.a.4.; and
- 3) Procedures to provide annual training, at a minimum, of personnel in spill prevention and response.
- c. The Permittee shall report each year in the Annual Report the following information:
  - 1) Summary of spills occurring during the reporting year, to include the following, at a minimum:
    - a. Location;
    - b. Spill Substance (i.e., fuel, oil, etc.);
    - c. Photographs (spill and after clean-up) to be made available upon request; and
    - d. Incident dates and time to resolution, including any enforcement actions taken and their result.
  - 2) Documentation of employee training as required by Part II.B.6.a.5
    - a. Description of the training curriculum or materials used; and
      - b. Dated records of attendance.

#### 7. Pollution Prevention/Good Housekeeping for Municipal Operations

- a. The Permittee shall further develop/revise, implement, and maintain a program that will prevent or reduce the discharge of pollutants in storm water run-off from municipal operations to the MEP. The program elements shall include, at a minimum, the following:
  - 1) An inventory (to include name and location) of all municipal facilities. Evaluate and determine which municipal facilities have the potential to discharge pollutants via storm water runoff;
  - 2) Develop and implement a short and long term strategy and program for the removal of trash from the waterways and tributaries in the permitted area in such a manner to quantify the removal of trash per year, which shall be included in the Annual Report. These strategies shall be included in the Permittee's SWMPP and shall be updated as necessary. This program shall address the following, at a minimum:
    - a. Direct removal of trash from waterbodies;
    - b. Direct removal of trash from the MS4;
    - c. Direct removal of trash prior to entry to the MS4;
    - d. Prevention through disposal alternatives; and
    - e. Prevention through waste reduction practices, additional enforcement, and/or initiatives.
  - 3) Require the following measures to be implemented in the public right of way for any event or wherever it is anticipated that substantial quantities of trash or litter may generated:
    - a. Arrangement for temporary protection of preventative measures to the catch basins, where feasible, and
    - b. Provide proper disposal of trash receptacles, cleanup of catch basins, as needed, and grounds of the event area within one business day subsequent to the event.
  - 4) Ensure that trash receptacles, or similar trash capturing devices are provided and maintained in areas identified as high trash generated areas;

- 5) A Standard Operating Procedures (SOP) detailing good housekeeping practices to be employed at appropriate municipal facilities (those that have the potential to discharge pollutants via storm water runoff) and during municipal operations that may include, but not limited to, the following:
  - a. Equipment washing;
  - b. Street sweeping;
  - c. Maintenance of municipal roads owned, operated, or under the responsibility of the Permittee;
  - d. Storage and disposal of chemicals and waste materials;
  - e. Vegetation control, cutting, removal, and disposal of the cuttings;
  - f. Vehicle fleets/equipment maintenance and repair;
  - g. External Building maintenance; and
  - h. Materials storage facilities and storage yards.
- 6) A program for inspecting municipal facilities, at a minimum of annually, to include municipal maintenance shops and equipment yards, for good housekeeping practices, including BMPs. The program shall include checklists and procedures for correcting noted deficiencies;
- 7) A training program for municipal facility staff in good housekeeping practices as outlined in the SOP developed pursuant to Part II.B.7.a.5.. The training shall be provided to municipal facility staff at a minimum of annually; and
- 8) The Permittee shall assess the water quality impacts for those flood management projects owned, operated, or the responsibility of the Permittee. The feasibility of retro-fitting existing structural control devised to provide additional pollutant removal from the storm water shall be evaluated.
- b. The Permittee shall include within the SWMPP the following information:
  - 1) The inventory of municipal facilities required by Part II.B.7.a.1;
  - 2) Evaluate and include discussion on effectiveness of strategy (or strategies) as required by Part II.B.7.a.2.
  - 3) A list of SOPs of good housekeeping practices required by Part II.B.7.a.5;
  - 4) An inspection plan and schedule (frequency), including checklists and any other materials needed to comply with Part II.B.7.a.6; and
  - 5) A description of the training program and training schedule including frequency as required by Part II.B.7.a.7.
- c. The Permittee shall report each year in the Annual Report the following information:
  - 1) Any updates to the municipal facility inventory;
  - 2) An estimated amount of trash/floatable material collected from the MS4 as required by Part II.B.7.a.2-4;
  - 3) Any updates to the inspection plan or schedule;
  - 4) Any updates to the SOP of good housekeeping practices;
  - 5) Summary of inspection reports of municipal facilities; and
  - 6) Results of the evaluation of the effectiveness of the Pollution Prevention/Good Housekeeping program.
- d. The Permittee shall maintain the following information and make it available upon request:
  - 1) Records of inspections and corrective actions, if any; and
  - 2) Training records including the dates of each training activities and names of personnel in attendance.

#### 8. Application of Pesticide, Herbicide, and Fertilizers (PHFs)

- a. For the *Application of Pesticide, Herbicide, and Fertilizers* (PHFs), the Permittee shall implement controls to reduce, to the *MEP*, the discharge of pollutants related to the storage and application of PHFs applied by employees or contractors, to public rights of way, parks, and other public property. The Permittee shall implement programs to encourage the reduction of the discharge of pollutants related to application and distribution of PHFs. For those controls implemented, the Permittee will obtain coverage and maintain compliance with ADEM NPDES Pesticide General Permit ALG870000, if applicable, or other applicable NPDES permits. In addition, the Permittee shall address priorities to include the following, at a minimum:
  - 1) Identify all areas known to receive high applications of PHFs, develop a program to detect improper usage, and prioritize problem areas;
  - Require evidence of proper certification and licensing for all applicators contracted to apply pesticides or herbicides on municipal property; require that applicators contracted to apply fertilizer are qualified in utilizing proper nutrient management practices;
  - 3) Maintain an inventory of on-hand PHFs with information about the formulations of various products, including how to recognize the chemical constituents from the label, their respective uses, directions and precautions for applicators that explain if products should be diluted, mixed or only used alone, and, proper storage of products;
  - 4) Equipment use and maintenance;
  - 5) Training in safe use, storage and disposal of PHFs;
  - 6) Annual inspection and monitoring of facilities where PHFs are stored; and
  - 7) Record keeping.
- b. The Permittee shall report each year in the Annual Report the following information:
  - 1) The areas within the MS4 jurisdiction that received high application of PHFs;
  - 2) A list of personnel certified and trained on proper PHF application;
  - 3) An inventory list of on-hand PHFs; and
  - 4) Inspections of the facilities where PHFs are stored.

#### 9. Oils, Toxics, and Household Hazardous Waste Control

- a. The Permittee shall prohibit to the MEP the discharge or disposal of used motor vehicle fluids and household hazardous wastes into the MS4. Specific activities to be completed under this item are:
  - 1) Make available material educating the public about used oil facility locations, hotline numbers, and alternatives to toxic materials;
  - 2) Annual, at a minimum, inspections of municipal maintenance shops and equipment yards;
  - 3) Advertise the location of used oil collection facilities; and
  - 4) Provide employee training, at a minimum of annually, on spill prevention at all municipal facilities where oils or toxic materials are used.
- b. The Permittee shall include within the SWMPP the following information:

- 1) Procedures to further develop, revise, implement, and enforce a program for oils, toxics, and household hazardous waste control to include educational information and employee training.
- c. The Permittee shall report each year in the Annual Report the following information:
  - 1) Quantities of Household Hazardous Waste and used oil collected; and
  - 2) Inspection reports of municipal maintenance shops and equipment yards; and
  - 3) Oils, Toxics, and Household Hazardous Waste Control training materials
    - a. Dated attendance sheet; and
    - b. Titles of presentations.

### 10. Industrial Storm Water Runoff

- a. The Permittee shall implement a program to inspect, monitor and control pollutants in storm water runoff to the MS4 from municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, and industrial facilities and high risk commercial facilities. Facilities to be addressed under this program include: facilities that have reported under the requirements of the Emergency Planning and Community Right to Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge that the Permittee determines is contributing substantial pollutants loading to the MS4 ("high risk facilities"). The program must provide for, at a minimum:
  - 1) Annual inspections, at a minimum, of municipal waste landfills, hazardous waste treatment, storage, disposal (TSD) and recovery facilities;
  - 2) Annual inspections, at a minimum, of industrial facilities and high-risk commercial facilities that do not have an NPDES permit issued by the Department as outlined in the SWMPP, and
  - 3) Data collected by a NPDES permitted facility to satisfy the monitoring requirements of an NPDES, State, land application or local pretreatment discharge permit may be used to satisfy Part II.B.10.a of the Permit. The Permittee may require the facility to conduct self-monitoring to satisfy this requirement, if necessary.
- b. The Permittee shall include in the SWMPP a list of all municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, high risk commercial facilities, and industrial facilities, both NPDES permitted and non-NPDES permitted, within the MS4.
- c. The Permittee shall include in the Annual Report a list of facilities inspected for the year and any corrective actions taken including enforcement, if applicable.

# C. Legal Authority

To the extent allowed under State law, the Permittee must annually review and revise, as necessary, its relevant ordinances or other regulatory mechanisms, or adopt any new ordinances that provide it with adequate legal authority to control pollutant discharges into and from its MS4, and to implement and enforce its SWMPP. To be considered adequate, this legal authority must, at a minimum, authorize the Permittee to:

- 1. Prohibit non-storm water discharges unless such storm water discharges are in compliance with a separate NPDES permit, or determined by the Department not to be a significant contributor of pollutants to waters of the State;
- 2. Prohibit and eliminate illicit connections to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4;
- 3. Control the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4;
- 4. Require operators of construction sites and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 to the MEP through the installation, implementation, and maintenance of appropriate controls, including installation, implementation and long-term maintenance of post construction controls;
- 5. Request information to determine compliance with ordinances or other regulatory mechanism;
- 6. Enter private property for the purpose of inspecting and monitoring at reasonable times any facilities, equipment, practices, or operations for active or potential polluted storm water discharges to the MS4;
- 7. Promptly require that dischargers cease and desist discharging and/or clean-up and abate a discharge;
- 8. Levy citations or administrative fines against responsible parties to include but not limited to non-compliant construction sites;
- 9. Require recovery and remediation costs from responsible parties; and
- 10. Provide the authority to enter into interagency agreements with other entities for the purpose of controlling the contribution of pollutants to the MEP from one MS4 to another MS4.

### D. SWMPP Plan Review and Modification

- 1. The Permittee shall submit to the Department within nine months of the effective date of this permit a SWMPP. The Permittee shall implement plans to seek and consider public input in the development, revision and implementation of this SWMPP, as required by Part II.B.2.b.1. Thereafter, the Permittee shall perform an annual review, at a minimum, of the current SWMPP and must modify the SWMPP, as necessary, to maintain compliance with the permit. The annual review of the SWMPP shall be documented and noted in the Annual Report. Any modifications to the SWMPP shall be submitted to the Department at the time a modification is made and the Permittee's website shall be updated with the revised version of the SWMPP. Modifications made to the SWMPP may include, but are not limited to, the replacement of ineffective or infeasible BMPs or the addition of components, controls and requirements.
- 2. The Permittee shall implement the SWMPP on all new areas added to their MS4 (or for which they become responsible for implementation of storm water quality controls) as soon as practicable but no later than one (1) year from the addition of the new area. Implementation of the program in any new area shall consider the plans of the SWMPP of the previous MS4 ownership, if any.

#### E. Impaired Waters and Total Maximum Daily Loads (TMDLs)

- 1. The Permittee must determine whether the discharge from any part of the MS4 contributes directly or indirectly to a waterbody that is included on the latest §303(d) list or designated by the Department as impaired or is included in an EPA-approved or EPA-established TMDL;
- 2. If the Permittee's MS4 discharges to a waterbody included on the latest §303(d) or designated by the Department as impaired, it must demonstrate the discharges, as controlled by the Permittee, do not cause or contribute to the impairment. The SWMPP must detail the BMPs that are being utilized to control discharges of

pollutants associated with the impairment. If existing BMPs are not sufficient to achieve this demonstration, the Permittee must, within six (6) months following the publication of the latest final §303(d) list, Department designation, or the effective date of this permit, submit a revised SWMPP detailing new or modified BMPs. The SWMPP must be revised as directed by the Department and the new or modified BMPs must be implemented within one year from the publication of the latest final §303(d) list or Department designation.

- 3. Permittees discharging from MS4s into waters with EPA-Approved TMDLs and/or EPA-Established TMDLs
  - a. The Permittee must determine whether its MS4 discharges to a waterbody for which a Total Maximum Daily Load (TMDL) has been established or approved by EPA. If an MS4 discharges into a water body with an EPA approved or established TMDL, then the SWMPP must include BMPs targeted to meet the assumptions and requirements of the TMDL. If additional BMPs will be necessary to meet the requirements of the TMDL, the SWMPP must include a schedule for installation and/or implementation of such BMPs. A monitoring component to assess the effectiveness of the BMPs in achieving the TMDL requirements must also be included in the SWMPP. Monitoring can entail a number of activities including, but not limited to: outfall monitoring, in-stream monitoring, and/or modeling. Monitoring data, along with an analysis of this data, shall be included in the Annual Report.
  - b. If, during this permit cycle, a TMDL is approved by EPA or a TMDL is established by EPA for any waterbody into which an MS4 discharges, the Permittee must review the applicable TMDL to see if it includes requirements for control of storm water discharges from the MS4.

i. If it is found that the Permittee must implement specific allocations of the TMDL, it must assess whether the assumptions and requirements of the TMDL are being met through implementation of existing BMPs or if additional BMPs are necessary. The SWMPP must include BMPs targeted to meet the assumptions and requirements of the TMDL. ii. If existing BMPs are not sufficient, the Permittee must, within six (6) months following the approval or establishment of the TMDL by EPA, submit a revised SWMPP detailing new or modified BMPs to be utilized along with a schedule of installation and/or implementation of such BMPs. Any new or modified BMPs must be implemented within one (1) year, unless an alternate date is approved by the Department, from the establishment or approval of the TMDL by EPA. A monitoring component to assess the effectiveness of the BMPs in achieving the TMDL requirements must also be included in the SWMPP. Monitoring can entail a number of activities including, but not limited to: outfall monitoring, in-stream monitoring, and/or modeling. Monitoring data, along with an analysis of this data, shall be included in the Annual Report.

# F. Responsibilities of Permittee

If the Permittee is relying on another entity to satisfy one or more requirements of this permit, then the Permittee must note that fact in the SWMPP. The Permittee remains responsible for compliance with the permit and reliance on another entity will not be a defense or justification for non-compliance if the entity fails to implement the permit requirements.

# **PART III Monitoring and Reporting**

The Permittee shall implement a monitoring program to provide data necessary to assess the effectiveness and adequacy of BMPs implemented under the SWMPP. The quality of the streams receiving MS4 discharges shall continue to be monitored to assess the water quality of the streams and to identify potential water quality impairments. This shall be accomplished by the following:

# A. Monitoring Locations

1. Proposed monitoring locations and descriptions of their respective characteristics shall be described in the SWPPP with actual locations described in the annual report;

| Waterbody    | Frequency            |
|--------------|----------------------|
| Cahaba River | Annual (Grab) Sample |
| Patton Creek | Annual (Grab) Sample |

2. In addition to the requirements in Part III.A.1., if a waterbody (not listed in Part III.A.1) within the MS4 jurisdiction is listed on the latest final §303(d) list, or otherwise designated impaired by the Department, or for which a TMDL is approved or established by EPA, during this permit cycle, then the Permittee must revise its monitoring program to include monitoring that addresses the impairment or TMDL. Any revisions to the monitoring program shall be documented in the SWMPP and Annual Report. In addition, the permit may be modified by the Department to establish the additional or revised monitoring locations.

# **B.** Monitoring Parameters and Frequency

1. Grab samples shall be collected annually on Cahaba River and Patton Creek at each instream monitoring station and analyzed for the following parameters:

- a. E.Coli;
- b. Total Nitrogen (TN) (mg/l);
- c. Total Phosphorus (mg/l);
- d. Total Suspended Solids (TSS) (mg/l);
- e. Temperature;
- f. pH/ORP;
- g. Turbidity (NTU);
- h. Conductivity;
- i. Dissolved Oxygen (mg/l);
- j. Ammonia Nitrogen (NH<sub>3</sub>-N) (mg/l);
- k. Biochemical Oxygen Demand (BOD) (mg/l);
- 1. Chemical Oxygen Demand (COD) (mg/l);
- m. Hardness as CaCO<sub>3</sub> (mg/l);
- n. Nitrate plus Nitrite Nitrogen (NO<sub>3</sub>+NO<sub>2</sub>-N) (mg/l);
- o. Oil and Grease (mg/l);
- p. Total Dissolved Solids (TDS) (mg/l);
- q. Total Kjeldahl Nitrogen (TKN) (mg/l); and
- 2. The Permittee must include in the instream monitoring program any additional parameters attributed with the latest final §303(d) list or otherwise designated by the Department as impaired or are included in an EPA-approved or EPA-established TMDL.

# C. Sample Type, Collection and Analysis

- 1. Grab samples shall be collected annually. Rainfall data and associated weather conditions shall be recorded for each grab sampling event;
- 2. Analysis and collection of grab samples shall be done in accordance with the methods specified at 40 CFR Part 136. Where an approved 40 CFR Part 136 method does not exist, then a Department approved alternative method may be used;
- 3. If the Permittee is unable to collect grab samples due to adverse conditions, the Permittee must submit a description of why samples could not be collected, including available documentation of the event. An adverse climatic condition which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

# **PART IV Annual Reporting Requirements**

- 1. The Permittee shall submit to the Department an Annual Report and all other information and documents via the Alabama Environmental Permitting and Compliance System (AEAPCS) no later than January 31st of each year. The Annual Report shall cover the previous fiscal year beginning October 1 through September 30.
- 2. The Permittee shall sign and certify the Annual Report in accordance with Part V.M. If the Responsible Official has designated a duly authorized representative in accordance with Part V.M. to sign the Annual Report, then include a copy of the written designation with the Annual Report.
- 3. The Annual Report shall include the following information, at a minimum, and in addition to those requirements referenced in Part II.B and Part III:
  - a. A list of contacts and responsible parties (e.g., agency, name, phone number, address, & email address) who had input to and are responsible for the preparation of the Annual Report.
  - b. An overall evaluation of the storm water management program developments and progress for the following:
    - 1) Major findings such as water quality improvements or degradation;
    - 2) Major accomplishments;
    - 3) Overall program strengths/weaknesses;
    - 4) Future direction of the program;
    - 5) The Permittee(s) will make an overall determination of the effectiveness of the SWMPP taking into account water quality/watershed improvements;
    - 6) Required actions that were not performed, and reasons why the actions were not accomplished; and
    - 7) If monitoring is required, evaluation of the monitoring data.
  - c. The Annual Report will include a narrative report of all program elements referenced in Part II.B of this permit. The activities concerning a program element shall be discussed as follows:
    - 1) Program element activities completed and in progress;
    - 2) General discussion of element. Explanation for all element activities that have not been fully implemented or competed. Results of activities shall be summarized and discussed (e.g., maintenance caused by inspection,

pollutants detected by monitoring, investigations as a result of dry and wet weather screening, number and nature of enforcement item, education activities/participation);

- 3) Status of program element with compliance, implementation, and augmentation schedules in Part II of the permit;
- 4) Assessment of controls; and
- 5) Discussion of proposed element revisions.
- d. Notice of reliance on another entity to satisfy some of your permit obligations.
- e. Results of the evaluation to determine whether discharges from any part of the MS4 contributes directly or indirectly to a waterbody that is included on the §303(d) list (or designated by the Department as impaired) or for which a TMDL has been established or approved by EPA.
- f. The Annual Report shall contain a monitoring section which discusses the progress and results of the monitoring programs required under Part III of the permit and shall include, at a minimum, the following information.
  - 1) Status of implementation of the monitoring program;
  - 2) Map(s) showing the monitoring station locations, latitude/longitude, and narrative site descriptions, including watershed size;
  - 3) Raw data, results, methods of evaluating the data, graphical summaries of the data, and an explanation/discussion of the data for each component of the monitoring program;
  - 4) An analysis of the results of each monitoring program component;
  - 5) A comparison of the reporting year's data to the previous five years of data to establish a trend analysis to determine the relative health of the receiving water;
  - 6) All monitoring reports and supporting data shall be submitted electronically via AEPACS concurrently with the submission of the Annual Report; and
  - 7) The interpretation of the analytical data, required by Part III.B.1-2 of the Permit, for determinacy of meeting water quality standards.
- g. Provide the status of the implementation and proposed changes to the SWMPP to include assessment of controls and specific improvements or degradation to water quality;
- h. Provide a summary of inspections and enforcement actions for regulatory program. Enforcement actions should include a corrective actions summary;
- i. Implementation status of the public education programs; and
- j. Status of expenditures and budget for the past fiscal year and the next fiscal year for the Permittee's program. The analysis shall indicate budgets and funding sources.

# PART V Standard and General Permit Conditions

#### A. Certification and Signature of Reports

All reports required by the permit and other information requested by the Director shall be signed and certified in accordance with Part V.M. of this permit.

# B. Submittals

All documents required to be submitted to the Department by this permit, shall be submitted to the Department via AEPACS unless the Permittee submits in writing valid justifications as to why the electronic submittal cannot be utilized and the Department approves in writing the utilization of hard copy submittals. The AEPACS can be accessed at the following link; <u>https://adem.alabama.gov/AEPACS</u>. Permit modifications of the existing permit shall be submitted through AEPACS.

Requests as to why AEPACS cannot be utilized shall be addressed to:

Alabama Department of Environmental Management Water Division Stormwater Management Branch Post Office Box 301463 Montgomery, Alabama 36130-1463

# C. Retention of Records

The Permittee shall retain the storm water quality management program developed in accordance with Part II of this permit until at least five (5) years after coverage under this permit terminates. The Permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records required by this permit, and records of all other data required by or used to demonstrate compliance with this permit, until at least three (3) years after coverage under this permit terminates. This period may be explicitly modified by alternative provisions of this permit or extended by request of the Director at any time.

# D. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

# E. Civil and Criminal Liability

1. Tampering

Any person, who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under this permit shall, upon conviction, be subject to penalties as provided by AWPCA.

2. False Statements

Any person knowingly makes any false statement, representation, or certification in any record or other documentation submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance, shall, upon conviction, be punished as provided by AWPCA

3. Relief from Liability

Nothing in this permit shall be construed to relieve the Permittee(s) of civil and criminal liability under AWPCA or FWPCA for non-compliance with any term or condition of this permit.

# F. Duty to Reapply

- 1. If the Permittee intends to continue an activity regulated by this permit beyond the expiration of this permit, the Permittee must apply for and obtain a new permit. The application shall be submitted via AEPACS at least 180 days prior to expiration of this permit.
- 2. Failure of the Permittee to apply for re-issuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code, Rule 335-6-6.-06, and should the permit not be re-issued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

# G. Need to Halt or Reduce an Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

# H. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

# I. Bypass

- a. Any bypass as defined in 40 CFR 122.41(m) is prohibited except as provided in Part V.I.b. and c.
- b. A bypass is not prohibited if:
  - 1. It does not cause any applicable discharge limitation, if specified in this Permit, to be exceeded;
  - 2. The discharge resulting from such bypass enters the same receiving water as the discharge from the permitted outfall, if applicable;
  - 3. It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system, if applicable; and
  - 4. The Permittee monitors the discharge resulting from such bypass at a frequency, at least daily, sufficient to prove compliance with the discharge limitations, if specified in this Permit.
- c. A bypass is not prohibited and need not meet the discharge limitations, if specified in this Permit, if:
  - 1. It is unavoidable to prevent loss of life, personal injury, or severe property damage;
  - 2. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the Permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
  - 3. The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days, if possible, prior to the anticipated bypass or within 24 hours of an unanticipated bypass, the Permittee is granted such authorization, and

Permittee complies with any conditions imposed by the Director to minimize any adverse impacts to waters resulting from the bypass.

d. The Permittee has the burden of establishing that each of the conditions of Parts V.I.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in Part V.I.a. and an exemption, where applicable, from the discharge limitations, if specified in this Permit.

# J. Upset

- a. Except as provided in Part V.I.b. and c., a discharge which results from an upset as defined in 40 CFR 122.41(n) need not met the applicable discharge limitations, if specified in this Permit if:
  - 1. No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director; and
  - 2. No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnished the Director with evidence, including properly signed, contemporaneous operating logs, design drawings, construction, certification, maintenance records, weir flow measurements, data photographs, rain gauge measurements, or other relevant evidence, demonstration that:
    - i. An upset occurred;
    - ii. The Permittee can identify the specific cause(s) of the upset;
    - iii. The Permittee's treatment facility was being properly operated at the time of the upset; and
    - iv. The Permittee promptly took all reasonable steps to minimize any adverse impact to waters resulting from the upset.
- b. The Permittee has the burden of establishing that each of the conditions of Part J.a. has been met to qualify for an exemption from the discharge limitations, if specified in this Permit.

# K. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, terminating, or revoking and reissuing this permit in whole or in part, or to determine compliance with this permit. The Permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.

# L. Other Information

If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

# M. Signatory Requirements

All reports and forms to be submitted by this permit, AWPCA and the Department's rules and regulations, shall be signed by a "responsible official" of the Permittee, as defined in ADEM Administrative Code, Rule 335-6-6-.09, or a "duly authorized representative" of such official, as defined by ADEM Administrative Code, Rule 335-6-6-.09, and shall bear the following certification:

"I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# N. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of FWPCA.

### **O. Property and Other Rights**

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of Federal, State, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the State of Alabama.

# P. Severability

The provision of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit shall not be affected thereby.

# Q. Compliance with Statutes and Rules

This permit is issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter that are applicable to this permit are hereby made a part of this permit. This permit does not authorize the non-compliance with or violation of any laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws.

# **R. Proper Operations and Maintenance**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a Permittee only when necessary to achieve compliance with conditions of the permit.

# S. Monitoring Records

- 1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- 2. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of reports required by this permit, and records of all data used to complete the application of this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended at the request of the Director at any time.

# T. Monitoring Methods

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

# U. Right of Entry and Inspection

The Permittee shall allow the Director or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon any of the permittee's premises where a regulated facility or activity or point source is located or in which any records must be maintained under conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records required to be maintained by the terms and conditions of this permit;
- 3. Inspect, at reasonable times, any point source, any monitoring equipment or practices being maintained to comply with this permit, or any treatment or control or systems being maintained to comply with this permit; and
- 4. Sample or monitor, at reasonable times, for the purposes of determining permit compliance or as otherwise authorized by AWPCA, any substances or parameters at any location.

# V. Additional Monitoring by the Permittee

If the Permittee monitors more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monitoring report. Such increased monitoring frequency shall also be indicated on the monitoring report.

# W. Permit Modification, Revocation and Reissuance, Suspension, and Termination

- 1. This permit may be modified or revoked and reissued, in whole or in part, during its term for cause including but not limited to, the following:
  - a. If cause for termination under Part V.D., of this permit exists, the Director may choose to revoke and re-issue this permit instead of terminating the permit;
  - b. If a request to transfer this permit has been received, the Director may decide to revoke and re-issue or to modify the permit; or
  - c. If modification or revocation and re-issuance is requested by the Permittee and cause exists, the Director may grant the request.
- 2. This permit may be modified during its term for cause, including but not limited to:
  - a. If cause for termination under Part V.D., of this permit exists, the Director may choose to modify this permit instead of terminating this permit;
  - b. The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;
  - c. Errors in calculation of discharge limitation or typographical or clerical errors were made;

- d. To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or judicial decision after the permit was issued;
- e. To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permit may be modified to change compliance schedules;
- f. To incorporate an applicable Section 307(a) of FWPCA toxic effluent standard or prohibition;
- g. When required by the re-opener conditions in this permit;
- h. Upon failure of the State to notify, as required by Section 402(b)(3) of FWPCA, another State whose water may be affected by a discharge permitted by this permit;
- i. When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions;
- j. When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or State law, rules, or regulations;
- k. To add a new Permittee who is the owner or operator of a portion of the Municipal Separate Storm Sewer System; or
- 1. To change portions of the Storm Water Quality Management Program that is considered permit conditions.
- 3. This permit may be terminated during its term for cause, including but not limited to, the following:
  - a. Violation of any term or condition of this permit;
  - b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance or the permittee's misrepresentation of any relevant facts at any time;
  - c. Materially false or inaccurate statements or information in the permit application or the permit;
  - d. The permittee's discharge threatens human life or welfare or the maintenance or water quality standards; or
  - e. Any other cause allowed by ADEM Administrative Code, Rule 335-6-6.
- 4. This permit may be suspended during its term for cause, including but not limited to, the reasons for termination listed above.
- 5. The filing of a request by the Permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term condition.

#### X. Termination of Coverage for a Single Permittee

Permit Coverage may be terminated, in accordance with the provision of 30 CFR 122.64 and 124.5, for a single Permittee without terminating coverage for other permittees.

# Y. Modification of Storm Water Management Program

Only those portions of the Storm Water Management Program specifically required as permit conditions shall be subject to modification requirements of 40 CFR 124.5. Replacement of an ineffective or infeasible BMP implementing a required component of the Storm Water Management Program with an alternate BMP expected to achieve the goals of the ineffective or infeasible BMP shall be considered a minor modification to the SWMPP and not modification to the Permit.

# Z. Changes in Monitoring Outfalls

This permit is issued on a system-wide basis in accordance with CWA 402(p)(3)(i) and authorizes discharges from all portions of the MS4. Since all outfalls are authorized, changes in monitoring outfalls, other than those with specific numeric effluent limitations, shall be considered minor modifications to the permit and will be made in accordance with the procedures at 40 CFR 122.63.

# AA. Definitions

- 1. "Alabama Handbook" means the latest edition of the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas, Alabama Soil and Water Conservation Committee (ASWCC) published at the time the permit is effective.
- 2. "<u>Arithmetic Mean</u>" means the summation of the individual values of any set values divided by the number of individual values.
- 3. "<u>AWPCA</u>" means <u>Code of Alabama</u> 1975, Title 22, the Alabama Water Pollution Control Act, as amended.
- 4. "<u>Best Management Practices</u>" (BMPs) means activities, prohibitions of practices, maintenance procedures, and other management practices implemented to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment systems, operating procedures, and practices to control facility runoff, spillage or leaks, sludge or water disposal, or drainage from raw material storage.
- 5. "Control Measure" as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.
- "CWA" or "The Act" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.
- 7. "Department" means the Alabama Department of Environmental Management or an authorized representative.
- 8. "Discharge", when used without a qualifier, refers to "discharge of a pollutant" as defined as ADEM Administrative Code 335-6-6.02(m).
- 9. "Flood Management Project" means a project that will alter, modify or change the base flood elevation of a 1% annual chance flood event.
- 10. "Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge at the time of sampling.

- 11. "Green Infrastructure" refers to systems and practices that use or mimic natural processes to infiltrate, evapotranspirate (the return of water to the atmosphere either through evaporation or by plants), or reuse stormwater or runoff on the site where it is generated.
- 12. "Hydrology" refers to the physical characteristics of storm water discharge, including the magnitude, duration, frequency, and timing of discharge.
- 13. "Illicit connection" means any man-made conveyance connecting a non-storm water discharge directly to a municipal separate storm sewer system.
- 14. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit.
- 15. "Industrial Land Use" means land utilized in connection with manufacturing, processing, or raw materials storage at facilities identified under Alabama State Law.
- 16. "Infiltration" means water other than wastewater that enters a sewer system, including foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
- 17. "Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.
- 18. "Large" municipal separate storm sewer system means all municipal separate storm sewers that are either:

a. Located in an incorporated place (city) with a population of 250,000 or more as determined by the latest decennial census; or

b. Located in counties (these counties are listed in Appendix H of 40 CFR 122), except municipal storm sewers that are located in the incorporated places, townships, or towns within such counties; or

c. Owned or operated by a municipality other than those described in Part V.AA.18.a. or b. and that are designated by the Director as part of the large or medium municipal separate storm sewer system; or

d. The Director may designate as a large municipal separate storm sewer system, municipal storm sewer located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional watershed, or other appropriate basis that includes one or more of the systems described in Part V.AA.18.a., b., or c.

- 19. "Low Impact Development" (LID) is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product.
- 20. "Major outfall" is the point(s) where the MS4 discharges to a water of the State from (1) a pipe (or closed conveyance) system with a cross-sectional area equal to or greater than 7.07 square feet (e.g., if a single circular pipe system, an inside diameter of 36 inches or greater),(2) a single conveyance other than a pipe, such as an open channel ditch, which is associated with a drainage area of more than 50 acres,(3) a pipe (or closed conveyance) system draining "industrial land use" with a cross-sectional area equal to or greater than 0.79 square feet (e.g., if a single circular
pipe system, an inside diameter of 12 inches or greater),(4) or a single conveyance other than a pipe, such as an open channel ditch, which is associated with an "industrial land use" drainage area of more than 2 acres; For the purpose of this permit, outfalls of the "double barrel" type, whose combined cross-sectional area is greater than 7.07 square feet, equivalent to a single circular pipe outfall with an inside diameter of 36 inches or greater, are also considered major outfalls.

- 21. "MEP" is an acronym for "Maximum Extent Practicable," the technology-based discharge standards and controls necessary for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). These standards and controls may consist of a combination of best management practices, control techniques, system design and engineering methods, and such other provisions for the reduction of pollutants discharged from a MS4 as described in the storm water management system.
- 22. "Medium" municipal separate storm sewer system means all municipal separate storm sewers that are either:

a. Located in an incorporated place (city) with a population of 100,000 or more but less than 250,000 as determined by the latest decennial census; or

b. Located in counties (these counties are listed in Appendix I of 40 CFR 122), except municipal separate storm sewers that are located in the incorporated places, townships, or towns within such counties; or

c. Owned or operated by a municipality other than those described in Parts V.AA.22.a. and b. and that are designated by the Director as part of the large or medium municipal separate storm sewer systems; or

d. The Director may designate as a medium municipal separate storm sewer system, municipal storm sewers located within the boundaries of a region defined by a stormwater management regional authority based on a jurisdictional watershed, or other appropriate basis that includes one or more of the systems as described in Parts V.AA.22.a., b., or c.

- 23. "MS4" is an acronym for "Municipal Separate Storm Sewer System" and is used to refer to either a large, medium, or small municipal separate storm sewer system. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities.
- 24. "Municipal Separate Storm System" is defined at 40 CFR Part 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined in ADEM Administrative Code335-6-6-.02(nn).
- 25. "Permittee" means each individual co-applicant for an NPDES permit who is only responsible for permit conditions relating to the discharge that they own or operate.
- 26. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling

stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

- 27. "Priority Construction Site" means any qualifying construction site in an area where the MS4 discharges to a waterbody which is listed on the most recently approved 303(d) list of impaired waters for turbidity, siltation, or sedimentation, any waterbody for which a TMDL has been finalized or approved by EPA for turbidity, siltation or sedimentation, any waterbody assigned the Outstanding Alabama Water use classification in accordance with ADEM Admin. Code r. 335-6-10-.09, and any waterbody assigned a special designation in accordance with 335-6-10-.10.
- 28. "Qualifying Construction Site" means any construction activity that results in a total land disturbance of one or more acres and activities that disturb less than one acre but are part of a larger common plan of development or sale that would disturb one or more acres. Qualifying construction sites do not include land disturbance conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission.
- 29. "Qualifying New Development and Redevelopment" means any site where construction commenced on or after July 1, 2018 that results from the disturbance of one acre or more of land or the disturbance of less than one acre of land if part of a larger common plan of development or sale that is greater than one acre. Qualifying new development and redevelopment does not include the following: land disturbances conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission or an existing development that has been constructed or approved prior to July 1, 2018.
- 30. "Storm water" is defined at 40 CFR Part 122.26(b)(13) and means storm water runoff, snow melt runoff, and surface runoff and drainage.
- 31. "Structural Controls" means an engineered BMP constructed with rigid walls and/or weirs and piped drainage that utilize active or passive treatment and/or mechanical systems for the purpose of treating storm water runoff.
- 32. "Structural Flood Control" means structural measures that control the 1% annual chance floodwaters by construction of barriers, storage areas or by modifying / redirecting channels.

#### **ORDINANCE NUMBER 2987**

## AN ORDINANCE RESCINDING ORDINANCE NUMBER 2769 AND AMENDING CHAPTER 5.5; ARTICLE II, ENTITLED "EROSION AND SEDIMENT CONTROL" OF THE VESTAVIA HILLS CODE OF ORDINANCES

## RECITALS

WHEREAS, on June 11, 2018, the City Council approved and adopted Ordinance Number 2769; and

WHEREAS, the Mayor and City Council feel it is in the best public interest to rescind Ordinance Number 2769 and further amend Chapter 5.5, Article II, Entitled "Erosion and Sediment Control" of the Vestavia Hills Code of Ordinances in its entirety; and

"WHEREAS, the sedimentation of streams, lakes and other waters of this state constitutes a major pollution problem; and

WHEREAS, sedimentation occurs from the erosion or depositing of soil and other materials into the waters, and control of erosion and sedimentation is deemed vital to the public interest and is necessary to the public health and welfare, and expenditures of funds for an erosion and sedimentation control program shall be deemed to benefit the public health and welfare; and

WHEREAS, the purpose of this ordinance is to provide for the creation, administration, control and enforcement of a program to reduce erosion and sedimentation problems pursuant to the National Pollutant Discharge Elimination System ("NPDES") permit ALS000017 from Alabama Department of Environmental Management ("ADEM") for storm water discharges from the Municipal Separate Storm Sewer System of the City of Vestavia Hills ("MS4"), which will permit the development in the City of Vestavia Hills, ("City") to continue with the least detrimental effects from pollution by sedimentation: and

WHEREAS, ADEM, pursuant to the authority delegated to it under the Clean Water Act, 33 U.S.C. Section 1251, *et seq.*, has required City to obtain a NPDES permit for storm water discharges from the MS4, effective March 1, 1995 and, therefore, City is subject to the federal storm water laws and regulations contained in 33 U.S.C. ¶ 1342 (P) and 40 C.F.R. 122.26, and is required to adopt a local erosion control ordinance. Act No. 95-775 of the Alabama State Legislature (Code of Alabama 1975, § 11-89C 1-14) and other

provisions of the Code of Alabama 1975 grant the authority to adopt such ordinances to the governing bodies of all Class 1 municipalities within the State of Alabama, to the governing bodies of counties in which Class 1 municipalities are located and to the governing bodies of all other municipalities located within such counties, and where any such other municipality is also located partially within an adjoining county, then the governing body of such adjoining county and which governing bodies are specifically designated in 40 C.F.R. part 122, Appendices F, G, H or I or by ADEM pursuant to the authority delegated to it under the Clean Water Act, 33 U.S.C. Section 1251, et *seq.;* and

WHEREAS, it is the purpose of this ordinance to protect and maintain the environment of the City and the short-term and long-term public health, safety and general welfare of the citizens of the City by controlling discharges of pollutants to the City's MS4, thereby, maintaining and improving the quality of the community waters into which the storm water outfalls flow, including, without limitation, the lakes, streams, ponds, wetlands, sinkholes and groundwater of the City; and

WHEREAS, this ordinance controls the discharge of certain non-storm water to the MS4 from land on which land-disturbing activities are conducted, to the maximum extent practicable, and provides enforcement procedures and penalties to ensure compliance with such controls; and

WHEREAS, it is further the purpose of this ordinance to enable the City to comply with the NPDES permit and applicable regulations (40 C.F.R. ¶ 122.26) for storm water discharges; and

WHEREAS, the objectives of this ordinance are to:

- a) Control:
  - i. the contribution of pollutants to the MS4 by storm water discharges associated with land-disturbing activities and
  - ii. the quality of storm water discharged to the MS4 from sites of landdisturbing activity;
- b) Prohibit illicit discharges to the MS4;
- c) Control the discharge to the MS4 of any spills, dumping or disposal of materials other than storm water from sites of land-disturbing activity; and
- d) Carry out all inspections, surveillance and monitoring procedures necessary to determine compliance and noncompliance with land-disturbing activity permits (singular, "Permit" and plural, "Permits").

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF VESTAVIA HILLS, ALABAMA ("CITY COUNCIL") THAT ORDINANCE NUMBER 2769 HEREBY RESCINDED AND THAT CHAPTER 5.5, ARTICLE II ENTITLED "EROSION AND SEDIMENT CONTROL" IS AMENDED IN ITS ENTIRETY, AS FOLLOWS:

## Article 1 DEFINITIONS

#### Section 1.01 Definitions.

For the purposes of this ordinance, the following words and terms shall have the meaning assigned to them in this section.

- Accidental Discharge a discharge prohibited by this Article into the MS4 or community water which occurs by chance and without planning or consideration prior to occurrence.
- Adverse Impact any deleterious effect on waters or wetlands, including their quality, quantity, surface area, species composition, aesthetics or usefulness for human or natural uses which are or may potentially be harmful or injurious to human health, welfare, safety or property or to biological productivity, diversity or stability, or which would unreasonably interfere with the enjoyment of life or property.
- Agriculture activities undertaken on land for the production of plants, crops, and animals which are useful to man.
- Alabama Department of Environmental Management (herein abbreviated as "ADEM")
  the State of Alabama regulatory agency, created under Code of Alabama 1975, §22-22A-1, et seq., responsible for administering and enforcing the storm water laws of the United States of America and the State of Alabama.
- Applicant any person, firm, corporation or governmental agency who executes the necessary forms to procure approval of Best Management Practices Plans from the Official.
- Best Management Practices (herein abbreviated as "BMP") activities, prohibitions of practices, maintenance procedures and management practices designed to prevent or reduce the pollution of waters to the MS4. Best Management Practices also include treatment requirements, operating procedures and practices to control facility site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage and construction sites.
- *Best Management Practices Plan* (herein abbreviated as "BMP Plan") a set of drawings and/or other documents submitted by a person as a prerequisite to obtaining a Permit, which contain all of the information and specifications pertaining to BMP.
- Clean Water Act (herein abbreviated as "CWA") the federal act (33 U.S.C. § 1251 through § 1387) which was formerly referred to as the Federal Water Pollution Control Act and Federal Water Pollution Control Act Amendments of 1972, Public

Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 6-483 and Public Law 97-117, 33 U.S.C.§ 1251-1387.

- *Clearing* the removal of trees and brush from the land, not including the ordinary mowing of grass or the maintenance of previously cleared areas.
- *Community Waters* any or all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of natural or artificial surface or subsurface water into which the MS4 outfalls flow.
- Contour a line of equal elevation above a specified datum, usually mean sea level.
- Contour Line a line joining points having or representing equal elevations.
- *Discharge* the passing of water or other liquid through an opening or along a pipe, conduit or channel; the rate of flow of water, silt, or other mobile substance which emerges from a pipe, conduit or channel, usually expressed as cubic feet per second, gallons per minute or million gallons per day.
- *Drainage* the removal of surface water from a given area either by gravity or by pumping; commonly applied to surface water and groundwater.
- Drainage Area that area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridge line; the area of a drainage basin or watershed, expressed in acres, square miles or other unit of area.
- *Engineer* a person currently licensed by the Alabama State Board of Registration for Professional Engineers and Land Surveyors to provide engineering services.
- Erosion wearing away of lands by running water.
- Erosion Control the application of measures to reduce erosion of land surfaces.
- Grading any act by which soil is cleared, stripped, stockpiled, excavated, scarified or filled, or any combination thereof.
- *Illicit Connection* any man-made conveyance connecting an illicit discharge directly to the MS4.
- *Illicit Discharge* any discharge that is not composed entirely of storm water, except discharges pursuant to a NPDES permit (other than NPDES Permit ALS000001) and discharges which are specifically excepted from this ordinance.
- *Minor Extension* an addition to an existing utility pipeline or other utility line in which the land disturbed consists of fewer than 7,500 linear feet.
- Municipal Separate Storm Sewer (herein abbreviated as "MS3") a conveyance or conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels and storm drains), owned or operated by a city, town or county or other public body (created by, or pursuant to, State law) having jurisdiction over storm water.
- Municipal Separate Storm Sewer System (herein abbreviated as "MS4") a system of municipal separate storm sewers, as defined hereinbefore.
- NPDES National Pollutant Discharge Elimination System.
- *Outfall* a point source (meaning any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container rolling stock, concentrated animal feeding operation, landfill leach ate collection system, vessel or other floating craft from which pollutants are or may be discharged, but not including return flows from irrigated agriculture or agricultural water runoff) at the point of a discharge to waters of the United States of America.
- Permit any permit issued pursuant to this ordinance.

*Permittee* - a person, party, government entity and all others who receive a permit to discharge under the NPDES.

Pollutant - includes, but is not limited to, the pollutants specified in Code of Alabama 1975, § 22-22-1(b) (3) and any other effluent characteristics specified in a Permit.
 Pollutant Loading - the amount of a pollutant entering the MS4.

Qualified Credentialed Professional - a Certified Professional in Erosion and Sediment Control ("CPESC") as determined by the Soil and Water Conservation Society ("SWCS") or the International Erosion Control Association ("IECA"). Other registered or certified professionals such as a professional engineer or a landscape architect, registered land surveyor, registered architect, registered geologist, registered forester, Registered Environmental Manager as determined by the National Registry of Environmental Professionals ("NREP"), Certified Professional Soil Scientist ("CPSS") as determined by the American Registry of Certified Professionals in Agronomy, Crops and Soils ("ARCPACS"), who can document the necessary education, training, and professional certification, registration, or credentials acceptable to the Official and can demonstrate proven experience in the field of erosion and sediment control shall be considered a qualified credentialed professional. The qualified credentialed professional must be in good standing with the authority granting the registration. The qualified credentialed professional must be familiar, and have expertise, with current industry standards for erosion and sediment controls and must be able to inspect and assure that nonstructural BMPs or other pollution control devices (silt fences, erosion control fabric, rock check devices, etc.) and erosion control efforts, such as grading, mulching, seeding and growth management, or management strategies have been properly implemented and regularly maintained according to good engineering practices and the requirements of this permit. A professional engineer ("PE") registered in the state of Alabama must certify the design and construction of structural practices such as spill prevention control and counter measures ("SPCC") plan containment structures, dam construction, etc.

- Sediment solid material settled from suspension in a liquid that has been transported and deposited from its site of origin by air, water, ice or gravity as a product of erosion and has come to rest on the earth's surface either above or below a water surface, usually, inorganic or organic particles originating from weathering, chemical precipitation, or biological activity.
- Silviculture the care and cultivation of forest trees, including site preparation, planting, pruning, thinning and harvesting.
- Site any tract, lot or parcel of land or combination of contiguous tracts, lots or parcels of land which are in one ownership, and any combination of tracts, lots and parcels which are contiguous, are owned by two or more parties and are to be developed as a unit, subdivision or project.
- Stabilization the prevention of soil movement by any of various vegetative and/or structural means.
- Storm Water the excess water running off from the surface of a drainage area during and immediately after a period of rain. It is that portion of the rainfall and resulting surface flow that is in excess of that which can be absorbed through the infiltration capacity of the surface of the basin.
- Storm Water Management the incorporation of a variety of activities and equipment

into a plan to address concerns associated with Storm Water for the purpose of preventing pollution, improving water quality, keeping pollutants out of runoff, and the implementation of Best Management Practices.

- Storm Water Management Program (herein referred to as "the Management Program" or "the Program") - a program which covers the duration of the permit. It shall include a comprehensive planning process which involves public participation and, where necessary, intergovernmental coordination, to reduce the discharge of pollutants, to the maximum extent practicable, using management practices control techniques and system design and engineering methods and such other provisions which are appropriate.
- Storm Water Permit a permit which grants permission to the holder to discharge storm water to the MS4 under the NPDES.
- Stream a course of running water usually flowing in a particular direction in a definite channel and discharging into some other course of running water or body of water.
- Structural Controls measures incorporated into existing Storm Water drainage systems or newly constructed systems to prevent or minimize the discharge of pollutants for the purpose of maintaining and/or improving water quantity and quality management; quantitative control by a system of vegetative and structural measures that control the increased volume and rate of surface runoff caused by man-made changes to the land; qualitative control by a system of vegetative, structural and other measures that reduce or eliminate pollutants that might otherwise be carried by surface runoff.
- *Turbidity* a condition in water or wastewater caused by the presence of suspended matter, resulting in the scattering and absorption of light rays. A measure of fine suspended matter in liquids.
- *Utility* a business or service which is engaged in regularly supplying the public with some commodity or service which is of public consequence and need, such as electricity, gas, water, telephone service and telegraph service.
- *Variance* the modification of the minimum storm water management requirements in situations in which exceptional circumstances, applicable to the site with respect to which the variance is requested, exist so that strict adherence to the provisions of this ordinance would result in unnecessary hardship and the granting of such modification would not result in a condition contrary to the intent of this ordinance.

## Article 2 ADMINISTRATION

## Section 2.01

The municipal engineer for the City, the municipal official or employee who is a qualified credentialed professional, such other municipal official or municipal employee who has had sufficient experience dealing with BMP design to enable them to enforce the provisions of this ordinance, an individual or agency contracted to provide such service, shall be responsible, on behalf of the City ("Official"), to enforce the provisions of this ordinance (whenever the word "Official" is used in this ordinance, it shall include the authorized agent of the Official).

# Article 3 APPLICATION AND FEES

## Section 3.01 Application.

- a. Before the commencement of any land-disturbing activity that is not exempted from obtaining a Permit under this ordinance, the owner of the land on which such activity shall be conducted, or his duly authorized agent, must file with the Department of Building Safety an application for the approval of the owner's BMP Plan. The Official must either approve or disapprove the BMP Plan within fourteen (14) days of the day it is filed with the Official. If the BMP Plan is disapproved, the Official must inform the Applicant, in writing, of the reasons for its disapproval. If the Applicant, on one or more occasions, revises the BMP Plan or submits to the Official additional documents or information in connection with the BMP Plan, the Official must make a written response to the Applicant with respect to whether such revised BMP Plan and/or additional documents and information have been approved or disapproved by the Official. All such additional responses must be made by the Official to the Applicant within fourteen (14) days of the day such revised BMP Plan or additional documents or information are submitted to the Official. The landdisturbing activity may not be commenced prior to the issuance of the Permit by the Official. The issuance of the Permit shall not excuse the owner from the need to obtain other required state and local permits or licenses.
- b. The minimum standards for the issuance of a Permit must meet the requirements of this ordinance
- c. Facilities that are covered under an ADEM NPDES permit for storm water discharge associated with construction activities ("ADEM NPDES permit") shall submit an ADEM Notice of Registration (NOR) with their application. The Notice of Intent (NOI) may be provided until the NOR is received from ADEM. Copies of all monitoring data and reports shall be submitted to the City in the same manner as they are submitted to ADEM and in the frequency specified by the City.

## Section 3.02 Permit Application Fee.

Each application for the issuance of a Permit shall be accompanied by a non-refundable fee of four hundred dollars (\$400), for individual single-family residences and one thousand dollars (\$1000), for all other types of land disturbing activities, to help defray the City's cost of processing and reviewing the application and the inspections associated with the application. Sites that are required to have Post-Construction controls as stated in Ordinance Number 2987 will have an additional fee of two thousand dollars (\$2000) to defray the City's cost of processing and reviewing and reviewing the structure's design and the associated inspection and maintenance BMPs. The applicant must submit three sets of its BMP Plan with its application and fee to the Official.

When work requiring a Land Disturbance Permit is commenced prior to obtaining the permit, the permit applicant shall be required to pay a penalty of one hundred dollars (\$100.00) plus a double permit fee. The payment of the required fee shall not relieve any person from fully complying with all of the requirements of all applicable regulations and codes, nor shall it provide relief from being subject to any of the penalties therein.

## Section 3.03 Post Construction Annual Issuance Fee.

An annual issuance fee of \$50.00 will be paid to the City to defray the administrative cost of inspecting Post-Construction controls and maintaining inspection records.

## Section 3.04 Data Required on the Application for a Permit.

- a. All applications for a Permit must include the following information:
  - 1. name of Applicant;
  - 2. telephone number and e-mail address of applicant;
  - 3. address where Applicant, or other person who can furnish information about the land-disturbing activity can be reached;
  - 4. name, address, telephone number, and e-mail address of the owner of the project, the owner of the property on which the project is to be located and the ground lessee of the property, if any, on which the land-disturbing activity is to be conducted if the applicant is not the owner of the project and such property;
  - 5. legal description and address, if any, of the property upon which the landdisturbing activity is to be conducted;
  - 6. names, addresses, telephone numbers, and e-mail addresses of all contractors and subcontractors who shall implement any BMP Plan; provided, however, that if the contractor and the subcontractors have not been selected when the application for a permit is filed, the Applicant shall furnish such information to the Official within five (5) days of the day or days on which the contractor and/or subcontractors are selected;
  - 7. name, address, telephone number, and e-mail address of the qualified credentialed professional who has approved the BMP Plan application (this is required for all land-disturbing activities except those related to the construction of individual single-family residences);
  - 8. each application for a Permit must be accompanied by a map or a plot of the land on which the land-disturbing activity will be conducted and any other information that is required under the provisions of Article 5.
- b. The detail of the BMP Plan must be commensurate with the size of the project, severity of the site condition and potential for off-site damage, as provided in Article 5

## Section 3.05 Maintenance of Records.

Records of compliance with the provisions of the Permit shall be maintained in the office of the owner or the applicant, shall be available to the Contact Person and shall be made available at any time for review by the Official; provided, that if such records are maintained without the State of Alabama and, because of their size, cannot be transmitted to the Official by email, such records must be delivered to the Official (at no expense to the City or the Official) within forty-eight (48) hours of receipt of request for such records.

## Section 3.06 Amended Application; Transfer of Permit.

a. A Permit may be amended, without the payment of an additional fee, upon the filing with the Official of an amended or restated Permit application, containing all

changes from the original application; provided, that the holder of the Permit shows to the reasonable satisfaction of the Official that there are no proposed changes which may affect the quantity and/or quality of storm water runoff. If an amended or restated application is filed with the Official with respect to land-disturbing activities for which a Permit has been issued, such existing Permit shall continue in effect, and the holder of the Permit may continue to operate under it unless and until an amended Permit is issued in response to the amended or restated application ("Amended Permit") at which time the original Permit shall expire and all land-disturbing activities must be conducted in accordance with the Amended Permit.

b. A Permit may be transferred, without the payment of an additional fee, upon the filing with the Official of an application for transfer; provided, that the holder and proposed transferee of the Permit show to the reasonable satisfaction of the Official that, upon or following the transfer, there will be no proposed changes which may affect the quantity and/or quality of storm water runoff. If there is a request for the transfer of a Permit and there are to be one or more changes in the operation of the project which is the source of the land-disturbing activity which may affect the quantity and/or quality of storm water runoff, the new owner or operator of such project must apply to the City for a new Permit prior to his involvement with the operation of such project.

# Section 3.07 Signatory Requirements.

- a) All applications and correspondence required by this ordinance to be submitted to the Official shall be signed as follows:
  - If an application or correspondence is submitted by a corporation, it must be signed by the president of the corporation or by a vice-president of the corporation who is in charge of a principal business function of the corporation, or any other person who performs similar policy-making or decision-making functions for the corporation, or who has been authorized to sign such applications and/or correspondence by a resolution adopted by the board of directors of the corporation. Proof of the authority of the signatory shall be provided to the Official, upon his request.
  - 2. If an application or correspondence is submitted by a limited liability company, it must be signed by a manager or other person who serves the same or similar function as the president of a corporation.
  - 3. If an application or correspondence is submitted by a partnership, it must be signed by a general partner of the partnership.
  - 4. If an application or correspondence is submitted by a sole proprietorship, it must be signed by the proprietor.
  - 5. If an application or correspondence is submitted by a municipality, the State or the federal government or by any municipal, state or federal agency, it must be signed by either the chief executive officer or a principal executive officer of any such government or by either the chief executive officer, a principal executive officer or a senior executive officer having responsibility for the overall operations of a principal geographic unit of any such governmental agency.
- b) Any person signing any application or correspondence required by this ordinance shall make the following certification: "I certify, under penalty of law,

that this document and all attachments were prepared under my direction or supervision and that I have personally examined, and I am familiar with, the information in this document and such attachments. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and civil penalty.

# Article 4 EXCLUSION

## Section 4.01

No person may conduct any land-disturbing activity without having obtained a Permit from the Official.

# Section 4.02

Land-disturbing activities shall include any land change which may result in soil erosion from water or wind and the movement of sediment to the MS4, including, but not limited to, the clearing, dredging, grading, excavating, transporting and filling of land, except that the term shall not include the following:

- a) Any land change on property about which the owner of the property has submitted information to the Authority proving, to the satisfaction of the Authority, that such property does not drain to the MS4. Such information may be submitted to the Official, who shall promptly deliver it to the Authority, and the determination as to whether such property drains to the MS4 shall be made by the Authority.
- b) Agriculture.
- c) Silviculture.
- d) Such minor land-disturbing activities as home gardens, landscaping on individual residential lots (excluding landscaping performed by, or on behalf of, a developer or builder, who builds a house on any such lot), home repairs, home maintenance work, minor additions to houses, the construction, maintenance or repair of accessory structures and other related activities which result in minor soil erosion. Minor land-disturbing activities typically are considered to result in soil disturbance less than 500 sf, but, in all cases, are subject to the Official's discretion.
- e) Minor land-disturbing activities such as individual connections for utility services and sewer services for single or two-family residences, minor grading for driveways, yard areas and sidewalks, excluding any grading done by, or on behalf of, a developer or builder in connection with the construction of a house. Minor land-disturbing activities typically are considered to result in soil disturbance less than 500 sf, but, in all cases, are subject to the Official's discretion.
- f) Minor maintenance, minor repair, and the minor extension of any existing underground public utility lines, except sewer lines; provided, that the utility company which owns such lines has received approval of a general BMP Plan from the Authority for such maintenance, repair, and extension; and provided further, that any utility company making a minor extension in connection with which the land disturbed consists of more than 1,000 linear feet must give the Official written notice of such extension prior to the commencement of such minor extension.
- g) The construction, repair or rebuilding of railroad tracks.
- h) Minor subsurface exploratory excavations under the direction of soils engineers or engineering geologists.
- i) The opening of individual burial sites in property which has been approved for such use by all necessary governmental authorities.
- j) Digging of water wells or environmental monitoring wells.

The activities referred to in items (b) through (i) above may be undertaken without a Permit; however, the persons conducting these excluded activities shall remain responsible for otherwise conducting such activities in accordance with the provisions of this ordinance and any other applicable law, including the proper control of sedimentation and runoff to the MS4. This ordinance shall apply to such land-disturbing activities that drain to the MS4 if a storm water pollution problem is shown to be caused by such activity following monitoring procedures and complaints.

# Article 5 BMP APPROVAL REQUIREMENTS

## Section 5.01 General Requirements.

No land-disturbing activity shall be conducted within the City until a Permit has been issued by the Official allowing such activity pursuant to the provisions of this ordinance. The following are BMP approval requirements:

(a) Persons conducting land-disturbing activities shall take all reasonable measures referred to, or provided for, in this ordinance to protect all public and private property from damage caused by such activities and to reduce storm water pollution to the maximum extent practicable.

No land-disturbing activities subject to this ordinance shall be undertaken

- (b) except in accordance with the following requirements:
  - 1. The person(s) proposing to conduct any land-disturbing activity or an agent, contractor or other representative of such person must contact the Official at least five (5) business days before commencement of the land-disturbing activity to advise the Official of the commencement of such land-disturbing activity, unless, for good cause shown, the Official permits such person, contractor, agent or other representative to contact him nearer to the date of the commencement of such land-disturbing activity.
  - 2. Other than land-clearing activities required to install the appropriate BMP in accordance with BMP Plans, any down slope erosion and sediment control measures, on-site stream channel protection and upslope diversion of drainage required by the BMP Plan shall be in place and functional before any clearing or earth- moving operations begin, and shall be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workday, but shall be replaced at the end of the workday.
  - 3. The angle for graded slopes and fills shall be no greater than the angle, which can be retained by vegetative cover or other adequate erosion control devices or structures. Any slope or fill which has been graded shall, within fourteen (14) days of the completion of such grading or the completion of any phase of grading, be planted or otherwise provided with ground cover, materials, devices or structures sufficient to restrain erosion. The BMPs shall remain in place in accordance with the BMP Plan until the graded slope or fill is stabilized.
  - 4. Adequate protective measures shall be provided for the containment of hazardous substances and any other materials which may pollute the MS4, including petroleum products, lubricants and paint.
  - 5. All control measures shall be checked, and repaired as necessary, monthly in dry periods and within twenty-four (24) hours after any rainfall at the site of 0.75 inch within a twenty-four (24)-hour period. During prolonged rainfalls, daily checking and, if necessary, repairing shall be done. The Permittee shall maintain written records of such checks and repairs, which records shall be subject to the inspection of the Official at any reasonable time.
  - 6. The BMP Plan shall show the size of disturbed area and a schedule of the projected starting and completion dates of the land- disturbing activity.

- 7. A site plan, accompanied by a written description of BMPs which are shown on the site plan and a schedule of implementation during land-disturbing activities and construction shall be furnished to the Official prior to the commencement of any land-disturbing activities.
- 8. A description of, and procedures for, proper storage, handling and disposal of construction materials stored on-site which could contribute to the pollutant loading to the MS4, shall be furnished to the Official prior to the commencement of any land-disturbing activities.

## Section 5.02 Design and Performance Standards.

The following are required for all land-disturbing activities except those related to the construction of individual single-family residences.

All applications for a Permit must contain, or be accompanied by, the materials and information necessary to satisfy the requirements of Sections 5.01 and 5.02 and must be accompanied by a soil erosion and sediment control plan ("Control Plan"). The Control Plan shall be prepared by a Qualified Credentialed Professional and shall include the following:

- (a) The Control Plan shall be accompanied by a map or plot of the property upon which land-disturbing activities are to be conducted, prepared by a registered land surveyor, showing the present contour lines of such property, and the present contour lines of at least the nearest twenty-five (25) feet of the properties immediately adjacent to such property and the existing grades and elevations of all streets which abut such property. Such map or plot shall show all existing drainage facilities and all natural drainage on such property and on such adjacent property.
- (b) All proposed contours, the proposed temporary and permanent disposition of surface water and the proposed drainage structures; provided, however, the Control Plans for utility projects, except sewer projects, shall not be required to show the proposed contours.
- (c) The proposed contours in the map or plot shall be depicted in contour intervals of two (2) or fewer feet; provided, however, the Control Plans for utility projects, except sewer projects, shall not be required to show the proposed contours. All maps, plots and plans submitted shall be on a sheet of paper at least twenty-four (24) inches by thirty-six (36) inches and drawn to a scale of not less than one inch equals 100 feet. Contour intervals of more than two (2) feet and maps, plots or plans which are smaller than the required size may be approved by the Official, upon written request and for good cause shown.
- (d) The Control Plan shall contain a description of the existing site conditions, a description of adjacent topographical features, the information necessary to determine the erosion qualities of the soil on the site, potential problem areas of soil and erosion and sedimentation, soil stabilization specifications, storm water management considerations, a projected time schedule for the commencement and completion of the land-disturbing activity, specifications for BMP Plan maintenance during the project and after the completion of the project, clearing and grading limits, and all other information needed to depict accurately the solutions to potential soil erosion and sedimentation problems to the MS4. The Control Plan shall include the series of BMPs and shall be reviewed by, and subject to the approval of,

the Official prior to the issuance of the Permit.

- (e) Where appropriate, in the opinion of the qualified credentialed professional who prepares the Control Plan, to the maximum extent practicable, the Control Plan shall include measures to reduce erosion and other adverse impact to MS4 drainage which would result from an increase in the volume of water and the rate of runoff of water during the conduct of land-disturbing activities.
- (f) Whenever the Official determines that a Control Plan does not comply with this ordinance, he shall notify the applicant in writing of the ways in which the Control Plan does not comply with this ordinance.
- (g) To the maximum extent practicable, sediment in runoff water must be minimized by using appropriate BMPs.
- (h) Structural controls shall be designed and maintained as required to minimize erosion and pollution to the maximum extent practicable. All surface water flowing toward the construction area shall, to the maximum extent practicable, either be passed through the site in a protected channel or diverted by using berms, channels or sediment traps, as necessary. Erosion and sediment control measures shall be designed, according to the size and slope of the disturbed areas or drainage areas, to minimize erosion and to control sediment, to the maximum extent practicable. Discharges from sediment basins and traps must be conducted in a manner consistent with good engineering practices. Sediment-laden, or otherwise polluted, water discharged to MS4 must be addressed in a manner consistent with good engineering practices and the requirements of this ordinance.
- (i) Control measures shall be maintained as an effective barrier to sedimentation and erosion in accordance with the provisions of this ordinance.
- (j) There shall be no distinctly visible floating scum, oil or other matter contained in the storm water discharge. The storm water discharge to an MS4 must not cause an unnatural color (except dyes or other substances discharged to an MS4 for the purpose of environmental studies and which do not have a harmful effect on the bodies of water within the MS4) or odor in the community waters. The storm water discharge to the MS4 must result in no materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life or fish and aquatic life in the community waters.
- (k) When the land-disturbing activity is finished and stable vegetation or other permanent controls have been established on all remaining exposed soil, the owner of the land where the land- disturbing activity was conducted, or his authorized agent, shall notify the Official of these facts, and request a final inspection. The Official shall then inspect the site within five (5) working days after receipt of the notice, and may require additional measures to stabilize the soil and control erosion If additional measures are required by the Official, written and sedimentation. notice of such additional measures shall be delivered to the owner, and the owner shall continue to be covered by the Permit issued with respect to the land-disturbing activity until a final and complete inspection is made and the Official approves the project as having been satisfactorily completed and delivers to the owner, within ten (10) days of the date of such approval, a certification of completion showing that the requirements of the Permit have been fulfilled. At that time the site and/or the project constructed thereon may come under the operation of other ordinances of the City.

- (1) The Control Plan must be accompanied by a letter of credit, a surety bond or a cash bond, with the City having the right to determine which type of security shall be furnished. A letter of credit, a surety bond or a cash bond (a letter of credit, a surety bond and a cash bond shall be herein collectively referred to as "Security") shall be furnished to the City in accordance with the following provisions:
  - 1. The Official shall require a letter of credit, a surety bond or a cash bond in such amount as specified herein to assure that the work, if not completed or if not in accordance with the permitted plans and specifications will be corrected to eliminate hazardous conditions, erosion and/or drainage problems. In lieu of a letter of credit or a surety bond required by the City, the owner may file a cash bond with the City in an amount equal to that which would be required in the letter of credit or the surety bond.
  - 2. The Security shall contain, or have attached to it as an exhibit, a legal description of the site. The Security shall remain in effect for such reasonable period of time as may be required by the Official.
  - 3. The Security for clearing operations only shall be in the amount of \$2,000 per acre for each acre, or fraction of an acre, disturbed or affected by such operations.
  - 4. The Security for earthwork or clearing and earthwork operations shall be in the amount of \$5,000 per acre for each acre, or fraction of an acre, disturbed or affected by such operations.
  - 5. The Security for earthwork or clearing and earthwork operations for an individual single-family residence may be reduced to \$3,000 with proof of completion of either the Jefferson County Erosion Workshop or the Qualified Credentialed Inspector (QCI) certification.
  - 6. Security equal to double the amounts required in subsections (3) and (4) herein, shall be required where clearing or earthwork is performed in areas designated as floodways, floodplains or areas susceptible to landslides.
  - 7. Each letter of credit must be issued by a bank which has its principal office in Jefferson County, Alabama.
  - 8. Each letter of credit must be issued by a bank which is reasonably satisfactory to the City and each surety bond must be issued by a surety company which is qualified to do business in Alabama and which is otherwise reasonably satisfactory to the City.

## Article 6 MONITORING AND INSPECTION

#### Section 6.01

The Official may periodically monitor the quality of storm water and the concentration of pollutants in storm water discharges from land-disturbing activities permitted to the MS4 pursuant to this ordinance.

## Section 6.02 Inspections.

- The Official, bearing proper identification, may enter and inspect all land-(a) disturbing activities for regular periodic inspections, investigations, monitoring, observations, measurements, enforcement, sampling and testing to verify compliance with the provisions of this ordinance and the specific BMP Plans and Control Plans for such land-disturbing activities. The Official shall notify the owner of such property, his Contact Person or his representative on the construction site prior to inspection, and the inspections shall be conducted at The owner or operator of a construction site with respect to reasonable times. which an NPDES permit has been issued shall provide the Official with the information required in Section 3.01(c) prior to the commencement of the work on the construction site. The Official shall inspect the construction site to confirm the implementation and the maintenance of BMP Plans, otherwise, such site shall be inspected when the Official believes, as a result of complaints or monitoring activity, that land-disturbing activities on the site are causing a substantial pollutant loading which threatens the MS4.
- (b) Upon the refusal by any property owner to allow the Official to enter, or to continue an inspection on, a site on which land-disturbing activities or construction work is being done, the Official shall terminate the inspection or confine the inspection to areas to which no objection is raised. If an agent of the Official was making, or attempting to make, such inspection, the agent shall promptly report to the Official the refusal and the reasons for the refusal, if the reasons are known by the agent. The Official may seek appropriate legal remedies to enable him to make or complete such Inspection, including seeking appropriate legal remedies from any court having jurisdiction over the matter. If the court grants a remedy to the Official, the property owner must reimburse the City all of the costs and expenses incurred by the City in obtaining such remedy, including court costs and reasonable attorneys' fees.
- (c) If the Official has reasonable cause to believe that discharges from the landdisturbing activities to the MS4 may cause an imminent threat to human health or the environment, an inspection of the site may take place at any time and without notice to the owner of the property or a representative on site. The Official shall present proper credentials upon request of the owner or his representative.
- (d) At any time during the conduct of an inspection, or at such other times as the Official may request information from an owner or his representative, the owner or representative may identify areas of its business, material or processes which contain a trade secret and an inspection of which might reveal such trade secret. If the Official has no clear and convincing reason to question such assertion of the owner or his representative, the inspection report shall note that trade secret

information has been omitted. To the extent practicable, the Official shall protect all information which is designated as a trade secret by the owner or his representative.

# Article 7 ENFORCEMENT AND ABATEMENT

# Section 7.01 NPDES Permits for Storm Water Discharge Associated with Construction Activities.

- a. No enforcement action shall be taken by the City for a violation of the terms of this ordinance if any of the following has occurred:
  - ADEM has issued a notice of violation with respect to the same alleged violation and is proceeding with an enforcement action with respect to such alleged violation;
    - ADEM has issued an administrative order with respect to the same
  - 2. alleged violation and is proceeding with an enforcement action with respect to such violation; or
  - 3. ADEM has commenced, and is proceeding with, an enforcement action, or has completed any other type of administrative or civil action, with respect to such alleged violation.
- b. Any determination or resolution made by ADEM with respect to an alleged violation shall be final, and the alleged violation shall not be made the subject of any additional enforcement action by the City; provided, however, that an enforcement action may be pursued by the City for continued or continuing substantial violations, subject to the provisions of Section 7.03(b) and pursuant to the following:
  - 1. ADEM will provide the Official with access to the ADEM NPDES permits issued with respect to each property within its jurisdiction, including inspections and notification of any enforcement actions taken by ADEM.
  - 2. The Official will notify ADEM and the permit holder, in writing, when the Official demonstrates that an NPDES permit holder is causing a substantial pollutant loading to the MS4.
  - 3. The Official may rely on ADEM to regulate, and to take enforcement actions against Permittees until such time as a Permittee is in continuing substantial violation of its NPDES permit and ADEM has failed to respond in a timely manner in accordance with Code of Alabama 1975, § 11-89C-1 et seq. If there is a continuing substantial violation of an ADEM NPDES permit and ADEM fails to respond as stated above, the Permittee shall be subject to this ordinance for that violation.

# Section 7.02 Immediate Threats to Public Health or Welfare.

Notwithstanding any other provision in this ordinance to the contrary, in the event of an immediate threat to the public health or welfare, the Official may take all appropriate measures to remove or alleviate such threat.

# Section 7.03 Notification; Enforcement Remedies.

- a. <u>Verbal Warning</u>: Whenever the Official finds that any person is in violation of any provision of this ordinance, or any order issued hereunder, the Official or his agent may serve upon such person a verbal warning of violation. This level of warning is intended for minor violations that would not cause significant harm to the environment.
- b. Notification of Violation: Whenever the Official finds that any person is in violation

of any provision of this ordinance, or any order issued hereunder, the Official or his agent may serve upon such person written notice of the violation. Within ten (10) calendar days of the date of such notice, an explanation of the violation and a plan for the satisfactory correction and future prevention thereof, including specific required actions, shall be submitted to the Official. Submission of such plan shall in no way relieve such person in violation of this ordinance of liability for any violations occurring before or after receipt of the notice of violation.

- c. <u>Compliance Order</u>: When the Official finds that any person has violated, or continues to violate, this ordinance, or has not completed remedial measures described in a previously issued Notice of Violation by the date set forth for such completion in the Notice of Violation, he may issue a compliance order to the violator, directing that, within a specified time period, adequate structures and devices be installed, or procedures implemented, and properly operated, or other action be taken, to remedy such violation. Compliance orders may also contain such other requirements as may be reasonably necessary and appropriate to address such violation, including the construction of appropriate structures, installation of devices and self-monitoring and management practices.
- d. <u>Stop Work Order</u>: When the Official finds that any person has violated, or continues to violate, this ordinance or any order issued under this ordinance; the Official may issue a Stop Work Order to such person to cease and desist all operations on the jobsite in violation immediately. The Stop Work Order shall remain in effect until the applicant or other responsible person has taken the remedial measures set forth in the Notice of Violation or Compliance Order issued. Work associated with BMP installation or maintenance may be allowed under Stop Work Order, if specified in the Order. A Stop Work Order can be issued in conjunction with other enforcement actions.
- e. <u>Violation of a Compliance Order or Repeated Unresolved Notices of Violation:</u> The penalty for violation of a Compliance Order or for repeated unresolved Notices of Violation shall be a fine in the amount of \$200 for a single-family residential site and \$400 for all other sites. Said fine shall be paid to the Building Safety Department within 5 working days of issuance. Payment of said fine does not relieve the applicant of obligations to comply with all other provisions of the Ordinance.
- f. Revocation of Permit and Forfeiture of Surety: When the Official finds that any person continues to violate provisions of this Ordinance, even after having been assessed a fine, the Official may officially revoke the Permit. Revocation of the Permit will also result in forfeiture of the associated surety. Said surety will be used to restore the site in such a way to eliminate hazardous conditions, erosion and/or drainage problems.

## Section 7.04 Unlawful Acts, Misdemeanor.

It shall be unlawful for any person to:

- a. violate any provision of this ordinance;
- b. violate the provisions of any Permit issued pursuant to this ordinance; Such person shall be guilty of a misdemeanor; and each day of such violation, failure or refusal to comply with this ordinance shall be deemed a separate offense and punishable accordingly. Any person found to be in violation of any of the provisions of this ordinance shall be punished by a fine of not less than \$100.00 and not more

than \$500.00 and/or up to 180 days in jail.

# Section 7.05 Judicial Proceedings and Relief.

- a. The Official may initiate proceedings in any court of competent jurisdiction against any person who has, or who, the Official has reason to believe, is about to:
  - 1. violate any provision of this ordinance;
  - 2. violate any provision of a Permit;
  - 3. fail or refuse to comply with any lawful order issued by the Official.
- b. The Official, with the consent of the City Council, may also initiate civil proceedings in any court of competent jurisdiction seeking monetary damages for any damages caused to public storm water facilities by any person, and may seek injunctive or other equitable relief to enforce compliance with the provisions of this ordinance or to force compliance with any lawful orders of the Official or the Board.

# Article 8 MISCELLANEOUS

## Section 8.01 Notices.

Whenever the City is required or permitted to:

- give a notice to any party except a Verbal Warning, such notice must be in writing; or
- b. deliver a document to any party; such notice or document may be delivered by personal delivery, certified mail (return receipt requested), registered mail (return receipt requested) or a generally recognized overnight carrier, to the address of such party which is in the records of the City or is otherwise known to the City.

## Section 8.02 References.

Whenever an Article or Section is referred to in this ordinance, unless the context clearly indicates the contrary, such reference shall be to an article or section of this ordinance.

#### Section 8.03 Severability.

The provisions of this ordinance are severable. If any part of this ordinance is determined by a court of law to be invalid, unenforceable or unconstitutional, such determination shall not affect any other part of this ordinance.

#### Section 8.04 Captions.

The captions of articles and sections are for the purpose of reference only, and such captions shall not affect the meaning of any provision of this ordinance.

## Section 8.05 Effective Date.

This ordinance shall be published as required by law and shall become effective on the 1st day of January, 2021.

DONE, ORDERED, ADOPTED and APPROVED this the 28th day of December. 2020.

Ashley C. Curry

Mayor

ATTESTED BY:

Rebecca Leavings City Clerk

Ordinance Number 2987 Page 24

#### **CERTIFICATION:**

I, Rebecca H. Leavings, as City Clerk of the City of Vestavia Hills, Alabama, hereby certify that the above and foregoing copy of 1 (one) Ordinance Number 2987 is a true and correct copy of such Ordinance that was duly adopted by the City Council of the City of Vestavia Hills on the 28th day of December, 2020, as same appears in the official records of said City.

Posted at Vestavia Hills Municipal Center, Vestavia Hills Library in the Forest, and Vestavia Hills New Merkle House and Vestavia Hills Recreational Center this the day of N , 2020.

2021

Rebecca Leavings

City Clerk

# **ORDINANCE NUMBER 2988**

**AN ORDINANCE RESCINDING ORDINANCE NUMBER 2770 AND** AMENDED SECTION 5.5, ARTICLE IV ENTITLED STORMWATER MANAGEMENT ILLICIT DISCHARGE, **ESTABLISHING** METHODS FOR CONTROLLING THE INTRODUCTION OF POLLUTANTS INTO **MUNICIPAL** SEPARATE STORM SEWER SYSTEM IN ORDER TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT PROCESS

#### STORM WATER MANAGEMENT ILLICIT DISCHARGE

## RECITALS

WHEREAS, on June 11, 2018, the City Council of the City of Vestavia Hills adopted and approved Ordinance 2770 to establish methods for controlling the introduction of pollutants into municipal separate storm sewer system; and

WHEREAS, the Mayor and City Council feel it is in the best public interest and rescind Ordinance Number 2770; and

WHEREAS, the purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of the City of Vestavia Hills through the regulation of nonstorm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law.

WHEREAS, this ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process.

WHEREAS, this ordinance provides the minimum content for implementing and enforcing a STORM WATER management consistent with the Alabama Department of Environmental Management (ADEM) permit currently issued to the City of Vestavia Hills.

WHEREAS, the objectives of this ordinance are:

1. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by STORM WATER discharges by any user

- 2. To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system
- 3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

NOW, THEREFORE BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF VESTAVIA HILLS, ALABAMA, THAT ORDINANCE NUMBER 2770 IS RESCINDED AND ORDINANCE 2988 IS APPROVED AND ADOPTED AND SECTION 5.5, ARTICLE IV OF THE VESTAVIA HILLS CODE OF ORDINANCES ENTITLED "STORMWATER MANAGEMENT ILLICIT DISCHARGE," IS AMENDED, AS FOLLOWS:

# Section 1 DEFINITIONS

For the purposes of this ordinance, the following words and terms shall have the meaning assigned to them in this section.

Authorized enforcement agency - employees or designees of the director of the municipal agency designated to enforce this ordinance.

Best Management Practices (BMPs) - schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to STORM WATER, receiving waters, or STORM WATER conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act. - The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

*Construction Activity* - Activities subject to NPDES Construction Permits. Currently these include construction projects resulting in land disturbance of 1 acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

*Hazardous Materials* - Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated,

stored, transported, disposed of, or otherwise managed.

*Illegal Discharge* - Any direct or indirect non-storm water discharge to the storm drain system, except as exempted in Section X of this ordinance.

Illicit Connections. - An illicit connection is defined as either of the following:

- 1. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by the City of Vestavia Hills or,
- 2. Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by the City of Vestavia Hills.

Industrial Activity - Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit - means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Non-Storm Water Discharge - Any discharge to the storm drain system that is not composed entirely of storm water.

*Person* - Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

*Pollutant* - Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

*Premises* Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Storm Drainage System - Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal

streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

*Storm Water* - Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Storm Water Pollution Prevention Plan - A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to STORM WATER, STORM WATER Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable.

Wastewater - means any water or other liquid, other than uncontaminated storm water, discharged from a facility.

# Section 2 ADMINISTRATION

The City of Vestavia Hills shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the City of Vestavia Hills may be enforced by the City Engineer or delegated in writing by an official of the City of Vestavia Hills to persons or entities acting in the beneficial interest of or in the employ of the agency.

## Section 3 ILLICIT DISCHARGE PROHIBITIONS

#### Section 3.1 Prohibition of Illegal Discharges.

No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.

#### Section 3.2 Illegal Discharges Exemptions.

The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

The following discharges are exempt from discharge prohibitions established by this ordinance provided that they have been determined not to be substantial contributor of pollutants by the City or Alabama Department of Environmental Management (ADEM):

- a) Water line flushing;
- b) Landscape irrigation or lawn watering (not consisting or treated, or untreated wastewater unless otherwise authorized);
- c) Diverted stream flows;
- d) Uncontaminated ground water infiltration
- e) Uncontaminated pumped groundwater;
- f) Discharges from potable water sources;
- g) Foundation or footing drains (not including active groundwater dewatering systems);
- h) Air conditioning condensation or drains;
- i) Irrigation water (not consisting or treated, or untreated wastewater unless otherwise authorized);
- j) Rising ground water;
- k) Springs;
- Water from crawl space pumps;
- m) Lawn watering runoff;
- n) Individual residential car washing, to include charitable carwashes;
- o) Residential street wash water;
- p) Discharges or flows from firefighting activities (including fire hydrant flushing);
- q) Flows from natural riparian habitat or wetlands;
- r) Dechlorinated swimming pool discharges;
- s) Dye testing is an allowable discharge, but requires a verbal notification to the City of Vestavia Hills prior to the time of the test.

## Section 3.3 Prohibition of Illicit Connections.

- a) The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.
- b) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- c) A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

## Section 4 SUSPENSION OF MS4 ACCESS

#### Section 4.1 Suspension Due to Illicit Discharges in Emergency Situations.

The City of Vestavia Hills may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the City of Vestavia Hills may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons.

#### Section 4.2 Suspension Due to the Detection of Illicit Discharge.

Any person discharging to the MS4 in violation of this ordinance may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The City of Vestavia Hills will notify a violator of the proposed termination of its MS4 access. The violator may petition the City of Vestavia Hills for a reconsideration and hearing.

A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the City of Vestavia Hills.

# Section 5 INDUSTRIAL, COMMERCIAL OR CONSTRUCTION ACTIVITY DISCHARGES

Any person subject to an industrial, commercial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City of Vestavia Hills prior to the allowing of discharges to the MS4.
## Section 6 MONITORING OF DISCHARGES

## Section 6.1 Applicability.

This section applies to all facilities that have storm water discharges associated with industrial, commercial, and construction activity.

## Section 6.2 Access to Facilities.

- a) The City of Vestavia Hills shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the City of Vestavia Hills.
- b) Facility operators shall allow the City of Vestavia Hills ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.
- c) The City of Vestavia Hills shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the City of Vestavia Hills to conduct monitoring and/or sampling of the facility's storm water discharge.
- d) The City of Vestavia Hills has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure STORM WATER flow and quality shall be calibrated to ensure their accuracy.
- e) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City of Vestavia Hills and shall not be replaced. The costs of clearing such access shall be borne by the operator.
- f) Unreasonable delays in allowing the City of Vestavia Hills access to a permitted facility is a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the City of Vestavia Hills reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this ordinance.
- g) If the City of Vestavia Hills has been refused access to any part of the premises from which STORM WATER is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City of Vestavia Hills may seek issuance of a search warrant from any court of competent jurisdiction.

## Section 7 REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES

The City of Vestavia Hills will adopt requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMPs shall be part of a STORM WATER pollution prevention plan (SWPP) as necessary for compliance with requirements of the NPDES permit.

## Section 8 WATERCOURSE PROTECTION

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

## Section 9 NOTIFICATION OF SPILLS

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non- hazardous materials, said person shall notify the City of Vestavia Hills in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City of Vestavia Hills within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

## Section 10 ENFORCEMENT AND ABATEMENT

Whenever the City of Vestavia Hills finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the City of Vestavia Hills may enforce the ordinance with escalating procedures.

## Section 10.1 Notification; Enforcement Remedies.

- a) <u>Warning Notice</u>: A warning notice of violation is the lowest level of formal response to a violation. It is a verbal or written response presented to the violator shortly after a violation has been identified and is intended for minor violations that would not cause significant harm to the environment.
- b) <u>Notification of Violation</u>: Whenever the Official finds that any person is in violation of any provision of this ordinance, or any order issued hereunder, the Official or his agent may serve upon such person written notice of the violation requiring the removal of illicit discharges and immediate cessation improper disposal practices within ten (10) calendar days of the date of such notice. Compliance by written notice of violation to the responsible person may require without limitation:
  - 1. The performance of monitoring, analyses, and reporting;
  - 2. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
  - 3. Payment of a fine to cover administrative and remediation costs; and
  - 4. The implementation of source control or treatment BMPs.
- c) <u>Compliance Order</u>: Whenever abatement of a violation and/or restoration of affected property is not possible within ten (10) days, a compliance order may be issued to the violator. The order shall set forth a deadline within which such remediation or restoration must be completed. Said order shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

## Section 10.2 Final Decision.

The decision of the City Engineer or their designee shall be final.

## Section 10.3 Enforcement Measures After Final Decision.

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within <u>thirty (30) days</u> of the decision of the municipal authority upholding the decision of the City of Vestavia Hills, then representatives of the City of Vestavia Hills shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

## Section 10.4 Cost of Abatement of the Violation.

Within <u>30</u> days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within <u>10</u> days. If the amount due is not paid within a timely manner as determined by the decision of the municipal

authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

Any person violating any of the provisions of this ordinance shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of <u>twelve (12)</u> percent per annum shall be assessed on the balance beginning on the <u>1st day</u> following discovery of the violation.

## Section 10.5 Injunctive Relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Ordinance. If a person has violated or continues to violate the provisions of this ordinance, the City of Vestavia Hills may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

## Section 10.6 Compensatory Action.

In lieu of enforcement proceedings, penalties, and remedies authorized by this Ordinance, the City of Vestavia Hills may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

## Section 10.7 Violations Deemed a Public Nuisance.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

## Section 10.8 Criminal Prosecution.

Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of \$500 dollars per violation per day and/or imprisonment for a period of time not to exceed one hundred and eighty (180) days.

The City of Vestavia Hills may recover all attorney's fees court costs and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses.

## Section 10.9 Remedies Not Exclusive.

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the City of Vestavia Hills to seek cumulative remedies.

## Section 11 MISCELLANOUS

## Section 11.1 Applicability.

This ordinance shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by the City of Vestavia Hills.

## Section 11.2 Severability.

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Ordinance.

## Section 11.3 Ultimate Responsibility.

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore, this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

## Section 11.4 Effective Date.

This ordinance shall be published as required by law and shall become effective the 1st day of January, 2021.

DONE, ORDERED, ADOPTED and APPROVED this the day of December, 2020.

Ashley C. Curry Ashley C. Curry

Mayor

ATTESTED BY:

**Rebecca** Leavings City Clerk

## **CERTIFICATION:**

I, Rebecca H. Leavings, as City Clerk of the City of Vestavia Hills, Alabama, hereby certify that the above and foregoing copy of 1 (one) Ordinance Number 2988 is a true and correct copy of such Ordinance that was duly adopted by the City Council of the City of Vestavia Hills on the day of December, 2020, as same appears in the official records of said City.

Posted at Vestavia Hills Municipal Center, Vestavia Hills Library in the Forest, and Vestavia Hills New Merkle House and Vestavia Hills Recreational Center this the day of 2020.

Rebecca Leavings City Clerk

## **ORDINANCE NUMBER 2771**

## AN ORDINANCE ESTABLISHING POST-CONSTRUCTION BEST MANAGEMENT PRACTICES FOR PERMANENT STORMWATER CONTROL STRUCTURES

# STORMWATER MANAGEMENT POST-CONSTRUCTION ORDINANCE

## RECITALS

WHEREAS, the City of Vestavia Hills operates under the requirements of the

Alabama Department of Environmental Management (ADEM) National Pollutant

Discharge Elimination System (NPDES) Permit; and

WHEREAS, this permit authorizes stormwater discharges from regulated small municipal separate storm sewer systems (MS4); and

WHEREAS, the City of Vestavia Hills must be compliant with the ADEM NPDES

Permit by developing, implementing, and enforcing a program to address post-

construction stormwater management; and

WHEREAS, the City of Vestavia Hills finds it necessary to enact an ordinance to address and enforce post-construction stormwater management standards on Qualifying Sites to prevent or minimize water quality impacts and ensure that the volume and velocity of pre-construction stormwater runoff is not significantly exceeded for the life of the property's use to the maximum extent practical (MEP).

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VESTAVIA HILLS, ALABAMA, AS FOLLOWS:

## Section 1 DEFINITIONS

For the purposes of this ordinance, the following words and terms shall have the meaning assigned to them in this section.

Best Management Practices - (herein abbreviated as "BMP") - activities, prohibitions of practices, maintenance procedures and management practices designed to prevent or reduce the pollution of waters to the MS4. Best Management Practices also include treatment requirements, operating procedures and practices to control facility site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage and construction sites.

Green Infrastructure – a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services.

*Hydrology* – Hydrology refers to the physical characteristics of storm water discharge, including the magnitude, duration, frequency, rate of change, and timing of discharge.

Low Impact Development – Low Impact Development (LID) emphasizes conservation and use of on-site natural features to protect water quality. This approach minimizes the project's impervious surface and loss of natural open space and implements engineered, small-scale hydrologic controls aiming to replicate the pre-development hydrologic regime of watersheds through infiltration, filtering, storing, evaporating, and detaining stormwater runoff close to its source.

*Non-structural BMPs* - Non-structural BMPs may include but not be limited to the following: preservation of open spaces and vegetation, establishment of conservation easements, establishment of buffers along streams and other waters, maintenance of vegetation, BMP inspection and maintenance, planning for future development or redevelopment.

*Qualifying Site* - Qualifying Site is any new development site or re-development site that results in a total land disturbance of one or more acres and sites that disturb less than one acre but are a part of a larger common development or sale that would disturb one or more acres.

*Structural BMPs* - Structural BMPs may include, but not be limited to the following: detention/ retention devices, check dams, drainage swales, lined ditches, infiltration basins, porous pavement, outlet protection, velocity dissipation devices, slope protection, constructed wetlands, rain gardens, catch basin inserts, vegetated filter strips, and rain barrels.

## Section 2 ADMINISTRATION

The municipal engineer for the City, the municipal official or employee who is a qualified credentialed professional, such other municipal official or municipal employee who has had sufficient experience dealing with BMP design to enable them to enforce the provisions of this ordinance, an individual or agency contracted to provide such service, shall be responsible, on behalf of the City, to enforce the provisions of this ordinance.

### Section 3

## **POST-CONSTRUCTION BMP DESIGN Section 3.1 Design Standards.**

The post-construction BMPs for qualifying sites, which may include a combination of structural BMPs and/or non-structural BMPs, must be designed to ensure that the volume and velocity of pre-construction stormwater runoff, to the maximum extent practicable, is not significantly exceeded.

Landowners and developers must develop and maintain best management practices to ensure, to the maximum extent practicable, that post-construction runoff mimics preconstruction hydrology of the site. A 1.1 inch rainfall over a 24-hour period preceded by a 72-hour antecedent dry period shall be the basis for the design and implementation of postconstruction BMPs.

The current Post Construction Stormwater Management Technical Memorandum (Addendum A) details acceptable design criteria meeting the requirement of the current NPDES Permit No. ALS000017 and shall be the basis for the design and implementation of post- construction BMPs. This document may be amended and re-adopted by the StormWater Management Authority. Inc and/or the Municipal Engineer. A copy of said Memorandum as amended may be obtained from the Municipal Engineer or from the City's website. The latest adopted Memorandum shall prevail in all stormwater designs.

## Section 3.2 Design References.

By reference in this Section, the City adopts the following as design references to meet the design standards:

- a) The latest version of the "Alabama Handbook for Erosion Control, Sedimentation Control and Stormwater Management on Construction Sites and Urban Areas", Volumes 1 and 2.
- b) The latest version of the "Low Impact Development Handbook for the State of Alabama".
- c) Any storm water design manual approved by the city that meets the design requirement of this ordinance.

a)

## Section 4 APPLICATION REQUIREMENTS

As part of the Land Disturbance Application, all Qualifying Sites shall include the following components:

## Section 4.1 Post-Construction BMP Design Description.

Procedures and strategies of the structural BMPs and/or non-structural BMPs that meet the design standards for Qualifying Sites found in Section 3.1 of this ordinance will be submitted to the City for review and approval. Submittal to the City of a post-construction BMP plan for approval by the City must be included as an integral part of the site-plan approval process.

Submittal to the City of a certified as-built of the BMPs and a letter of substantial compliance from the design engineer are required within 120 days of construction completion.

### Section 4.2 Post-Construction BMP Inspection Plan Description.

Procedures and strategies that will address inspections of the BMPs to confirm proper function, require corrective actions to poorly functioning or inadequately maintained BMPs, and require record keeping of maintenance activities, inspections, and corrective actions. The City shall perform or require the performance of an inspection by the developer/ owner/ operator at least once per year. Records of these inspections shall be made available to ADEM upon request and copies shall be provided to the City on an annual basis. The minimum documentation requirements for inspections are as follows:

- a) Facility type;
- b) Inspection date;
- c) Name and signature of qualified inspector:
- d) Site location;
- e) Owner information (name. address, phone number, fax, and email);
- f) Checklist of BMP's that must be inspected and required condition of BMP's to ensure proper functioning. Description of the existing storm water BMP condition that may include the quality of: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, and safety benches: permeable paving: spillways, weirs, and other control structures: and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;
- g) Photographic documentation of all critical storm water BMP components:
- b) Determination of whether the BMP operations and maintenance has adhered to the BMP Operation and Maintenance Plan and any specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP; and
- i) Maintenance agreements for long-term BMP operations and maintenance.

### Section 4.3 Post-Construction BMP Operation and Maintenance Plan Description.

Procedures and strategies that will address adequate long-term operation and maintenance of the BMPs. A BMP Operation and Maintenance Plan shall be a part of the As-Built Evaluation and Certification Form submittal and approval process. The plan shall identify the necessary reoccurring maintenance and operational activities and schedule of those activities necessary to ensure that the BMPs continue to meet the original design intent and standards of this ordinance. The Operation and Maintenance Plan shall also designate the party that is responsible and funding mechanism necessary to the out the Plan.

One or more of the following shall be applicable (as determined by the City) to establish the responsible party for long-term operation and maintenance. The document(s) shall be provided to the City for review. Upon approval, an executed copy shall be put on file in the Department of Public Services:

- a) The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party.
- b) Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance.
- c) Written conditions in project conditions, covenants, and restrictions for residential properties assigning maintenance responsibilities to a home owner's association or other appropriate group for maintenance of structural and treatment control management practices.
- d) Any other legally enforceable agreement that assigns permanent responsibility for maintenance.

## Section 5 ENFORCEMENT AND ABATEMENT

If a responsible party fails or refuses to meet the design, operation, or maintenance standards required by this ordinance, the City, after reasonable notice, may correct a violation of the design standards, operation, or maintenance needs by performing all necessary work to place the measures in proper working condition. In the event that the BMPs become a danger to public safety or public health, which includes water quality, the City shall notify in writing the responsible party for changes to design, operation, maintenance, and repairs of the BMP. Upon receipt of that notice, the responsible party shall have 14 calendar days, or such additional time as the City shall determine to be reasonably necessary to complete the action, to make changes to design, operation, maintenance, and repairs of the measures in an approved manner. In the event that corrective action is not undertaken within that time, the City may take necessary corrective action. The cost of any action by the City under this Section shall be billed to the responsible party. If the responsible party refuses to pay the bill, the City is entitled to bring an action against the responsible party to pay, file a lien against the property, or both. Costs shall include interest, collection fees, and reasonable attorney fees.

The City shall also have the authority to issue a Stop Work Order on any other components of the development to ensure that the BMPs are properly installed and maintained.

## Section 6 MISCELLANEOUS

#### Notices. Section 6.1

Whenever the City is required or permitted to:

- a) give a notice to any party, such notice must be in writing; or
- b) deliver a document to any party; such notice or document may be delivered by personal delivery, certified mail (return receipt requested), registered mail (return receipt requested) or a generally recognized overnight carrier, to the address of such party which is in the records of the City or is otherwise known to the City.

#### Section 6.2 References.

Whenever a Section is referred to in this ordinance, unless the context clearly indicates the contrary, such reference shall be to a section of this ordinance.

#### Section 6.3 Severability.

The provisions of this ordinance are severable. If any part of this ordinance is determined by a court of law to be invalid, unenforceable or unconstitutional, such determination shall not affect any other part of this ordinance.

#### Section 6.4 Captions.

The captions of Sections and sections are for the purpose of reference only, and such captions shall not affect the meaning of any provision of this ordinance.

#### Section 6.5 Ultimate Responsibility.

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore, this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

#### Section 6.6 Effective Date.

This Ordinance Number 2771 shall be published/posted as required by Alabama Law and shall become effective on July 1, 2018.

DONE, ORDERED, ADOPTED and APPROVED this the 11th day of June,

2018.

Ashley C. Curry Ashley C. Curry

Mayor

Ordinance Number 2771 Page 10

ATTESPED BY Rebecca Leavings

# City Clerk

## **CERTIFICATION:**

I, Rebecca H. Leavings, as City Clerk of the City of Vestavia Hills, Alabama, hereby certify that the above and foregoing copy of 1 (one) Ordinance # 2771 is a true and correct copy of such Ordinance that was duly adopted by the City Council of the City of Vestavia Hills on the 11<sup>th</sup> day of June, 2018, as same appears in the official records of said City.

Rebecca Leavings City Clerk



SWMA MS4 Program

Post-Construction Stormwater Management Technical Memorandum

## <u>Overview</u>

In 1990, the U.S. Environmental Protection Agency (EPA) promulgated regulations establishing Phase I of the National Pollutant Discharge Elimination Systems (NPDES) stormwater program. The Phase I program for municipal separate storm sewer systems (MS4s) require operators of "medium" and "large" MS4s that generally serve populations of 100,000 or greater to implement a stormwater management program as a means to control to the maximum extent practicable (MEP) polluted discharges from certain municipal, industrial and construction activities into the MS4.

The Alabama Department of Environmental Management (ADEM) presently has primary jurisdiction over permitting and enforcement of the Stormwater Program for Alabama. The City of Vestavia Hills (City) was issued NPDES Permit Number ALS000017 on June 7, 2017. This NPDES Permit became effective on July 1, 2017 and will expire on June 30, 2022. The City is required to develop and implement a Stormwater Management Program (SWMP) in accordance with the NPDES Permit requirements.

In accordance with the NPDES Permit, the City is required to develop and implement a Post Construction Stormwater Program to address stormwater runoff from qualifying new development and re-development projects by July 1, 2018. This memorandum provides technical guidance regarding the City's updated post construction stormwater management requirements in accordance with the City's NPDES Permit.

## Applicable Developments

The City's updated post construction stormwater management requirements are only applicable to "Qualifying New Development or Redevelopment" projects as defined below: "Qualifying New Development and Redevelopment" means any site that results from the disturbance of one acre or more of land or the disturbance of less than one acre of land if part of a larger common plan of development or sale that is greater than one acre. Qualifying new development and redevelopment does not include land disturbances conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission.

Since stormwater detention and retention facilities are the primary Best Management Practices (BMPs) that have historically been used for postconstruction stormwater management, this technical memorandum has been developed to primarily addresses stormwater detention and retention facilities. While these engineering practices are not precluded, such practices along may not achieve the level of post-construction stormwater control required. The intent of this technical memorandum is to evaluate options to manage stormwater runoff and best protect water quality for the community.

## Implementation

Effective **July 1, 2018**, all qualifying new development and redevelopment projects shall be designed in accordance with this technical memorandum.

## Waiver Request

The City recognizes that there are existing project sites that have been constructed or previously approved, prior to the effective date of this technical memorandum, that may qualify for a waiver from the updated post construction stormwater management requirements. As a result, the City has developed an Existing Development, Post Construction Stormwater Management Waiver Request Form (Figure 1) to address existing project sites. In order for an existing project site to be considered for a waiver, the waiver request form shall be completed and submitted to the City for review and approval. If a waiver has been submitted for a development that has not been completed and the density of the development is increased and/or modified, the developer shall resubmit a waiver request for this development.

The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicants, provided that at least one of the following conditions applies:

- 1. It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this ordinance.
- 2. Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the City Engineer and the implementation of the plan is required by local ordinance.

## Draft Ordinance

- 3. Provisions are made to manage stormwater by an off-site facility. The off-site facility is required to be in place, to be designed and adequately sized to provide a level of stormwater control that is equal to or greater than that which would be afforded by on-site practices and there is a legally obligated entity responsible for long-term operation and maintenance of the stormwater practice.
- 4. The City Engineer finds that meeting the minimum on-site management requirements is not feasible due to the natural or existing physical characteristics of a site.

In instances where one of the conditions above applies, the City Engineer may grant a waiver from the strict compliance with these stormwater management provisions, as long as acceptable mitigation measures are provided. However, to be eligible for a variance, the applicant must demonstrate to the satisfaction of the City Engineer that the variance will not result in the following impacts to downstream waterways:

- Deterioration of existing culverts, bridges, dams, and other structures;
- Degradation of biological functions or habitats;
- Accelerated streambank or streambed erosion or siltation; Increased threat of flood damage to public health, life, or property.

## Water Quality Requirements

Post-construction stormwater runoff quality is an important component of the City's SWMP. In order to meet the requirements of the City's NPDES Permit, a Water Quality Volume (WQ<sub>v</sub>) must be accounted for on each project site and BMPs must be utilized to store and treat the WQ<sub>v</sub>. The required WQ<sub>v</sub> is based upon the first 1.1 inches of rainfall that occurs on the project site. The WQ<sub>v</sub> can be estimated as described below.

 $WQ_v = 1.1$  inches / acre of additional impervious area.

For example: An existing 12.5 acre site planned for re-development contains 3 acres of existing impervious area. The proposed development will contain 7 total acres of impervious area in the post-development condition. The required WQ<sub>v</sub> shall be calculated as follows:

WQ<sub>v</sub> = 1.1 inches \* 4 acres of additional impervious area = 1.1 inches \* (1 foot / 12 inches) \* 4 acres \* (43,560 sq.ft. / 1 acre) = 15,972 cubic feet of storage required

The WQ<sub>v</sub> that is required for each project site may be provided in multiple ways to allow greater flexibility during design. There are a number of post-construction BMPs such as detention ponds, retention ponds, bioretention swales, rain gardens/bioretention features, permeable paving, proprietary stormwater quality treatment devices, sand filters, etc. that may be utilized by the Owner and their Engineer-of-Record to meet the water quality requirements.

## Low Impact Development (LID) and Green Infrastructure (GI)

As an option for meeting the updated post-construction stormwater management requirements, the City encourages Owners and Developers to incorporate the use of low impact development (LID) and green infrastructure (GI) practices into qualifying development and redevelopment projects. The latest version of the Alabama Low Impact Development Handbook is incorporated into this technical memorandum by reference.

## <u>Design Standards</u>

For detention and retention ponds, the calculation methodology shall utilize the National Resource Conservation Resources (NRCS) Urban Hydrology for Small Watersheds Technical Release 55 (TR-55) or equivalent. For the determination of pre-construction and post-construction stormwater runoff hydrology, the 24-hour rainfall depths from National Oceanic and Atmospheric Administration (NOAA) Atlas14, Volume 9, Version 2 included in Table 1 shall be used:

| Storm<br>Event<br>(24 hour) | Rainfall<br>(inches)<br>(Bessemer) | Rainfall<br>(inches)<br>(Bham WSFO) | Rainfall<br>(inches)<br>(Bham AP<br>ASOS) | Rainfall<br>(inches)<br>(Pinson) |
|-----------------------------|------------------------------------|-------------------------------------|-------------------------------------------|----------------------------------|
| 2-year                      | 4.09                               | 4.1                                 | 4.12                                      | 4.11                             |
| 5-year                      | 4.97                               | 4.99                                | 5.02                                      | 4.99                             |
| 10-Year                     | 5.82                               | 5.83                                | 5.85                                      | 5.8                              |
| 25-Year                     | 7.18                               | 7.15                                | 7.13                                      | 7.02                             |
| 100-Year                    | 9.71                               | 9.56                                | 9.39                                      | 9.15                             |



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## Table 1. Design Storms

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As a part of the City's requirements for post-construction stormwater runoff management, all project sites shall be responsible for ensuring, to the MEP, that post- development runoff mimics pre-development hydrology for the 2-year, 5-year, 10- year, and 25-year rainfall depths listed in Table 1. All stormwater detention or retention facilities must be able to convey the peak flow rate associated with a 100- year, 24-hour storm event. The Owner and/or Developer shall ensure, to the MEP, that installation of post-construction BMPs shall not adversely impact and/or cause flooding of properties and/or stream channel erosion located upstream and downstream of post-construction BMPs.

## **Detention and Retention Ponds**

As a part of this technical memorandum, two structural BMPs (detention and retention ponds) have been highlighted as design options to assist in meeting the post- construction stormwater management requirements of the City's NPDES permit. Both detention ponds and retention ponds are fairly simple to design, construct and maintain. However, other structural BMPs may be selected by the Owner and Engineer-of-Record for review and approval by the City and are welcomed to be incorporated into the overall stormwater management plan for each project site.

A Design Form, Detention / Retention Ponds (Figure 2) has been developed by the City to aid in the design, review, and approval of detention and retention facilities. The design form provides a standard format for the Engineer-of-Record to provide information concerning pre-development conditions, post-development conditions, pond outlet configurations, pond storage, and pond peak flow discharges. For a project that contains multiple detention facilities, the Engineer-of-Record may simply provide a Design Form for each facility. While a detention pond can be utilized to meet the stormwater management requirements, some type of filtration system is also needed for a detention pond to meet the stormwater quality requirements. The filtration system must allow the volume of water associated with the WQ<sub>v</sub> to drain slowly out of the pond, but should drain within a forty-eight (48) hour period. Figure 3 provides some basic examples of filtering systems that may be applicable to detention ponds.

The Engineer-of-Record is encouraged to utilize Low Impact Development (LID) and/or Green Infrastructure (GI) practices as cost-effective options to meet both the water rate/volume and water quality requirements.

## As-Built Certification

As a part of the NPDES permit, the City must insure the BMPs that have been designed and approved are constructed and operated in accordance with their original design and intent. In an effort to confirm that the constructed BMPs

City of Vestavia Hills

Draft Ordinance

meet the designer's intent, an As-Built Evaluation and Certification form (Figure 4) has been developed. It shall be the Owner's responsibility to have as-built information, such as pond volume, embankment size and elevations, invert size and elevations, and spillway elevations, field surveyed by a Professional Land Surveyor. It shall be the Engineer-of-Record's responsibility to utilize the field surveyed information to fill out the As-Built Evaluation and Certification Form. The Owner has two options for completing the As-Built Evaluation and Certification is the certification.

- Option 1 The As-Built Evaluation and Certification form shall be submitted and approved by the City prior to the issuance of a Certificate of Occupancy (CO) and/or prior to the recording of the final subdivision plat.
- Option 2 If the Owner would like to obtain a CO and/or record the final subdivision plat prior to the City's approval of the As-Built Evaluation and Certification form, the Owner may post a bond or other forms of surety acceptable to the City in the amount of 100% of the construction cost associated with post-construction stormwater management BMPs and the cost associated with the effort required to complete the As-Built Evaluation and Certification. The As-Built Evaluation and Certification form shall be submitted to the City within 120 days of receipt of a CO and/or recording of the final subdivision plat.

## Annual Inspections

In order for post-construction BMPs to continue to function in accordance with their original design and installation, annual inspections are required by the City's NPDES permit. The Owner of the project is required to have these annual inspections performed and must then submit the required Annual Inspection Form (Figure 5) to the City. The Annual Inspection Form shall provide documentation concerning adherence to the BMP Operation and Maintenance Plan and the condition of each facility in terms of vegetative cover, erosion that may be occurring, the condition of inlets into the pond and the pond outlet, embankment conditions and any maintenance required and/or performed. The City shall evaluate the documentation submitted to confirm that the stormwater management facilities are continuing to function as designed.

The Annual Inspection Form shall be submitted to the City each year by 30 September.

## **Operation and Maintenance**

It is the responsibility of the Owner to operate and maintain the stormwater management facility and/or BMPs in accordance with the original design intent and approval. A long-term Operation and Maintenance Plan shall be part of the As-Built Evaluation and Certification Form submittal and approval process. The plan shall identify the necessary reoccurring maintenance and operation activities and schedule of those activities necessary to ensure that the BMPs continue to meet the standards of the ordinance. The Operation and Maintenance Plan shall also designate the entity that is responsible and funding mechanism necessary to carry out the Plan.

If the original Owner or Developer has sold the project or passed ownership on to a Homeowner's Association, then it is the new Owner or HOA's responsibility to maintain the facility in accordance with the Operation and Maintenance Plan and provide any required inspection and maintenance.

Should maintenance be needed at a facility as a result of the Annual Inspection, the Owner shall provide the City documentation of the maintenance required and a schedule for completing all maintenance activities. Once all maintenance activities are completed, the Owner shall provide documentation to the City of the maintenance performed and that the BMP operates as it was designed.

A summary of maintenance activities shall be submitted to the City each year by 30 September. The summary shall cover the previous fiscal year beginning 1 October through 30 September.

## List of Figures

Figure 1 – Existing Development Post Construction Stormwater Management Waiver Request Form

- Figure 2 Design Form, Detention / Retention Ponds
- Figure 3 Detention Pond Outlet Structure Example
- Figure 4 As-Built Evaluation and Certification Form
- Figure 5 Annual Inspection Form

## **ORDINANCE NUMBER 3099**

AN ORDINANCE TO REPEAL ORDINANCE NUMBERS 2331, 2331-A and 2331-B AND APPENDIX A, VESTAVIA HILLS CODE OF ORDINANCES AND TO ESTABLISH THE ZONING CODE OF THE CITY OF VESTAVIA HILLS, ALABAMA

# BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VESTAVIA HILLS, ALABAMA, AS FOLLOWS:

1. Ordinance Numbers 2331, 2331-A and 2331-B, and Appendix A, Vestavia Hills Code of Ordinances, are hereby repealed in its entirety and the Zoning Code of the City of Vestavia Hills, Alabama, is hereby adopted, approved and amended and restated to read, in its entirety, as follows:

# CITY OF VESTAVIA HILLS

# ZONING ORDINANCE



Adopted: June 27, 2022

# CITY OF VESTAVIA HILLS, ALABAMA

# 2022

Mayor

Ashley C. Curry

## Vestavia Hills City Council

Rusty Weaver, Mayor Pro-Tempore Kimberly Cook Paul Head George Pierce

## Vestavia Hills Planning and Zoning Commission

Q

Michael Vercher, Chair Lyle Larson David Maluff Jonathan Romeo Hasting Sykes Erica Barnes Rick Honeycutt Rusty Weaver Ryan Farrell

Rebecca Leavings, City Clerk Keith Blanton, Director, Department of Building Safety Christopher Brady, City Engineer Conrad Garrison, City Planner

## TABLE OF CONTENTS

| Article 1                                                                                                                                                                                             | GENERAL PROVISIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1-1                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| §1.1.                                                                                                                                                                                                 | Legislative Intent and Purpose                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1-1                                                                                                   |
| §1.2.                                                                                                                                                                                                 | Application of Regulations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1-1                                                                                                   |
| §1.3.                                                                                                                                                                                                 | Short Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1-1                                                                                                   |
| §1.4.                                                                                                                                                                                                 | Organization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1-1                                                                                                   |
| Article 2                                                                                                                                                                                             | GLOSSARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2-1                                                                                                   |
| §2.1.                                                                                                                                                                                                 | General Definitions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2-1                                                                                                   |
| §2.2.                                                                                                                                                                                                 | Use Definitions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2-13                                                                                                  |
| §2.3.                                                                                                                                                                                                 | Abbreviations used in this Ordinance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2-18                                                                                                  |
| Article 3                                                                                                                                                                                             | ESTABLISHMENT OF DISTRICTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3-1                                                                                                   |
| §3.1.                                                                                                                                                                                                 | Purpose                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3-1                                                                                                   |
| §3.2.                                                                                                                                                                                                 | Zoning Districts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3-1                                                                                                   |
| §3.3.                                                                                                                                                                                                 | Interpretation of District Boundaries                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3-1                                                                                                   |
| §3.4.                                                                                                                                                                                                 | District Boundaries Established                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3-2                                                                                                   |
| Article 4                                                                                                                                                                                             | GENERAL REGULATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4-1                                                                                                   |
| §4.1.                                                                                                                                                                                                 | Uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4-1                                                                                                   |
| §4.2.                                                                                                                                                                                                 | General Lot Regulations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4-1                                                                                                   |
| §4.3.                                                                                                                                                                                                 | Area and Dimensional Regulations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4-1                                                                                                   |
| 84.4                                                                                                                                                                                                  | Accessory Structures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4.4                                                                                                   |
| 84.4.                                                                                                                                                                                                 | Accessory Structures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                       |
| §4.4.<br>§4.5.                                                                                                                                                                                        | Fences.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4-4                                                                                                   |
| §4.4.<br>§4.5.<br>§4.6.                                                                                                                                                                               | Fences<br>Ownership and Management of Common Open Spaces and Facilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4-4                                                                                                   |
| §4.4.<br>§4.5.<br>§4.6.<br>§4.7.                                                                                                                                                                      | Fences.<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                       |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.                                                                                                                                                        | Fences<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                       |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.8.<br>\$4.9.                                                                                                                                    | Fences<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts<br>Donation Bins                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                       |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5                                                                                                                                 | Fences.<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts<br>Donation Bins<br>RESIDENTIAL DISTRICTS                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                       |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.                                                                                                                       | Fences<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts<br>Donation Bins<br>RESIDENTIAL DISTRICTS<br>E-2 Residential Estate District                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                       |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.                                                                                                             | Fences.<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts<br>Donation Bins<br>RESIDENTIAL DISTRICTS<br>E-2 Residential Estate District<br>R-1 Low Density Residential District.                                                                                                                                                                                                                                                                                                                                                                | 4-4<br>4-4<br>4-5<br>4-6<br>4-6<br>4-7<br>5-1<br>5-1<br>5-2                                           |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.<br>\$5.3.                                                                                                   | Fences.<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts.<br>Donation Bins<br>RESIDENTIAL DISTRICTS<br>E-2 Residential Estate District<br>R-1 Low Density Residential District<br>R-2 Medium Density Residential District                                                                                                                                                                                                                                                                                                                     | 4-4<br>4-4<br>4-5<br>4-6<br>4-6<br>4-7<br>4-7<br>5-1<br>5-1<br>5-2<br>5-3                             |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.<br>\$5.3.<br>\$5.4.                                                                                         | Fences.<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts<br>Donation Bins<br>RESIDENTIAL DISTRICTS<br>E-2 Residential Estate District<br>R-1 Low Density Residential District<br>R-2 Medium Density Residential District<br>R-3 Medium Density Residential District                                                                                                                                                                                                                                                                           | 4-4<br>4-4<br>4-5<br>4-6<br>4-6<br>4-7<br>5-1<br>5-1<br>5-2<br>5-3<br>5-4                             |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.<br>\$5.2.<br>\$5.3.<br>\$5.4.<br>\$5.5.                                                                     | Fences.<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums<br>Commercial Vehicles in Residential Districts<br>Donation Bins<br>RESIDENTIAL DISTRICTS<br>E-2 Residential Estate District<br>R-1 Low Density Residential District<br>R-2 Medium Density Residential District<br>R-3 Medium Density Residential District<br>R-4 Medium Density Residential District                                                                                                                                                                                                                                | 4-4<br>4-4<br>4-5<br>4-6<br>4-6<br>4-7<br>5-1<br>5-1<br>5-1<br>5-2<br>5-3<br>5-4<br>5-5               |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.<br>\$5.3.<br>\$5.4.<br>\$5.5.<br>\$5.6.                                                                     | Fences.      Ownership and Management of Common Open Spaces and Facilities.      Condominiums.      Commercial Vehicles in Residential Districts.      Donation Bins      RESIDENTIAL DISTRICTS      E-2 Residential Estate District.      R-1 Low Density Residential District.      R-2 Medium Density Residential District      R-3 Medium Density Residential District      R-4 Medium Density Residential District      R-5 Multi-family Residential District                                                                                                                                                            | $\begin{array}{c} 4-4\\$                                                                              |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.<br>\$5.3.<br>\$5.4.<br>\$5.5.<br>\$5.6.<br>\$5.7.                                                           | Fences.      Ownership and Management of Common Open Spaces and Facilities.      Condominiums.      Commercial Vehicles in Residential Districts.      Donation Bins      RESIDENTIAL DISTRICTS      E-2 Residential Estate District.      R-1 Low Density Residential District.      R-2 Medium Density Residential District      R-3 Medium Density Residential District      R-4 Medium Density Residential District      R-5 Multi-family Residential District      R-6 Zero Lot Line Residential District                                                                                                                | 4-4<br>4-4<br>4-5<br>4-6<br>4-7<br>5-1<br>5-1<br>5-1<br>5-1<br>5-2<br>5-3<br>5-4<br>5-5<br>5-6<br>5-7 |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.<br>\$5.3.<br>\$5.4.<br>\$5.5.<br>\$5.6.<br>\$5.7.<br>\$5.8.                                                 | Fences.<br>Ownership and Management of Common Open Spaces and Facilities.<br>Condominiums.<br>Commercial Vehicles in Residential Districts.<br>Donation Bins.<br>RESIDENTIAL DISTRICTS.<br>E-2 Residential Estate District.<br>R-1 Low Density Residential District.<br>R-2 Medium Density Residential District .<br>R-3 Medium Density Residential District .<br>R-4 Medium Density Residential District.<br>R-5 Multi-family Residential District.<br>R-6 Zero Lot Line Residential District.<br>R-7 Duplex and Triplex Residential District.                                                                               | $\begin{array}{c} 4-4\\$                                                                              |
| \$4.4.<br>\$4.5.<br>\$4.6.<br>\$4.7.<br>\$4.8.<br>\$4.9.<br>Article 5<br>\$5.1.<br>\$5.2.<br>\$5.3.<br>\$5.4.<br>\$5.5.<br>\$5.6.<br>\$5.7.<br>\$5.8.<br>\$5.9.                                       | Fences.<br>Ownership and Management of Common Open Spaces and Facilities.<br>Condominiums.<br>Commercial Vehicles in Residential Districts.<br>Donation Bins.<br>RESIDENTIAL DISTRICTS.<br>E-2 Residential Estate District.<br>R-1 Low Density Residential District.<br>R-2 Medium Density Residential District.<br>R-3 Medium Density Residential District.<br>R-4 Medium Density Residential District.<br>R-5 Multi-family Residential District.<br>R-6 Zero Lot Line Residential District.<br>R-7 Duplex and Triplex Residential District.<br>R-8 Townhouse Residential District.                                          | $\begin{array}{c} 4-4\\$                                                                              |
| <pre>\$4.4.<br/>\$4.5.<br/>\$4.6.<br/>\$4.7.<br/>\$4.8.<br/>\$4.9.<br/>Article 5<br/>\$5.1.<br/>\$5.2.<br/>\$5.3.<br/>\$5.4.<br/>\$5.5.<br/>\$5.6.<br/>\$5.7.<br/>\$5.8.<br/>\$5.9.<br/>\$5.10.</pre> | Fences.<br>Ownership and Management of Common Open Spaces and Facilities<br>Condominiums.<br>Commercial Vehicles in Residential Districts.<br>Donation Bins.<br>RESIDENTIAL DISTRICTS.<br>E-2 Residential Estate District.<br>R-1 Low Density Residential District.<br>R-2 Medium Density Residential District .<br>R-3 Medium Density Residential District .<br>R-4 Medium Density Residential District .<br>R-5 Multi-family Residential District.<br>R-6 Zero Lot Line Residential District .<br>R-7 Duplex and Triplex Residential District .<br>R-8 Townhouse Residential District.<br>R-9 Planned Residential District. | $\begin{array}{c} 4-4\\$                                                                              |

| Article 6  | NON-RESIDENTIAL DISTRICTS                         | 6-1  |
|------------|---------------------------------------------------|------|
| §6.1.      | A-Agriculture District                            | 6-1  |
| §6.2.      | B-1 Neighborhood Business District                | 6-2  |
| §6.3.      | B-1.2 Neighborhood Mixed Use District             | 6-3  |
| §6.4.      | B-2 General Business District                     | 6-5  |
| §6.5.      | B-3 Conditional Business District                 | 6-6  |
| §6.6.      | O-1 Office Park District                          | 6-7  |
| §6.7.      | O-2 Office Park District                          | 6-8  |
| §6.8.      | INST Institutional District                       | 6-9  |
| §6.9.      | Planned Unit Development (PUD)                    | 6-10 |
| §6.10.     | MXD Planned Community Mixed Use District          | 6-20 |
| Article 7  | USE-SPECIFIC REGULATIONS                          | 7-1  |
| §7.1.      | Home Occupations                                  | 7-1  |
| §7.2.      | Gas and Service Stations                          | 7-2  |
| §7.3.      | Conservation Subdivisions                         | 7-2  |
| §7.4.      | Bed and Breakfast                                 | 7-6  |
| §7.5.      | Mini-warehouses                                   | 7-7  |
| §7.6.      | Veterinary Hospitals, Animal Shelters and Kennels | 7-7  |
| §7.7.      | Day Care Facilities                               | 7-7  |
| §7.8.      | Accessory Dwellings                               | 7-8  |
| §7.9.      | Telecommunications Facilities                     | 7-9  |
| Article 8  | PARKING REGULATIONS                               | 8-1  |
| §8.1.      | Off Street Parking                                | 8-1  |
| §8.2.      | Design Standards                                  | 8-6  |
| §8.3.      | Off-Street Loading                                | 8-8  |
| Article 9  | LANDSCAPING REGULATIONS                           | 9-1  |
| §9.1.      | General                                           | 9-1  |
| §9.2.      | Site Landscaping                                  | 9-1  |
| §9.3.      | Buffers                                           | 9-3  |
| §9.4.      | Screening                                         | 9-7  |
| §9.5.      | Planting, Installation and Maintenance            | 9-9  |
| §9.6.      | Tree Preservation Regulations                     | 9-10 |
| Article 10 | NONCONFORMITIES                                   | 10-1 |
| §10.1.     | General                                           | 10-1 |
| §10.2.     | Continuance                                       | 10-1 |
| §10.3.     | Abandonment or Discontinuation                    | 10-1 |
| §10.4.     | Structural Extensions and Alterations             | 10-1 |
| §10.5.     | Use Extensions                                    | 10-1 |
| §10.6.     | New Construction Conforming                       | 10-1 |
| §10.7.     | Destruction                                       | 10-2 |

| Article 11 | SIGN REGULATIONS                                    | 11-1  |
|------------|-----------------------------------------------------|-------|
| §11.1.     | Purpose.                                            | 11-1  |
| §11.2.     | Definitions                                         | 11-1  |
| §11.3.     | General Provisions                                  | 11-6  |
| §11.4.     | General Sign Regulations                            | 11-9  |
| §11.5.     | Regulations for Certain Sign Types                  | 11-12 |
| §11.6.     | Signs Permitted By District                         | 11-16 |
| §11.7.     | Signs Permitted for Integrated Business Centers     | 11-18 |
| §11.8.     | Temporary Signs in Non-residential Districts        | 11-19 |
| §11.9.     | Nonconforming Conditions                            | 11-20 |
| §11.10.    | Legal Status Provisions                             | 11-21 |
| Article 12 | BOARD OF ZONING ADJUSTMENT                          | 12-1  |
| §12.1.     | Powers and Duties of the Board of Zoning Adjustment | 12-1  |
| §12.2.     | Administrative Review                               | 12-1  |
| §12.3.     | Special Exceptions                                  | 12-1  |
| §12.4.     | Variances                                           | 12-2  |
| §12.5.     | Abatement Order                                     | 12-3  |
| §12.6.     | Rehearings                                          | 12-4  |
| §12.7.     | Notice Requirement                                  | 12-4  |
| §12.8.     | Appeals from Action of the Board of Adjustment      | 12-5  |
| Article 13 | ADMINISTRATION, ENFORCEMENT, AMENDMENTS, PENALTIES  | 13-1  |
| §13.1.     | Zoning Official                                     | 13-1  |
| §13.2.     | Building Permit; Design Review                      | 13-1  |
| §13.3.     | Conditional Uses                                    | 13-2  |
| §13.4.     | Amendments                                          | 13-3  |
| §13.5.     | Zoning of Annexed Property                          | 13-5  |
| §13.6.     | Temporary Emergency Relief                          | 13-7  |
| §13.7.     | Remedies and Penalties for Violation                | 13-7  |
| §13.8.     | Certificate of Occupancy Required                   | 13-7  |
| §13.9.     | Fees                                                | 13-8  |
| Article 14 | LEGAL STATUS PROVISIONS                             | 14-1  |
| §14.1.     | Interpretation and Purpose                          | 14-1  |
| §14.2.     | Savings Clause                                      | 14-1  |
| §14.3.     | Repealing Clause                                    | 14-1  |
| §14.4.     | Effective Date                                      | 14-1  |

## INDEX OF TABLES

| Table 5.1 E-2 District Area and Dimensional Regulations           | . 5-1 |
|-------------------------------------------------------------------|-------|
| Table 5.2 R-1 District Area and Dimensional Regulations           | . 5-2 |
| Table 5.3 R-2 District Area and Dimensional Regulations           | . 5-3 |
| Table 5.4 R-3 District Area and Dimensional Regulations           | . 5-4 |
| Table 5.5 R-4 District Area and Dimensional Regulations           | . 5-5 |
| Table 5.6 R-5 District Area and Dimensional Regulations           | . 5-6 |
| Table 5.7 R-6 District Area and Dimensional Regulations (Notes)   | . 5-7 |
| Table 5.8 R-7 District Area and Dimensional Regulations (Notes)   | . 5-8 |
| Table 5.9 R-8 District Area and Dimensional Regulations (Notes)   | . 5-9 |
| Table 5.11 RC-1 District Area and Dimensional Regulations (Notes) | 5-11  |
| Table 5 Use Regulations for Residential Districts                 | 5-12  |
| Table 6.1 A District Area and Dimensional Regulations             | . 6-1 |
| Table 6.2 B-1 District Area and Dimensional Regulations           | . 6-2 |
| Table 6.3 B-1.2 District Area and Dimensional Regulations         | . 6-3 |
| Table 6.4 B-2 District Area and Dimensional Regulations           | . 6-5 |
| Table 6.5 B-3 District Area and Dimensional Regulations           | . 6-6 |
| Table 6.6 O-1 District Area and Dimensional Regulations           | . 6-7 |
| Table 6.7 O-2 District Area and Dimensional Regulations           | . 6-8 |
| Table 6.8 INST District Area and Dimensional Regulations          | . 6-9 |
| Table 6 Use Regulations for Non-Residential Districts             | 6-26  |
| Table 8.1 Minimum Required Off-street Parking Spaces              | . 8-3 |
| Table 8.1.1: Typical Shared Parking Demand by Use and Time of Day | . 8-5 |
| Table 8.2.2: Parking Lot Dimensional Requirements (in feet)       | . 8-6 |
| Table 8.3: Number of Berths                                       | . 8-8 |
| Table 9.2.2 Frontage and Perimeter Landscaping Standards (Notes)  | . 9-2 |
| Table 9.2.4 Building Landscaping Standards                        | . 9-3 |
| Table 9.3A Buffer Requirements By Use                             | . 9-6 |
| Table 9.3B Requirements by Buffer Class                           | . 9-6 |
| Table 11.5.3 Attached Sign Area 1                                 | 1-15  |
| Table 11.7 Freestanding Signage for Integrated Business Centers   | 1-19  |

## Article 1 GENERAL PROVISIONS

## §1.1. Legislative Intent and Purpose

Pursuant to Title 11-52-70, Code of Alabama, 1975, (Acts 1923, No. 443, pg. 590; Code 1923, Section 1878; Code of Alabama, 1949, Title 37, Section 772) each municipal corporation in the State of Alabama may divide the territory within its corporate limits into business, industrial and residential zones or districts and may provide the kind, character and use of structures and improvements that may be erected or made within the several zones or districts established and may, from time to time, rearrange or alter the boundaries of such zones or districts and may also adopt such ordinances as necessary to carry into effect and make effective the provisions of said Title 11-52-70.

By virtue of that authority, the City of Vestavia Hills, Alabama, hereinafter referred to as "the City", adopted Ordinance Number 28 on December 2, 1953, regulating the general use of private land. It established districts and outlined the intended use for each said zone or district. Ordinance Number 28 became known as the Zoning Code for the City. Said Code, including revisions, has been reprinted several times since 1953.

## §1.2. Application of Regulations

No building, structure, or land shall hereafter be used or occupied, and no building, structure or part thereof shall hereafter be erected, constructed, reconstructed, moved, or structurally altered unless in conformity with all the regulations of this ordinance for the district in which it is located except as otherwise provided for legal nonconformities pursuant to <u>Article 10</u>. All construction shall be done in strict compliance with the City Building Code, Fire Code, Plumbing Code, Subdivision Regulations, and Electrical Code, as adopted by the City.

## §1.3. Short Title

This Ordinance shall be known as the "Zoning Ordinance of the City of Vestavia Hills, Alabama", and the map herein referred to, which is identified by the title "City of Vestavia Hills, Alabama, Zoning Map", dated January 1, 1962 and as amended, shall be known as the "Zoning Map of the City of Vestavia Hills, Alabama," hereinafter referred to as "the Zoning Map". Said map and all explanatory matter thereon is hereby adopted and made a part of this Ordinance, as aforesaid.

## §1.4. Organization

- 1.4.1. This Ordinance is organized as follows:
  - 1. For purposes of organization, this Zoning Ordinance, is divided into fourteen (14) Articles. The Article designation number represents the first digit (or two as the case may be) of that series of numbers used to identify the respective regulations of the Ordinance; e.g., in the reference number §1.2.3.4, the digit "1" represents the Article.
  - 2. Each Article is subdivided into several major headings known as Sections, which are represented by the second digit; e.g., in the reference number §1.2.3.4, the digit "2" represents the Section.
  - 3. Each Section is subdivided into Subsections, which are represented by the digit(s) following the Section designation number; e.g., in the reference number §1.2.3.4 the digit "3" represents the Subsection.
  - 4. Each Subsection may be subdivided into Paragraphs, which are represented by the digit following the Subsection designation; e.g., in the reference number §1.2.3.4 the digit "4" represents the Paragraph.

- 5. Each Paragraph may be subdivided into Items, which are represented by the lower-case letter following the Paragraph designation; which may then be further subdivided as (1), (2), (3)... (a), (b), (c)...and (i), (ii), (iii)...
- 1.4.2. Internal Referencing. All references to Articles, Sections, Subsections, Paragraphs and Items within this Ordinance shall refer to Articles, Sections, Subsections, Paragraphs and Items in this Ordinance unless otherwise specified. When an Article, Section or other subdivision is referenced within a provision or requirement of this Ordinance, unless otherwise specified, all subdivisions within such reference shall be assumed to be applicable.
- 1.4.3. Page Numbering. Each Article contains its own separate page numbering system. The page numbers are prefixed by the respective Article number. As an example, page 10 of Article 8 is designated page 8-10.

## Article 2 GLOSSARY

For the purposes of this Ordinance, certain words and terms are defined as herein indicated and shall apply to all parts of this Ordinance unless otherwise specified.

## §2.1. General Definitions.

Unless specifically defined herein, words or phrases used in this Ordinance shall be interpreted so as to give them the same meaning as they have in common usage and so as to give this Ordinance its most reasonable application. All words used in the present tense shall include the future tense, all words in the singular number shall include the plural number, and all words in the plural number shall include the singular number, unless the natural construction of the wording indicates otherwise. The words "used for" shall include the meaning "designed for", and the word "structure" shall include the word "building". The word "lot" shall include the words "plot" and "tract" and the word "shall" is mandatory.

- 2.1.1. *Abutting*. Touching at one point or along a common side, boundary or property line. Two properties separated by a street or right-of-way are "Adjacent", but not "Abutting". However, for purposes of annexation, two properties separated by a street or right-of-way are considered contiguous and therefore eligible for annexation.
- 2.1.2. Access Management. The process of providing and managing vehicular access from public streets to private development while preserving the flow of traffic in terms of safety, capacity, and speed.
- 2.1.3. Accessory Structure. A subordinate structure or a portion of the principal structure, the use of which is incidental to the principal use of the premises, including any detached minor building

consisting of masonry or frame walls and roof, at least one story in height or other type of structure necessary as an adjunct to the use and occupancy of a principal structure, except open structures such as pergolas, arbors and other garden houses of similar character. The term "Accessory Structure" shall also include children's playhouses, tree houses, storage houses built on skids and on permanent foundations and any other Structure not expressly exempted in this Section.

- 2.1.4. *Accessory Use*. A use which is incidental to and customarily found in connection with the principal use of the premises.
- 2.1.5. *Adjacent*. Either abutting or on the opposite side of a common street, right-of-way, or easement that separates it from the subject property. However, properties separated by a freeway or railroad ROW shall not be considered "Adjacent".
- 2.1.6. *Alley*. A public or private right-of-way or easement, on which no parcel fronts, providing access for two (2) or more properties along the side or rear of said properties.
- 2.1.7. *Alteration* and *Altered*. The word "Alteration: shall include any of the following:
  - 1. Any addition to the height or depth of a building or structure.
  - 2. Any change in the location of any exterior walls of a building or structure.
  - 3. Any increase in the interior accommodations of a building or structure.

In addition to the foregoing, a building or structure shall be classified as altered when it is repaired, renovated, remodeled, or rebuilt at a cost in excess of fifty (50) percent of its value prior to the commencement of such repairs, renovation, remodeling, or rebuilding.

- 2.1.8. *Applicable District*. That zoning district in which a structure, subdivision or property is located or proposed to be located.
- 2.1.9. *Applicant*. A landowner, including his heirs, successors and assignees, or developer authorized to represent a property for which an application for development has been filed.
- 2.1.10. Application for Development or Application. Any application required to be filed and accepted prior to start of construction or development including, but not limited to, an application for a building, design review, or sign permit; for the approval of a subdivision plat or plan; or for the acceptance of a development plan.
- 2.1.11. *Basement*. A story partly or wholly underground. For purposes of height measurement a basement shall be counted as a story when more than onehalf (1/2) of its height is above grade level.
- 2.1.12. Best Management Practices, Stormwater. A collection of structural practices and vegetative measures which, when properly designated, installed and maintained, will provide effective erosion and sedimentation control for all rainfall events.
- 2.1.13. *Block.* A unit of land bounded by streets or a combination of streets, public land, public parks, cemeteries, railroad rightsof-way, watercourses, or any other barrier to the continuity of development.
- 2.1.14. *Board of Zoning Adjustment*. The Board of Zoning Adjustment of the City of Vestavia Hills, Alabama established pursuant to the provisions of <u>Article 12</u> and through which, the Board considers

requests for variances and special exceptions and hears appeals to decisions of city staff in regard to this Zoning Ordinance.

- 2.1.15. Buffer. A landscaped strip of land provided between two or more properties, uses, or buildings to mitigate the incompatible characteristics of adjacent uses and/or buildings. Buffers may include berms, shrubs, trees, fences or walls, other screening devices, or a combination of such devices as required by §9.3 Buffers.
- 2.1.16. *Build-to Line*. A line parallel to the front lot line establishing the furthest distance a building may be built from such lot line.
- 2.1.17. Building. Any structure, consisting of a foundation, walls or supports and roof with or without other parts, constructed or used for a residence, business, industry, or other public or private purpose, or accessory thereto, and including greenhouses, stables, garages, roadside stands, manufactured homes, and similar structures, whether stationary or movable, but excluding recreational vehicles/travel trailers, fences, walls, signs and awnings. Features which are structurally essential and connected to the structure shall be considered as part of the structure within the meaning of this Zoning Ordinance.
- 2.1.18. *Building Area*. The portion of the lot occupied by the main building, accessory buildings, other structures and impervious surfaces.
- 2.1.19. *Building Code*. The code(s) adopted by the City, and as may be amended from time to time by the Council, which governs the design and construction of buildings and structures, including fire, plumbing and electrical codes.
2.1.20. *Building Height*. The vertical distance measured from the finished grade level at the front of the building to the deck line for mansard roofs, to the uppermost point of the parapet wall for flat roofs, and to the average height between eaves and ridges for gable, hip, and gambrel roofs.



Determining Building Height

2.1.21. *Building Line*. The perimeter of that portion of a building or structure nearest a lot line, but excluding open steps, terraces, cornices, and other ornamental features projecting from the walls of the building or structure.



- 2.1.22. *Building Official*. An official of the City of Vestavia Hills Department of Building Safety designated to administer and enforce the City Building Code and applicable provisions of this Zoning Ordinance.
- 2.1.23. *Caliper*. The trunk diameter of a tree measured six inches above grade level.
- 2.1.24. *Certificate of Occupancy*. A certificate issued by the Department of Building Safety, with approval of the Fire Marshal, upon completion of a new building or upon a change or conversion of the structure or use of a building, which certifies that all requirements and regulations as provided herein and within all other applicable requirements, have been complied with.
- 2.1.25. *City, The*. The City of Vestavia Hills, Alabama unless otherwise indicated by context.
- 2.1.26. *City Council or Council.* The City Council of the City of Vestavia Hills, Alabama.
- 2.1.27. *City Engineer*. A registered professional engineer, licensed by the State of Alabama, and employed by the City of Vestavia Hills or engaged as a consultant by the City.

- 2.1.28. *City Fire Code or Fire Code*. An ordinance adopted by the City providing standards for fire safety and as may be modified from time to time by the City Council.
- 2.1.29. *City Planning Staff*. Municipal staff designated to review development plans, including the Zoning Official/City Clerk, Fire Marshal, City Engineer, Building Official and others as needed.
- 2.1.30. *Clear Sight Triangle*. See "Sight Triangle, Clear".
- 2.1.31. *Commercial Vehicle*. Any motor vehicle licensed by the state as a commercial vehicle.
- 2.1.32. *Commission, The*. See "Planning Commission".
- 2.1.33. Comprehensive Plan. The official public document prepared in accordance with §11-52-8 of the Code of Alabama, 1975, as amended, consisting of maps, charts, and textual material, that constitutes a policy guide to decisions about the future development of the City.
- 2.1.34. Conditional Use. A use which may be permitted only by the Council following a recommendation by the Commission in accordance with §13.3. The recommendation by the Commission may be to approve or deny the application, which said recommendation is advisory only. Zoning is a legislative matter decided by the Council. The Council is not bound by the recommendation of the Commission.
- 2.1.35. *Condominium*. A division of property or interest in property as defined by, created under and subject to the "Alabama Uniform Condominium Act of 1991" and subsequent amendments and revisions.
- 2.1.36. *Conservation Easement*. A voluntary agreement between a landowner and a municipal agency or qualified not-for-

profit corporation to restrict the development, management, or use of the land in perpetuity or as otherwise defined by the terms of the easement.

- 2.1.37. *Covenant*. A restriction upon the use of a property placed in a deed running with the land and enforced by private landowners or homeowner or condominium associations.
- 2.1.38. *Dedication.* The deliberate assignment of land by its owners for any general or public uses, reserving to themselves no other rights than such as are compatible with the full exercise and enjoyment of the public uses to which the property has been devoted.
- 2.1.39. *Deed.* A legal document conveying ownership of real property.
- 2.1.40. *Density*. The number of dwelling units per acre of lot area.
- 2.1.41. *Design Capacity*. The maximum number of persons that may be accommodated by a use as determined by its design and by the Building Code.
- 2.1.42. *Developer*. Any owner, agent of such owner or tenant with the written permission of such owner, who makes or causes to be made a land development.
- 2.1.43. *Development*. Any of the following activities:
  - 1. The improvement of one (1) lot or more abutting lots, tracts or parcels of land for any purpose involving:
    - a. a group of two (2) or more residential or non-residential buildings, whether proposed initially or cumulatively, or a single non-residential building on a lot or lots regardless of the number of occupants or tenure; or
    - b. the division or allocation of land or space, whether initially or cumulatively, between or among two

or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features;

- 2. A subdivision of land.
- Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.
- 2.1.44. *Driveway*. A private drive providing access between a street or access drive and a parking or other vehicular use area.
- 2.1.45. *Dwelling Unit*. One or more rooms located within a building and forming a single habitable unit with facilities, which are used or intended to be used for living, sleeping, cooking and eating purposes by not more than one (1) family.
- 2.1.46. *Easement*. A right granted by a landowner to a grantee, allowing for limited use of private land for a public or quasi-public or private purpose, and with which the property owner shall not have the right to make use of the land in a manner that violates the right of the grantee.
- 2.1.47. *Engineer*. A professional engineer registered by the State of Alabama Board of Registration for Professional Engineers and Surveyors.
- 2.1.48. *Entity*. A person, association, firm, corporation, or organization of any kind.
- 2.1.49. *Erect*. To build, construct, reconstruct, move upon or any other physical operation on the premises required for development.
- 2.1.50. *Façade*. The exterior wall of a building extending the entire width of a building elevation that faces a public street or any public way.



- 2.1.51. Family. One or more persons related by blood, marriage, or adoption, or by some other legal custodial relationship, living and cooking together as a single housekeeping unit in a single dwelling unit; or two unrelated individuals living and cooking together as a single housekeeping unit in a single dwelling unit. For purposes of this Ordinance, "family" shall not include any society, club, fraternity, sorority, association, lodge, federation, or like organizations; or any group of individuals who are in a group living arrangement. See also "Housekeeping Unit".
- 2.1.52. *Fence*. Any barrier of any material or combination of materials, other than a building, erected to enclose or screen areas of land or used as a means of protection, confinement or buffering. For the purposes of this Ordinance, the "fence" includes the term "wall", but does not include the term "retaining wall".
  - 1. *Buffer Fence*. A fence used toward fulfillment of the requirements of <u>§9.3</u> <u>Buffers</u>.
  - 2. *Privacy Fence*. A fence intended to provide a physical and visual barrier between common or public areas and a private area or use. Privacy fences are distinguished from other fences by their height and opaque design.

- 3. *Screen Fence*. A fence used toward fulfillment of the requirements of <u>§9.4</u> <u>Screening</u>.
- 2.1.53. Floodplain. An area adjacent to a watercourse, which area is subject to flooding as the result of the occurrence of an intermediate regional flood and which area thus is so adverse to past, current or foreseeable construction or land use as to constitute a significant hazard to public health and safety and to property. Floodplains are identified by the National Flood Insurance Program.
- 2.1.54. *Floodway*. The area regulated by Federal, state, or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program) within the 100-year floodplain.
- 2.1.55. *Floor Area, Gross.* The gross horizontal areas of all floors, measured from the exterior faces of the exterior walls of a building. Unfinished garages, basements and cellars are not included in the calculation of gross floor area.
- 2.1.56. *Fowl*. Winged animals other than household pets, including but not limited to, chickens, geese, and ducks, that are kept, bred or raised for commercial purposes.
- 2.1.57. Frontage.
  - 1. *Frontage, Block.* All the property on one side of a street between two intersecting streets measured along the right-of-way line of the street, or if the street is dead-ended, then all of the property on one (1) side between an intersecting street and the dead end of the street.



- 2. *Frontage, Lot.* The width of a lot as measured along its front lot line.
- 2.1.58. *Grade Level*. The average level of the finished ground surface adjacent to the exterior walls of the building.





- 2.1.60. *Greenway*. An open space corridor that links urban, suburban, and rural communities to natural and scenic areas with a network of connected trails, walkways, and natural preservation areas.
- 2.1.61. *Gross Floor Area.* The floor area within the inside perimeter of the exterior walls of the building under consideration, exclusive of vent shafts and courts, without deduction for corridors,

stairways, ramps, closets, the thickness of interior walls, columns or other features.

- 2.1.62. *Gross Leasable Area*. The total floor area for which the tenant pays rent and that is designed for the tenant's occupancy and exclusive use, including any basements and mezzanines.
- 2.1.63. Half Story. See "Story, Half Story".
- 2.1.64. Housekeeping Unit or Single Housekeeping Unit. A family living together in a single dwelling unit, with common access to and common use of all living and eating areas and facilities for the preparation and serving of food within the dwelling unit.
- 2.1.65. *Impervious Surface*. A man-made surface that does not allow the passage or infiltration of rain water. This may include improvements such as roadways, sidewalks, driveways, parking lots and patios. Improvements constructed of pervious materials and intended to minimize stormwater runoff can be submitted to the City's Engineer's office for approval.
- 2.1.66. *Improvements*. Those physical additions and changes to the land that may be necessary to produce usable and desirable developments including but not limited to driveways, landscaping, streets, sidewalks, curbs and gutters, sewer, and stormwater control facilities.
- 2.1.67. *Interim Use.* Any temporary use of land in any area of a planned development, which has been approved as a part of the Master Development Plan and criteria. An interim use can be any use and may or may not be a permitted use or a conditional use in the applicable district.
- 2.1.68. *Intersection Sight Distance*. The length of the line of sight between a motorist, stopped at an intersection, and the nearest

intersection, driveway, alley or other signalized or non-signalized access point to the left or to the right of the motorist.

- 2.1.69. *Junk*. Materials including scrap, copper, brass, rope, rags, batteries, paper, trash, rubber debris, waste iron, steel and other old or scrap ferrous or non-ferrous material, including wrecked, scrapped, ruined, dismantled or junked motor vehicles or parts thereof.
- 2.1.70. *Landscape Architect*. A landscape architect registered by the State of Alabama.
- 2.1.71. *Landscaping*. Treatment of grade with ground cover, shrubs, trees and other vegetation, and/or ornamentation
  - 1. *Building Landscaping*. A landscaped strip between a building and its lot boundary or off-street parking area, as required by <u>§9.2 Site Landscaping</u>.
  - 2. *Frontage Landscaping*. A landscaped strip between off-street parking areas or buildings and adjacent public streets as required by §9.2 Site Landscaping.
  - 3. *Interior Landscaping*. Landscaping within an off-street parking area as required by <u>§9.2 Site Landscaping</u>.
  - 4. *Perimeter Landscaping*. A landscaped strip between an off-street parking area and abutting lots. Perimeter landscaping does not include landscaping between an off-street parking area and buildings on the same lot.
- 2.1.72. *Livestock*. Animals of any kind, including fish and fowl, kept, bred or raised for commercial or other purposes, excluding house pets such as domestic cats and dogs, fish, fowl, and other similar animals kept for personal pleasure in accordance with regulations of the Health Department and applicable animal control authority of the applicable County.

- 2.1.73. *Lot.* A designated Parcel, tract or area of land established by plat, subdivision, or as otherwise permitted by law, to be separately owned, used, developed, or built upon.
  - 1. *Corner Lot.* A lot abutting upon two or more streets at their intersection or on two parts of the same street forming an interior angle of less than 135 degrees.
  - 2. *Flag Lot*. A lot that does not meet the lot width requirements of its district within the normally required front yard setback.
  - 3. *Interior Lot*. Any lot which is not a corner lot.
  - 4. *Reverse Frontage Lot.* A through lot with vehicular access restricted to the street of lesser classification.
  - 5. *Through Lot*. A lot that fronts on two parallel streets or that fronts on two streets that do not intersect at the boundaries of the lot.



- 2.1.74. *Lot Area*. The area contained within the lot lines of a lot, excluding any street right-of-way, but including the area of any easement.
- 2.1.75. *Lot Depth*. The average distance between the front and rear lot lines.
- 2.1.76. Lot Lines.
  - 1. *Front Lot Line*. A lot line separating a lot from the street on which it fronts. On corner lots and double-frontage lots, all

lot lines abutting a street (except alleys 16' or less in width), shall be front lot lines.

2. *Rear Lot Line*. A lot line, which is most distant from a front lot line. In the case of corner lots, the rear lot line shall be that lot line, other than a front lot line, that is shorter in dimension. For the purposes of determining rear yard setbacks on a lot where the side lot lines meet in a point, the "rear lot line" is assumed to be a line not less than ten (10) ft long drawn within the lot between the two side lot lines and parallel to the front lot line, and which is referred to as the "Adjusted Rear Lot Line".





3. *Side Lot Line*. Any lot line, which is not a front or rear lot line.



Lot Lines, Interior Lot



Lot Lines, Corner Lot

2.1.77. Lot Width. In the case of interior lots, the distance between the side lot lines. In the case of corner lots, the distance between the front lot line and the opposing lot line. Such distance shall be measured along a straight line, which is at right angles to the axis of the lot, and shall be measured at the front yard setback line. When a lot abuts on a curved street, the lot width is determined using the arc length.



- 2.1.78. *Lot of Record*. A lot that exists as shown on a deed or plat, which has been recorded by the applicable County.
- 2.1.79. *Master Development Plan.* A plan required for the review and approval of a planned development, in which necessary information is provided sufficient for the Commission, Council and other

reviewers to determine its compliance with the intents and requirements of the applicable provisions of this Ordinance.

- 2.1.80. *Mulch*. A material (pine straw, bark chips, wood chips, etc.) placed on the ground to stabilize soil, protect roots, limit weed growth and otherwise promote tree and shrub growth.
- 2.1.81. *Net Floor Area.* The actual occupied area, not including unoccupied accessory areas such as corridors, stairways, ramps, toilet rooms, storage areas, mechanical rooms and closets.
- 2.1.82. *Nonconformities*. An improvement, premises or use that does not conform to regulations of this Ordinance and/or other regulations of the City, but which lawfully existed prior to the effective date of such regulations.
  - 1. *Nonconforming Improvements*. Any improvements made to land not in conformance with the provisions of this Ordinance or other applicable regulations of the City. Improvements, which may be classified as nonconforming, include but are not limited: parking areas, driveways, lighting, sidewalks, buffers and screening, and other landscaping.
  - 2. *Nonconforming Premises*. A premises and/or building thereupon not meeting the applicable dimensional requirements of this Ordinance.
  - 3. *Nonconforming Use.* The use of any building or land which was lawful at the time of passage of this Ordinance or amendment thereto, but which use does not conform, after the passage of this Ordinance or amendment thereto, with the use regulations of the district in which it is situated.
- 2.1.83. *Open Space*. Land, not covered by parking areas, rights-of-way or buildings other than recreational structures, pools

and stormwater facilities, which is landscaped or left in a natural state as required by the provisions of this Ordinance.

- 1. Common Open Space. Open space within a development held in common ownership and maintained by a property owners' association of all residents for recreation, protection of natural land features, amenities or buffers; is freely accessible to all residents of the development; and is protected by the provisions of this Ordinance to ensure that it remains in such use(s).
- 2.1.84. *Patio*. A level, landscaped, and/or surfaced area directly adjacent to a principal building near finished grade and not covered by a permanent roof.
- 2.1.85. *Planned Development*. One or more contiguous parcels planned and developed as a single entity according to an approved Master Development Plan.
- 2.1.86. *Planning Commission* or *Commission*. The City of Vestavia Hills Planning and Zoning Commission.
- 2.1.87. *Poultry*. Fowl normally raised as food such as chickens, ducks, geese, guineas and turkeys or for commercial uses such as peacocks.
- 2.1.88. *Premises*. A lot, parcel, tract or plot of land including all buildings, improvements and structures existing thereon.
- 2.1.89. *Principal Building*. A building, in which is conducted the principal use of the lot on which it is situated.
- 2.1.90. *Principal Use*. The primary or predominant use of any lot or parcel.
- 2.1.91. Property Maintenance Code or City Property Maintenance Code. The International Property Maintenance Code as adopted by the City Council, as amended.

- 2.1.92. *Public Hearing*. A meeting announced and advertised in advance and open to the public, with the public given an opportunity to talk and participate. Public hearings are advertised and held in accordance with the <u>Code of Alabama</u>, 1975, as amended.
- 2.1.93. Public Notice. Notice published prior to a Public Hearing, as required by the Code of Alabama, 1975, as amended. Such notice states the time and place of the hearing and the particular nature of the matter to be considered at the hearing. Public notice for rezoning, conditional use and/or variance requests also include the posting of a sign at conspicuous locations along the perimeter of the subject property; the sign is posted at least one (1) week prior to the hearing and describes the nature, date, time, and location of the hearing.

Public notice of a public hearing to consider an application for zoning or rezoning must be provided (published or posted) by the City in accordance with the <u>Code of Alabama</u>, 1975, as amended, including specifically, Title 11-52-77 and Title 11-45-8 and Act 1123 of the 1973 Legislature.

- 2.1.94. *Remote Parking*. A parking area not located on the same lot as the use for which the parking is provided.
- 2.1.95. *Retaining Wall.* A wall resisting the lateral displacement of soil or other materials to improve or control drainage and erosion.
- 2.1.96. *Ridge Line*. The intersection of two roof surfaces forming the highest horizontal line of the roof.
- 2.1.97. *Right-of-Way*. Land reserved, used, or to be used for a street, alley, walkway, drainage facility, or other public purpose.

- 2.1.98. *Right-of-Way Line*. The line that forms the boundary of a right-of-way, typically corresponding with the front lot line of abutting properties.
- 2.1.99. *Runoff.* The portion of rainfall, irrigation water and any other liquids that flows across ground surface and eventually is returned to streams.
- 2.1.100. *Setback*. The distance between a building or structure and a lot line. See also "Yard".
- 2.1.101. *Setback Line*. A line that is the required minimum distance from any lot line and that establishes the area within which the principal structure must be erected or placed.
- 2.1.102. *Shrub*. A woody plant, generally multistemmed and smaller than a tree.
- 2.1.103. *Sight Triangle, Clear.* An area of unobstructed vision at a street intersection defined by a line of sight between points at a given distance from the intersection of the street centerlines. See also "Intersection Sight Distance".
- 2.1.104. *Site*. Area of a lot occupied by a structure.
- 2.1.105. *Stacking Space*. A space intended for the queuing of vehicles to a drive-through window, fuel pump, ATM or similar standing point.
- 2.1.106. *Story*. That portion of a building included between the surface of any floor and the surface of the floor next above it, or, if there be no floor above it, then the space between the floor and the ceiling next above it.
  - Half Story. A space under a sloping roof in which space the possible floor area with headroom of five (5) feet or less contains at least forty (40) percent of the total floor area of the story directly beneath it; or a building story that contains not more than fifty (50) percent

of the total floor area of the story directly beneath it.

- 2.1.107. Street. Any vehicular way that is (1) an existing state, county, or municipal roadway; (2) shown upon a plat approved pursuant to law; (3) approved by other official action; (4) shown on a plat duly filed and recorded in the office of the applicable county tax assessor; (5) shown on the official map or adopted master plan. The term "street" includes the land between the street lines, but excludes alleyways that are 20' or less in width, whether improved or not.
  - 1. *Access Drive*. A private street providing access to a development from a street on which the development has only a very narrow street frontage.
  - 2. *Access Street*. A minor street, which is parallel and in close proximity to a higher order street and that provides access to abutting properties. Also commonly referred to as a frontage road or service road.
  - 3. *Arterial*. A street that distributes traffic to and from collectors. Arterials include U.S. Highway 31, U.S. Highway 280, and Columbiana Road.
  - 4. *Collector*. A street that collects traffic from local streets and connects with minor and major arterials. Collector streets include, but are not limited to, Acton Road, Altadena Road, Cahaba Heights Road, Cahaba River Road, Crosshaven Drive, Dolly Ridge Road, Green Valley Road, Massey Road, Rocky Ridge Road, Shades Crest Road, and Tyler Road.
  - 5. *Cul-de-sac*. A local street terminating in a vehicular turnaround at one end.
  - 6. *Local Street*. A street used primarily to provide access to abutting properties.

- 2.1.115. Waiver. Limited relief or adjustment to the literal requirements of this Ordinance granted by the Zoning Official.
- 2.1.116. Wall. (1) A vertical screen or barrier distinguished from a "fence" in its design and materials. See "Fence". (2) A vertical exterior or interior surface of a vertical exterior or interior surface.
- 2.1.117. Yard. An open space lying between the principal building and the nearest lot line.
- Front Yard. A yard extending the full width of the lot between any building and the front lot line and measured from perpendicular to the front building line.
- 2. Rear Yard. A yard extending across the full width of the lot between the principal building and the rear lot line (or adjusted rear lot line) and measured perpendicular to the rear building line.
- 3. Required Yard. The minimum required open space between a building or structure and the nearest lot line, unoccupied and unobstructed by any structure from the ground upward.
- 4. Side Yard. A yard between the main building and the side lot line and extending from the front yard to the rear yard and measured perpendicular to the side building line.



- 2.1.108. Street Centerline. A line running parallel with the street right-of-way which is half the distance between the extreme edges of the official right-of-way width as surveyed, or where not surveyed, half the distance from the edges of pavement.
- 2.1.109. Structure. Anything constructed or erected, the use of which requires a location on the ground, or attached to ground, including but not limited to buildings, signs, billboards, backstops for tennis courts, fences, or radio tower.
- 2.1.110. Structural Alterations. Any change in the supporting members of a building or structure, such as bearing walls, columns, beams or girders.
- 2.1.111. Temporary Building. Portable, mobile or transportable contractor's construction buildings, the use of which is incidental to construction operations being conducted on the same or adjoining lot or tract will be allowed with permit all districts, provided they are not used as a dwelling.

2.1.112. Tree.

- Canopy Tree. A deciduous tree, usually single-trunked, with a defined crown of foliage, which attains a mature height of at least thirty (30) feet.
- 2. Understory Tree. A deciduous or evergreen tree which attains a mature height of no greater than thirty (30) feet.
- 2.1.113. Use. The purpose for which land or a building or other structure is designed, arranged, or intended or for which it is or may be occupied or maintained.
- 2.1.114. Variance. Relief or an adjustment to the literal requirements of this Ordinance granted pursuant to the provisions of <u>Article 12</u>.

#### Yards, Corner Lot

- 2.1.118. *Zoning Approval*. Certification issued by the Zoning Official stating that an application for development is in conformity with the requirements of this Ordinance.
- 2.1.119. *Zoning Official.* The municipal official designated to administer this Zoning Ordinance. The term "Zoning Official" may also include a designated representative of the Zoning Official.

# §2.2. Use Definitions

- 2.2.1. *Animal Shelter*. Non-profit (e.g., SPCA) or public organization providing shelter for small domestic animals.
- 2.2.2. Assisted Living Facility. A permanent building, portion of a building, or a group of buildings in which room, board, meals, laundry, and assistance with personal care and other services are provided for not less than twenty-four (24) hours in any week to a minimum of two ambulatory adults not related by blood or marriage to the owner and/or administrator and licensed by the State of Alabama.
- 2.2.3. Automotive Repair Service.
  - 1. *Minor Automotive Repair Service*. A place of business engaged in the repair and maintenance of automobiles and light trucks including the sale, installation, and servicing of mechanical equipment and parts but not including painting, body work, upholstery work, fabrication of parts, or rebuilding of engines.
  - 2. *Major Automotive Repair Service*. A place of business engaged in the repair and maintenance of automobiles and light trucks including the sale, installation, and servicing of mechanical equipment and parts including painting,

body work, upholstery work, fabrication of parts, or rebuilding of engines.

- 2.2.4. *Bed and Breakfast.* An establishment having guest rooms, which are subordinate and incidental to the main, owner occupied, single-family residential use.
- 2.2.5. Boarding House. Any building or portion thereof that contains not less than three (3) nor more than nine (9) guest rooms, which are designed or intended to be used, let, or hired out for occupancy by individuals for compensation whether paid directly or indirectly, for a definite period of time longer than thirty (30) days.
- 2.2.6. *Business Support Service*. A place of business that supplies support services primarily to business or professional offices or services, such as photocopy, computer, and office equipment, supplies and services.
- 2.2.7. *Caretaker Dwelling*. A residence, incidental to a principal use, for an onsite manager, watchman or caretaker employed on the premises.
- 2.2.8. *Clinic*. A building or portion of a building where patients are not lodged overnight, but are admitted for examination and treatment.
- 2.2.9. *Club, Private*. A building or portion thereof or premises owned or operated by a corporation, association, person for a social, educational or recreational purpose, but not primarily for profit or to render a service which is customarily carried on as a business.
- 2.2.10. *Conservation Subdivision*. A residential development, in accordance with §7.3, wherein a portion(s) of the site is set aside as open space.
- 2.2.11. *Construction Service*. A place of business engaged in construction

activities, incidental storage, and wholesaling of building material (but not a home improvement center which also sells at retail), such as a building contractor, trade contractor, or wholesale building supplies store.

- 2.2.12. *Convenience Store*. A retail sales business, which specializes in providing household products and foods. Convenience stores may also provide for any or all of the following as an accessory use: video tape rental, preparation and sale of deli foods.
- 2.2.13. *Country Club*. A recreational facility, usually restricted to members and their guests, which generally includes a clubhouse, dining and recreation facilities.
- 2.2.14. Day Care Center. A care facility, licensed by the State of Alabama Department of Human Resources, which receives more than six (6) children for care during only part of the day.
- 2.2.15. *Day Care Home, Family*. A care facility, licensed by the State of Alabama Department of Human Resources, which is a single-family dwelling and which receives children for care during only part of the day.
- 2.2.16. *Donation Bin*. A container or receptacle held out to the public as a place for people to drop off clothing or other items as donations to a charitable organization.
- 2.2.17. *Duplex*. A building designed and arranged to provide separate sleeping, cooking and kitchen accommodations and toilet facilities for occupancy by two families.
- 2.2.18. *Dwelling*. A building containing one or more dwelling units used for residential purposes, but in the case of a building having two or more portions divided by one or more party walls forming a

complete separation, each such portion shall be considered a separate dwelling.

- 1. *Single-family Dwelling*. A building designed for or occupied exclusively by one family and having only one dwelling unit from the ground to roof and having independent outside access.
- 2. *Dwelling, Multi-Family.* A building or portion thereof designed for occupancy by four or more families living independently of each other under one roof.
- 2.2.19. Entertainment.
  - 1. *Indoor Entertainment*. A commercial establishment providing spectator entertainment within an enclosed building, including movie theaters and playhouses; and art centers and similar indoor cultural facilities.
  - 2. *Outdoor Entertainment.* A commercial establishment providing spectator entertainment in open or partially enclosed or screened facilities, including amphitheaters, sports arenas, racing facilities, and amusement parks.
- 2.2.20. Farm.
  - 1. *Raising of Crops.* The tilling of soil, the raising of crops, horticulture and gardening and including the sale of crops or horticultural products incidental to the operation of a farm.
  - 2. *Raising of Livestock*. The keeping or raising of cattle, horses, swine, and/or fowl and including sale of such livestock and dairy products incidental to the operation of a farm.
- 2.2.21. *Farming, Forestry.* Operations involving the operation of timber tracts, tree farms, forest nurseries, the gathering of forest products, or performing forest services, including temporary sawmills and chippers for cutting of timber growth on

the same premises but excluding lumber yards, mills, and similar activities.

- 2.2.22. *Farm Support Business*. A commercial establishment engaged in the sale of farm support goods and services, including the following activities: the sale of feed, grains, fertilizers, pesticides, and similar farm support goods, the provision of warehousing and storage facilities for raw farm products, and the provision of veterinary services to large animals.
- 2.2.23. *Gas Station*. A business that includes gasoline sales and that may also include an automatic car wash function and retail sales of food, beverages, and sundries, but which does not include any automotive repair services, sales, or rental. A "Gas Station" that contains a minor automotive repair function is considered a "Service Station".
- 2.2.24. *Group Home*. A non-profit or for-profit facility for the sheltered care of persons with special needs, which, in addition to providing food and shelter, may also provide some combination of personal care, social or counseling services and transportation.
- 2.2.25. *Home Improvement Center*. A place of business providing building, appliance, yard and garden materials, tools, and supplies at retail and wholesale.
- 2.2.26. *Home Occupation*. An occupation or activity carried out for gain which is clearly incidental to use of the premises for dwelling purposes in accordance with <u>§7.1 Home Occupations</u>.
- 2.2.27. *Hotel*. A building offering transient lodging accommodations to the general public and which may include other functions, such as restaurants, conference rooms, entertainment, personal services, and recreational facilities. "Hotels" are distinguished from "motels" in that hotel

guest rooms are accessible from the interior of the building.

- 2.2.28. *Institution*. A nonprofit, religious, or public use, such a s a religious building, library, public or private school, hospital, or government-owned or governmentoperated building, structure, or land used for public purpose. For the purposes of this Ordinance, institutional uses are further categorized as:
  - Low Intensity Institutional Use. Civic, service, and fraternal organizations and cultural facilities up to 10,000 sq. ft.; day care centers; pre-schools; elementary schools; group homes with more than six (6) residents.
  - 2. *Medium Intensity Institutional Use.* Nursing homes; civic, service, and fraternal organizations and cultural facilities between 10,000 and 50,000 sq. ft., government buildings up to 12,500 sq. ft.; health institutions up to 50,000 sq. ft.; junior high and middle schools; places of assembly up to 750 seats; stadiums and arenas up to 5,000 seats; other institutions up to 50,000 sq. ft.
  - 3. *High Intensity Institutional Use*. Government buildings greater than 12,500 sq. ft.; health institutions greater than 50,000 sq. ft.; places of assembly greater than 750 seats; high schools, universities, colleges, junior colleges; other institutions greater than 50,000 sq. ft.
- 2.2.29. *Kennel*. A lot or premises on which three(3) or more dogs are housed, groomed, bred boarded, trained, or sold, all for a fee or compensation.
- 2.2.30. *Laundromat*. An establishment providing washing, drying, or dry cleaning machines on the premises for rental use to the general public.

- 2.2.31. Laundry and Dry Cleaning Establishment. A service establishment engaged in the cleaning or laundering of garments primarily for individuals.
- 2.2.32. *Laundry, Industrial*. A service establishment primarily engaged in high volume laundry and garment services, including linen supply; diaper service; industrial laundries; and carpet and upholstery cleaners.
- 2.2.33. *Live-Work.* A two-story or taller building designed to accommodate a business on the ground story and one single-family dwelling on the upper story. The business is owned and/or operated by the owner of the dwelling and therefore the building may be designed to accommodate interior access between the business space and the dwelling above.
- 2.2.34. *Lodging*. A use in which temporary living quarters are made available to the general public for compensation, including but not limited to hotels and motels.
- 2.2.35. Lounge. A licensed establishment engaged in the preparation, sale, or serving of liquor for consumption on the premises, including taverns, bars, cocktail lounges, night clubs, private clubs, restaurant lounges, hotel or motel lounges, and similar uses where liquor consumption is a primary or incidental activity on the premises for the establishment. Not included within this definition are establishments that sell or serve only beer or wine as an incidental activity on the premises or establishments that sell liquor, beer, or wine in packages for off-premise consumption.
- 2.2.36. *Maintenance Service*. An establishment providing building and yard maintenance services, such as janitorial services, exterminating services, landscape

services, and window cleaning services to include incidental covered storage only.

- 2.2.37. *Manufacturing, Light.* The manufacture, predominantly from previously prepared materials, of finished products or parts, including processing, fabrication, assembly, treatment, and packaging of such products, and incidental storage, sales, and distribution of such products.
- 2.2.38. *Mixed Use*. The co-location of residential uses with non-residential uses on one lot or in one building, as may be permitted within certain districts within this Ordinance.
- 2.2.39. *Motel.* A building offering transient lodging accommodations to the general public and which may include other functions, such as restaurants, conference rooms, entertainment, personal services, and recreational facilities. "Motels" are distinguished from "hotels" in that motel guest rooms are accessible from the exterior of the building.
- 2.2.40. *Neighborhood Retail.* Retail uses that serve the daily and weekly needs of residents in surrounding neighborhoods and that are housed in buildings of a scale compatible with surrounding residential development. Such uses include but are not limited to delicatessens, small grocery stores, drug stores, convenience stores, hardware stores, clothing stores and jewelry stores. Neighborhood retail does not include appliance, furniture, gasoline or automotive sales.
- 2.2.41. *Neighborhood Services*. Service uses that serve the daily and weekly needs of residents in surrounding neighborhoods and that are housed in buildings of a scale compatible with surrounding residential development. Such uses include, but are not limited to, banks, dry

cleaning pick-up stations, beauty salons, barber shops, shoe repair, alterations, and fitness centers. Neighborhood services do not include automotive repair services.

- 2.2.42. Nursery School or Kindergarten. Any premises or portions thereof used for educational work or parental care of children of less than the age required for enrollment in the public school system. Nursery school or kindergarten includes every preschool, nursery school or kindergarten operated separate and apart from another school offering general education courses or from a place of worship. For purposes of this Ordinance, nursery schools or kindergartens operated in conjunction with and on the premises of any such school or place of worship shall be considered a part of such school or place of worship.
- 2.2.43. *Nursing Home*. A home for the aged or infirm in which three or more persons not of the immediate family are received, kept or provided with food or shelter or care for compensation, but not including hospitals, clinics or similar establishments devoted primarily to the diagnosis and treatment of the sick or infirm.
- 2.2.44. *Personal Service*. A retail establishment providing services involving the care of a person, such as a barber shop, beauty shop, cosmetic studio, dry cleaning and laundry pick-up station, indoor exercise and fitness center, tanning salon, seamstress, tailor, shoe repair shop, key repair shop, travel agency, interior decorator, formal wear rental, and similar uses.
- 2.2.45. *Place of Assembly*. Buildings arranged for general assembly for civic, public, social or religious purposes, including banquet rooms, coliseums, community centers, civic centers, places of worship and similar uses.

- 2.2.46. *Place of Worship*. Building used for nonprofit purposes by a recognized and legally established sect solely for purposes of worship.
- 2.2.47. *Public Facility*. Buildings arranged for the purpose of providing public services, not otherwise listed in this section, including government offices, post offices, transit stations, police stations, fire and emergency service stations, civil defense operations, and similar uses.
- 2.2.48. *Public Utility Facility*. Facility that provides public utility services to the public at large, including water and sewerage facilities, gas distribution facilities, electric transmission and distribution facilities, and cable transmission and distribution facilities.
- 2.2.49. Recreation.
  - 1. Active Recreation. Outdoor recreation that requires dedicated facilities and maintenance, such as swimming, organized sports, tennis and similar activities.
  - 2. *Indoor Recreation*. A commercial establishment providing recreational or sports activities to participants within an enclosed building, including bowling alleys, billiard parlors, video game centers, ice and roller skating rinks, and other commercial indoor recreational and sports activities.
  - 3. *Outdoor Recreation.* A commercial establishment providing recreation or sports activities to participants in open or partially enclosed or screened facilities, including driving ranges, miniature golf courses, golf courses, swimming pools, tennis courts, and other commercial outdoor recreational and sports activities.
  - 4. *Passive Recreation*. Outdoor recreation that does not require significant maintenance or facilities, such as

walking, hiking, picnicking, viewing, and environmental education activities. Passive recreation shall also include the impromptu use of an open space for nonorganized sports activities or games.

- 2.2.50. Restaurant.
  - 1. *Fast Food Restaurant*. An establishment where food and drink are rapidly prepared for carry out, fast delivery, drive-through, or drive-in and may also include standard sit-down consumption.
  - 2. *Standard Restaurant*. An establishment where food and drink are prepared, served, and primarily consumed within the building where guests are seated and served.
- 2.2.51. Salvage Yard. A lot or structure or part thereof, used primarily for the collecting, storage and sale of junk or for the collecting, dismantling, storage and salvaging of machinery or vehicles not in running condition, or for the sale of parts thereof.
- 2.2.52. Service Station. Any building, structure, or land used primarily for the dispensing, sale or offering for sale at retail of any automobile fuels, oils or accessories but not including major work such as motor overhaul, body and fender repair or spray painting.
- 2.2.53. *Shopping Center*. A group of commercial establishments planned, constructed and managed as a single entity with common parking and driveway facilities.
- 2.2.54. *Telecommunication Facilities*. Any cables, wires, lines, wave guides, antennas, structures, and any other facilities or equipment associated with the transmission or reception of electronic communication located near or installed upon a tower or antenna support structure.

- 2.2.55. *Townhouse*. A single-family dwelling in a row of at least three such units in which each unit has its own front and rear outdoor access, no unit is located over another, and each unit is separated by one or more vertical common fireresistant walls.
- 2.2.56. *Triplex.* A building containing three (3) dwelling units, each of which has direct access to the outside or to a common hall.

# §2.3. Abbreviations used in this Ordinance

- 2.3.1. ac Acre(s)
- 2.3.2. ADEM Alabama Department of Environmental Management
- 2.3.3. ALDOT Alabama Department of Transportation
- 2.3.4. ATM Automated Teller Machine
- 2.3.5. bldg Building
- 2.3.6. BR Bedroom or guest accommodation
- 2.3.7. BZA Board of Zoning Adjustment
- 2.3.8. DRB Design Review Board
- 2.3.9. DU Dwelling unit
- 2.3.10. ft Foot or Feet
- 2.3.11. GFA Gross Floor Area
- 2.3.12. If Linear feet
- 2.3.13. max. Maximum
- 2.3.14. min. Minimum
- 2.3.15. MPO Metropolitan Planning Organization
- 2.3.16. n/a not applicable
- 2.3.17. PUD Planned Unit Development
- 2.3.18. ROW Right-of-way
- 2.3.19. sq. ft. Square feet
- 2.3.20. % Percent

2.3.21. § - Section, Subsection or similar division of this Ordinance

Ordinance No. 3099

# Article 3 ESTABLISHMENT OF DISTRICTS

#### §3.1. Purpose

The following Ordinance has been prepared by the Vestavia Hills City Planning and Zoning Commission, hereinafter referred to as "the Commission" and adopted by the Vestavia Hills City Council, hereinafter referred to as "the Council". This Zoning Ordinance regulates the general use of private land. It does this through the establishment of zones or districts and outlines the intended use for each. Thus there are residential districts and institutional, business and planned development districts.

The Ordinance further sets forth conditions for use. For instance, in order to control the density of population it prescribes minimum front, rear and side yards, numbers of families per lot, and amount of total ground space per family on any one lot.

This Zoning Ordinance is administered by the Zoning Official.

This Ordinance provides for a Board of Zoning Adjustment. The Board's duties are largely judicial. If the Building Official refuses to issue a Building Permit, applicant can appeal to the Board of Zoning Adjustment for a review of his decision.

#### §3.2. Zoning Districts

For the purposes of this Ordinance the City is hereby divided into the following districts:

- 3.2.1. E-2 Residential Estate District
- 3.2.2. R-1 Low Density Residential District
- 3.2.3. R-2 Medium Density Residential District
- 3.2.4. R-3 Medium Density Residential District
- 3.2.5. R-4 Medium Density Residential District
- 3.2.6. R-5 Multi-family Residential District
- 3.2.7. R-6 Zero Lot Line Residential District

- 3.2.8. R-7 Duplex and Triplex Residential District
- 3.2.9. R-8 Townhouse Residential District)
- 3.2.10. R-9 Planned Residential Community District
- 3.2.11. RC-1 Residential District (Condominiums)
- 3.2.12. A Agricultural District
- 3.2.13. B-1 Neighborhood Business District
- 3.2.14. B-1.2 Neighborhood Mixed Use District
- 3.2.15. B-2 General Business District
- 3.2.16. B-3 Arterial Business District
- 3.2.17. O-1 Office Park District
- 3.2.18. O-2 Office Park District
- 3.2.19. INST Institutional District
- 3.2.20. PUD Planned Unit Development District
- 3.2.21. MXD Planned Community Mixed Use District

#### §3.3. Interpretation of District Boundaries

Where uncertainty exists as to the boundaries of any district shown on the zoning map, the following rules shall apply:

- 3.3.1. Where such district boundaries are indicated as approximately following centerlines of streets or alleys, lot lines, stream centerlines, property lines or corporate limit lines, such lines shall be considered to be such boundaries.
- 3.3.2. Where a district boundary divides a lot, the location of such boundary, unless the same is indicated by dimensions shown on the map, shall be determined by the use of the scale appearing on the Zoning Map.
- 3.3.3. Authority for each entry made on the map must be found in the applicable Zoning Ordinance or Amendment.

- 3.3.4. The controlling document for determining the zoning classification of any particular property in the City shall be in the Ordinance adopted and enacted by the Council, which zoned or rezoned said parcel.
- 3.3.5. Where physical or cultural features existing on the ground are at variance with those shown on the Zoning Map, or in other circumstances not covered by the preceding rules, the Board of Zoning Adjustment, hereinafter referred to as "the BZA" shall interpret the district boundaries.

# §3.4. District Boundaries Established

The boundaries of each district are indicated upon the Zoning Map. Said map and all notations, references and other information shown thereon shall be as much a part of this Ordinance as is fully described herein. Said map shall be retained in the office of the City Clerk.

# Article 4 GENERAL REGULATIONS

#### §4.1. Uses

- 4.1.1. In each district no use other than the specific types specified for that district shall be permitted. Uses not specified as permitted, as Special Exception Uses or as Conditional Uses, are prohibited.
- 4.1.2. No permit shall be issued for Special Exception Uses, as indicated in the district regulations, except with the written approval of the BZA, and subject to such conditions as said BZA may require to preserve and protect the character of the District and otherwise promote the purposes of this Ordinance.

Special Exceptions, unlike variances, do not require a showing of unnecessary hardship. A Special Exception denotes a species of administrative permission that allows property to be used in a manner which the regulations expressly permit and under conditions specified in this Ordinance though it may not be permissibly used as a substitute for a variance. A use prohibited by this Ordinance may not be authorized by Special Exception. See <u>§12.3 Special</u> <u>Exceptions</u>.

4.1.3. Any use listed in a district as a Conditional Use shall only be permitted upon approval by the Council upon a recommendation by the Commission in accordance with the procedure set forth in <u>§13.3 Conditional Uses</u>. The recommendation by the Commission may be to approve or deny the application, which said recommendation shall be advisory only. Zoning is a legislative matter decided by the Council. The Council shall not be bound by the recommendation of the Commission.

#### §4.2. General Lot Regulations

- 4.2.1. Street Access. No structure shall be constructed on a nonconforming lot that does not abut a public street with a minimum right-of-way width of forty (40) ft.
- 4.2.2. Official Street Line. Where an official line has been established for the future widening or opening of a street upon which a lot abuts, such official line shall be considered as the property line.

# §4.3. Area and Dimensional Regulations

- 4.3.1. Open Space and Height. In each district each structure hereafter erected or altered shall be provided with the yards specified, shall be on a lot of the area and width specified and shall not exceed the heights specified in the district schedule. No open space or lot required for a building or structure shall during its life be occupied by or counted as open space for another building or structure.
  - 1. No lot shall be reduced in area so that yards and other open spaces total less than the minimum area required under this Ordinance.
  - The sale of lots in an unapproved subdivision is prohibited by Title 11-52-33, Code of Alabama, 1975.
- 4.3.2. Dimensional Standards for Residential Zoning Classifications. In any residential district, the dimensional standards normally required shall not apply if modification or variations from these standards are shown on an approved preliminary plot plan or subdivision plat provided the same shall have been first approved by the BZA, or the Commission by the authority vested in it by the Subdivision Regulations.
- 4.3.3. Existing Lots of Record. A single-family dwelling may be constructed on any nonconforming lot in any residential

district if said lot contains less than the minimum lot area required in the applicable district, provided the following condition is met:

- 1. No structure shall be constructed on a nonconforming lot without front, rear, and side yard setbacks as required in the applicable district.
- 4.3.4. Lot Width. Minimum lot width shall be measured along the front building line.
- 4.3.5. Lot Frontage. Lot frontage should be comparable to the minimum lot width. However, where the lot frontage is less than the minimum lot width, the Commission may approve such lots, if having a minimum of forty (40) feet lot frontage, but all building line restrictions shall remain in full force and effect on such irregularly shaped lots, unless otherwise approved by the Commission. In no case shall the minimum lot frontage be less than forty (40) feet except as follows:
  - 1. Townhouses shall have a minimum lot frontage of eighteen (18) feet
  - 2. Lots on culs-de-sac shall have a minimum lot frontage of twenty-five (25) feet, measured along the arc.



Figure 4.3.5: Lot frontage for cul-de-sacs

3. Non-residential uses in non-residential districts may have a lot frontage width less than forty (40) feet so long as access

to such lot is provided by another frontage greater than forty (40) feet in width, by an alley or by a shared access approved by the Commission.

- 4.3.6. General Setback Regulations
  - 1. The minimum front yard setback may be reduced where the setbacks of the buildings on abutting lots is less than the normally required front yard setback (see Figure 4.3.6). In such case, the setback may be less than that normally required, but not less than:
    - a. For interior lots, the average of the asbuilt setbacks on the abutting lots.
    - b. For corner lots, the as-built setback on the abutting lot per corresponding frontage.
  - 2. No side yard setback shall be required in excess of twenty-five (25) feet.
  - 3. For corner lots in single-family residential districts, the minimum front yard setback shall be observed on both lot frontages abutting street rights-of-way (except alleys 16' or less in width), unless otherwise provided by this Ordinance.
  - 4. Every part of a required yard shall be open from its lowest point to the sky unobstructed except for:
    - a. Accessory uses conforming to <u>§4.4</u> <u>Accessory Structures</u>.
    - b. Uncovered terraces, decks, steps and porches, which are not, in any part, located within five (5) feet of any abutting lot line zoned R-5, R-6, R-7, R-8 and R-9 only. Uncovered steps and stairs, of any height, may encroach no more than twenty-five (25) percent into a required front yard on a single-family or duplex lot.

Reduced setback for Interior Lot



Reduced setback for Corner Lot



Adjusted minimum setback on Frontage A = 36 ft Adjusted minimum setback on Frontage B = 30 ft

Figure 4.3.6 Reduced front yard setbacks

- c. Roof overhangs, projecting into a required yard no more than three (3) feet but in no case shall they project closer than three (3) feet to any property line.
- d. Bay windows, chimneys, window air condition units and similar architectural features or mechanical components of single-family dwellings and duplexes projecting no more than four (4) feet into a required yard. The cumulative width(s) of such encroachments shall not constitute more than ten (10) percent of the total length of the corresponding wall. In no case shall such projections extend nearer than three (3) feet from any abutting lot line.

- e. Mechanical components of central air conditioning systems, irrigation pumps, grinder pumps, or similar mechanical equipment projecting into a required side yard no more than four (4) feet and no closer than five (5) feet to any lot line, except in subdivisions with side setbacks of a minimum of 5' or less or as may be otherwise approved by the Building Official in the case of zero lot line developments.
- f. Moveable awnings attached to and supported by a building wall may be placed over doors or windows in any required yard, but such awnings shall not project closer than five (5) feet to any lot line. Canopies shall provide a clear space between grade level and the bottom of the valance of at least eight (8) feet. See also §7.2 Gas and Service Stations for gas and service station canopies.

In addition to the aforesaid, a reduction of a front, rear or side yard up to one (1) foot may be approved by the Building Official provided that no portion of the building shall extend closer than three (3) feet to the nearest property line.

- 5. On through lots, the required front yard setback shall be provided on each frontage except where a note appears on a recorded plat prohibiting access to one of the abutting frontages. Along such frontage, the minimum rear yard shall be required per the applicable district.
- 4.3.7. Height Regulations. The maximum building height regulations prescribed in this Ordinance shall not apply to belfries, chimneys, church spires, cooling towers, elevator bulkheads, fire towers, flag poles, television antennae, tanks, water towers, or mechanical equipment rooms that:

- 1. do not separately or in combination with other rooftop structures exceed ten (10) percent of the horizontal roof area; and
- 2. no sign, nameplate, display or advertising device of any kind shall be inscribed upon or attached to any such structure or otherwise erected so as to extend above the roof of the principal structure.
- 4.3.8. Sight Distance Requirements. No planting, fence, building, wall, sign or other structure shall be placed or maintained so as to obstruct the vision of motorists within a clear sight triangle determined by the City Engineer in accordance with the City Public Works and Engineering Standards.
- Foundation. Footings and foundations for new constructions and additions installed on a lot or parcel that has an average grade slope exceeding 1/3 shall be designed by a State of Alabama licensed engineer. A geotechnical engineer shall be required to evaluate the site and inspect the footings and foundations.

#### §4.4. Accessory Structures

- 4.4.1. Time of Construction. No accessory building shall be constructed until the construction of the principal building, to which it is accessory, has been commenced, and no accessory building shall be used unless the principal building is also being used
- 4.4.2. Location
  - 1. Accessory structures shall be located only in the rear yard and shall not be located nearer than ten (10) feet from the principal dwelling.
  - 2. Side yard setback. The side yard setback shall be that required of principal structures in the applicable district.

- 3. Rear yard setback. Accessory structures shall not be located nearer than fifteen (15) feet from the rear lot line.
- 4.4.3. Height. Accessory structures shall not exceed one (1) story in height nor sixteen (16) feet. Greater height may be permitted only by a Special Exception upon request to the BZA in accordance with the provision of <u>§12.3 Special Exceptions</u>.
- 4.4.4. Building Materials. If the accessory structure is a detached minor building consisting of masonry or frame walls and roof, then in such event said minor building shall be constructed with building materials of the same type and kind as used for the construction of the principal structure on the premises.
- 4.4.5. Miscellaneous
  - 1. The term "accessory structure" shall not include:
    - a. Any use not on the same lot to which it is accessory unless authorized by the Board of Zoning Adjustment.
    - b. Any use not customarily incidental to a permitted use.
    - c. Any use detrimental to a residential neighborhood, if located within a residential area or if abutting residential uses.
    - d. An accessory dwelling except where specifically permitted by this Ordinance.

# §4.5. Fences.

- 4.5.1. Visibility. No fence or wall shall be permitted between the building line and the front lot line. Fences shall not be placed within the clear sight triangle as determined by the City Engineer.
- 4.5.2. No fence shall be erected, installed, constructed or otherwise structurally altered in the City except in strict

compliance with the terms and provisions of this ordinance.

- 4.5.3. Any person, firm, corporation, partnerships or other entity desiring to build a fence on any property located within the City shall follow the procedure and comply with the following requirements:
  - 1. Unless it has been approved as part of a valid Building Permit, no fence shall be erected, installed, constructed or otherwise structurally altered on any property until a fence permit is issued by the City.
  - 2. No approval for the issuance of a permit shall be made until such time as the Building Official and Fire Marshal have approved the plans and specifications for the erection, installation, construction or structural alteration of said wall or fence and certifies that the same meet the requirement of paragraphs 3 and 4 below.
  - 3. The person, firm, corporation, partnership or other entity applying for a permit shall submit plans and specifications for the erection, installation, construction or structural alteration of the fence. The plans and specifications shall include the following:
    - a. A map or survey of the lot upon which the fence will be located.
    - b. The location of the fence on the property
    - c. The dimensions of the fence, including the height, width and length.
    - d. Estimated cost.
    - e. List and description of materials to be used.
  - 4. No fence shall be erected, installed, constructed, or otherwise structurally altered unless the material utilized therefore is such that the grade and

quality of said material is the same on all sides, including the front and back. Materials are limited to chain link, masonry, vinyl, composite, or wood.

- 5. In all residential zoning districts, fences, regardless of material, shall be no higher than eight feet measured from the ground. Any fence exceeding 8' in height shall require a Conditional Use Approval pursuant to Section 13.3. If Conditional Use Approval is requested, drawings indicating the requested fencing, location, height and materials will be required.
- 6. In all residential zoning districts, fences may be located between the front building line and the front setback line provided said fences are open, ornamental in style, finished on both sides and excluding any chain link or privacy wood fencing.
- 7. For security purposes, in all residential zoning districts, fences may be located between the front building setback and the front lot line providing that all of the following criteria are met:
  - a. The residential property must be a lot of record recorded in the Office of the Judge of Probate; and
  - b. The recorded lot must consist of a minimum one (1) acre of property; and
  - c. The primary residential unit constructed upon the property must be located a minimum 100' from the front lot line; and
  - d. The fence and gate shall be constructed so as to be open, ornamental and decorative in style and constructed of finished stone, masonry and/or metal. Said fencing located within the front yard setback shall exclude wood and/or chain link fencing; and

- e. Said fencing shall be located a minimum of 2' inside the front lot line or a minimum of 5' from any public improvements, within the right-ofway, whichever is greater. Said location shall be approved by the City Planner and/or City Engineer in order to mitigate adverse effects to the subject or adjacent properties. NOTE: All public improvements, including utilities, shall be designated on required drawings in the form of a survey and certified by an Engineer and/or Surveyor licensed by the State of Alabama; and
- f. Said security gate shall be set back minimum 40' from the edge of pavement or at least 2' inside of the private property line, whichever is greater; and
- g. A Knox switch/switches shall be installed and gate shall be at proper width in order to allow access for emergency vehicles and shall be approved by Fire Marshall prior to permitting."

# §4.6. Ownership and Management of Common Open Spaces and Facilities

For all developments involving the creation of open spaces or facilities to be owned and maintained by a homeowner, property owner, or Condominium association, the following shall apply:

4.6.1. Owner's Association. An association representing the owners shall own the common open space or facility in perpetuity. Membership in the association shall be mandatory and automatic for all owners of the subdivision or condominium and their successors. The association shall have lien authority to ensure the collection of dues from all members. The responsibility for maintaining the common open space and/or facilities located thereon shall be borne by the association.

- 4.6.2. Management Plan. The applicant shall submit a plan for management of open space and/or common facilities that:
  - allocates responsibility and guidelines for the maintenance and operation of the common open space/facilities including provisions for ongoing maintenance and for long-term capital improvements;
  - 2. estimates the costs and staffing requirements needed for maintenance and operation of, and insurance for, the common open space/facilities and outlines the means by which such funding will be obtained or provided;
  - 3. provides that any changes to the plan be approved by the Commission; and
  - 4. provides for enforcement of the plan.
- 4.6.3. In the event the party responsible for maintenance of the common open space/facility fails to maintain all or any portion in reasonable order and condition, the City may take any corrective action, to the extent permitted by law, which is deemed necessary and suitable to remedy the situation.

#### §4.7. Condominiums

The condominium form of ownership is permitted in any and all Zoning Districts although the area and dimensional regulations for certain districts or uses may not directly relate to such form of property ownership, such as minimum lot areas, widths or yards. Therefore, condominiums shall not be held literally to such regulations; but instead shall be consistent with their intent. For example, if this Ordinance requires a minimum lot area of 10,000 sq. ft. for a particular district or use, such area shall be provided, although it is not within a separately owned lot, and shall not be counted toward another part of the same development. Similarly, in a district that requires a ten (10) foot side yard setback; there shall be a twenty (20) foot separation between the sides of buildings in a condominium development.

Furthermore, when a district limits the intensity of development to one principal building per lot, such regulations shall not apply literally in the case of condominiums. In such case, more than one such building shall be permitted so long as the minimum (lot) area is provided per principal building.

# §4.8. Commercial Vehicles in Residential Districts

In all residential zoning districts, commercial vehicles, as permitted, shall only be parked behind the front building line or within an enclosed structure.

# §4.9. Donation Bins

- 4.9.1. Donation bins may be located on premises in non-residential districts only and shall not, after the effective date of these regulations, be placed on a premises without written approval of the Zoning Official. The following information shall be provided to the Zoning Official with the request for placement:
  - 1. Name, address and phone number of the applicant.
  - 2. Name, address and phone number of the owner of the concerned property and a letter of authority/permission from said owner.
  - 3. Information as to the manner and schedule for which the bin is to be emptied or removed.
- 4.9.2. Standards. The Zoning Official shall only approve bin placement in accordance with the following:

- 1. Bins shall be set back as required for principal buildings in the applicable nonresidential district and may not encumber any required sight triangle, off-street parking or stacking space, circulation or loading/unloading area, buffer, required yard or landscaping area.
- 2. All goods shall be regularly removed to avoid overflow and the bin area shall be maintained in a safe, orderly condition.
- 3. Bins shall not be placed in any manner that conflicts with conditions imposed on the premises through conditional use, special exception use, variance, design review or similar approval.

# §4.10. Swimming Pools in Residential Districts

- 4.10.1 In all residential zoning districts, pools shall be constructed within the side and/or rear yards with a minimum setback of 5' from any adjacent property line.
- 4.10.2 All mechanical pool equipment shall be located a minimum of 3' from any adjacent property line.
- 4.10.2 Decks constructed for above ground pools in Residential District R-1, R-2, R-3 and R-4 shall be located within the regular side setbacks of the respective zoning district.

Ordinance No. 3099

# Article 5 RESIDENTIAL DISTRICTS

# §5.1. E-2 Residential Estate District

This district is intended to accommodate detached, single-family dwellings on estate-sized lots.

- 5.1.1. Use Regulations. See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following limitations:
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.1.2. Area and Dimensional Regulations: The area and dimensional regulations set forth following and in Table 5.1 shall be observed (See also <u>Article 4 General Regulations</u>):
  - 1. Only one principal building and its accessory structures may be built on any lot of record, which, at the time of enactment of this Ordinance, is separately owned.
  - 2. The maximum building height may be increased to three (3) stories, or 45 feet, whichever is less, upon approval of a Special Exception. Such increase in height shall only be permitted upon a favorable recommendation by the Fire Marshal and subject to any conditions required by the Fire Marshal and/or Board, which may include installation of a home fire sprinkler system.
- 5.1.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see Article 8.
  - 3. For landscaping requirements for permitted non-residential uses, see <u>Article 9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 5.1 E-2 District Area and Dimensional<br>Regulations |                                   |
|------------------------------------------------------------|-----------------------------------|
| Min. Floor Area                                            |                                   |
| One Story                                                  | 2,000 sq. ft.                     |
| Two Story                                                  | 2,000 sq. ft.                     |
| Min. Total Floor Area                                      | 2,000 sq. ft.                     |
| Min. Yard Setbacks                                         |                                   |
| Front                                                      | 75 ft                             |
| Rear                                                       | 50 ft                             |
| Side                                                       | 25 ft                             |
| Min. Lot Area                                              | 1 acre                            |
| Min. Lot Width                                             | 150 ft                            |
| Max. Building Height (see                                  | 35 ft or 2 $\frac{1}{2}$ stories, |
| also §5.1.2.2)                                             | whichever is less                 |
| Max. Building Area                                         |                                   |
| On percent of lot                                          | 25%                               |

#### §5.2. R-1 Low Density Residential District

The district is intended to accommodate detached, single-family dwellings on large lots together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.2.1. Use Regulations. See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following limitations:
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.2.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.2 shall be observed (See also <u>Article 4 General Regulations</u>):
  - 1. Only one main structure and its accessory buildings may be built on any lot of record, which, at the time of enactment of this Ordinance, is separately owned.
  - 2. On no lot separately owned shall the aggregate width of required side yards be such that less than twenty-four (24) feet of the width of the lot be left to build upon after side yard requirements are observed.
  - 3. The maximum building height may be increased to three (3) stories, or 45 feet, whichever is less, upon approval of a Special Exception. Such increase in height shall only be permitted upon a favorable recommendation by the Fire Marshal and subject to any conditions required by the Fire Marshal and/or Board, which may include installation of a home fire sprinkler system.
- 5.2.3. Development Standards.
  - 1. For accessory structures, see  $\S4.4$ .

- 2. For parking requirements, see <u>Article 8</u>.
- 3. For landscaping requirements for permitted non-residential uses, see <u>Article 9</u>.
- 4. For sign regulations, see <u>Article 11</u>.

| Table 5.2 R-1 District Area and Dimensional<br>Regulations |                                                 |
|------------------------------------------------------------|-------------------------------------------------|
| Min. Floor Area                                            | 2,000 sq. ft.                                   |
| Min. Yard Setbacks                                         |                                                 |
| Front                                                      | 60 ft                                           |
| Rear                                                       | 30 ft                                           |
| Side                                                       | 17 ft                                           |
| Min. Lot Area                                              | 20,000 sq. ft.                                  |
| Min. Lot Width                                             | 115 ft                                          |
| Max. Building Height (see                                  | 35 ft or 2 <sup>1</sup> / <sub>2</sub> stories, |
| also §5.2.2.3)                                             | whichever is less                               |
| Max. Building Area                                         |                                                 |
| On percent of lot                                          | 30%                                             |

# §5.3. R-2 Medium Density Residential District

This district is intended to accommodate detached, single-family dwellings on moderately-sized lots together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.3.1. Use Regulations: See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.3.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.3 shall be observed (See also <u>Article 4 General Regulations</u>):
  - 1. Only one main structure and its accessory buildings may be built on any lot of record, which, at the time of enactment of this Ordinance, is separately owned.
  - 2. On no lot separately owned shall the aggregate width of required side yards be such that less than twenty-four (24) feet of the width of the lot be left to build upon after side yard requirements are observed.
- 5.3.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see <u>Article 8</u>.
  - 3. For landscaping requirements for permitted non-residential uses, see <u>Article 9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 5.3 R-2 District Area and Dimensional<br>Regulations |                                                                      |
|------------------------------------------------------------|----------------------------------------------------------------------|
| Min. Floor Area                                            | 1,600 sq. ft.                                                        |
| Min. Yard Setbacks                                         |                                                                      |
| Front                                                      | 50 ft                                                                |
| Rear                                                       | 30 ft                                                                |
| Side                                                       | 15 ft                                                                |
| Min. Lot Area                                              | 15,000 sq. ft.                                                       |
| Min. Lot Width                                             | 100 ft                                                               |
| Max. Building Height                                       | 35 ft or 2 <sup>1</sup> / <sub>2</sub> stories,<br>whichever is less |
| Max. Building Area                                         |                                                                      |
| On percent of lot                                          | 30%                                                                  |

#### §5.4. R-3 Medium Density Residential District

This district is intended to accommodate detached, single-family dwellings on moderately-sized lots together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.4.1. Use Regulations: See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.4.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.4 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - 1. Only one main structure and its accessory buildings may be built on any lot of record, which, at the time of enactment of this Ordinance, is separately owned.
  - 2. On no lot separately owned shall the aggregate width of required side yards be such that less than twenty-four (24) feet of the width of the lot be left to build upon after side yard requirements are observed.
- 5.4.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see <u>Article 8</u>.
  - 3. For landscaping requirements for permitted non-residential uses, see <u>Article 9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 5.4 R-3 District Area and Dimensional<br>Regulations |                                                 |
|------------------------------------------------------------|-------------------------------------------------|
| Min. Floor Area                                            | 1,400 sq. ft.                                   |
| Min. Yard Setbacks                                         |                                                 |
| Front                                                      | 50 ft                                           |
| Rear                                                       | 30 ft                                           |
| Side                                                       | 15 ft                                           |
| Min. Lot Area                                              | 15,000 sq. ft.                                  |
| Min. Lot Width                                             | 100 ft                                          |
| Max. Building Height                                       | 35 ft or 2 <sup>1</sup> / <sub>2</sub> stories, |
|                                                            | whichever is less                               |
| Max. Building Area                                         |                                                 |
| On percent of lot                                          | 30%                                             |

# §5.5. R-4 Medium Density Residential District

This district is intended to accommodate detached, single-family dwellings on moderately-sized lots together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.5.1. Use Regulations: See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.5.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.5 shall be observed (See also <u>Article 4 General Regulations</u>):
  - 1. Only one main structure and its accessory buildings may be built on any lot of record, which, at the time of enactment of this Ordinance, is separately owned.
  - 2. On no lot separately owned shall the aggregate width of required side yards be such that less than twenty-four (24) feet of the width of the lot be left to build upon after side yard requirements are observed.
- 5.5.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see Article 8.
  - 3. For landscaping requirements for permitted non-residential uses, see <u>Article 9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 5.5 R-4 District Area and Dimensional<br>Regulations |                                            |
|------------------------------------------------------------|--------------------------------------------|
| Min. Floor Area                                            | 1,200 sq. ft.                              |
| Min. Yard Setbacks                                         |                                            |
| Front                                                      | 40 ft                                      |
| Rear                                                       | 25 ft                                      |
| Side                                                       | 10 ft                                      |
| Min. Lot Area                                              | 12,000 sq. ft.                             |
| Min. Lot Width                                             | 70 ft                                      |
| Max. Building Height                                       | 35 ft or 2 ½ stories,<br>whichever is less |
| Max. Building Area                                         |                                            |
| On percent of lot                                          | 30%                                        |

#### §5.6. R-5 Multi-family Residential District

This district is intended to accommodate multi-family dwellings together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.6.1. Use Regulations: See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.6.2. Area and Dimensional Regulations. The area and dimensional regulations set forth in Table 5.6 shall be observed (See also <u>Article 4 General Regulations</u>).
- 5.6.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see Article 8.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 5.6 R-5 District Area and Dimensional<br>Regulations |                         |
|------------------------------------------------------------|-------------------------|
| Min. Living Area per                                       | 1,000 sq. ft.           |
| Dwelling Unit                                              |                         |
| Min. Yard Setbacks                                         |                         |
| Front                                                      | 25 ft                   |
| Rear                                                       | 30 ft                   |
| Side                                                       | 20 ft                   |
|                                                            | 17,500 sq. ft for first |
| Min. Lot Area                                              | 4 units plus 3,500 sq.  |
|                                                            | ft. per additional unit |
| May Duilding Usight                                        | 40 ft or 3 stories,     |
| Max. Building Height                                       | whichever is less       |
| Min. Building Group Spacin                                 | g                       |
| Front-to-front                                             | 40 ft                   |
| Front-to-side                                              | 30 ft                   |
| Front-to-back                                              | 50 ft                   |
| Back-to-back                                               | 40 ft                   |
| Side-to-back                                               | 30 ft                   |
| Side-to-side                                               | 20 ft                   |
| Any other situation                                        | 16 ft                   |
| Max. Building Area                                         |                         |
| On percent of lot                                          | 35%                     |

# §5.7. R-6 Zero Lot Line Residential District

This district is intended to accommodate detached, single-family dwellings on small lots together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.7.1. Use Regulations: See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.7.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.7 shall be observed (See also <u>Article 4 General Regulations</u>):
  - 1. Only one main structure and its accessory buildings may be built on any lot of record, which, at the time of enactment of this Ordinance, is separately owned.
  - Accessory structures and uses customarily incidental to single family uses are permitted in the rear yard only, subject to <u>§4.4</u>.
- 5.7.3. Development Standards.
  - 1. Homes may be attached with patio fence or wall in order to achieve privacy between homes.
  - 2. For accessory structures, see  $\underline{\$4.4}$ .
  - 3. For parking requirements, see <u>Article 8</u>.
  - 4. For landscaping requirements for permitted non-residential uses, see <u>Article 9</u>.
  - 5. For sign regulations, see <u>Article 11</u>.

| Table 5.7 R-6 District Area and Dimensional<br>Regulations <sup>(Notes)</sup> |                                                                      |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Min. Floor Area                                                               |                                                                      |
| One story                                                                     | 1,000 sq. ft.                                                        |
| Two story                                                                     |                                                                      |
| first floor                                                                   | 700 sq. ft.                                                          |
| total                                                                         | 1,100 sq. ft.                                                        |
| Min. Yard Setbacks                                                            |                                                                      |
| Front                                                                         | 12 ft <sup>(1)</sup>                                                 |
| Rear                                                                          | 20 ft                                                                |
| Side                                                                          | 0/10 ft <sup>(2)</sup>                                               |
| Min. Lot Area                                                                 | 4,000 sq. ft.                                                        |
| Min. Lot Width                                                                | 40 ft                                                                |
| Maxi. Building Height                                                         | 35 ft or 2 <sup>1</sup> / <sub>2</sub> stories,<br>whichever is less |
| Max. Density                                                                  | 4 DU/acre <sup>(3)</sup>                                             |
| Min. Dwelling Spacing                                                         |                                                                      |
| Front-to-front                                                                | 40 ft                                                                |
| Front-to-side                                                                 | 20 ft                                                                |
| Front-to-back                                                                 | 40 ft                                                                |
| Back-to-back                                                                  | 40 ft                                                                |
| Side-to-back                                                                  | 30 ft                                                                |
| Side-to-side                                                                  | 10 ft                                                                |

<sup>1</sup> Front yard setback shall be measured from the outside edge of the gutter, curb or edge of pavement, or back of sidewalk, where required, whichever is greater, but under no circumstances within the right-of-way of any dedicated street.

<sup>2</sup> One side yard with no (zero) setback is permitted, provided however the total of setbacks of both sides shall be at least ten (10) ft. Building separation, in any case, shall comply with City Building and Fire Codes.

<sup>3</sup> Included in the calculations shall be all parts of the development including, but not limited to, common areas, streets and public improvements, park areas, etc.

# §5.8. R-7 Duplex and Triplex Residential District

This district is intended to accommodate detached, single-family dwellings on small lots, duplexes and triplexes together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.8.1. Use Regulations: See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.8.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.8 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - 1. Accessory structures and uses are permitted in the rear yard only.
- 5.8.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see Article 8.
  - 3. For landscaping requirements for permitted non-residential uses, see <u>Article 9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.
- 5.8.4. Procedures for creating an R-7 District. See <u>§13.4 Amendments</u>.

| Table 5.8 R-7 District Area and Dimensional<br>Regulations <sup>(Notes)</sup> |                                   |
|-------------------------------------------------------------------------------|-----------------------------------|
| Min. Floor Area                                                               |                                   |
| One story                                                                     | 1,000 sq. ft.                     |
| Two story                                                                     |                                   |
| first floor                                                                   | 700 sq. ft.                       |
| total                                                                         | 1,100 sq. ft.                     |
| Min. Yard Setbacks                                                            |                                   |
| Front                                                                         | 12 ft <sup>(1)</sup>              |
| Rear                                                                          | 25 ft                             |
| Side                                                                          | 10 ft                             |
| Min. Lot Area                                                                 | 3,750 sq. ft. <sup>(2)</sup>      |
| Min. Lot Width                                                                | 40 ft                             |
| May Duilding Usight                                                           | 35 ft or 2 $\frac{1}{2}$ stories, |
| Max. Dunding neight                                                           | whichever is less                 |
| Min. Dwelling Spacing                                                         |                                   |
| Front-to-front                                                                | 40 ft                             |
| Front-to-side                                                                 | 20 ft                             |
| Front-to-back                                                                 | 50 ft                             |
| Back-to-back                                                                  | 40 ft                             |
| Side-to-back                                                                  | 30 ft                             |
| Side-to-side                                                                  |                                   |
| Multi-unit                                                                    | 20 ft                             |
| Single-unit                                                                   | 10 ft                             |
| Any other situation                                                           | 16 ft                             |

<sup>1</sup> Front yard setback shall be measured from the outside edge of curb or back of sidewalk, where required, but under no circumstances within the right-of-way of any dedicated street.

<sup>2</sup> May include common area.
## §5.9. R-8 Townhouse Residential District

This district is intended to accommodate detached single-family dwellings and townhouses, together with other uses, as may be permitted on appeal, which are compatible with such residential uses.

- 5.9.1. Use Regulations: See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Only low intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.9.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.9 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - That portion of the façade containing a front-loaded garage shall be set back twenty (20) feet from the back of sidewalk. Driveways in front yards shall not take up more than fifty (50) percent of the front yard, as provided. Narrow lots may require rear access.
  - 2. Customary accessory buildings or structures are permitted provided such use is located in rear yard.
- 5.9.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see Article 8.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.
  - 5. Procedures for creating an R-8 District. See <u>§13.4 Amendments</u>.

| Table 5.9 R-8 District Area and Dimensional<br>Pagulations (Notes) |                                   |  |  |  |  |  |
|--------------------------------------------------------------------|-----------------------------------|--|--|--|--|--|
| Regulations                                                        |                                   |  |  |  |  |  |
| Min. Floor Area                                                    |                                   |  |  |  |  |  |
| One story                                                          | 1,000 sq. ft.                     |  |  |  |  |  |
| Two story                                                          |                                   |  |  |  |  |  |
| first floor                                                        | 800 sq. ft.                       |  |  |  |  |  |
| total                                                              | 1,200 sq. ft.                     |  |  |  |  |  |
| Min. Yard Setbacks                                                 |                                   |  |  |  |  |  |
| Front                                                              | 12 ft <sup>(1)</sup>              |  |  |  |  |  |
| Rear                                                               | 20 ft                             |  |  |  |  |  |
| Side                                                               | none                              |  |  |  |  |  |
| Min. Lot Area                                                      | 1,250 sq. ft.                     |  |  |  |  |  |
| Min. Average Lot Area                                              | 4,360 sq. ft.                     |  |  |  |  |  |
| Min. Lot Width                                                     | 18 ft                             |  |  |  |  |  |
| Mar Duilding Height                                                | 35 ft or 2 $\frac{1}{2}$ stories, |  |  |  |  |  |
| Max. Building Height                                               | whichever is less                 |  |  |  |  |  |
| Min. Building Group Spacing                                        |                                   |  |  |  |  |  |
| Front-to-front                                                     | 40 ft                             |  |  |  |  |  |
| Front-to-side                                                      | 30 ft                             |  |  |  |  |  |
| Front-to-back                                                      | 50 ft                             |  |  |  |  |  |
| Back-to-back                                                       | 40 ft                             |  |  |  |  |  |
| Side-to-back                                                       | 30 ft                             |  |  |  |  |  |
| Side-to-side                                                       | 20 ft                             |  |  |  |  |  |
| Any other situation 16 ft                                          |                                   |  |  |  |  |  |
| <sup>1</sup> Front vard setback shall be measured from the         |                                   |  |  |  |  |  |
| back of curb or back of sidewalk, where required.                  |                                   |  |  |  |  |  |
| but under no circumstances within the right-of-way                 |                                   |  |  |  |  |  |
| of any dedicated street.                                           |                                   |  |  |  |  |  |

#### §5.10. R-9 Planned Residential District

This district is intended to accommodate a range of residential uses, which may be selected from, combined and distributed within a site as is most appropriate to the location, access, context and natural character of the area. The R-9 District also provides for a limited number of non-residential uses, as may be permitted in appeal, which are compatible with residential uses.

- 5.10.1. Use Regulations. See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following limitations:
  - Only low and medium intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.10.2. Area and Dimensional Regulations. For the following uses, the area and dimensional regulations set forth for the corresponding district shall be observed (See also <u>Article 4 General Regulations</u>).
  - 1. Single-family dwellings (E-2, R-1, R-2, R-3, R-4 and R-6)
  - 2. Townhouse dwellings (R-8)
  - 3. Duplexes and triplexes (R-7)
- 5.10.3. Development Standards.
  - 1. For parking requirements, see <u>Article 8</u>.
  - 2. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 3. For sign regulations, see <u>Article 11</u>.
- 5.10.4. Procedures for creating an R-9 District. See <u>§13.4 Amendments</u>.

## §5.11. RC-1 Residential District

- 5.11.1. Use Regulations See <u>Table 5</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following limitations:
  - 1. Only low and medium intensity institutional uses shall be permitted and only by Special Exception per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u>, as indicated in Table 5.
- 5.11.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 5.11 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - 1. For the purposes of this §5.11, stories shall mean levels of livable floor space, which are all above ground.
- 5.11.3. Development Standards.
  - 1. For parking requirements, see <u>Article 8</u>.
  - 2. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 3. For sign regulations, see <u>Article 11</u>.

| Table 5.11 RC-1 District Area and<br>Dimensional Regulations (Notes) |                                   |  |  |  |  |  |
|----------------------------------------------------------------------|-----------------------------------|--|--|--|--|--|
| Min. Floor Area                                                      |                                   |  |  |  |  |  |
| Average                                                              | 1,200 sq. ft.                     |  |  |  |  |  |
| 1-BR unit                                                            | 800 sq. ft.                       |  |  |  |  |  |
| 2-BR unit                                                            | 1,250 sq. ft.                     |  |  |  |  |  |
| 3-BR unit 1,500 sq. ft.                                              |                                   |  |  |  |  |  |
| Min. Yard Setbacks                                                   |                                   |  |  |  |  |  |
| Front                                                                | 30 ft                             |  |  |  |  |  |
| Rear 30 ft                                                           |                                   |  |  |  |  |  |
| Side                                                                 | 20 ft                             |  |  |  |  |  |
| Min. Land Size                                                       | 20,000 sq. ft.                    |  |  |  |  |  |
| Min. Average Lot Area                                                | 4,000 sq. ft. <sup>(1)</sup>      |  |  |  |  |  |
| May Duilding Usisht                                                  | 35 ft or 2 $\frac{1}{2}$ stories, |  |  |  |  |  |
| Max. Building Height                                                 | whichever is less                 |  |  |  |  |  |
| Max. Building Area                                                   |                                   |  |  |  |  |  |
| On percent of lot 35%                                                |                                   |  |  |  |  |  |
| <sup>1</sup> Calculation includes common area.                       |                                   |  |  |  |  |  |

| Table 5 Use Regulations for Residential Districts |     |     |     |     |     |     |     |             |     |     |      |
|---------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-------------|-----|-----|------|
| USES / DISTRICTS:                                 | E-2 | R-1 | R-2 | R-3 | R-4 | R-5 | R-6 | <b>R-</b> 7 | R-8 | R-9 | RC-1 |
| RESIDENTIAL                                       |     |     |     |     |     |     |     |             |     |     |      |
| Accessory Dwelling, <u>§7.8</u>                   | Y   |     |     |     |     |     |     |             |     |     |      |
| Assisted Living Facility                          |     |     |     |     |     | С   |     |             |     | С   |      |
| Duplex                                            |     |     |     |     |     |     |     | Y           |     | Y   | Y    |
| Conservation Subdivision, §7.3                    | Y   | Y   | Y   | Y   | Y   |     |     |             |     | Y   |      |
| Family Day Care Home, <u>§7.7</u>                 | Y   | Y   | Y   | Y   | Y   |     | Y   |             |     |     |      |
| Group Home                                        |     |     |     |     |     | С   |     |             |     | С   |      |
| Home Occupation, <u>§7.1</u>                      | Y   | Y   | Y   | Y   | Y   | Y   | Y   | Y           | Y   | Y   | Y    |
| Independent Living Facility                       |     |     |     |     |     | Y   |     |             |     | С   |      |
| Multi-family dwelling                             |     |     |     |     |     | Y   |     |             |     | Y   | С    |
| Single-family dwelling, detached                  | Y   | Y   | Y   | Y   | Y   |     | Y   |             |     | Y   |      |
| Townhouse                                         |     |     |     |     |     |     |     |             | Y   | Y   | Y    |
| Triplex                                           |     |     |     |     |     |     |     | Y           |     | С   |      |
| LODGING                                           |     |     |     |     |     |     |     |             |     |     |      |
| Bed and Breakfast                                 | С   | С   | С   | С   | С   |     |     |             |     | С   | С    |
| INSTITUTIONAL                                     |     |     |     |     |     |     |     |             |     |     |      |
| Day Care Center, <u>§7.7</u>                      |     |     |     |     |     |     |     |             |     | С   |      |
| Nursing Home                                      |     |     |     |     |     | С   |     |             |     |     |      |
| Place of Assembly                                 | С   | С   | С   | С   | С   | С   | С   | С           | С   | С   |      |
| Public Facility                                   | SE          | SE  | SE  | SE   |
| Public Utility Facility                           | SE          | SE  | SE  | SE   |
| School, Not-for-Profit                            | С   | С   | С   | С   | С   | С   | С   | С           | С   | С   | С    |
| School, Public or Private                         | С   | С   | С   | С   | С   | С   | С   | С           | С   | С   | С    |
| OTHER                                             |     |     |     |     |     |     |     |             |     |     |      |
| Country Club                                      | С   | С   | С   | С   | С   |     |     |             |     | С   |      |
| Parks, Gardens, Playgrounds                       | Y   | Y   | Y   | Y   | Y   | Y   | Y   | Y           | Y   | Y   | Y    |
| Telecommunications Facilities,<br>§7.9            | С   | С   | С   | С   | С   | С   | С   | С           | С   | С   | С    |

 $\mathbf{Y}$  – The use is permitted by right.

L – Permitted by right as limited by district regulations

SE – Special Exception Use, requires approval by BZA (see §12.3). May also be subject to district limitations.

C – Conditional Use, requires approval by the Council (see §13.3). May also be subject to district limitations.

A use followed by a numeric cross-reference is subject to Use-Specific Regulations in Article 7.

A blank cell indicates that the use is not permitted.

### Article 6 NON-RESIDENTIAL DISTRICTS

### §6.1. A-Agriculture District

This district is intended to promote the continued use of open, unsubdivided lands for agriculture and low-density residential use as well as non-residential uses, as may be permitted on appeal, which are compatible with the conservation of such semi-rural uses and land areas.

- 6.1.1. Use Regulations: See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following limitations.
  - 1. Stables and Farms shall only be permitted on lots of one (1) acre or larger.
  - 2. Only low and medium intensity institutional uses may be approved and only as Special Exceptions per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u> as indicated in Table 6.
- 6.1.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 6.1 shall be observed (See also <u>Article 4 General Regulations</u>):
  - 1. Only one main structure and its accessory buildings may be built on any lot of record, which at the time of enactment of this ordinance, is separately owned.
  - 2. Livestock and fowl shall not be housed, fed or watered within 150 feet from the boundary of another district nor 300 feet of the nearest existing residence on any abutting or adjacent property.
  - 3. Piles of feed or bedding shall be located no closer than 100 feet from a right-ofway line, property line to minimize odor and nuisance problems.
  - 4. Manure shall be stored for removal and disposed of in accordance with all

applicable county, state and federal regulations. No manure piles shall be located closer than 100 feet from a rightof-way line, property line, zoning district boundary, wetland, watercourse or other water body.

| Table 6.1 A District Area and Dimensional<br>Regulations      |                |  |  |  |  |  |
|---------------------------------------------------------------|----------------|--|--|--|--|--|
| Min. Floor Area 1,400 sq. ft.                                 |                |  |  |  |  |  |
| Min. Yard Setbacks                                            |                |  |  |  |  |  |
| Front                                                         | 40 ft          |  |  |  |  |  |
| Rear                                                          | 30 ft          |  |  |  |  |  |
| Side                                                          | 15 ft          |  |  |  |  |  |
| Min. Lot Area                                                 | 20,000 sq. ft. |  |  |  |  |  |
| Min. Lot Width                                                | 100 ft         |  |  |  |  |  |
| Max. Building Height 40 ft or 3 stories,<br>whichever is less |                |  |  |  |  |  |
| Max. Building Area                                            |                |  |  |  |  |  |
| On percent of lot                                             | 25%            |  |  |  |  |  |
| Rear yard percentage 30%                                      |                |  |  |  |  |  |
| <sup>1</sup> Calculation includes common area.                |                |  |  |  |  |  |

- 6.1.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see <u>Article 8</u>.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

#### §6.2. B-1 Neighborhood Business District

This district is intended to accommodate nonresidential uses of a scale and in such locations as to be compatible with and conveniently serve the day-to-day needs of adjacent neighborhoods.

- 6.2.1. Use Regulations: See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
  - Retail, service and office uses shall be limited to a maximum gross floor area of 10,000 sq. ft. per establishment. However, additional floor area up to 25,000 sq. ft. may be approved as a Conditional Use per <u>§13.3</u>.
  - 2. Only low and medium intensity institutional uses may be approved and only as Special Exceptions per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u> as indicated in Table 6.
- 6.2.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 6.2 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - 1. Side yard setbacks shall not be required; however, wherever a building is set back from the side lot line, such setback shall be as required by the Building Code and landscaping as required by <u>§9.2</u> shall be provided.
- 6.2.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see <u>Article 8</u>.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see Article 11.

| Table 6.2 B-1 District Area and Dimensional<br>Regulations |                     |  |  |  |  |  |
|------------------------------------------------------------|---------------------|--|--|--|--|--|
| Min. Yard Setbacks                                         |                     |  |  |  |  |  |
| Front 20 ft                                                |                     |  |  |  |  |  |
| Rear 30 ft                                                 |                     |  |  |  |  |  |
| Side 0-10 ft, see §6.2.2.1                                 |                     |  |  |  |  |  |
| Max Building Height                                        | 35 ft or 3 stories, |  |  |  |  |  |
| whichever is less                                          |                     |  |  |  |  |  |

# §6.3. B-1.2 Planned Neighborhood Mixed Use District

This district is intended to accommodate a range of mutually supportive residential and neighborhood-scale non-residential and mixed uses developed in a pedestrianfriendly pattern. Such development is further intended to be located and designed so as to be convenient to and compatible with adjacent neighborhoods.

Council approval of the application for B-1.2 zoning will include approval of the development plan, including, site plan and setbacks, renderings, and other public improvements. The Zoning Official, Building Official, and City Engineer may approve incidental changes, however, substantial changes to the approved plan (i.e. increased density, amended layout, change of use, etc.) may only be approved by Council following recommendation of the Planning and Zoning Commission.

- 6.3.1. Use Regulations: See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following limitations.
  - Retail, service and office uses shall be limited to a maximum gross floor area of 10,000 sq. ft. per establishment. However, additional floor area up to 25,000 sq. ft. may be approved as a Conditional Use per §13.3.
  - Only low and medium intensity institutional uses may be approved and only as Special Exceptions per <u>§12.3</u> or as Conditional Uses per <u>§13.3</u> as indicated in Table 6.
- 6.3.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 6.3 shall be observed (See also <u>Article 4 General Regulations</u>):
  - 1. Front Yards.

- a. When separated from the nearest boundary of any single-family residential district by more than 200 feet or by a street right-of-way, no front yard setback shall be required. Otherwise, the minimum front yard setback shall be twenty (20) feet.
- b. Buildings may be required to be set back as needed to provide a sidewalk as required in §6.3.3.1.
- 2. Side yard setbacks shall not be required; however, wherever a building is set back from the side lot line, such setback shall be as required by the Building Code and landscaping as required by <u>§9.2</u> shall be provided.

| Table 6.3 B-1.2 District Area and Dimensional<br>Regulations |                                           |  |  |  |  |  |
|--------------------------------------------------------------|-------------------------------------------|--|--|--|--|--|
| Min. Yard Setbacks                                           |                                           |  |  |  |  |  |
| Front see §6.3.2.1                                           |                                           |  |  |  |  |  |
| Rear                                                         | 0-15 (depending on buffer if required) ft |  |  |  |  |  |
| Side                                                         | see §6.3.2.2                              |  |  |  |  |  |
| Max. Building Height 35 ft                                   |                                           |  |  |  |  |  |

6.3.3. Development Standards.

- All buildings shall have a sidewalk a minimum five (5) to eight (8) feet width along the lot frontage as determined and approved by the City Engineer. Additional right-of-way or a sidewalk easement shall be provided along the lot frontage, if necessary, to accommodate the required sidewalk width.
- Residential uses, if located within fifteen (15) feet or less of a front lot line, shall be raised at least two (2) feet above grade level.
- 3. Residential and non-residential uses shall not be located on the same floor of the same building.
- 4. No vehicular use area, other than a driveway, shall be permitted forward of

any front building line without Conditional Use approval per  $\S 13.3$ .

- 5. For accessory structures, see  $\S4.4$ .
- 6. For parking requirements, see <u>Article 8</u>. Abutting on-street parking spaces may be counted toward these requirements.
- 7. Landscaping shall be provided as required in <u>Article 9</u> except as follows;
  - a. Landscaping shall not be required at the building front when the building is built up to the public sidewalk. If the building is set back, the front yard shall be (1) designed and improved as an extension of the sidewalk; (2) designed and improved as a plaza; (3) landscaped as required in <u>§9.2</u> Site Landscaping; or (4) a combination of these.
  - b. Buffers shall not be required between developments within the B-1.2 District but shall required between B-1.2 District developments and uses located outside of the district, as applicable.
- 8. For sign regulations, see <u>Article 11</u>.

## §6.4. B-2 General Business District

This district is intended to accommodate a wide range of non-residential uses in locations convenient to large sections of the community.

- 6.4.1. Use Regulations: See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following.
  - 1. Manufacturing incidental to a retail business where articles are sold at retail on the premises may be permitted as a Special Exception per  $\S 12.3$ .
- 6.4.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 6.4 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - 1. Side yard setbacks shall not be required; however, wherever a building is set back from the side lot line, such setback shall be as required by the Building Code and landscaping as required by <u>§9.2</u> shall be provided.
- 6.4.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see <u>Article 8</u>.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 6.4 B-2 District Area and Dimensional<br>Regulations |                     |  |  |  |  |
|------------------------------------------------------------|---------------------|--|--|--|--|
| Min. Yard Setbacks                                         |                     |  |  |  |  |
| Front 30 ft                                                |                     |  |  |  |  |
| Rear                                                       | 30 ft               |  |  |  |  |
| Side 0-10 ft, see §6.4.2                                   |                     |  |  |  |  |
| Max Building Height                                        | 45 ft or 4 stories, |  |  |  |  |
| Film Dunung Holght                                         | whichever is less   |  |  |  |  |

### §6.5. B-3 Conditional Business District

This district is intended to accommodate a wide range of business uses as well as certain non-residential uses that are generally incompatible with the other districts within this Ordinance. Thus the District provides a mechanism through which such uses may be reviewed by the Commission and Council, who may impose conditions upon such development to mitigate incompatibilities with surrounding development.

- 6.5.1. Use Regulations: See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses.
- 6.5.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 6.5 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - 1. Side yard setbacks shall not be required; however, wherever a building is set back from the side lot line, such setback shall be as required by the Building Code and landscaping as required by <u>§9.2</u> shall be provided.
- 6.5.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see <u>Article 8</u>.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 6.5 B-3 District Area and Dimensional<br>Regulations |  |  |  |  |  |
|------------------------------------------------------------|--|--|--|--|--|
| Min. Yard Setbacks                                         |  |  |  |  |  |
| Front 30 ft                                                |  |  |  |  |  |
| Rear 30 ft                                                 |  |  |  |  |  |
| Side 0-10 ft, See §6.5.2.1                                 |  |  |  |  |  |
| Max. Building Height 5 stories                             |  |  |  |  |  |

### §6.6. O-1 Office Park District

This district is intended to accommodate office buildings of limited scale and intensity in locations easily accessible to the overall community.

- 6.6.1. Use Regulations: See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following limitations.
  - 1. No storage (except of samples for display purposes), manufacture, repair or delivery of merchandise thereon or therefrom shall be permitted. This shall not apply to said activities when they are incidental to a permitted use and completely contained within the interior of the building or tenant space housing the principal use.
- 6.6.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 6.6 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
- 6.6.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see Article 8.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 6.6 O-1 District Area and Dimensional<br>Regulations |                                          |  |  |  |  |  |
|------------------------------------------------------------|------------------------------------------|--|--|--|--|--|
| Min. Yard Setbacks                                         |                                          |  |  |  |  |  |
| Front                                                      | 30 ft                                    |  |  |  |  |  |
| Rear                                                       | 30 ft                                    |  |  |  |  |  |
| Side 20 ft                                                 |                                          |  |  |  |  |  |
| Min. Lot Area 10,000 sq. ft.                               |                                          |  |  |  |  |  |
| Min. Lot Width                                             | 100 ft                                   |  |  |  |  |  |
| Max. Building Height                                       | 35 ft or 2 stories,<br>whichever is less |  |  |  |  |  |
| Max. Building Area                                         |                                          |  |  |  |  |  |
| With basement parking 30%                                  |                                          |  |  |  |  |  |
| Without basement parking                                   | 25%                                      |  |  |  |  |  |

### §6.7. O-2 Office Park District

This district is intended to accommodate large-scale, intensive office development in locations easily accessible to the overall region.

- 6.7.1. Use Regulations: See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following use limitations.
  - No Storage (except of samples for display purposes), manufacture, repair or delivery of merchandise thereon or therefrom shall be permitted. This shall not apply to said activities when they are incidental to a permitted use and completely contained within the interior of the building or tenant space housing the principal use.
- 6.7.2. Area and Dimensional Regulations. The area and dimensional regulations set forth following and in Table 6.7 shall be observed (See also <u>Article 4 General</u> <u>Regulations</u>):
  - The maximum building height shall be four (4) stories. However, additional building height up to ten (10) stories may be approved by the Council through Conditional Use review per <u>§13.3</u>. Additional building height shall only be permitted in accordance with the following findings:
    - a. The location of the building is a sufficient distance from any single-family residential districts to mitigate incompatibility.
    - b. The capacity of the existing street network and any proposed improvements will be sufficient to serve the additional traffic without undue disruption of current traffic.
    - c. The location and available fire protection services are sufficient to

effectively serve the proposed development.

- 6.7.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see <u>Article 8</u>.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.

| Table 6.7 O-2 District Area and Dimensional<br>Regulations |                                 |  |  |  |  |  |
|------------------------------------------------------------|---------------------------------|--|--|--|--|--|
| Min. Yard Setbacks                                         |                                 |  |  |  |  |  |
| Front                                                      | 40 ft                           |  |  |  |  |  |
| Rear                                                       | 30 ft                           |  |  |  |  |  |
| Side                                                       | 20 ft                           |  |  |  |  |  |
| Min. Lot Area                                              | 25,000 sq. ft.                  |  |  |  |  |  |
| Min. Lot Width                                             | 100 ft                          |  |  |  |  |  |
| Max. Building Height                                       | 4 - 10 stories, see<br>§6.7.2.1 |  |  |  |  |  |
| Maximum Building Area                                      |                                 |  |  |  |  |  |
| With basement parking                                      | 30%                             |  |  |  |  |  |
| Without basement parking 25%                               |                                 |  |  |  |  |  |

### §6.8. INST Institutional District

This district is intended to accommodate institutional uses that, due to their scale and related impacts, are not compatible with residential use and are therefore generally to be developed in highly accessible locations and/or outside of established neighborhoods.

- 6.8.1. Use Regulations. See <u>Table 6</u> (at the end of this Article) for Permitted Uses, Special Exception Uses, and Conditional Uses and the following use limitations:
  - 1. No party may alter, expand or extend existing buildings nor construct new ones for the purpose of establishing a use not permitted within the INST District.
- 6.8.2. Area and Dimensional Regulations. The area and dimensional regulations set forth in Table 6.8 shall be observed (See also <u>Article 4 General Regulations</u>):
- 6.8.3. Development Standards.
  - 1. For accessory structures, see  $\underline{\$4.4}$ .
  - 2. For parking requirements, see Article 8.
  - 3. For landscaping requirements, see <u>Article</u> <u>9</u>.
  - 4. For sign regulations, see <u>Article 11</u>.
- 6.8.4. Exemptions.
  - 1. Any and all real property located within the corporate City Limits, which was developed as a place of worship, municipal building or facility, school or hospital on or before October 16, 1978, is exempt from these regulations.
  - 2. The purpose of this provision is to establish that any and all places of worship, municipal buildings or facilities, school or hospitals which had developed in the City prior to the adoption of Ordinance Number 445 and were at said time rezoned to the INST District, may continue to use said property, either in whole or in part, and

have the right to continue its operations on said property without further proceedings. Said places of worship, municipal buildings and facilities, schools and hospitals may continue the lawful use of said land and structures located thereon, existing on and prior to October 16, 1978. As such, any structure may be built, enlarged, extended, reconstructed or structurally altered on said land for any lawful purpose permitted on said land under the Zoning Ordinance in force and effect on and prior to October 16, 1978.

 The regulations herein shall apply only to that real estate within the INST District developed subsequent to October 16, 1978.

| Table 6.8 INST District Area and Dimensional<br>Regulations |                                          |  |  |  |  |  |
|-------------------------------------------------------------|------------------------------------------|--|--|--|--|--|
| Min. Yard Setbacks                                          |                                          |  |  |  |  |  |
| Front 50 ft                                                 |                                          |  |  |  |  |  |
| Rear 50 ft                                                  |                                          |  |  |  |  |  |
| Side 35 ft                                                  |                                          |  |  |  |  |  |
| Max. Building Height                                        | 45 ft or 3 stories,<br>whichever is less |  |  |  |  |  |

#### §6.9. Planned Unit Development (PUD)

### 6.9.1. Intent.

Planned unit development ("PUD") is a method of development which permits more than one use to be developed on a tract of land, in part or whole, in accordance with an approved Master Development Plan, the intent of which is to:

- Promote a sense of community, permit flexibility and consequently more creative and imaginative design to accommodate planned associations of uses developed as integral land use units such as office parks or complexes, commercial uses, service centers, residential developments of multiple or mixed housing, including multi-family dwellings, attached and detached singlefamily dwellings, or any appropriate combination of uses which may be planned, developed or operated as integral land use units;
- 2. Permit higher than typical densities of land in areas within the PUD in conjunction with provisions for more expansive functional open space and community services;
- Promote the efficient use of land to facilitate a more economic arrangement of uses, buildings, traffic circulation systems and utilities;
- 4. Combine and coordinate uses, building forms, building relationships, and architectural styles within the PUD;
- 5. Promote the preservation and enhancement of existing natural landscape features, their scenic qualities and amenities to the greatest extent possible, and utilize such features in a harmonious fashion;
- 6. Exempt a development from the conventional zoning regulations

regarding setbacks, minimum yard size, minimum greenbelts, off-street parking regulations, minimum floor areas, and other regulations to achieve the intent described herein;

- 7. Give the developer reasonable assurance of ultimate approval before beginning final engineering work while providing City officials with reasonable assurance that the development will retain the character envisioned at the time of concurrence; and
- 8. Promote privacy by permitting the use of gates to control access on private streets, subject to approval by the City as part of the PUD and subdivision review process.
- 6.9.2. Application and Requirements for PUD.
  - Submission of Application. The property owner (or his/her/its duly appointed representative) of a tract of land shall submit to the City Clerk, a minimum of twenty-five (25) working days prior to a regularly scheduled Commission meeting, an application for approval of a PUD, which shall meet the requirements of this §6.9.
  - 2. Area Requirements. Except when the Master Development Plan of an existing approved PUD is amended by the original applicant, or his/her/its successors or assigns, to include additional area as provided in §6.9.9.3 hereof, any tract of land to be zoned PUD shall have a minimum of seventy-five (75) acres.
  - 3. Contents of Application. The application submitted in accordance with this §6.9 shall contain the following:
    - a. Application Fee. A fee to defray the cost of processing the application, as set from time to time by the Council. Applicant shall be responsible for all

costs of notification and advertisement incurred.

- b. Owners. List of owners of the property. Any material change in the owners of the property shall be submitted to the City Clerk within sixty (60) days after such change.
- c. Plan. A Master Development Plan of the PUD and any maps necessary to show the following information:
- The direction of north, appropriate scale and topography (in no greater than ten (10) feet contour intervals), waterways, flood plains, wetlands, forest cover and known areas of subsurface mining or environmental hazards;
- (2) The location of the various land uses by PUD land use districts as listed in §6.9.5 hereof;
- (3) The location of any existing and proposed public or private streets, greenbelts, buffers, natural or manmade open spaces, schools, parks and community service areas within and adjacent to the project area; and
- (4) The location of any proposed gates for control of access on public and private streets.
- 4. Planning Criteria. The application shall also include the following written statements and other matters:
  - a. A legal description of the total site proposed for the PUD;
  - b. A general description of the surrounding area, including current zoning and/or land uses;
  - c. A statement of planning objectives to be achieved by the PUD through the particular approach proposed by the applicant. The statement should include a description of the character of the proposed development and the rationale behind the assumptions and

projections made by the applicant in relation to the over-all community growth;

- d. Of the development is to be in phases or stages, a general discussion of how the phases or staging is to proceed and an estimated date when the PUD will begin;
- e. General delineation of the various land use districts within the PUD, indicating for each such district its general size in terms of estimated total number of acres, with the exact boundaries of each such area to be determined by plat approved by the Commission;
- f. A calculation of the residential density in dwelling units per gross acre including interior roadways, and including maximum density in units per acre, and densities for all other land use districts within the PUD;
- g. Development criteria which shall include:
- setbacks or other location methods, minimum finished floor areas, sign criteria, building heights, off-street parking requirements for each proposed land use district, and/or any other development criteria which the applicant may proposed, and
- (2) a general discussion of loading areas, greenbelts and buffers;
- h. Proposed plans for open space;
- i. Availability and accessibility if transportation, water supply and sewage disposal to the property;
- j. General statement regarding the ownership and maintenance of common areas and/or common open space;
- k. Documentation of any protective and/or restrictive covenants, homeowner or business associations

and architectural review committees, if any, and a discussion of their functions;

- A general statement concerning any planned street/subdivision sign designs, including street, traffic and informational signs or other standards;
- m. Any planned interim uses of any portion of the property;
- n. A traffic study, if required by the City Engineer;
- o. Landscaping criteria; and
- p. Any proposed modification of existing subdivision regulations as applicable to the PUD.
- 6.9.3. Other Regulations Not Applicable.

It is the intent of this §6.9 that the PUD application shall set forth development criteria applicable to the property and that flexibility shall be allowed in the construction of improvements thereon. Accordingly, for the purposes of this §6.9, <u>Articles 5</u> and <u>6</u>, <u>§4.4 Accessory</u> <u>Structures</u> (except as set forth in §6.9.6) of this Zoning Ordinance, shall not apply to this §6.9. The applicability of the City Subdivision Regulations shall be subject to any modifications approved pursuant to §6.9.2.4.p above.

- 6.9.4. Review Procedure.
  - 1. General. The application shall be reviewed as provided in <u>§13.4</u> of this Zoning Ordinance.
  - Approval. Approval of the application for the PUD by the Council shall be an approval of (a) the Master Development Plan and (b) the planning criteria of the application (collectively, the "Plan"). The developer of the PUD may proceed with the development of the property in accordance with the Plan, and no further approvals shall be required except as set forth in §6.9.9 hereof.

6.9.5. PUD Land Use Districts

The following PUD land use districts shall apply to all or part of a PUD.

- 1. Planned Single-Family Residential (PR-1).
  - a. Permitted Uses. Attached or detached single-family residential dwellings (including, without limitation, cluster residential, garden homes, duplexes, and townhouses); open spaces; parks; tot lots; swimming pools; picnic areas; tennis courts; community buildings; public playgrounds; municipal fire and/or police stations; golf courses and/or country clubs (if shown on the Plan); home occupations (as defined in §7.1); non-residential child and/or adult day-care centers; residential information offices; wastewater effluent spray irrigation fields (if shown on the Plan); and accessory structures and uses customarily incidental to such permitted uses.
  - b. Conditional Uses. Public, private or parochial schools, but not providing residential accommodations; places of worship; museums; libraries; art galleries; recreational facilities operated on a nonprofit basis; golf courses and country clubs (if not shown on the Plan); convenience commercial uses; wastewater effluent spray irrigation fields (if not shown on the Plan); and other uses not listed in this §6.9.5.1 as may be approved by the Council following the recommendation of the Commission.
  - c. Maximum Building Height. Buildings in the PR-I District shall not exceed three (3) stories in height and shall conform to the City Building Code, Fire Code and Fire Prevention Code, as adopted and amended by the City.
  - d. Special Setback Requirement. Unless otherwise approved by the

Commission, any single-family residential dwelling constructed in a PR-1 land use district must be, at the time of initial construction, located or situated:

- (1) Not less than three hundred (300) feet from any then existing building in any other land use district in the Plan, which exceeds three (3) stories in height but does not exceed six (6) stories in height; and
- (2) Not less than five hundred (500) feet from any then existing building in any other land use district in the Plan, which exceeds six (6) stories in height.

This requirement shall apply only to the initial construction of a singlefamily residential dwelling in a PR-1 land use district, and specifically shall not apply to subsequent additions to or modifications of such single-family residential dwelling, nor to any reconstruction in the event of partial or total destruction to such singlefamily dwelling due to a fire or other casualty.

- 2. Planned Multi-family Residential (PR-2).
  - a. Permitted Uses. Multi-family dwellings and accessory structures; those permitted and conditional uses allowed by PR-1; municipal fire and/or police stations and uses customarily incidental to such permitted uses.
  - b. Conditional Uses. Nursing homes; independent living facilities; assisted living facilities; professional offices; and other uses not listed in this §6.9.5.2 as may be approved by the Council following recommendation by the Commission.
  - c. Maximum Building Height. Unless approved as a conditional use:

- When a building is to be constructed within three hundred (300) feet of a single-family residential dwelling in a PR-1 land use district existing at the time of the issuance of a Building Permit for said building, said building shall not exceed three (3) stories in height.
- (2) When a building is more than three hundred (300) feet but less than five (500) feet from a single-family residential dwelling in a PR-1 land use district existing at the time of the issuance of a Building Permit for said building, said building shall not exceed six (6) stories in height.
- (3) No building shall exceed ten (10) stories in height.

In the event a building is destroyed by fire or other casualty, such building may be rebuilt or reconstructed up to its original height without regard to the distance between such building and any single-family residential dwelling built after the commencement of the initial construction of such building. All buildings shall conform to the City Building Code, Fire Code and Fire Prevention Code as adopted by the City.

- 3. Planned Office (PO).
  - a. Permitted Uses. Public buildings, places of worship, banks and other lending institutions; municipal fire and/or police stations; professional offices ; and offices used exclusively for office purposes, wherein retail or wholesale trade or business is not conducted or wherein no merchandise or products are manufactured, stored, handled, conveyed, sold or otherwise disposed of, together with usual related support businesses (such as, but not limited to, restaurants and food

service restaurants, drug stores, barber shops, beauty parlors, travel agencies, hotel/motel accommodations; office supply and/or quick print and copy establishments, and like uses), provided that such related support uses are physically located inside the structures devoted to the permitted uses set forth above, and accessory structures and uses customarily incidental to such permitted uses.

- b. Conditional Uses. Those conditional uses allowed by PR-2, except detached single-family dwellings; helistops, and other uses not listed in this §6.9.5.3 as may be approved by the Council following recommendation by the Commission.
- c. Maximum Building Height. Unless approved as a conditional use:
- When a building is to be constructed within three hundred (300) feet of a single-family residential dwelling in a PR-1 land use district existing at the time of the issuance of a building permit for said building, said building shall not exceed three (3) stories in height.
- (2) When a building is to be constructed more than three hundred (300) feet but less than five hundred (500) feet from a single-family residential dwelling in a PR-1 land use district existing at the time of the issuance of a building permit for said building, said building shall not exceed six (6) stories in height.
- (3) No building shall exceed ten (10) stories in height.

In the event a building is destroyed by fire or other casualty, such building may be rebuilt or reconstructed up to its original height without regard to the distance between such building and any single-family residential dwelling built after the commencement of the initial construction of such building. All buildings shall conform to the City Building Code, Fire Code and Fire Prevention Code as adopted by the City.

- 4. Planned Neighborhood Commercial (PNC).
  - a. Permitted Uses. Those permitted uses allowed by PO; those permitted uses and conditional uses allowed by PR-2; retail establishments consistent with a neighborhood environment, including, but not limited to barber or beauty shops; restaurants; private clubs; drug stores; laundry and dry cleaning pick up stations and plants using nonflammable solvents only, if otherwise free of obnoxious fumes, odors and smoke; grocery stores; convenience stores; automotive gasoline service stations; florist shops; bakeries; child and/or adult day-care or nurseries; neighborhood service facilities; copy centers; travel agencies; car rental agencies; and with accessory structures and uses customarily incidental to such permitted uses.
  - b. Conditional Uses. Those permitted uses allowed by PR-2; helistops; amphitheaters; in-door motion picture theaters and/or auditoriums; and such other uses not listed in this §6.9.5.4 as may be approved by the Council following recommendation by the Commission.

- 5. Planned Business (PB).
  - a. Permitted Uses. Those permitted uses allowed by PR-1 and PNC; schools; retail establishments, including but not limited to, shopping centers; veterinary clinics (no outside kennels); auto dealerships; auto parts stores; building material sales; department stores; radio and TV stations; domestic equipment rental, furniture stores; motels or hotels; in-door motion picture theatres and/or auditoriums; hospitals; automotive gasoline service establishments which may also serve auto functions such as muffler, tire, battery, brake and transmission shops; establishments for the design and distribution of printed material, coinoperated laundromats; car washes; card/gift shops; cosmetic studios; craft or hobby shops; dance studios; photographic studios; duplicating or copying service; health food stores; interior decorating stores; opticians, medical clinics; shoe repair, audio video; tanning salons; assisted living care facilities; hardware stores; jewelry stores; sporting goods stores; sales showrooms for appliances, furniture, carpet, lighting fixtures, medical and office equipment; toy stores; indoor sports facilities (bowling, health club or spa, racquet club, skating rink); and factory outlet stores, and accessory structures and uses customarily incidental to such permitted uses.
  - b. Conditional Uses. Those conditional uses allowed by PNC; commercial recreation and amusement facilities; self-service storage facilities; telecommunications facilities; and other uses not listed in this §6.9.5.5 as may be approved by the Council following recommendation by the Commission.

- 6. Planned Light Industrial (PI).
  - a. Permitted Uses. Those permitted uses allowed by PB; major auto repair or renovation facilities not housed in the same structure or accessory structure to an auto sales establishment; bottling plants; construction yards; distribution yards for gasoline and fuel or tanks; domestic animal kennels; farm machinery and farm supply sales; heavy equipment sales and service; highway maintenance yards and buildings; janitorial and maintenance service; laundry and dry cleaning plants; printing establishments; light industrial, fabricating, processing, assembling and manufacturing uses; sanitary sewage and/or waste water treatment facilities; research and development laboratory facilities; warehouses; water or liquid storage tanks; wood working shops; and selfservice storage facilities and accessory structures and uses customarily incidental to such permitted uses.
- b. Conditional Uses. Those conditional uses allowed by PB, except multifamily; live entertainment; telecommunications facilities; and other uses not listed in this §6.9.5.6, all as may be approved by the Council following recommendation by the Commission.
- 6.9.6. Requirements for Accessory Structures, Fences, Signs, Off-street Parking, Loading Areas, Landscaping, and Buffer Strips

It is intended that the development criteria submitted with the application for the PUD will set forth requirements for accessory structures, fences, landscaping, buffer strips, signs, off-street parking, and loading areas. If the application does not contain such information, then the provisions of <u>§4.4</u> Accessory Structures, §4.5 Fences, <u>Article 8</u> Parking Regulations, <u>Article 9</u> Landscaping and <u>Article 11</u> Sign Regulations shall apply, but not otherwise.

6.9.7. Mixed Use.

It is intended that the flexibility of the PUD will allow in appropriate circumstances mixed uses on any particular parcel within the PUD, taking into consideration the compatibility of the intended uses with the surrounding use(s). "Mixed use," as used herein, shall be defined as a combination of permitted use(s) and conditional use(s) for more than one land use district and shall be considered as a "conditional use" under each land use district.

- 6.9.8. Building Permit
  - 1. General. The developer of the PUD shall proceed with the development of the property in accordance with the Plan and no further approvals shall be required except as set forth in this §6.9.8. If plans are submitted for the construction of improvements on any particular parcel within the PUD, a Building Permit shall be approved or disapproved according to the procedure set forth in this §6.9.8.
  - 2. Issuance of Building Permits for Permitted Uses. Upon application for a Building Permit for the construction of improvements on any parcel within the PUD, if the Zoning Official shall determine that the intended use of the improvements is a "permitted use" within the applicable land use district of the PUD, then a Building Permit shall be issued in accordance with the provisions of <u>Article 13</u>.
  - Other Uses. Upon application for a building permit for the construction of improvements on any parcel within the PUD, if the Zoning Official shall determine that the intended use of the

improvements is a "conditional use" or "mixed use" within the applicable land use district of the PUD, the Zoning Official shall defer said applicant and application to the Commission for application review in accordance with §6.9.8.4 below.

- 4. Conditional uses. Requests for conditional uses as stipulated within the land use district regulations of the PUD are permitted only after review and a recommendation for approval, denial or other report by the Commission and approval by the City Council, in accordance with §13.3, subject to the following procedure:
  - a. The applicant shall submit to the Commission a site development plan which shall include:
  - (1) Existing and proposed topography;
  - (2) Property lines;
  - (3) Scale;
  - (4) Storm drainage facilities and other utility easements;
  - (5) Existing and proposed structures and their uses;
  - (6) Schematic exterior lighting;
  - (7) General landscaping and fences;
  - (8) Location of outside storage areas;
  - (9) Location of parking and loading areas;
- (10) Points of ingress and egress; and
- (11) Signs, unless the protective covenants for the PUD establishes an architectural review committee or other entity that is responsible for, among other things, review and approval of signage.
  - b. Any review and/or determination made by the Commission pursuant to this §6.9.8.4 shall be governed by, and performed in accordance with §13.3 of the Zoning Ordinance.

- 5. Subdivision plats and roads. Nothing in this §6.9.8 shall be construed to require a Building Permit for approval of subdivision plats or road designs or the construction of roads within the PUD.
- 6.9.9. Deviation from the Plan.
  - 1. Incidental Change. To facilitate insignificant adjustments of the approved Plan as may be required by engineering or other circumstances unforeseen at the time of zoning approval, Zoning Official and City Engineer, as applicable or appropriate under the circumstances, may approve alterations to the plan which are considered incidental in scope, which approval shall be in writing. Approval of plans by official rubber stamp, initials and/or signature of the appropriate official shall be deemed approval "in writing".
  - 2. Minor Change. Changes to the plan, which are minor but more significant in scope than an incidental change, are subject to the review, approval and authorization of the Commission through the typical plat approval process. "Minor changes" shall be defined as increases in density, reductions in open space, and land use district boundary changes, provided no such minor change exceeds 5% of the original specification for such respective matter under the plan.
  - 3. Major Change. A "major change" in the plan shall be defined as any increase in density, reduction in open space, or land use district boundary change, in excess of 5% of the original specification for such respective matter under the plan. (NOTE: Such 5% is a cumulative total, which includes all requests since the plan was approved by the Council).
  - 4. Approval of Major Changes. Whenever the developer of a PUD shall request a major change as defined in §6.9.9.3, the

developer shall file an application for change, which shall be reviewed in accordance with the provision of §6.9.2 of the Zoning Ordinance.

- 5. Approval of Plat Changes. Once any plat has been approved by the Commission, any changes to such approved plat will be subject to review and approval by the Commission through the typical process for such changes. Any approved changes to a plat will not constitute a change to the Plan.
- 6.9.10. Time Limit for Development of Plan.

If no construction has begun within twelve (12) months from the estimated and approved start up date of the PUD, as indicated by §6.9.2.4.d. above, said approval shall lapse and be of no further effect. The Commission, upon showing of good cause by the developer, may extend for period(s) of six (6) months for the beginning of construction and development shall commence each year on the lesser of ten (10) percent of the total PUD or twenty (20) acres (whichever is less) and said construction should continue and be completed within a reasonable time.

- 6.9.11. Definitions.
  - 1. Intent. For purposes of this §6.9, certain terms used herein are herewith defined, and if any terms defined herewith in this §6.9.11 shall contradict or conflict with any terms defined in any other section of this Zoning Ordinance, those terms as defined in this §6.9.11 shall control.
  - 2. Definitions.
    - a. *Attached single-family dwelling* shall refer to those buildings so designed and arranged to provide separate sleeping, cooking, and kitchen accommodations and toilet facilities for occupancy of two (2) families or

more whereby the living units are built for sale, in fee simple, and not for lease and including condominiums and townhouses.

- b. *Cluster residential* shall refer to detached single-family residential dwellings, typified by a building separation of a minimum of ten (10) feet or as allowable by applicable fire code.
- c. *Detached single-family dwelling* shall refer to a detached building so designed and arranged to provide sleeping, cooking, and kitchen accommodations and toilet facilities for occupancy by one family only.
- d. *Interim use* shall refer to any temporary use of land in any area of a PUD, which has been approved as a part of the Master Development Plan and criteria. An interim use can be any use and may or may not be a permitted use or a conditional use of the land use district in which it is located.
- e. *Multi-family dwellings* shall refer to a structure designed or used for residential occupancy by more than two (2) families, with or without common or separate kitchen facilities or dining facilities, and which is leased in part or whole, including apartment houses, apartment hotels, rooming houses, boarding houses, fraternities, sororities, dormitories, or similar housing types, but not including hotels, motels, hospitals, or nursing homes.
- f. *Open space* shall refer to any greenbelt, buffer, park, lake, river, or recreational development or area which is owned by or dedicated to the public, or owned in common or private, devoid of any habitable buildings, except where accessory to the provision of recreation

opportunities, landscaping, drainage, spray irrigation or soil conservation, including, without limitation, conservation or green space easements, parks, such open spaces as may be located within a school site, golf courses, and such spaces as may be restricted to homeowner or business association membership. NOTE: No more than twenty-five (25) percent of the open space specified in the approved Plan shall be included in building setbacks. Furthermore, no areas may be included as part of the open space specified in the approved Plan unless such area is a contiguous area of at least 1,000 square feet, which exceeds 15 feet in width at its narrowest point.

- g. *Plat* shall refer to any drawing or drawings and related written material indicating the manner or layout of a road, parcel, and/or subdivision to be submitted to the City for approvals and/or recording purposes.
- h. *Story* shall refer to any portion of a building that is (1) constructed wholly above ground and (2) included between the surface of any floor and the surface of the floor next above it, or, if there is no floor next above it, then the space between the floor and the ceiling next above it. Attic space shall not be included as a story.
- 6.9.12. Changes to Zoning Ordinance

No amendment or modification of this Zoning Ordinance shall negate or affect in any adverse manner any property which was developed under a PUD Plan approved prior to the date hereof (the "Approved Plan"), it being intended that all existing improvements developed in accordance with an Approved Plan shall remain legally conforming. The property owner (of his/her/its duly appointed representative) may request in accordance with the requirements of this Zoning Ordinance, an amendment or modification of the Approved Plan with respect to any Property owned by such property-owner in light of any amendments or modifications of this Zoning Ordinance adopted subsequent to the date of the Approved Plan.

## §6.10. MXD Planned Community Mixed Use District

6.10.1. Intent. The MXD District is intended to direct and encourage development of mixed uses in a pedestrian and/or transitsupportive pattern in locations indicated as "Village Centers" in the Comprehensive Plan. An MXD District may also coincide with an area surrounding a transit station or within designated centers along a transit line as designated in the Comprehensive Plan. Also considered shall be the use of the land and its improvements with adjacent land and the benefits or detriments to the property, adjacent land and to the City, which would result from the development in accordance with the proposed plan; thus promoting the public health, safety and welfare.

> Furthermore the MXD District is intended to encourage redevelopment and infill development laid out, developed and used according to a Master Development Plan to improve mobility by providing pedestrian and transit-friendly development with a mix of residential, commercial and employment opportunities in accord with the following:

- 1. Encourage investment in areas so designated by the Comprehensive Plan while adding to the quality of life in neighborhoods;
- 2. Encourage safe, attractive and convenient access for transit users, pedestrians and bicyclists through appropriate design;
- 3. Allow densities supportive of mixed use development;
- 4. Reduce vehicular trip generation by allowing for combining of trips and locating destinations within walking and biking distances of neighborhoods and transit stops;

- Reduce congestion and increase safety on major roadways by providing from local streets, shared drives and alleys;
- 6. Reduce conflicts between pedestrians, bicycles and vehicles;
- 7. Reinforce the use of public transit by locating employment-oriented business and higher density residential uses, adjacent to transit stops.
- 6.10.2. Area Requirements. Except when the Master Development Plan of an existing approved MXD is amended to include additional area, any tract of land to be zoned MXD shall have a minimum of two (2) acres.
- 6.10.3. Review Procedure.
  - Prior to submission of the Master Development Plan, the applicant shall submit and review a conceptual plan with City Planning Staff for a preliminary indication of the consistency of the plan with the basic intents and requirements of the District. The applicant shall then prepare and submit the required materials of the Master Development Plan to the City Clerk.
  - 2. Applications shall be submitted a minimum of twenty-five (25) working days prior to the next regularly scheduled Commission meeting.
  - 3. Rezoning to an MXD District shall proceed as provided in <u>§13.4</u> <u>Amendments</u> and as described herein.
  - 4. Council approval of the application for the MXD shall be an approval of (a) the Master Development Plan and (b) the planning criteria of the application (collectively, the "Plan"). The developer may proceed with the development in accordance with the Plan, and no further approvals shall be required except for Building Permits, subject to §13.2.

- 6.10.4. Application. The application shall contain the following:
  - 1. An application fee to defray the cost of processing the application, as set from time to time by the Council. Applicant shall be responsible for all costs of notification and advertisement incurred.
  - 2. A list of property owners. Any material change in the owners of the property shall be submitted to the City Clerk within sixty (60) days after such change.
  - 3. A Master Development Plan and any maps necessary to show the following information:
    - a. A legal description;
    - b. North arrow and scale
    - c. Planning objectives to be achieved. The statement should include a description of the character of the proposed development and the rationale behind the assumptions made by the applicant in relation to the overall community growth;
    - d. Topography (in no greater than two (2) foot contour intervals), waterways, flood plains, wetlands, forest cover and known areas of subsurface mining or environmental hazards;
    - e. A general description of the surrounding area, including current zoning and/or land uses,
    - f. Existing and proposed streets, greenbelts, buffers, open spaces, schools, parks and community service areas within and adjacent to the project area
    - g. A description of how any phases or staging will proceed and an estimated date when the development will begin;
    - h. The gross floor area of non-residential uses, area of proposed open spaces, and the number and gross density

(including streets and open spaces) of all dwelling units;

- i. Development criteria, in accordance with §6.10.8 through §6.10.10, including but not limited to: setbacks and build-to lines, building heights, street and sidewalk design, signage, off-street parking, lighting, and/or any other development criteria which the applicant may propose;
- j. The location of proposed structures and uses;
- k. Landscape design criteria and plans for open space;
- Availability of transportation, water supply, storm sewer and sewage disposal;
- m. Plans for the ownership and maintenance of common areas;
- n. Documentation of any protective and/or restrictive covenants, property owner associations and architectural review committees, if any, and a discussion of their functions;
- o. A traffic study, if required by the City Engineer;
- p. Any proposed modification of the subdivision regulations.
- 6.10.5. Other Regulations Not Applicable.Where the provisions of this Section are in conflict with other provisions of this Ordinance, the provisions of this Section shall take precedence.

It is the intent of this Section that the application shall set forth criteria applicable to the property and that flexibility shall be allowed in the construction of improvements thereon. Accordingly, for the purposes of this district, the strict conformity to provisions of <u>Articles 4</u>, 7, 8 and 9, shall not apply, except as otherwise stated herein. The applicability of the City Subdivision Regulations shall be subject to any modifications accepted by the Commission.

- 6.10.6. Deviation from the Plan.
  - 1. Incidental Change. The Zoning Official, Building Official and City Engineer, as applicable, may approve alterations to the plan that are considered incidental in scope, which acceptance shall be in writing. Acceptance of plans by official stamp or seal, initials and/or signature of the appropriate official shall be deemed acceptance "in writing".
  - Minor Change. Changes that are minor but more significant in scope than an incidental change are subject to review, acceptance by the Commission through the typical plat acceptance process. "Minor changes" include increases in density, reductions in open space, and changes to the accepted proportion of mixed uses, provided no such minor change exceeds five (5) percent of the original specification under the Plan.
  - 3. Major Change. A "major change" includes any increase in density, reduction in open space, or change to the accepted proportion of mixed uses over five (5) percent of the original specification for such respective matter. (NOTE: Such percentage is cumulative, which includes all requests since final acceptance). The developer shall file an application for any major change, which shall be reviewed in accordance with the provision of §6.10.3.
  - 4. Acceptance of Plat Changes. Once the Commission has accepted any plat, any changes shall require acceptance by the Commission through the typical process for such changes. Any accepted changes to a plat will not constitute a change to the plan.
- 6.10.7. Time Limit for Development of Plan. If no construction has begun within twelve

(12) months from the start up date, as accepted in the Plan, said acceptance shall lapse and be of no further effect. The Commission, upon showing of good cause by the developer, may extend for period(s) of six (6) months for the beginning of construction, the intent being that construction should be completed within a reasonable time.

- 6.10.8. Uses. It is intended that flexibility be provided to allow mixed uses within the development, taking into consideration compatibility with surrounding use(s). Therefore, the development shall contain and provide an appropriate mix of complementary uses, which shall include those that offer goods and services at different times of day and those in which people may choose to live, work, shop and play in close proximity to one another.
  - 1. Prohibited uses. Uses or structures prohibited shall be the following, including uses and structures deemed by the Commission to be substantially similar in use and impact to those listed following:
    - a. Drive-through facilities, except those located to the rear or interior of the development.
    - b. Sales, service and rental of commercial equipment and construction materials.
    - c. Vehicle sales, service and rental, except in an enclosed structure.
    - d. Distribution, storage and warehousing facilities.
    - e. Heavy commercial services.
    - f. General manufacturing and other industrial uses.
    - g. Salvage, recycling and outdoor storage.
    - h. Towing services.

- i. Wholesale trade.
- 2. Notwithstanding provisions to the contrary that may be found elsewhere in this Ordinance:
  - a. Uses prohibited in a mixed use development that were lawfully in existence at the time of district designation but that are to remain as a part of the overall Plan, shall not be expanded, because such uses are not considered to be compatible with the intent of the district.
  - b. All other uses and structures that were lawfully in existence at the time of district designation may be expanded, upon findings by the Commission that the proposed expansion complies with the intents of the MXD District and the Plan. Total such expansion shall be limited to a maximum of twenty (20) percent of the gross floor area present at the time of district designation, and only upon acceptance by the Commission of a Plan that commits the applicant, through covenant or other appropriate means, to development that will achieve, through phases if necessary, full compliance with all applicable standards of the district.
- 6.10.9. Parking Requirements. It is intended that the provision of shared and on-street parking, mixed uses and optimized pedestrian access allows reductions in parking requirements as provided in  $\underline{\$8.1.2}$ .
  - 1. Parking shall not exceed 120% of the cumulative spaces required by <u>§8.1.2</u> unless such additional parking is provided in a parking structure.
  - 2. Only new on-street parking, created as a result of the development, may be counted toward the parking requirement.

- 3. Surface parking lots shall be landscaped in accordance with the applicable requirements of <u>§9.2 Site Landscaping</u>.
- 4. Vehicular access to parking and loading areas shall be limited to mid-block alleys and shared driveways.
- 6.10.10. Review Criteria and Standards. The Commission shall employ the following checklist during the review process.
  - 1. Uses.
    - a. A project shall include a residential component in combination with one or more of the following: commercial, lodging, institutional or recreational uses. The ratio of mixed uses shall be acceptable to the Commission.
    - b. A variety of uses shall be placed close together to optimize pedestrian convenience.
    - c. Buildings may include more than one use. However, residential uses may not be located on the same floor of the same building as a different use.
    - d. Residential uses shall not exceed a net density of ten (10) dwelling units per acre.
  - 2. Site Planning. Site plans should establish legible circulation paths, human-scaled public spaces and clear transitions between public and private space through the location of buildings, parking areas, access points, and walkways.
    - a. Blocks larger than 400 feet x 400 feet should be avoided within the center of a mixed use development. Blocks may be larger along the periphery to provide an appropriate transition to surrounding neighborhoods.
  - 3. Building Height.
    - a. The maximum building height, for lots adjacent to any single-family residential district, shall be three (3)

stories or forty-eight (48) feet, whichever is less.

- b. The maximum building height for all other cases shall be five (5) stories or sixty (60) feet, whichever is less.
- 4. Streetscape Design.
  - a. All streets shall be designed to promote connectivity while calming traffic.
  - b. New streets may include on-street parking as approved by the City Engineer.
  - c. Sidewalks shall be installed along all street frontages as needed, and shall:
  - Be completely interconnected within the site and from the site to adjacent public sidewalks;
  - (2) Be at least five (5) feet wide in primarily residential areas;
  - (3) Be at least eight (8) feet wide in primarily commercial areas; and
  - (4) Be separated from the street by a vertical curb.
  - d. A tree lawn, regularly spaced tree wells, planter boxes, and/or on-street parking shall be provided as a buffer between the roadway and sidewalk.
  - e. Planting strips and street trees shall be provided as required in the City Public Works Manual.
- 5. Building Design. Buildings shall be oriented to maximize the building frontage along the street. Building frontage may be less and a modest setback incorporated where necessary to provide an appropriate transition to adjacent neighborhoods.
  - a. Mixed-use buildings with street level commercial space shall be set back no more than five (5) feet from the sidewalk unless the proposed setback is to be a courtyard, plaza or similar public space.

- b. Any residential units located within fifteen (15) feet of a public sidewalk shall be raised at least two (2) feet above the grade level of the sidewalk.
- c. Buildings shall provide and maintain a public entrance along the street.
  Buildings shall be oriented toward the pedestrian by providing a direct link between the building and the existing and/or proposed pedestrian system.
- d. Shading and protection from inclement weather, through awnings or canopies, shall be provided over public sidewalks to optimize pedestrian comfort.
- e. Building service areas should be placed away from street view.
- 6. Open Space.
  - a. In primarily non-residential areas at least fifteen (15) percent of the total site area shall be dedicated to open space. Where feasible, this should be fulfilled with a plaza, courtyard or similar public space in a central location adjacent to multiple buildings on the site.
  - b. In primarily residential areas at least twenty (20) percent of the total site area shall be dedicated to usable open space.
- 7. Vehicle and Bicycle Parking.
  - a. Parking should be placed away from street view, to the rear or side of buildings and never at corners.
  - b. Parking areas within a block should be shared. Reserved spaces shall be excluded from shared parking reductions per  $\S{8.1.2}$ .
  - c. Parking facilities shall be designed with connections to the sidewalk system and through-pedestrian paths, clearly identifiable through changes in material or elevation.

- d. Along street frontages, parking structures should contain ground-level business uses.
- e. Bicycle parking facilities should be provided as follows:
- (1) Multi-family: 1 space per dwelling
- (2) Retail: 1 space per 2000 sq. ft. GLA
- (3) Office: 1.0 space per 4,000 sq. ft. GLA
- (4) Park and Ride Facilities: 10 spaces per acre
- 8. Lighting. Lighting should be carefully integrated with building, landscape and streetscape design. Scale, intensity, and fixture design should vary between areas of different densities and uses. Lighting should increase pedestrian comfort and safety. Well-lit streetscapes provide a sense of security and encourage nighttime activity. Ornamental light posts and fixtures help to create an attractive streetscape and should be consistent with the architectural character of the area.

Light fixtures should be shielded to keep light focused downward and avoid glare and excess lighting.

- a. Lighting may be used to showcase building and landscape features, emphasize important spaces and promote nighttime vitality and safety. All light sources should be shielded to eliminate nighttime glare. Buildingmounted lights may be used in place of light posts to safely illuminate pedestrian and minor vehicular ways.
- b. Streetscape lighting should be compatible with the scale and character of surrounding buildings and open spaces. A larger number of lower scale, low-intensity lights is preferred to fewer, taller high-intensity lights. In the center of mixed use developments, light posts should be eight (8) to twelve (12) feet in height along

sidewalks and spaced no more than thirty (30) feet apart. For natural quality, lighting elements should provide full-spectrum light to prevent color distortion. Ornamental fixtures are recommended.

- c. Roadway lighting should be designed to enhance the safety of vehicular and pedestrian flows. Light posts may be located at both edges of the roadway or within a landscaped median. Lighting should be concentrated at intersection crosswalks for pedestrian safety. Roadway lighting should not adversely affect the streetscape lighting.
- 9. Stormwater management. Off-site treatment (including curb and gutter, conduits, catch basins, and related appurtenances) shall be the preferable management technique; however, where such technique is inadequate or impractical, it should be combined or substituted with on-site retention and/or detention facilities integrated into the open space and landscape design of the site.
- 10. Transit. Development sites that include an existing or planned transit stop shall:
  - a. Be directly served by a sidewalk.
  - b. Include a concrete loading pad from sidewalk to curb.
  - c. Include a transit shelter integrated with the development.
  - d. Provide bicycle parking as accepted by the Commission.
  - e. Include bus turnout lanes along the transit route.
  - f. Provide park-and-ride facilities (if in area designated by the MPO as a parkand-ride service area)

| Table 6 Use Regulations for Non-Residential Districts |    |     |       |     |     |     |     |      |
|-------------------------------------------------------|----|-----|-------|-----|-----|-----|-----|------|
| USES / DISTRICTS:                                     | А  | B-1 | B-1.2 | B-2 | B-3 | 0-1 | O-2 | INST |
| AGRICULTURAL                                          |    |     |       |     |     |     |     |      |
| Farm, Raising of Crops only                           | Y  |     |       |     |     |     |     |      |
| Farm, Raising of Livestock                            | L  |     |       |     |     |     |     |      |
| Farm Support Business                                 | SE |     |       |     | С   |     |     |      |
| Forestry                                              | Y  |     |       |     |     |     |     |      |
| Stable                                                | Y  |     |       |     |     |     |     |      |
| RESIDENTIAL                                           |    |     |       |     |     |     |     |      |
| Assisted Living Facility                              |    |     | С     |     |     |     |     | Y    |
| Independent Living Facility                           |    |     | Y     |     |     |     |     |      |
| Multi-family dwelling                                 |    |     | Y     |     |     |     |     |      |
| Townhouse                                             |    |     | Y     |     |     |     |     |      |
| LODGING                                               |    |     |       |     |     |     |     |      |
| Bed and Breakfast, <u>§7.4</u>                        | С  |     |       |     |     |     |     |      |
| Hotel                                                 |    |     |       | Y   | Y   |     |     |      |
| Motel                                                 |    |     |       |     | Y   |     |     |      |
| INSTITUTIONAL                                         |    |     |       |     |     |     |     |      |
| Animal Shelter, <u>§7.6</u>                           | Y  |     |       | С   | С   |     |     | С    |
| Private Club                                          |    | Y   | Y     | Y   | Y   | Y   | Y   | Y    |
| Day Care Center, <u>§7.7</u>                          |    | L   | L     | Y   | Y   | С   | С   | С    |
| Hospital                                              |    |     |       |     | С   |     | С   | Y    |
| Nursing Home                                          |    |     |       |     | С   |     |     | Y    |
| Place of Assembly                                     | С  | L   | L     | Y   | Y   | L   | Y   | Y    |
| Public Facility                                       | L  | L   | L     | Y   | Y   | L   | Y   | Y    |
| Public Utility Facility                               | SE | SE  | SE    | SE  | SE  | SE  | SE  | SE   |
| School, Commercial                                    | С  | L   | L     | Y   | Y   | L   | Y   | Y    |
| School, Not-for-Profit                                | С  | L   | L     | Y   | Y   | L   | Y   | Y    |
| School, Public                                        | С  | L   | L     | Y   | Y   | L   | Y   | Y    |
| BUSINESS                                              |    |     |       |     |     |     |     |      |
| Automotive Repair Service, Major                      |    |     |       | С   | С   |     |     |      |
| Automotive Repair Service, Minor                      |    |     |       | Y   | Y   |     |     |      |
| Automotive Sales                                      |    |     |       | С   | С   |     |     |      |
| Bank or Financial Service                             |    | L   | L     | Y   | Y   | Y   | Y   |      |
| Broadcast Studio                                      |    |     |       | Y   | Y   | Y   | Y   |      |
| Business or Professional Office                       |    | L   | L     | Y   | Y   | Y   | Y   |      |
| Business Support Service                              |    | L   | L     | Y   | Y   | Y   | Y   |      |
| Car Wash, Freestanding (non-accessory)                |    |     |       | С   | С   |     |     |      |
| Convenience Store                                     |    | Y   | Y     | Y   | Y   |     |     |      |
| Entertainment, Indoor                                 |    |     |       | Y   | Y   |     |     |      |
| Entertainment, Outdoor                                |    |     | С     | С   | С   |     |     |      |
| Funeral Home                                          |    |     |       | С   | Y   |     |     |      |
| Garden Center/ Nursery                                |    | L   | L     | Y   | Y   |     |     |      |

Y – The use is permitted by right.

L – Permitted to limits set by district regulations

SE – Special Exception Use, requires approval by BZA (see  $\S12.3$ ). May also be subject to district limitations.

C – Conditional Use, requires approval by the Council (see §13.3). May also be subject to district limitations.

A use not listed may be requested for approval as a Conditional Use per  $\S13.3$ .

A use followed by a numeric cross-reference is subject to Use-Specific Regulations in Article 7.

A blank cell indicates that the use is not permitted.

| Table 6 Use Regulations for Non-Residential Districts |   |     |       |     |     |     |     |      |
|-------------------------------------------------------|---|-----|-------|-----|-----|-----|-----|------|
| USES / DISTRICTS:                                     | A | B-1 | B-1.2 | B-2 | B-3 | O-1 | O-2 | INST |
| Gas Station, <u>§7.2</u>                              |   |     | С     | Y   | Y   |     |     |      |
| Hardware Store                                        |   | L   | L     | Y   | Y   |     |     |      |
| Home Improvement Center                               |   |     |       | Y   | Y   |     |     |      |
| Kennel, §7.6                                          | Y |     |       |     | С   |     |     |      |
| Laundromat                                            |   |     | Y     | Y   | Y   |     |     |      |
| Laundry and Dry Cleaning, Retail                      |   | Y   | Y     | Y   | Y   | Y   | Y   |      |
| Laundry, Industrial                                   |   |     |       | С   | С   |     |     |      |
| Liquor Lounge                                         |   | С   | С     | С   | С   |     |     |      |
| Maintenance Service                                   |   |     |       | С   | С   |     |     |      |
| Medical Clinic                                        |   |     | L     | Y   | Y   | Y   | Y   | Y    |
| Medical Support Service                               |   |     | L     | Y   | Y   | Y   | Y   | Y    |
| Personal Service                                      |   | L   | L     | Y   | Y   |     |     |      |
| Produce Market                                        | Y | Y   | Y     | Y   | Y   |     |     |      |
| Restaurant, Fast Food                                 |   | L   | L     | Y   | Y   |     |     |      |
| Restaurant, Standard                                  |   | L   | L     | Y   | Y   |     |     |      |
| Retail, General, Enclosed                             |   |     |       | Y   | Y   |     |     |      |
| Retail, General, Unenclosed                           |   |     |       | С   | Y   |     |     |      |
| Retail, Neighborhood                                  |   | L   | L     | L   | L   |     |     |      |
| Services, Neighborhood                                |   | L   | L     | L   | L   |     |     |      |
| Service Station, §7.2                                 |   |     | С     | Y   | Y   |     |     |      |
| Studio, Artist                                        |   | Y   | Y     | Y   | Y   |     |     |      |
| Veterinary Hospital, §7.6                             |   |     |       | С   | С   |     |     |      |
| OTHER                                                 |   |     |       |     |     |     |     |      |
| Airport                                               |   |     |       |     | С   |     |     |      |
| Cemetery                                              | С |     |       |     |     |     |     | С    |
| Construction Service                                  |   |     |       |     | С   |     |     |      |
| Country Club                                          | С |     |       |     |     |     |     |      |
| Heliport                                              |   |     |       |     | С   |     | С   | С    |
| Landfill                                              |   |     |       |     | С   |     |     |      |
| Manufacturing, Light                                  |   |     |       |     | С   |     |     |      |
| Mixed Use, General                                    |   |     | L     |     |     |     |     |      |
| Mixed Use, Live-Work                                  |   |     | L     |     |     |     |     |      |
| Parks, Gardens, Playgrounds                           | Y | Y   | Y     | Y   | Y   |     |     | Y    |
| Recreation, Indoor                                    |   |     |       | Y   | Y   |     |     |      |
| Recreation, Outdoor                                   |   |     |       | С   | С   |     |     | Y    |
| Rehabilitation Facility                               |   |     |       |     | С   |     |     | Y    |
| Research Laboratory                                   |   |     |       |     | С   |     | С   |      |
| Salvage Yard                                          |   |     |       |     | С   |     | С   |      |
| Storage, Mini-warehouse, §7.5                         |   |     |       | С   | С   |     |     |      |
| Storage, Outdoor                                      |   |     |       |     | С   |     |     |      |
| Telecommunications Facilities, §7.9                   | С | С   | С     | С   | С   | С   | С   | С    |
| Warehousing, Wholesale, Distribution                  |   |     |       | С   | С   |     |     |      |

Y – The use is permitted by right.

 $\mathbf{Y}$  – The use is permitted by right.  $\mathbf{L}$  – Permitted to limits set by district regulations  $\mathbf{SE}$  – Special Exception Use, requires approval by BZA (see §12.3). May also be subject to district limitations.  $\mathbf{C}$  – Conditional Use, requires approval by the Council (see §13.3). May also be subject to district limitations. A use not listed may be requested for approval as a Conditional Use per §13.3. A use followed by a numeric cross-reference is subject to Use-Specific Regulations in Article 7.

A blank cell indicates that the use is not permitted.

Ordinance No. 3099

# Article 7 USE-SPECIFIC REGULATIONS

# §7.1. Home Occupations

Home occupations are permitted uses in any estate or residential zoning classification under the following limitations. For home occupations in a planned unit development, refer to  $\underline{\$6.9.5.1}$ .

- 7.1.1. Limitations
  - 1. Home occupations shall be conducted only in the principal dwelling. No more than twenty-five (25) percent, up to 500 sq. ft., of the dwelling may be used for a home occupation.
  - 2. There shall be no outdoor display or storage associated with the home occupation and no commodities shall be sold on the premises other than by phone, mail or internet. No goods shall be delivered to a purchaser on the premises.
  - 3. No sign may be attached to the dwelling or any part of the real estate advertising any home occupation.
  - 4. No home occupation shall be permitted if it creates noise, odors, vibrations or traffic congestion, which interferes with the residential qualities of the neighborhood insofar as health, safety, morals, convenience and general welfare are concerned.
  - 5. In order to be a permitted home occupation, the use must be one which is habitually, customarily, and commonly established as a reasonable incidental, accessory, subordinate and secondary use. The existing dwelling shall not be enlarged to accommodate the home occupation; nor shall any accessory structure be built for the purpose of operating the home occupation.
  - 6. No home occupation shall be permitted that requires the operation or keeping on premises of a commercial vehicle.

- 7. No persons other than members of the family residing on the premises shall be employed by the home occupation.
- 8. Home occupations shall be limited to the hours between 7:00 a.m. and 10:00 p.m.
- 7.1.2. Provided full conformance with the above limitations, the types of home occupations that may be permitted shall include, but not be limited to, the following:
  - 1. Offices provided no customers or clients shall be allowed on premises
  - 2. Phone, mail order and similar sales provided no inventory is stored on the premises and no goods are delivered on the premises by the home owner to any customers.
  - 3. Music and art lessons, provided there shall be no more than two students receiving instruction at any one time and no students shall be received after 7:00 p.m.
  - 4. Instruction by a private tutor who offers academic instruction in the several branches of study required to be taught in the public schools of the State of Alabama provided there are no more than five (5) individuals participating in the tutorial instruction at any one time. When complying with this limitation, the home occupation shall not be considered an "Educational Group E" or "Educational Occupancy" for the purposes of the City Building and Fire Codes or City Life Safety Code, respectively. The requirement of "no more than five (5)individuals participating in the tutorial instruction at any one time" shall not mean or include parents that reside in the home or their children, stepchildren or wards.
  - 5. Crafts, dress making, sewing, tailoring and similar occupations with limited

equipment and provided no clients or customers shall be allowed on premises.

The Board of Zoning Adjustment may approve other home occupations per <u>§12.3 Special Exceptions</u> so long as they present no greater impact on the neighborhood than those listed above and provided conditions required by the BZA will be met to limit noise, traffic or other impacts that might otherwise disrupt the residential character of the neighborhood.

## §7.2. Gas and Service Stations

- 7.2.1. Use Limitations
  - 1. The following uses shall be prohibited: painting, body work, major repair, dismantling for recovery of parts, and sales or rental of motor vehicles or trailers.
  - 2. Service stations shall not include more than three (3) service bays.
- 7.2.2. Area and Dimensional Regulations
  - All oil drainage pits and hydraulic lifts shall be located within an enclosed Structure and shall be located no closer than fifty (50) feet to an abutting residential lot line and no closer than twenty-five (25) feet to any other lot line.
  - 2. All permitted mechanical repair work shall be conducted within an enclosed structure and shall be located no closer than fifty (50) feet to any abutting residential lot line and no closer than twenty-five (25) feet to any other lot line.
  - Fuel pumps, pump islands and other service facilities may occupy required yards; however, such shall be set back at least fifteen (15) feet from any lot line. Canopies shall not extend closer than five (5) feet to any lot line.
- 7.2.3. No storage of vehicles shall be permitted for periods in excess of thirty (30) days. Vehicles shall not be permitted to remain

on the property longer than forty-eight (48) hours unless such vehicles are stored within an enclosed building or within a rear or side yard screened in accordance with <u>§9.4 Screening</u>.

## §7.3. Conservation Subdivisions

- 7.3.1. Intent
  - To provide the flexibility to achieve the most effective development on lands that are constrained by natural hazards, environmentally sensitive areas or environmental regulations, which may limit the amount or type of development on such properties;
  - 2. To enhance quality of life by promoting the creation of accessible greenspace throughout the community;
  - 3. To protect sensitive, environmental land features to protect the health and safety of residents and neighboring property owners;
  - 4. To reduce erosion and sedimentation by minimizing land disturbance and removal of vegetation;
  - 5. To encourage interaction within the community by allowing clustering of homes and orienting them closer to the street, thereby providing gathering places and encouraging the use of parks as focal points within the community;
  - 6. To encourage street systems that tend to reduce traffic speeds and reliance on main arteries.
  - 7. To promote construction of convenient walking trails, bike paths, and greenways within new developments that are connected to Adjacent neighborhoods and activity centers to increase accessibility for pedestrians and bicyclists; and

- 8. To reduce perceived density by providing a maximum number of lots with direct access to and views of open space.
- 7.3.2. Applicability. The Conservation Subdivision option is available as a use by right in any zoning district in which single-family detached dwellings may be permitted. The applicant shall comply with all other provisions of this Ordinance and all other applicable regulations, except those which may be modified as specified within this Section.
- 7.3.3. Ownership of Development Site. The tract of land to be subdivided and/or developed may be held in single, separate, and multiple ownership. If held in multiple ownership, the site shall be developed according to a single plan with common authority and common maintenance responsibility as approved by the City Attorney.
- 7.3.4. Density Determination. The maximum number of lots shall be determined by the minimum lot size of the Applicable District, the minimum lot size as required by City or County Health Department standards for septic tank use (or similar density limitation where applicable), or the maximum density of the applicable district, whichever is most restrictive. Furthermore, density determination shall also take into account the amount of land necessary for internal streets and other subdivision requirements. In making this calculation, the following shall not be included in the total acreage of the Parcel:
  - 1. Bodies of open water over 5,000 sq. ft. of contiguous area; and
  - 2. Wetlands, as defined by the City or by the Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.

- 7.3.5. Application Requirements
  - 1. Site Analysis Map Required. Concurrent with the submission of a subdivision plat, the applicant shall prepare and submit a site analysis map. The purpose of the site analysis map is to ensure that important site features have been adequately identified prior to the creation of the site design, and that the proposed open space will meet the requirements of this Section. The site analysis map shall include the following:
    - a. Property boundaries;
    - b. All streams, rivers, lakes, wetlands, flood hazard boundaries, and other hydrologic features;
    - c. All boundaries of applicable regulated buffer areas, easements, and rights-ofway;
    - d. Topography at 5-feet or smaller intervals;
    - e. All Primary and Secondary Conservation Areas labeled by type, as described in §7.3.6;
    - f. General vegetation characteristics;
    - g. General soil types;
    - h. Planned location of protected Open Space;
    - i. Existing roads and structures; and
    - j. Potential connections with existing greenspace and trails.



2. Conservation Subdivision Plan. The developer shall prepare a conservation subdivision plan which yields no more lots than identified under §7.3.4. The conservation subdivision plan shall identify open spaces to be protected in accord with §7.3.6 and may include lots which do not meet the size and setback requirements of the applicable district. The Conservation Subdivision Plan shall include an Open Space Management Plan, as described in §7.3.6 and shall be prepared and submitted prior to the issuance of a land disturbance permit.



- 3. Instrument of Permanent Protection Required. An instrument of permanent protection, such as a conservation easement or permanent restrictive covenant and as described in §7.3.6.5, shall be placed on the open space concurrent with the issuance of a land disturbance permit.
- 4. Other Requirements. The applicant shall adhere to all other applicable requirements of the applicable district and the Subdivision Regulations.
- 7.3.6. Open Space Management Plan. For the purposes of conservation subdivisions, open space is defined as the portion of the conservation development or subdivision that has been set aside for permanent protection. Activities within the open space are restricted in perpetuity

through the use of a legal instrument approved by the City Attorney.

- 1. Standards to Determine Open Space
  - a. The minimum restricted open space shall comprise at least twenty-five (25) percent of the gross tract area.
  - b. The following are considered Primary Conservation Areas and are required to be included within the open space, unless the applicant demonstrates that this provision would constitute an unusual hardship and be counter to the purposes of the Conservation Subdivision:
  - (1) The 100-year floodplain;
  - (2) Riparian zones of at least 75 feet
     width along perennial and intermittent
     stream shown on the United States
     Geological Survey (USGS)
     quadrangle topographic maps.
  - (3) Slopes above twenty-five (25) percent of at least 10,000 sq. ft. contiguous area;
  - (4) Wetlands determined to be jurisdictional by the Corps pursuant to the Clean Water Act;
  - (5) Existing and planned trails that connect the site to neighboring areas; and
  - (6) Archaeological sites, cemeteries and burial grounds.
  - c. The following are considered Secondary Conservation Areas and should be included within the open space to the maximum extent feasible:
  - (1) Important historic sites
  - (2) Existing healthy, native forests of at least one (1) acre contiguous area;
  - (3) Individual existing healthy trees greater than eight (8) inches caliper; and
- (4) Other significant natural features and scenic viewsheds, particularly those that can be seen from public streets.
- d. Utility rights-of-way and small areas of impervious surface may be included within the protected open space but cannot be counted towards the twentyfive (25) percent minimum area requirement (exception: historic Structures and existing trails may be counted). Large areas of impervious surface, such as streets and parking lots shall be excluded from the open space.
- e. At least thirty-three (33) percent of the open space shall be suitable for passive recreational use.
- f. At least seventy-five (75) percent of the open space shall be in a contiguous tract, which may be divided by a local Street whose area shall be excluded from the open space. The open space shall adjoin any neighboring areas of open space, other protected areas, and non-protected natural areas that would be candidates for inclusion as part of a future area of protected open space.
- g. The open space shall be directly accessible to the largest practicable number of lots and/or Buildings within the site. Non-abutting lots shall be provided with safe, convenient access to the open space.
- 2. The following uses shall be permitted within the open space:
  - a. Conservation of natural, archeological or historical resources;
  - Meadows, woodlands, wetlands, wildlife corridors, game preserves, or similar conservation-oriented areas;
  - Boardwalks or walking /bicycle trails constructed of porous paving materials;

- d. Passive recreation areas, such as open fields;
- e. Active recreation areas, provided that they are limited to no more than ten (10) percent of the total open space and are not located within Primary Conservation Areas. Active recreation areas may include impervious surfaces. Active recreation areas in excess of this limit must be located outside of the protected open space.
- f. Landscaped Stormwater Management facilities, community wastewater disposal systems and individual wastewater disposal systems located on soils particularly suited to such uses. Such facilities shall be located outside of Primary Conservation Areas;
- g. Easements for drainage, access, and underground utility lines;
- h. Other conservation-oriented uses compatible with the purposes of this Ordinance.
- 3. The following uses shall be prohibited within the open space:
  - a. Golf courses;
  - Roads, parking lots and similar impervious surfaces, except as specifically authorized in the previous sections;
  - c. Agricultural and forestry activities not conducted according to accepted best management practices;
  - d. Impoundments; and
  - e. Other activities as determined by the applicant and recorded on the legal instrument providing for permanent protection.
- 4. Ownership and Management of Open Space. Ownership and maintenance of the common open space and any facilities thereon shall be as provided for

in  $\S4.6$  Ownership and Management of Common Open Spaces.

- 5. Legal Instrument for Protection of Open Space. The open space shall be protected in perpetuity by a binding legal instrument that is recorded with the deed. The instrument for permanent protection shall include clear restrictions on the use of the open space. These restrictions shall include all restrictions contained in this article, as well as any further restrictions the applicant chooses to place on the use of the open space. The instrument shall be one of the following:
  - a. A permanent conservation easement in favor of either:
  - (1) a land trust or similar conservationoriented non-profit organization with legal authority to accept such easements. The organization shall be bona fide and in perpetual existence and the conveyance instruments shall contain an appropriate provision for retransfer in the event the organization becomes unable to carry out its functions; *or*
  - (2) a governmental entity with an interest in pursuing goals compatible with the purposes of this Ordinance, and if the entity accepting the easement is not the City, then a third right of enforcement favoring the City shall be included in the easement.
  - b. A permanent restrictive covenant for conservation purposes in favor of a governmental entity.
  - c. An equivalent legal tool that provides permanent protection, as approved by the City Attorney.
- 6. Tax Assessment of Open Space. Once a legal instrument for permanent protection has been placed upon the open space, the applicant may request the County Tax Assessor to reassess the open space at a

lower value to reflect its more limited use.

# §7.4. Bed and Breakfast

- 7.4.1. Use Limitations
  - Bed and Breakfasts are permitted only in detached single-family dwellings. Lodging located in a non-residential building is considered either a "hotel" or "motel" and is not subject to the requirements of this §7.4.
  - 2. The maximum number of allowable guest rooms shall be determined by dividing the gross interior floor area of the principal building (excluding garages) by 500 sq. ft. And, no more than fifty (50) percent of the GFA (excluding garages) of the principal building shall be utilized for guest accommodations. All guest rooms shall be located within the principal building.
- 7.4.2. Parking. For each approved guest room, there shall be provided one (1) parking space, in addition to those required for the dwelling use. Such additional required parking spaces shall be properly situated on site and screened from adjacent properties. Such parking areas should not detract from the residential character of the neighborhood. Recreational vehicle parking shall be prohibited.
- 7.4.3. Modifications to Dwelling. Aside from any alterations necessary to ensure the safety of the dwelling, no exterior modifications shall be allowed unless approved by the BZA as a part of the Special Exception approval process. Approved exterior modifications should not detract from the residential character of the dwelling or the neighborhood.

## §7.5. Mini-warehouses

- 7.5.1. No storage space shall exceed 400 sq. ft. in area nor be used for other than storage purposes.
- 7.5.2. For single-story facilities all storage units shall open onto a paved driveway with a minimum width of ten (10) feet for each direction of travel or fourteen (14) feet for one-way travel.
- 7.5.3. Outdoor storage of goods and materials, other than vehicles, shall be prohibited. Any types of vehicles, including recreational vehicles, if stored on site, shall be fully screened in accordance with <u>§9.4 Screening</u>.

# §7.6. Veterinary Hospitals, Animal Shelters and Kennels

- 7.6.1. No indoor or outdoor pens or runs shall be located within 100 feet of a residential district boundary. Outdoor runs shall be set back no less than fifty (50) ft from all lot lines.
- 7.6.2. Outdoor runs shall be located to the rear of the building and all such areas visible from a public right-of-way shall be enclosed with a wooden privacy fence or similar weather-resistant, durable, and opaque material. Fences (or walls) shall be no less than four (4) ft nor greater than eight (8) ft in height and shall be subject to the applicable regulations of §9.4 <u>Screening</u>.
- 7.6.3. All waste material shall be stored in closed containers and screened as required in <u>§9.4 Screening</u>.
- 7.6.4. Emission of any offensive odors, beyond the lot line, shall not be permitted at any time.

## §7.7. Day Care Facilities

Day care facilities, operated within a dwelling, shall comply with the following

requirements and all applicable requirements of  $\S7.1$  Home Occupations, as applicable

- 7.7.1. Application of Regulations. The provisions of this Section shall apply to day care facilities providing service for part of a twenty-four (24)-hour day for children under sixteen (16) years of age; for the aged; or for persons who are disabled, by persons giving care (excluding care provided by relatives). Day care facilities shall include family day care homes and day care centers. This Section does not apply to baby-sitting or child day care service furnished in places of worship during worship services.
- 7.7.2. General Provisions. The following general provisions apply to all day care facilities.
  - 1. All day care facilities shall comply with all applicable State regulations.
  - Hours of outside play shall be limited to between the hours of 7:00 a.m. and sunset, as defined by the National Weather Service
  - 3. An outdoor play area shall be provided for child day care facilities in other than the front yard. Play equipment shall be located at least ten (10) feet from an abutting lot line.
  - 4. Fencing, where permitted by this Ordinance, shall be provided to restrict children from hazardous areas and principal arterial and minor arterial roads. Natural or physical barriers may be used as required fencing so long as such barriers functionally restrict children from these areas.
  - 5. The expansion of a family day care home to a day care center shall require rezoning to a district in which a day care center is permitted. When applying for rezoning, the applicant shall submit a

plan showing any existing or proposed outdoor play areas, outdoor play equipment, fencing, access drives, adjacent streets, adjacent hazardous uses, on-site hazards, merchandise delivery areas, on-site sewage disposal facilities, parking spaces, and the drop-off circulation pattern.

- 7.7.3. Family Day Care Homes. In addition to the other provisions of this Section, family day care homes shall comply with the following:
  - 1. The facility must have a current State registration certificate. Proof of registration renewal must be supplied to the Fire Marshal every two (2) years.
  - 2. There shall be no external evidence of such use. No signs indicating such use may be erected on site.
  - 3. Family day care homes shall be limited to the care of no more than two (2) non-occupant children at any one time.
  - 4. Family day care homes shall only be permitted in detached single-family dwellings.
- 7.7.4. Day Care Centers. In addition to the other provisions of this Section, day care centers shall comply with the following:
  - A fence with a minimum height of four

     (4) feet shall physically contain the children within the outdoor play area. Natural or physical barriers may be used in place of fencing so long as such barriers functionally contain children.
  - 2. If the facility fronts on streets of different classifications, access shall be along the thoroughfare of lesser functional classification.
  - 3. All pedestrian pathways shall be adequately lit for safety if utilized during non-daylight hours. Specific areas for lighting are entranceways, pedestrian access to the outdoor play areas,

sidewalks, drop-off areas, merchandise delivery areas, and all parking areas. Such lighting shall not produce objectionable glare on adjacent properties.

7.7.5. Inspections. The Building Official and/or Fire Marshal shall have the right to enter and inspect the dwelling, building and premises for compliance purposes following advance notice to the owner.

# §7.8. Accessory Dwellings

- 7.8.1. Use Limitations.
  - 1. No more than one Accessory Dwelling shall be permitted for each principal dwelling.
  - 2. The gross floor area of the Accessory Dwelling shall not exceed twenty-five (25) percent of that of the principal dwelling. If housed within a structure also containing parking for the principal dwelling, such parking area may be excluded from the calculation. However, if any parking is provided for the Accessory Dwelling, it shall be included in the calculation.
- 7.8.2. Location and Setbacks. Accessory Dwellings shall be located to the side or rear of the principal dwelling and shall be set back from side and rear lot lines as required of the principal dwelling.
- 7.8.3. Access. The Accessory Dwelling shall not have access to abutting streets in addition to that permitted for the principal dwelling.
- 7.8.4. Design Standards. If visible from the public right-of-way, the design of the Accessory Dwelling shall be consistent with that of the principal dwelling, including colors, materials, roof pitch, etc.

#### §7.9. Telecommunications Facilities

- 7.9.1. Purpose. The purpose of these standards is to establish minimum considerations and criteria for the review of telecommunications facilities. It is the City of Vestavia Hill's express intent that the construction of new towers be an option of last resort; to the greatest extent feasible, location of antennae on existing towers and other suitable structures should first be sought. These standards are designed to ensure the compatibility of towers with and avoid adverse impacts to nearby properties and discourage the proliferation of towers throughout the City.
- 7.9.2. Applicability. All telecommunication facilities are subject to these standards and to statutory review by the Commission and Council in accordance with Section 11-52-11 of the Code of <u>Alabama</u>, 1975, as amended. Anything contained in this Ordinance to the contrary notwithstanding, telecommunications facilities are conditional uses, which require approval by the Council.
- 7.9.3. Objectives. The proposed locations and design of all telecommunication facilities shall duly consider the following public health, safety and general welfare objectives:
  - 1. Structural Safety. The proposed facility will comply with wind loading and other structural standards contained in applicable building and technical codes so as not to endanger the health and safety of residents, employees or travelers in the event of structural failure of the tower due to extreme weather conditions or other acts of God.
  - 2. View Protection. The proposed facility will be designed to minimize adverse visual impacts to surrounding properties

and the public right-of-way, given the topography of the proposed site and surrounding area.

- 3. Land Use Compatibility. The proposed facility will be compatible with the surrounding land uses, given the character of the use and development of the location.
- 4. Design Harmony. The proposed facility will be designed in harmony with the natural setting and the surrounding development pattern as well as to the highest industry standards.
- 5. Existing Communication Services. The proposed facility will comply with FCC and other applicable standards so as not to interfere with existing communication services in the area.
- 6. Health Effects. The proposed tower will comply with all applicable federal, state, county and City health standards so as not to cause detrimental health effects to persons in the surrounding area.
- 7.9.4. Development Criteria. The Building Official and City Engineer shall review all applications for telecommunications facilities for compliance with the applicable standards and criteria listed below. These criteria are considered the minimum necessary to protect the public health, safety and general welfare. The Commission may also impose higher standards if it deems them to be necessary to further the objectives of this Section.
  - 1. Co-Location. No new tower shall be established if space is structurally, technically and economically available on an existing tower, which would serve the area that, the new tower would serve. Documentation that reasonable efforts have been made by the applicant to achieve co-location shall be submitted in accordance with §7.9.4.2 below. Towers

shall be designed to maximize shared use to the greatest extent possible, given the structural and technical limitations of the type of tower proposed. In any event, colocation shall be encouraged. If feasible, each tower shall, at a minimum, be designed for double its intended use for all transmitting and receiving antennae other than microwave dish antennae.

- 2. Removal of Obsolete Towers. Any tower that is no longer in use for its original communications purpose shall be removed at the owners' expense. The owner shall provide the Building Official with a copy of the notice of the FCC of intent to cease operations, which shall be given ninety (90) days from the date of ceasing operations to remove the obsolete tower and accessory structures. In the case of multiple operators sharing use of single tower, this provision shall not become effective until all users cease operations.
- 3. Setbacks.
  - a. Where permitted, the distance between the base of the tower, including guys, accessory facilities and property lines abutting residential districts, public parks and roads must equal twenty (20) percent of the tower height.
    Property lines adjacent to other uses (e.g. agricultural, industrial) shall require a setback equal to the rear yard setback established for the underlying zone.
  - b. Notwithstanding Item a above, when located within or adjacent to a residential district or dwelling, the minimum standard setback from all adjoining residential property boundaries shall be fifty (50) feet.
  - c. Site plan review by the Commission may result in reduction of the standard setbacks in exceptional cases where a hardship would result due to unusual

conditions on the site or other impracticalities. However, the Commission shall not reduce the setbacks to the detriment of affected residential properties.

- 4. Appearance.
  - a. Towers shall be of a monopole type and shall maintain an exterior finish so as to reduce the visibility of the structure, unless other standards are required by the FAA.
  - b. The design of the tower shall be of a type that has the least visual impact on the surrounding area as determined by the Commission.
  - c. The design of the tower compound shall, to the greatest extent possible, maximize use of building materials, colors, textures, screening and landscaping that effectively blend the tower facilities within the surrounding natural setting and built environment.
- 5. Lighting. Towers shall not be artificially lighted unless required by FAA or other authority for safety purposes. Where required, the Commission shall review the available lighting alternatives to assure that lighting proposed would cause the least disturbance to the surrounding views. "Dual lighting" (red at night/strobe during the day) shall be preferred unless restricted by the FAA. Security lighting may be permitted in accordance with Item e: Security Devices, below.
- 6. Landscaping.
  - a. A landscaped buffer shall effectively screen the view of the tower compound from adjacent public ways and residential properties.
  - b. The standard buffer shall consist of a minimum eight (8) feet wide landscaped strip outside the dark vinyl coated steel security fencing of the

perimeter of the compound. The buffer strip shall be planted with an attractive combination of trees, shrubs, vines and/or ground covers that can achieve the full height of the fence at maturity and enhances the outward appearance of the security fence. For sites within 1,000 feet of a residence, site review by the Commission may impose increased buffer standards to include a decay-resistant, solid wood fence, earth berms and brick or masonry walls in addition to the security fencing. All fencing and landscaping shall be maintained by the lessor/owner.

- c. In isolated non-residential areas, alternative landscaping methods may be accepted, such as the use of earth toned colored, vinyl-coated steel security fencing in combination with four feet of evergreen trees, shrubs, vines and/or other plantings.
- d. In certain locations where the visual impact of the tower would be minimal, such as remote, agricultural or rural locations, or developed heavy industrial areas, the landscaping requirements may be reduced or waived by the Commission.
- e. Existing mature tree growth and natural landforms on the site shall be preserved to the maximum extent possible. In some cases, such as towers located on large, wooded lots, preservation of substantial natural growth around the property perimeter may be a sufficient buffer.
- f. Cellular facilities utilizing underground vaults in lieu of above ground switching gear buildings shall be exempted from any buffer requirements.
- 7. Security Devices. The facility shall be fully secured. A minimum eight (8) feet

high, dark vinyl coated steel fence shall be installed around the entire perimeter of the compound (measured to the top of the fence or barbed wired, if applicable). Security fencing shall require screening in accordance with landscaping requirements, as defined above. Other security measures shall include locks and alarms. Approved barbed or razor wire and lighting of the compound shall be permitted, if deemed necessary to fully secure the tower compound.

- 8. Access. Driveways and onsite parking shall be provided to assure the operator's access to the facility for maintenance or emergency services.
- 7.9.5. Application. Any application submitted for approval shall submit the following items, in addition to any other required items, to show compliance with these review standards.
  - 1. Statement of Impact on Health, Safety and Welfare. A brief written statement shall address conformance with the health, safety and welfare objectives of this guideline.
  - 2. Site Plan. A scaled site plan shall show the location and dimensions of all improvements, including setbacks, drives, parking, fencing, landscaping, and other information necessary to determine compliance with the development criteria of these guidelines.
  - 3. Rendering. A rendering of the tower, accessory facilities and compound shall depict colors, materials and treatment. If lighting or other FAA requirements for tower color is proposed, evidence of such requirement shall be submitted.
  - 4. Justification for a New Tower. The applicant shall document a proposal for a new tower that the planned equipment for a proposed tower cannot be accommodated on an existing tower

within the proposed service area. The applicant shall submit a written affidavit showing what attempts have been made to share an existing tower or that no such tower exists.

- 5. Certification of Shared Use Design. A qualified, registered engineer shall certify that the proposed tower's structural design can accommodate a minimum of two (2) shared users, in accordance with §7.9.4 Development Criteria.
- 6. As Built Survey. A qualified, registered engineer shall certify that the proposed tower is to be constructed and installed in accordance with the submitted site plan including the installation of any required buffer yard.
- 7. Total anticipated capacity of the structure, including the number and types of antennae that can be accommodated.
- 8. Mitigation measures for ice and other hazardous falling debris, including setbacks and de-icing equipment.
- 7.9.6. Exceptions. Towers camouflaged to resemble woody trees or indigenous vegetation to blend in with the native landscape, and other types of concealment, shall be reviewed by the Design Review Board. Concealment techniques are design methods used to blend a wireless telecommunications facility, including any antennas thereon, unobtrusively into the existing surroundings so as to not have the appearance of a wireless telecommunications facility. Such structures shall be considered wireless telecommunications facilities and not spires, belfries, cupolas, or other appurtenances usually required to be placed above the roof level for purposes of applying height limitations. Due to their height, such structures must be designed with sensitivity to elements

such as building bulk, massing and architectural treatment of both the wireless telecommunications facility and surrounding development. Concealed towers on developed property must be disguised to appear as either a part of the structure housing, a principal uses, or an accessory structure that is normally associated with the principal use occupying the property. Concealed towers developed on unimproved property must be disguised to blend in with existing vegetation.

#### Article 8 PARKING REGULATIONS

#### **§8.1. Off Street Parking**

There shall be provided, at the time of the erection of any building or at the time any principal building is enlarged or increased in capacity by adding dwelling units, guest rooms, seats, or floor area, or before conversion from one type of use or occupancy to another, permanent off-street parking in the amount specified in Table 8.1. Required parking shall be provided for each use on the site. In calculating required parking, fractions are rounded up to the next whole number; however, when multiple uses are proposed on the same site, the fractional requirement for each use is added together prior to rounding. For the purpose of calculation in non-residential uses, "storage areas, including merchandise storage areas" shall not be a part of the NFA or GFA calculation. For uses not specified, the Building Official shall determine required parking based on the most similar use in Table 8.1.

- 8.1.1. Certification of Minimum Parking Requirements. Each application for zoning approval shall include the location, number and dimensions of offstreet parking spaces, if required, and the means of access. This information shall be in sufficient detail to enable the Zoning Official to determine whether or not the requirements of this Article are met. The Building Permit for the use of any building, structure or land where offstreet parking space is required shall be withheld by the Building Official until the provisions of this Article are fully met.
- 8.1.2. Joint Use Parking Lots. Parking facilities for one use shall not be considered as providing the required parking facilities for any other use on the same or separate lots, except as provided herein:

- Under circumstances wherein a combination of uses or other factors might require total parking facilities in excess of actual need, if so determined and certified by the Zoning Official, a commensurate reduction in parking may be approved by the Commission. Two uses, for example, may share one parking facility and the spaces provided therein when the parking demand for the uses occur at wholly separate times. Furthermore, such uses need not be located on the same lot, so long as the requirements of <u>§8.1.3 Remote Parking</u> are met.
- 2. Shared parking for mixed-use developments. Subject to approval by the Commission, minimum parking requirements for a mixed-use development may be reduced by calculation of shared parking requirements for the development utilizing the shared parking demand information in <u>Table 8.1.1</u> and the Worksheet shown in Figure 8.1.1. These parking reductions shall not be available to lodging or residential uses unless such uses are part of a development also including non-lodging, non-residential uses.

Parking reductions may be allowed as part of site plan approval only if it is demonstrated to the satisfaction of the Commission that a combination of the following factors or measures are proposed by the development plan, including but not limited to:

- a. There are no material adverse impacts on parking conditions in the immediate vicinity.
- b. The development plan mitigates vehicular traffic impacts by proposing limited access to and from public streets.

c. The development plan proposes the creation of new or upgraded sidewalks to help foster non-vehicular accessibility.

| Table 8.1 Minimum Required Off-street Parking Spaces |                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Resi                                                 | dential Uses                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
| a.                                                   | Single-family dwellings (attached or detached), duplexes and triplexes                                                                                                              | 2 spaces per dwelling unit                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |
| b.                                                   | Multi-family dwellings<br>• 1-BR of efficiency unit<br>• 2-BR unit<br>• 3+ BR unit                                                                                                  | <ul> <li>1.25 spaces</li> <li>1.75 spaces</li> <li>2.0 spaces</li> </ul>                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| Lodg                                                 | zing Uses                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
| c.                                                   | Hotels and Motels                                                                                                                                                                   | 1 space per sleeping unit                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
| d.                                                   | Lodging/conference rooms. The Lodging-Conference Parking<br>Factor (LCRP) = the total conference room square footage<br>divided by the total number of sleeping units.              | <ul> <li>0-20 LCP = 0</li> <li>20-40 LCP = 1 space/400 sq. ft.</li> <li>40-60 LCP = 1 space/200 sq. ft.</li> <li>60+ LCP = 1 space/150 sq. ft.</li> </ul>                                                                                                                                                                                    |  |  |  |  |  |
| e.                                                   | Lodging/restaurants and lounges. The Lodging-Restaurant<br>Parking Factor (LRP) = total restaurant or lounge square<br>footage divided by the total number of sleeping units (SU's) | <ul> <li>0-10 LRP = 20% of normal requirement</li> <li>10-30 LRP = 40% of normal requirement</li> <li>30-50 LRP = 60% of normal requirement</li> <li>50+ LRP = 80% of normal requirement</li> </ul>                                                                                                                                          |  |  |  |  |  |
| Insti                                                | tutional Uses                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
| f.                                                   | Places of assembly, Funeral homes                                                                                                                                                   | 1 space per 4 fixed seats in the largest assembly area or<br>per 40 sq. ft. of floor area available for the<br>accommodation of moveable seats in the largest<br>assembly room                                                                                                                                                               |  |  |  |  |  |
| g.                                                   | Libraries, art museums and similar cultural facilities                                                                                                                              | 1 space per 400 sq. ft. of GFA                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |
| h.                                                   | Private clubs, country clubs, and lodges                                                                                                                                            | 1 space per 250 sq. ft. of GFA                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |
| i.                                                   | <ul> <li>Day care and residential care facilities</li> <li>Day care or nursery</li> <li>Assisted living facility</li> <li>Independent living facility</li> </ul>                    | <ul> <li>1 space per employee on the greatest shift plus 1<br/>space per 10 children based on maximum design<br/>capacity</li> <li>1 space per 3 residents at max. capacity plus 1 space<br/>per 2 employees on largest shift</li> <li>1 space per 2 residents at max. capacity plus 1 space<br/>per 2 employees on largest shift</li> </ul> |  |  |  |  |  |
| j.                                                   | <ul><li>Schools</li><li>Elementary and middle schools</li><li>High school</li></ul>                                                                                                 | <ul> <li>2 spaces per classroom, or 1 space per 5 seats in the primary assembly area, whichever is greater</li> <li>5 spaces per classroom, or 1 space per 4 seats in the primary assembly area, whichever is greater</li> </ul>                                                                                                             |  |  |  |  |  |

| Table 8.1 Minimum Required Off-street Parking Spaces |                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Retai                                                | l, Service, Office and other Commercial Uses                                                                                                                                                          |                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |
| k.                                                   | Retail stores<br>• up to 50,000 sq. ft. GFA<br>• 50,000 – 90,000 sq. ft. GFA<br>• more than 90,000 sq. ft. GFA                                                                                        | <ul> <li>1 space per 200 sq. ft. NFA</li> <li>1 spacer per 225 sq. ft. NFA</li> <li>1 space per 250 sq. ft. NFA</li> </ul>                                                                                                                                                                        |  |  |  |  |  |
| 1.                                                   | Retail, Bulk merchandise or wholesale establishment                                                                                                                                                   | 1 space per 300 sq. ft. NFA                                                                                                                                                                                                                                                                       |  |  |  |  |  |
| m.                                                   | Retail automobile, boat, manufactured home, recreational vehicle, and similar sales establishments                                                                                                    | 1 space per 300 sq. ft. of floor area dedicated to<br>showroom and office use, plus 1 space per service bay,<br>plus 1 space per 5,000 sq. ft. of display area; or 10<br>spaces, whichever is greater                                                                                             |  |  |  |  |  |
| n.                                                   | Service stations, car wash                                                                                                                                                                            | 5 spaces per bay and 2 spaces per wash rack                                                                                                                                                                                                                                                       |  |  |  |  |  |
| 0.                                                   | <ul> <li>Restaurants and Lounges. Public floor area = GFA (including outdoor dining area not excluded from parking requirements) less all non-customer areas</li> <li>Fast food restaurant</li> </ul> | <ol> <li>space per 3 seats, plus 1 space per 2 employees on shift<br/>of greatest employment; OR 1 space per 40 sq. ft. of<br/>public floor area, whichever is greater</li> <li>1 space per 100 sq. ft. GFA plus 4 stacking spaces per<br/>window</li> </ol>                                      |  |  |  |  |  |
| p.                                                   | <ul><li>Bank, savings and loan or other financial institution</li><li>with drive-thru</li><li>without drive-thru</li></ul>                                                                            | <ul> <li>1 space per 400 sq. ft. GFA plus 3 stacking spaces per drive-thru lane</li> <li>1 space per 300 sq. ft. GFA</li> </ul>                                                                                                                                                                   |  |  |  |  |  |
| q.                                                   | Offices <ul> <li>Professional and business offices</li> <li>Medical and dental offices, clinics</li> </ul>                                                                                            | <ul> <li>1 space per 250 sq. ft. GFA</li> <li>4 spaces per doctor plus 1.0 spaces per employee</li> </ul>                                                                                                                                                                                         |  |  |  |  |  |
| r.                                                   | Commercial recreational and entertainment establishments <ul> <li>bowling alley or pool room</li> <li>mini-golf course</li> <li>golf course</li> <li>stadium</li> </ul>                               | <ol> <li>space per 200 sq. ft. GFA</li> <li>2 spaces per bowling lane or pool table</li> <li>1 space per hole plus 2 spaces per 9 holes plus 1 space<br/>per 2 employees</li> <li>45 spaces per 9 holes</li> <li>1 space per 5 seats (one seat is equal to two ft of<br/>bench length)</li> </ol> |  |  |  |  |  |
| s.                                                   | Personal services                                                                                                                                                                                     | 1 space per 250 sq. ft. GFA                                                                                                                                                                                                                                                                       |  |  |  |  |  |
| t.                                                   | General service or repair, printing, publishing, plumbing, heating, broadcasting                                                                                                                      | 1 space per 500 sq. ft. GFA                                                                                                                                                                                                                                                                       |  |  |  |  |  |
| u.                                                   | Laundromat                                                                                                                                                                                            | 1 space per 250 sq. ft. GFA                                                                                                                                                                                                                                                                       |  |  |  |  |  |
| Light                                                | Industrial Uses                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |
| v.                                                   | Self-storage facilities                                                                                                                                                                               | 5 spaces for office plus 1 space per 20 rental units (rows<br>between storage buildings shall be designed for<br>simultaneous vehicle parking and passage)                                                                                                                                        |  |  |  |  |  |

| Table 8.1.1: Typical Shared Parking Demand by Use and Time of Day |                                                                                                              |                     |                     |                    |                     |                     |  |  |  |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------------|---------------------|---------------------|--|--|--|
| Parking Demand by Use*                                            | Weekday<br>8am-5pm                                                                                           | Weekday<br>6pm-12am | Weekday<br>12am-6am | Weekend<br>8am-5pm | Weekend<br>6pm-12am | Weekend<br>12am-6am |  |  |  |
| Residential                                                       | 60%                                                                                                          | 100%                | 100%                | 80%                | 100%                | 100%                |  |  |  |
| Office                                                            | 100%                                                                                                         | 20%                 | 5%                  | 5%                 | 5%                  | 5%                  |  |  |  |
| Commercial                                                        | 90%                                                                                                          | 80%                 | 5%                  | 100%               | 70%                 | 5%                  |  |  |  |
| Lodging                                                           | 70%                                                                                                          | 100%                | 100%                | 70%                | 100%                | 100%                |  |  |  |
| Restaurant                                                        | 70%                                                                                                          | 100%                | 10%                 | 70%                | 100%                | 20%                 |  |  |  |
| Entertainment                                                     | 40%                                                                                                          | 100%                | 10%                 | 80%                | 100%                | 50%                 |  |  |  |
| Movie Theater 40% 80% 10% 80% 100% 10%                            |                                                                                                              |                     |                     |                    |                     |                     |  |  |  |
| Institutional (non-church)                                        | 100%                                                                                                         | 20%                 | 5%                  | 10%                | 10%                 | 5%                  |  |  |  |
| Institutional (church) 10% 5% 5% 100% 50% 5%                      |                                                                                                              |                     |                     |                    |                     |                     |  |  |  |
| * Different parking demands                                       | * Different parking demands may be used than the typical shown here if documented in a parking demand study. |                     |                     |                    |                     |                     |  |  |  |

| Figure 8.1.1: Shared Parking Reduction Worksheet Example 1*                             |                                   |                    |                     |                     |                    |                     |                     |  |  |
|-----------------------------------------------------------------------------------------|-----------------------------------|--------------------|---------------------|---------------------|--------------------|---------------------|---------------------|--|--|
|                                                                                         | Conventional<br>parking<br>demand | А                  | В                   | С                   | D                  | Е                   | F                   |  |  |
| Shared vs.<br>Conventional Demand                                                       |                                   | Weekday<br>8am-5pm | Weekday<br>6pm-12am | Weekday<br>12am-6am | Weekend<br>8am-5pm | Weekend<br>6pm-12am | Weekend<br>12am-6am |  |  |
| 1- Residential                                                                          | 100                               | 60                 | 100                 | 100                 | 80                 | 100                 | 100                 |  |  |
| 2 - Office                                                                              | 100                               | 100                | 20                  | 5                   | 5                  | 5                   | 5                   |  |  |
| 3 - Commercial                                                                          | 100                               | 90                 | 80                  | 5                   | 100                | 70                  | 5                   |  |  |
| 4 - Lodging                                                                             | 100                               | 70                 | 100                 | 100                 | 70                 | 100                 | 100                 |  |  |
| 5 - Restaurant                                                                          | 100                               | 70                 | 100                 | 10                  | 70                 | 100                 | 20                  |  |  |
| 6 - Total Parking<br>Needed         500         390         400         220         325 |                                   |                    |                     | 375                 | 230                |                     |                     |  |  |
| Conventional Demand =                                                                   | 500 spaces                        |                    |                     |                     |                    |                     |                     |  |  |
| Shared Parking Demand (greatest value from Line 6 Columns A-F) = <u>400 Spaces</u>      |                                   |                    |                     |                     |                    |                     |                     |  |  |
| Shared Parking Reduction                                                                | n = 100 Spaces                    |                    |                     |                     |                    |                     |                     |  |  |
| * Figures in italics are sar                                                            | mple calculation                  | ns only.           |                     |                     |                    |                     |                     |  |  |

- 8.1.3. Remote Parking. All residential and lodging uses shall have the required parking spaces provided on the lot(s) on which such use is located. For all other uses, if the off-street parking space required by this Ordinance cannot be reasonably provided on the same lot on which the principal use is located, such space may be provided on land within 400 feet of the main entrance to such principal use. Said land shall not be used for other purposes unless adequate provisions for parking have been made for such other use. However, remote parking areas must be zoned the same as the principal use or as may be permitted upon appeal to the BZA.
- 8.1.4. Maintenance of Parking Capacity. No off-street parking facility shall be reduced to less than the amount required for the use involved.

#### §8.2. Design Standards

Off-street parking areas shall be improved and maintained as required herein.

- 8.2.1. General Requirements.
  - Ingress and egress for parking facilities shall be in accordance with access spacing standards adopted by the City Engineer. Wherever stacking space is deemed necessary by the City Engineer to prevent blocking of traffic, such space shall be required. No parking space shall block designated emergency access. Fire lanes may be required by the Fire Department.
  - 2. No portion of any parking or stacking space shall be located within the street right-of-way or an easement not intended for such purposes, nor cross a public sidewalk.
  - 3. Except for detached single-family dwellings and duplexes, no off-street parking space shall be permitted which

requires a vehicle to back out into a public street.

- 4. Except for single-family dwellings and duplexes, access drives and parking aisles shall not be used to meet minimum parking requirements.
- 8.2.2. Dimensions. The design and dimensions of the parking area and spaces shall be in accordance with <u>Table 8.2.2</u>, as shown in Figure 8.2.2, and as follows:
  - 1. Compact car spaces may be provided but shall not exceed a ratio of one (1) compact car space: three (3) standard spaces. Compact Parking Stalls, if used pursuant to this section, may be 8' stall width and 16' stall depth.
  - 2. Handicapped spaces shall be provided as required by the Building Code.
  - 3. Up to two (2) ft of vehicle overhang over a wheel stop may count toward the required length of a parking space. However, in such cases, the City Engineer may require additional aisle width. Vehicle overhang shall not project over a lot line, right-of-way, or required sidewalk or landscaped area.

| Table 8.2.2: Parking Lot Dimensional<br>Requirements (in feet)                |     |      |      |      |     |  |  |  |
|-------------------------------------------------------------------------------|-----|------|------|------|-----|--|--|--|
| Parking Angle $0^{\circ}$ $30^{\circ}$ $45^{\circ}$ $60^{\circ}$ $90^{\circ}$ |     |      |      |      |     |  |  |  |
| Stall Width (A)                                                               | 8   | 8.5  | 8.5  | 9    | 9   |  |  |  |
| Stall Length (B)                                                              | 22  | 20   | 20   | 19   | 19  |  |  |  |
| Stall Depth (C)                                                               | 8   | 17.4 | 20.2 | 21   | 19  |  |  |  |
| Curb Length<br>(D)                                                            | 22  | 17   | 12   | 10.4 | 9   |  |  |  |
| Aisle Width (E)                                                               |     |      |      |      |     |  |  |  |
| One Way                                                                       | 12  | 15   | 15   | 20   | 20  |  |  |  |
| Two Way                                                                       | 20  | 20   | 20   | 24   | 24  |  |  |  |
| Interlock (F)                                                                 | n/a | 3.9  | 3.2  | 2.3  | n/a |  |  |  |



Angled Parking with Interlock

Figure 8.2.2 Parking Lot Dimensions

8.2.3. Paving Standards. All parking and vehicular use areas shall be paved with asphaltic concrete, concrete, paving stone or masonry in accord with standards adopted by the City Engineer. However, the City Engineer may approve pervious parking surfaces in areas susceptible to flooding and/or in zoning districts with restrictive impervious coverage standards. Required parking spaces shall be permanently marked and maintained and shall be accessible from a driveway or aisle such that all vehicles approach the street in a forward motion. Restrictions and exceptions include:

- Detached single-family dwellings and duplexes may substitute a ribbon-type driveway or an unpaved all-weather surface, in accord with standards adopted by the City Engineer, in place of a solidpaved surface. Vehicles may approach a street in either a forward or backing motion. This shall not apply to shared driveways serving multiple residences unless approved in writing by the City Engineer.
- 2. All driveways that cross an existing sidewalk shall be paved from the edge of street pavement to at least ten (10) ft from the back of the sidewalk, regardless of whether the parking on-site is required to be paved or not. See illustration at right. Ribbon-type driveways shall be solid-paved from the back of sidewalk to the edge-of-pavement.



3. In addition to Paragraph 2, above, all uses, whether required to provide paved parking or an unpaved all-weather surface, driveways shall be required to pave all turn-outs and portions of driveways located within any rights-of-way.

- 8.2.4. Pavement Markings. The City Engineer may prescribe such traffic markers and or signs as deemed necessary to safely and efficiently manage traffic flow. Parking spaces, except those serving singlefamily dwellings and duplexes, shall be demarcated with painted lines and/or signs or other markings accepted by the City Engineer. Stacking spaces shall not be individually marked but instead shall be clearly demarcated to direct traffic, as necessary.
- 8.2.5. Drainage. Off-street Parking facilities shall be drained to prevent damage to abutting property and streets. Landscaping areas shall be graded and designed to receive a reasonable portion of the rainfall from surrounding pavement. Openings for the flow of water shall be provided around any landscaped areas lined with protective curbing.
- 8.2.6. Dead End Parking. Vehicular use areas shall be designed to provide for safe and convenient circulation within the site. Dead end parking is discouraged. When all other design options have been exhausted, the City may approve a striped area measuring a minimum of fifteen (15) ft by the full width of the parking aisle to be used as a vehicular turnaround area. "No Parking" and "Tow Away Zone" signage must be provided in vehicular turnaround areas in order to discourage vehicular parking. Ten (10) or less consecutive parking spaces shall not be considered dead end parking.
- 8.2.7. Landscaping. Off-street parking areas extending to within twenty-five (25) feet or less of a lot line, shall be landscaped in accordance with <u>§9.2.2 Frontage and</u> <u>Perimeter Landscaping</u>. Off-street parking areas of twenty-five (25) or more

parking spaces shall be landscaped in accordance with <u>§9.2.3 Interior</u> Landscaping.

#### §8.3. Off-Street Loading

For all uses involving the receipt or distribution of goods by trucks, there shall be provided off-street loading berths as indicated in Table 8.3 unless modified or waived by the City Engineer. Loading berth(s) shall:

- 8.3.1. Be a minimum of twelve (12) feet in width, thirty (30) feet in length, and fourteen (14) feet in clear height.
- 8.3.2. Be screened as required in <u>§9.4</u> <u>Screening</u>.
- 8.3.3. Not occupy any part of a required buffer, rear yard or front yard.
- 8.3.4. Not be located or oriented on site so as to require trucks to back onto the property from a public street.

| Table 8.3: Number of Berths               |          |  |  |  |  |  |
|-------------------------------------------|----------|--|--|--|--|--|
| 4,000 – 25,000 sq. ft. GFA                | 1 berth  |  |  |  |  |  |
| 25,001 – 40,000 sq. ft.<br>GFA            | 2 berths |  |  |  |  |  |
| 40,001 – 60,000 sq. ft.<br>GFA            | 3 berths |  |  |  |  |  |
| For each additional 50,000<br>sq. ft. GFA | 1 berth  |  |  |  |  |  |

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Ordinance No. 3099

# Article 9 LANDSCAPING REGULATIONS

The City of Vestavia Hills, Alabama, in accordance with Title 11-52-70, <u>Code of Alabama</u>, 1975, has determined that some regulation of landscaping property will promote the beauty and aesthetics of the City. Furthermore, the intent of these standards are: to facilitate a harmonious and attractive environment; to prevent erosion; to capture and treat drainage and stormwater runoff; to reduce glare, wind turbulence, carbon monoxide, heat, and noise; to stabilize property values; and to generally preserve and promote the establishment of a healthful and pleasant community.

#### §9.1. General

A landscape plan for any development subject to design review pursuant to  $\S13.2.2$ shall be submitted to the Design Review Board prior to issuance of a Building Permit. If the development includes a request for rezoning or conditional use, then such landscaping plan shall also be presented to the Commission, together with the application for rezoning or conditional use, as applicable.

- 9.1.1. The landscape plan shall include the following information:
  - 1. Proposed planting schedule including the type, quantity, spacing, size, installation instructions and common name of all plantings.
  - 2. Plant materials labeled and shown in relation to lot lines, adjacent streets, buildings and parking areas.
  - 3. All Buffers required under §9.3, if any.
  - 4. All Screening required under §9.4, if any.
  - 5. Approaches to building entrances.
  - 6. Proposed parking areas and means of vehicular egress and ingress.
  - 7. Location, size, function and furnishings for proposed open spaces shown in

relation to lot lines, adjacent streets, sidewalks, buildings and parking areas.

- 8. All utilities and fire connections.
- 9. Proposed landscape vehicles, equipment, and materials to be stored on the property.
- 10. Soil preparation methods, bedding and mulching, and planting details
- 9.1.2. Landscaping shall be provided in accordance with the following:
  - 1. Where existing topographic patterns contribute to beauty and utility of a development, they shall be preserved whenever at all possible, practical and feasible.
  - 2. Landscape treatment shall be provided to enhance architectural features and to strengthen vistas.
  - 3. All landscaping shall be installed in accordance with accepted good planting procedures as prescribed by the American Society of Landscape Architects.
  - 4. This Article establishes requirements for site landscaping, as well as landscaping for Buffers and Screening. Landscaping provided to fulfill Buffer or Screening requirements, may also be counted, in whole or in part, toward site landscaping requirements and vice versa.
  - 5. Existing trees, plantings and other vegetation, which meet these standards, in whole or in part, may be accepted by the approving authority, to count toward landscaping requirements.

## §9.2. Site Landscaping

9.2.1. Applicability. Site landscaping shall be provided with all new multi-family, nonresidential and mixed-use developments in accordance with the following standards. Existing premises must conform with these standards as provided in Article 10 Nonconformities. Required site landscape areas include: frontage landscaping, building landscaping, parking lot interior landscaping and parking lot perimeter landscaping as shown in Figure 9.2.



STREET

Figure 9.2 Site Landscaping Areas

3. building landscaping

- 9.2.2. Frontage and Perimeter Landscaping
  - 1. Frontage landscaping shall be provided along lot frontages to reduce the visual impact of and glare from vehicular use areas, enhance the public streetscape, and to control access between private and public space where appropriate. Frontage landscaping is required for the length of parking and vehicular circulation areas that extend within twenty-five feet of the front lot line(s). Frontage landscaping shall be provided as shown in Table 9.2.2 and as follows:
    - a. For the purposes of this Subsection, corner lots shall be considered to have two frontages.
    - b. The planting strip shall be located along the outside edge of the vehicular use area
  - 2. Perimeter Landscaping shall be provided to reduce the visual impact of and glare from vehicular use areas on adjacent property, capture and treat stormwater and to control access between

developments where appropriate. Perimeter landscaping is required for the length of parking and vehicular circulation areas that extend within twenty-five (25) of side and rear lot lines. Perimeter landscaping shall be provided as shown in Table 9.2.2 and as follows:

- a. The planting strip shall be located along the outside edge of the vehicular use area.
- b. Perimeter landscaping requirements may be modified by the Zoning Official in writing where natural conditions make such landscaping unnecessary and/or impractical.
- c. Perimeter landscaping may be waived or reduced between two vehicular use areas on abutting lots, which are connected by a cross access agreement and are of integrated design.
- d. A solid fence of a height of at least thirty (30) inches shall suffice for perimeter landscaping along an alley.

| Table 9.2.2 Frontage and Perimeter Landscaping<br>Standards <sup>(Notes)</sup>                        |                                                     |             |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------|--|--|--|--|--|--|
|                                                                                                       | Frontage                                            | Perimeter   |  |  |  |  |  |  |
| Min. Depth of<br>Planting Strip                                                                       | 8 ft OR<br>4 ft and 5 ft<br>fence/wall              |             |  |  |  |  |  |  |
| Height (at<br>maturity)                                                                               | 2.5–3.5 ft <sup>(1)</sup>                           | 2.5 ft min. |  |  |  |  |  |  |
| Min. Density of<br>Shrubs (size at<br>time of planting)                                               | 1 3-gal shrub per 3 ft OR<br>1 5-gal shrub per 5 ft |             |  |  |  |  |  |  |
| Min. Density of<br>Trees1 canopy tree per 50 ft OR<br>1 understory tree per 40 ft                     |                                                     |             |  |  |  |  |  |  |
| <sup>1</sup> Shall not exceed 2.5 ft within Clear Sight Triangle (§4.3.8 Intersection Sight Distance) |                                                     |             |  |  |  |  |  |  |

9.2.3. Interior Landscaping shall be provided within off-street parking areas of twentyfive (25) or more spaces to capture and treat stormwater, create human scale and minimize heat islands by providing shade and reducing reflective surfaces, as follows:

- 1. There shall be at least twenty (20) sq. ft. of interior landscaping per parking space.
- 2. Every planting area (peninsula, median or island) containing a required tree shall be at least seventy-five (75) sq. ft. and seven (7) feet in width. Each planting area shall be suitably landscaped with a variety of plant materials including but not limited to ground covers, shrubs, flowering plants, pine straw and mulch.
- 3. There shall be a canopy tree within eighty (80) feet or an understory tree within sixty (60) feet of every parking space, which may include trees planted to meet other landscaping requirements.
- 4. Landscape islands shall be provided at the end of any parking bay containing twenty (20) or more parking spaces. Trees shall be provided within said islands in accordance with §9.2.3.3 above.
- 9.2.4. Building Landscaping shall be incorporated along building elevations, which are thirty-five (35) feet or greater in length and are set back from property lines, to accentuate entrances, reinforce pedestrian accessways to and from parking areas, and to enhance secondary facade areas, as shown in Table 9.2.4 and as follows:
  - 1. Building landscaping areas shall be located along or shall begin within fifteen (15) feet of each building elevation to accommodate a walkway between the building and landscaping. Other required landscaping may be counted toward Building Landscaping requirements if meeting this location requirement.
  - 2. Required building landscaping may be aggregated into one or more locations

along the elevation to allow for pedestrian/vehicular access and loading areas along the building elevation.

| Table 9.2.4 Building Landscaping Standards |                             |  |  |  |  |  |
|--------------------------------------------|-----------------------------|--|--|--|--|--|
| Min. Depth of<br>Planting Strip            | 6 ft                        |  |  |  |  |  |
| Shrubs per Elevation                       | 10 hedge plants or          |  |  |  |  |  |
| Length                                     | shrubs per 50 ft            |  |  |  |  |  |
| Trees per Elevation                        | 1 canopy tree per 50 ft OR  |  |  |  |  |  |
| Length                                     | 1 understory tree per 35 ft |  |  |  |  |  |

# §9.3. Buffers

Buffers shall be provided in accord with the requirements of <u>Tables 8.3A</u> and <u>8.3B</u> and as described in this §9.3. In cases where Buffers are required or deemed necessary for the protection and/or separation of uses on abutting lots, the following provisions shall be the minimum requirements unless otherwise specified by the reviewing authority in individual cases. For the purposes of this Section, "fences" and "walls" shall have the same meaning.

- 9.3.1. General Requirements. Except as otherwise provided herein, buffers shall be required based on the developing use and the existing, abutting use, regardless of the zoning districts in which they are located.
  - 1. Required yards, where corresponding with the buffer area, may overlap and may be counted toward a buffer width requirement.
  - 2. 100 percent of the applicable buffer requirements shall be the responsibility of the developing land use, except when the developing use will abut an existing more intensive use established prior to the adoption of these standards and for which no buffer is in place. In this case, the approving authority may require up to fifty (50) percent of the required buffer width on the developing site. In such

case, the applicant shall only be required to preserve existing vegetation within the buffer width or replace such vegetation with equivalent landscaping.

- 3. Any required buffer abutting a park or greenway may be reduced, if the property owner dedicates land to be set aside, for all or part of the required buffer width, to the City for incorporation into the park or greenway if approved by the Council.
- 4. Buffer requirements may be modified by the approving authority for certain cases as follows:
  - a. When the proposed use will abut an existing, nonconforming use on a property that is designated for another use in the Comprehensive Plan *and* is zoned accordingly with said plan, the Buffer may be modified to be consistent with the projected use of the neighboring land.
  - b. If the land use relationships between two (2) abutting lots changes so that a lesser Buffer would be required, the width of the previously provided Buffer may be reduced accordingly.
  - c. If the required Buffer abuts a public alley, up to one-half (1/2) of the alley width may be counted toward the buffer width requirement but the landscaping density requirements shall not be reduced.
  - d. Whenever the proposed use abuts vacant land, buffer requirements shall be based on the zoning of the abutting property or the use projected by the Comprehensive Plan, whichever requires a lesser buffer. When determining buffer requirements based on the zoning or projected use of abutting vacant land, the Zoning Official shall consider the range of possible future uses and base the requirement on the use(s) that require a lesser buffer.

- 5. Golf courses, playfields, stables, swimming pools, tennis courts, and other recreational facilities; parking and other vehicular use areas; Buildings, dumpsters, and Outdoor Storage are prohibited in required Buffers. The approving authority may permit a pedestrian access way through a required Buffer, to allow access between the abutting uses, if desired.
- 9.3.2. Design Requirements.
  - 1. Trees and shrubs shall be provided in accordance with <u>Table 9.3B</u>.
  - 2. Stormwater management and drainage controls required by the City Engineer shall be coordinated with the buffer design and integrated into the overall site design.
  - 3. The required Buffer width and planting density may be reduced as provided in Table 9.3B when a buffer fence is provided that meets the following standards:
    - a. Buffer fences shall be of masonry, ornamental metal, durable wood, or a combination thereof as approved by the reviewing authority. Untreated wood, chain-link, plastic or wire shall not be permitted. No more than twenty-five (25) percent of the fence surface, required as a part of a buffer, shall be left open. The finished side of the fence shall face abutting property.
    - b. Buffer fences shall be a minimum of six (6) feet high and no taller than eight (8) feet. Buffer landscaping shall be placed along the exterior side. If longer than 100 feet in one direction, the fence shall have columns of wood or masonry, spaced no greater than fifty (50) feet on center and which project outward from the fence surface.

| Table 9.3A Buffer Requirements By Use                                               |                                  |                         |        |         |                 |               |     |          |                |
|-------------------------------------------------------------------------------------|----------------------------------|-------------------------|--------|---------|-----------------|---------------|-----|----------|----------------|
|                                                                                     | Existing Abutting Uses or Zoning |                         |        |         |                 |               |     |          |                |
| Proposed Use                                                                        | Single-family                    |                         | Multi- | In      | Ins             | Institutional |     | Business | Parks &        |
| -                                                                                   | detached                         | attached                | family | Lodging | low/medium/high |               |     |          | green-<br>ways |
| Residential and Lodging                                                             |                                  | Type of Buffer Required |        |         |                 |               |     |          |                |
| Detached, single-family                                                             | n/a                              | n/a                     | n/a    | n/a     |                 | n/a           |     | n/a      | n/a            |
| Attached, single-family                                                             | А                                | n/a                     | n/a    | n/a     |                 | n/a           |     | n/a      | n/a            |
| Multi-family                                                                        | В                                | А                       | n/a    | n/a     |                 | n/a           |     | n/a      | n/a            |
| Lodging                                                                             | В                                | В                       | А      | n/a     |                 | n/a           |     | n/a      | n/a            |
| Institutional                                                                       |                                  | _                       |        |         | -               |               |     |          | _              |
| Low intensity                                                                       | А                                | А                       | n/a    | n/a     | n/a             | n/a           | n/a | n/a      | n/a            |
| Medium intensity                                                                    | А                                | А                       | А      | n/a     | n/a             | n/a           | n/a | n/a      | А              |
| High intensity                                                                      | В                                | В                       | В      | А       | А               | n/a           | n/a | n/a      | А              |
| Business/Commercial                                                                 |                                  |                         |        |         |                 |               |     |          |                |
| Offices up to 50,000 sq. ft.                                                        | А                                | А                       | А      | n/a     | А               | n/a           | n/a | n/a      | А              |
| Offices greater than 50,000 sq. ft.                                                 | В                                | В                       | В      | n/a     | В               | А             | n/a | n/a      | А              |
| Amusement; outdoor entertainment                                                    | В                                | В                       | В      | А       | В               | А             | n/a | n/a      | А              |
| Retail, shopping centers, and restaurants up to 50,000 sq. ft.                      | В                                | В                       | А      | n/a     | А               | А             | n/a | n/a      | А              |
| Retail, shopping centers, and restaurants greater than 50,000 sq. ft.               | В                                | В                       | В      | n/a     | В               | А             | n/a | n/a      | А              |
| Heavy commercial, including repair, contractor and automotive uses                  | В                                | В                       | В      | А       | В               | А             | n/a | n/a      | А              |
| Industry                                                                            |                                  |                         |        |         |                 |               |     |          |                |
| Warehousing, storage,<br>telecommunications towers and<br>public utility facilities | С                                | С                       | С      | С       | С               | В             | В   | А        | В              |
| Other industrial uses                                                               | С                                | С                       | С      | С       | С               | С             | С   | В        | В              |

| Table 9.3B Requirements by Buffer Class |                 |                    |                           |                                     |                                  |  |  |  |  |  |
|-----------------------------------------|-----------------|--------------------|---------------------------|-------------------------------------|----------------------------------|--|--|--|--|--|
| Buffer                                  | Width           |                    | Required trees per 100 lf | Required Shrubs per 100 lf          |                                  |  |  |  |  |  |
| Class                                   | With fence/wall | Without fence/wall | Understory Trees          | With fence/wall                     | Without fence/wall               |  |  |  |  |  |
| А                                       | 10 ft           | 15 ft              | 9 in single row           | 15 in single row                    | 20 in single row                 |  |  |  |  |  |
| В                                       | 15 ft           | 20 ft              | 10 in single row          | 20 in single row                    | 30 in alternating or double rows |  |  |  |  |  |
| С                                       | 22 ft           | 30 ft              | 12 in single row          | 25 in alternating or<br>double rows | 40 in double rows                |  |  |  |  |  |



Figure 9.3: Buffer Landscaping Rows

- 9.3.3. Planting Requirements. The required Buffer shall be installed before a Certificate of Occupancy may be approved. Except as herein provided, plantings installed toward buffer requirements shall be in accord with the general requirements and minimum planting specifications set forth in §9.5 <u>Planting, Installation and Maintenance</u>.
  - 1. Existing natural vegetation, which meets, in whole or in part, buffer planting requirements, may be applied toward the requirements of this Section.
  - 2. Trees shall be evergreen.
  - 3. Shrubs shall be evergreen and be thirty (30) inches tall at planting. However, up to twenty-five (25) percent of the required shrubs: 1) may be deciduous, b) may be two (2) feet tall when planted, provided an average height of three (3) to four (4) feet within four (4) years; and c) when planted on a berm, may be of a lesser height, provided that the combined height of the Berms and planting is at least six (6) feet after four (4) years.

#### §9.4. Screening

Screening is intended to provide both visual separation of conflicting uses on-site and between adjacent properties and shall be designed to be compatible with the surrounding environment and shall not dominate the view. For the purposes of this section, "fences" and "walls" shall have the same meaning.

- 9.4.1. Applicability. For all multi-family, nonresidential and mixed use developments, the following shall require Screening:
  - 1. Garbage collection, recycling and refuse handling areas
  - 2. Maintenance areas or utility structures associated with a building or development
  - 3. Water meters, gas meters, electric meters and air conditioners/mechanical units
  - 4. Loading docks or spaces
  - 5. Outside runs for veterinary clinics, animal shelters, and kennels
  - 6. Outdoor storage of materials, stock, equipment, and vehicles (such as those stored for repair)
  - 7. Any other uses for which screening may be required by the reviewing authority
- 9.4.2. Safety Provisions.
  - 1. Screening shall not conflict with §4.3.8 Sight Distance Requirements.
  - 2. Screening shall not block access to any above-ground, pad-mounted transformer and shall provide the minimum clear distance required by the utility company.
  - 3. Screening shall not impede or divert the flow of water in any drainage way.
- 9.4.3. Design Requirements. The method of screening, including height and materials, shall be that which is sufficient to visually screen the use. The minimum height needed is preferred. Fences, berms, or landscaping used for other purposes, but that are proposed as part of

a required screen and that meet the requirements of this Section, may count toward screening requirements. The design of screening shall be in accord with the following and as approved by the reviewing authority:

- Location of uses. Location on site should be the first consideration in screening the uses listed in §9.4.1 above. The reviewing authority may lessen screening requirements when the location of the use to be screened reduces its visibility or other impact to the public and neighboring properties.
  - a. Uses requiring screening, when colocated, may be screened together.
  - b. Uses that produce objectionable noise or odors shall be located so as to minimize such impacts to the public and abutting properties.
- 2. Screening Fences. All screening fences shall comply with the following:
  - a. Screening fences shall be of masonry, ornamental metal, vinyl, durable wood, or a combination thereof. Untreated wood, chain-link, plastic or wire shall not be permitted. No more than twenty-five (25) percent of the fence surface, required as part of a Screen, shall be left open. The finished side of the fence shall face abutting property.
  - b. Where screening fences are longer than fifty (50) feet in one direction, evergreen landscaping shall be placed along the exterior side. Where such fences are longer than 100 feet in one direction, required landscaping shall include both trees and shrubs and the fence shall have columns of wood or masonry which project outward from the fence surface. Such columns shall be spaced no greater than fifty (50) feet on center.

- c. Fences located forward of the front building line shall not exceed six (6) feet. Fences located in a required rear or side yard shall not exceed eight (8) feet in height.
- 3. Berms. Berms shall be landscaped and stabilized to prevent erosion and shall be a minimum height of four (4) feet. Slopes shall be approved by the City Engineer.
- Shrubs and trees. Except as herein provided, plantings installed for screening requirements shall conform to <u>§9.5</u> following.
  - a. Shrubs shall be evergreen and spaced no more than five (5) feet on center.
  - b. Trees shall be evergreen and, when used in the absence of a fence, should have a low understory and/or be used together with shrubs to provide an opaque visual Screen.
- 5. Screening requirements for specific uses.
  - a. Dumpsters, trash refuse, and recycling containers shall not be located forward of the front building line. Enclosures, while allowed within the property setback lines, cannot be included within the required buffer areas or within 5' of a property line. Such containers shall be screened by a combination of opaque fence or masonry wall and plant material on three (3) sides. Opaque gates, designed to complement the screen, shall be installed for access. The fence or wall shall be at least two (2) feet taller than the container.
  - b. For restaurants, enclosures shall be sized, as needed, to accommodate the storage of grease containers.
  - c. Mechanical equipment on roofs or on site shall be screened so as to not be visible from public streets or adjacent properties. The screening of buildingmounted mechanical equipment shall

be an integral component of the building design. Mechanical equipment installed on site shall be adequately screened by plant materials and/or fences and shall blend in with site landscaping.

- d. Outdoor storage, where permitted, shall be screened to a height of six (6) feet or two (2) feet taller than the material or equipment to be screened, whichever is greater.
- e. Service areas, loading docks, work yards, and similar uses should be located to minimize their visibility to the public and to any abutting properties to which such functions would be objectionable. Where their location is insufficient to effectively screen the use, required screening shall be at least six (6) feet in height. Loading berths shall be within the building or concealed by means of a screening wall of material similar to and compatible with that of the Building.

## §9.5. Planting, Installation and Maintenance

- 9.5.1. Planting.
  - 1. All plants shall be suitable for local planting conditions and the intended landscaping purpose. All required landscaping areas shall be maintained with mulch (two inches deep at installation), sod or other approved ground cover.
  - 2. Native, drought-tolerant vegetation shall be used where practicable to avoid excess water consumption for irrigation. Plans submitted for review shall identify such native species.
  - 3. Required plantings shall be spaced to allow for adequate growth and coverage.
  - 4. Canopy trees shall have a minimum twoand-one-half (2.5) inch caliper measured

six (6) inches above ground and be a minimum twelve (12) feet in height at time of planting. At time of planting, evergreen trees shall be a minimum seven (7) feet in height and multistemmed trees shall be eight (8) feet in height.

- 5. Shrubs shall have a minimum height of one (1) foot measured from grade level at the time of planting.
- 9.5.2. Installation and Inspection.
  - 1. Required plantings shall be installed at the next seasonal planting opportunity unless a written waiver has been issued by the Zoning Official.
  - 2. Required landscaping materials shall be installed before a Certificate of Occupancy may be approved.
  - 3. At the time of installation and upon inspection, minor changes may be approved in writing by the Zoning Official, provided the changes meet the minimum requirements of this Article. Any change, which said Official determines to be a major change, shall require a revised Landscaping Plan be resubmitted for approval.
- 9.5.3. Maintenance. The Owner shall be responsible for providing, protecting, and maintaining required plantings in a healthy and growing condition. Any dead, missing, or unhealthy plants shall be replanted at the next seasonal planting opportunity, and broken or deteriorated non-living materials shall be replaced. Planted areas shall be maintained in a healthy condition. Screening fences/walls, pavers, irrigation or other improvements shall be maintained in good condition, and any such improvement shall be replaced or repaired within thirty (30) days of its demise. Failure to comply with these maintenance requirements shall

constitute a violation of this Ordinance and shall be subject to the remedies and penalties provided in  $\S13.7$ .

#### **§9.6.** Tree Preservation Regulations

- 9.6.1. These provisions are intended to regulate the removal and/or destruction of trees within the community for the purpose of:
  - 1. Preserving the existing character of the city, part of which is derived from existing groves of mature pine, oak and other species of trees;
  - 2. Reducing the effects of noise and air pollution;
  - 3. Preventing soil erosion and the siltation of drainage improvements and waterway;
  - 4. Protection and enhancing the aesthetic qualities of the community; and
  - 5. Adding an element of landscape maturity to new developments in the city thereby enhancing buffering, privacy and increasing the value of property.
- 9.6.2. Applicability and Exceptions. These regulations shall apply to each Protected Tree within the corporate limits of the City, except a Protected Tree on any lot zoned or used exclusively for single family (attached and/or detached) [except new residential subdivisions as defined in §9.6.5.2] and any property zoned as PUD (planned unit development).
- 9.6.3. General Regulations. No Protected Tree as defined in this Section shall be removed, relocated, destroyed or otherwise directly or indirectly damaged unless and until a tree permit under this Section has first been issued. The City is authorized to issue an annual permit to public utility companies exempting them from this requirement with respect to the trimming of Protected Trees that may interfere with utility lines located within public right-of-way, upon such terms and

conditions as may be determined by the City. No tree permit shall be required for the incidental trimming or pruning of a Protected Tree located on private property by the owner of the property or the owner's agent.

- 9.6.4. Definitions
  - 1. Caliper: The measurement of the diameter of a tree trunk four (4) feet above existing grade.
  - 2. Protected Tree: Any tree that has a caliper of at least six (6) inches.
- 9.6.5. Tree Permit
  - 1. Any person wishing to remove, relocate, destroy, or otherwise damage a Protected Tree shall, under the provisions of this subsection, make written application to the DRB, which application shall include a landscape plan as provided before in said application or other information that adequately explains the request.
  - 2. As part of any request for a land disturbance permit for a new subdivision with a minimum of five (5) lots, the applicant shall include, as a part of the application, a tree save plan that will preserve as many trees in the development as practical. The plan shall be approved by the Commission as part of the preliminary plat process (or final plat process if no preliminary is required) with input and recommendations from the City Engineer, the Department of Building Safety and the Vestavia Hills Tree Commission. Once approval of the tree save plan has been secured along with all other requirements concerning a land disturbance permit, the City Engineer may issue a land disturbance permit for said subdivision; or
  - 3. Application fees for the filing of tree permit requests shall be in accordance with City of Vestavia Hills Schedule of

Fees unless it can be demonstrated to the Department of Building Safety that said tree is/has been damaged, diseased, or in danger of falling close to existing or proposed structures.

- 4. In the case of tree removal or relocation activities that will be required on a continuing or repetitive basis, the City may issue a blanket tree permit on such terms and for such duration as are determined to be appropriate under the circumstances. Completed applications shall be filed with the Committee a minimum of 15 days prior to the regular scheduled meeting and shall contain the signature of the property owner or a notarized letter assigning an agent to represent signed by the owner.
- 5. The DRB will consider approval or denial of the application at the next regularly scheduled meeting following proper filing of the completed application. If approved, a tree permit shall be issued by the Department of Building Safety authorizing the proposed activity.
- 6. The Mayor may declare an emergency and impose a temporary moratorium on the enforcement of this requirement, following severe storm events within the city.
- 9.6.6. Criteria for Issuance of a Tree Permit
  - 1. A Tree Permit for the requested activity shall be issued if:
    - a. The tree is located in an area where a structure or improvement is to be placed according to a site plan or building permit approved by the City; or
    - b. The tree is diseased, damaged, in danger of falling close to existing or proposed structures (approved in A. above), interferes with existing or proposed essential utility services,

creates unsafe vision clearance or conflicts with other ordinances or regulations of the City; or

- c. Removal of the tree will not result in any adverse material affect to the appearance of the site, since other Protected Trees of similar age, height, and species are present on the site and/or a sufficient number of replacement trees are proposed to be planted on the site in appropriate locations and of sufficient size to prevent such adverse affect.
- d. The tree is to be removed and relocated as part of (1) the bona fide harvesting or thinning of timber from land currently assessed and managed as forest property; (2) the bona fide thinning of growth from undeveloped property for the purpose of the maintenance of the overall health of the trees and growth on such property; (3) the release from nursery inventory of trees commercially cultivated for the purpose of resale; or (4) the preservation of such tree in connection with the expansion of agricultural operations in the vicinity of such tree.
- 2. If, in the determination of the DRB that the application does not meet the above criteria, it will be denied and the reasons communicated to the applicant who may appeal the decision to the Commission within ten (10) working days by filing a written request with the City Clerk in a format or on a form as specified by the department.
- 9.6.7. Enforcement and Penalties. Whenever the Building Official shall determine that a violation of this Section has occurred, any of the following actions may be initiated singly or in combination:
  - 1. On any new construction site, a stop work order may be immediately issued to the contractor or property owner. Upon

receipt of such order, construction may not be resumed until an approved plan authorizing the removal of the subject trees is presented to the DRB or a remediation proposal is presented to the Chairman and approved by the DRB as provided in subsection (3) below.

- 2. On an existing developed site, depending upon the circumstances of the violation, a formal citation may be issued to the violator as determined by the Building Official. A stop work order shall specify the nature of the violation and require that any work not permitted under this Article immediately cease and desist. The property owner shall, within, two (2) weeks, present a remediation proposal to the City for correcting the violation.
- 3. Each remediation proposal shall be reviewed by the Building Official, who shall present the proposal to the DRB along with a recommendation for acceptance or rejection, or modification thereof.
- 4. Any person violating any of the provisions of this Section shall be guilty of an offense against the City and shall, upon conviction, be punished for each violation as provided in <u>§13.7 Remedies and Penalties for Violation</u>. Each Protected Tree removed, relocated, destroyed, or otherwise damaged without a Tree Permit shall constitute a separate violation.
- 5. These regulations shall not be construed to impair: (1) the right of eminent domain granted by State laws to utilities, whether public or private, or (2) their right to design, locate, erect, construct, re-construct, alter, protect or maintain utility poles, towers, lines, conduits, pipes or mains reasonably required in the public service or (3) their right to exercise authority conferred by statute, franchise, certificate of convenience and

necessity, license or easement. Maintenance, repair, and extension of any public and private utility lines or related infrastructure are expressly allowed. The preceding will apply to work done by the utility's employees, agents and contractors doing work for the utility. This page intentionally left blank.

Ordinance No. 3099

## Article 10 NONCONFORMITIES

## §10.1. General

Any use or structure existing at the time of enactment or of subsequent amendment to this Ordinance, but not in conformity with its provisions, may be continued with the following limitations. Any use or structure, which does not conform to the provisions of this Ordinance, shall not be:

- 10.1.1. Changed to another non-conforming use
- 10.1.2. Re-established after discontinuance for one year
- 10.1.3. Extended except in conformity to this Ordinance
- 10.1.4. Rebuilt after fire or damage exceeding fifty (50) percent of its fair market value immediately prior to said damage.

# §10.2. Continuance

The lawful use of a structure or the lawful use of land existing at the time of the effective date of this Ordinance may be continued although such use does not conform to the provisions hereof.

- 10.2.1. If no structural alterations are made, a non-conforming use may be changed to another non-conforming use of the same or a more restrictive classification or to a conforming use, but such use shall not thereafter be changed to a less restrictive classification.
- 10.2.2. Whenever a non-conforming use has been changed to a more restrictive classification or to a conforming use, such use shall not thereafter be changed to a less restrictive classification or nonconforming use, respectively.
- 10.2.3. The Nonconforming Use of a Structure or of a premises may be hereafter extended throughout those parts of a building or premises, which were lawfully and manifestly arranged or

designed for such use at the effective date of nonconformity.

#### §10.3. Abandonment or Discontinuation

- 10.3.1. In the event that a structure or premises occupied by a non-conforming use becomes and remains abandoned for a continuous period of one (1) year, the use of the same shall thereafter conform to the use regulation of the applicable district.
- 10.3.2. In the event the use of a property, on which nonconforming improvements exist, including but not limited to, parking areas, driveways, lighting, sidewalks, buffers and screening, and other landscaping, becomes discontinued for a continuous period of one (1) year, such nonconforming improvements shall be brought into conformity with the applicable provisions of this Ordinance.

# §10.4. Structural Extensions and Alterations

No structure or premises occupied by a nonconforming use shall be enlarged, extended, reconstructed or structurally altered, unless such use is changed to a use which conforms to the use regulations of the applicable district, provided, however, that a structure or premises may be physically enlarged, extended, reconstructed or structurally altered to the extent necessary for compliance with any existing and applicable law or ordinance specifying minimum standards of health and safety.

# §10.5. Use Extensions

No non-conforming use shall be enlarged, extended or expanded unless such use is changed to a use, which conforms to the use regulations of the applicable district.

## §10.6. New Construction Conforming

A structure or building conforming to the use regulations of the applicable district but not

conforming to any other provision of these regulations may be enlarged, extended or expanded provided that such enlargement, extension or expansion conforms to all regulations required in the district.

## §10.7. Destruction

Any building or structure damaged by explosion, fire, act of God or the public enemy to the extent of more than fifty (50) percent of its fair market value immediately prior to said damage, shall not be restored except in conformity with this Section.

#### Article 11 SIGN REGULATIONS

#### §11.1. Purpose.

The purpose of these Sign Regulations is to provide specific regulations for the control of all signs designed or intended to be seen by, or attract the attention of, the public, which may be erected, displayed, maintained, or altered in the City, for the public health, safety, and welfare of the residents. Further, it is the intent of this Ordinance to:

- Support implementation of the City of Vestavia Hills Comprehensive Plan 2004 – 2025 and any subsequent adopted amendments;
- 2. Encourage the effective use of signs as a means of communication in the City;
- Acknowledge the public need of commercial and non-commercial individuality and expression balanced with the public need for an aesthetically pleasing community;
- 4. Provide a pleasing overall environmental setting and community appearance deemed vital to the continued economic viability of the City;
- Protect and enhance the value of properties and to have signage appropriate to the planned character and development of each area in the City;
- 6. Promote quality and consistent signage within the community;
- 7. Provide signage standards by which all properties are to adhere;
- 8. Assist the applicant in understanding how to apply for signage plan approval as required; and
- 9. Promote the public health, safety and welfare of the City by preventing signs from becoming hazards or nuisances.

## §11.2. Definitions

For the purposes of this Article, certain words and terms are defined as herein indicated and shall apply to all parts of this Article unless otherwise specified.

Unless specifically defined herein, words or phrases used in this Article shall have the meaning otherwise ascribed to them in this Zoning Ordinance. Otherwise they shall have the same meaning as they have in their common usage.

- 11.2.1. *Abandoned Sign*. A sign that no longer correctly directs or exhorts any person, advertises a bona fide business, leaser, owner, product or activity conducted or product available on the premises where such sign is displayed.
- 11.2.2. *Arterial*. For the purposes of this Article, a thoroughfare or the applicable segment thereof with four (4) or more lanes or having a posted speed limit of forty (40) or more miles per hour.
- 11.2.3. *Attached Sign*. A sign other than a freestanding sign, including wall signs, projecting signs and awning and canopy signs.
- 11.2.4. *Awning Sign*. A sign directly painted or otherwise directly affixed to an awning.
- 11.2.5. *Banner*. A flexible substrate on which copy or graphics may be displayed.
- 11.2.6. *Banner Sign*. A sign utilizing a banner as its display surface.
- 11.2.7. Canopy. A multisided overhead structure or architectural projection that is supported: 1) by attachments to a building on one or more sides and either cantilevered from such building or also supported by columns at additional points, or 2) supported by columns, but not enclosed by walls. The surface(s) and/or soffit of an a canopy may be illuminated by means of internal or external sources of light.

- 11.2.8. Canopy Sign. A sign directly painted or otherwise directly affixed to a canopy. When the sign appears on a canopy detached from the building, it is considered a "detached canopy sign".
- 11.2.9. Collector. For the purposes of this Article, a thoroughfare or the applicable segment thereof, excluding an "arterial," with three (3) or more lanes or having a posted speed limit of thirty (30) miles or more per hour. A thoroughfare with a continuous two-way left turn lane, shall be considered to have three (3) lanes.
- 11.2.10. *Commercial Message*. Words, symbols, logos, pictures or any combination thereof that identify or which direct attention to a business, commodity, service or entertainment sold or offered for sale or a fee.
- 11.2.11. Copy Area, Sign Copy Area. The area in square feet that can be enclosed by the smallest rectangle or combination thereof that will encompass the actual copy of a sign. Signs that are of a regular geometric shape may be calculated based upon that shape, such as circles and triangles. Spacing between letters or between letters and graphics is counted. Where different height letters are used, the sign copy area is the area of the composite shape formed by circumscribing each letter with the smallest possible rectangle. Logos shall be considered part of the copy area. For attached signs, copy area refers to the message, not to the background.

#### Calculating copy area



Circumscribe each letter, symbol, or graphic (including spacing between each) with the smallest possible rectangle



Copy area equals the area of the composite shape formed by the individual rectangles

- 11.2.12. *Department*. The City of Vestavia Hills Department of Building Safety.
- 11.2.13. *Double-Faced Sign*. A sign constructed to display its message on the outer surfaces of two opposite planes. When only one face may be viewed from any vantage point along the thoroughfare, the area of one side (the larger, if applicable) is counted toward allowable sign area. If both faces may be viewed from the same vantage point, the area of both sides is counted.



Double-faced signs: For the sign above left, copy area on only one face is counted. For the sign above right, copy area of both faces is counted.

11.2.14. *Electrical Sign*. Any sign containing electrical wiring attached or equipped to be attached to an electrical energy source.
- 11.2.15. *Freestanding Sign*. Any sign erected on a freestanding frame, foundation, mast or pole and not attached in any way to any building.
- 11.2.16. *Holiday Decorations*. Decorative elements of a temporary nature intended for the acknowledgement of a holiday or holiday season, exclusive of decorations that contain business, product sales, or service advertising content. Holiday decorations shall not be considered "signs."
- 11.2.17. *Incidental Sign*. A non-commercial sign, other than an official sign, providing information or direction for the convenience and necessity of the public.
- 11.2.18. *Integrated Business Center*. A group of commercial establishments on one or more parcels of land having shared access and/or shared parking.
- 11.2.19. *Legible*. Able to be read by a person of ordinary eyesight standing at ground level at a location on the public right-of-way or on another private property.
- 11.2.20. *Local Street.* For the purposes of this Article, a thoroughfare or applicable segment thereof with no more than two (2) lanes and having a posted speed limit less than thirty (30) miles per hour.
- 11.2.21. *Mansard Sign*. A sign integrated into a portion of a mansard roof or a mansard roof-like structure at the top of a wall and that does not extend more than two feet above the top of the wall or deck line, whichever is lower.



Mansard Sign

- 11.2.22. *Marquee Sign*. A changeable message sign mounted on a marquee or canopy.
- 11.2.23. *Message Board*. A sign that is designed to allow changing the message through the replacement of individual characters, or through electronic or other means.
- 11.2.24. Neighborhood. For the purposes of this Article, 1) A building or group of buildings containing ten or more multifamily dwelling units (regardless of ownership); or 2) Any area of twenty (20) or more dwelling units on individual lots located within the same subdivision plat and sharing access to city streets through the same collector or local streets or any combination thereof.
- 11.2.25. *Neighborhood Sign*. A freestanding sign located at the principal entrance or entrances to a neighborhood.
- 11.2.26. *Non-commercial Message*. Any wording or other displays other than a commercial message. Non-commercial messages are considered to be on-premises messages.
- 11.2.27. *Nonconforming Sign*. A sign which is not in conformance with the provisions of this ordinance or amendment heretofore or hereafter enacted, where such sign lawfully existed prior to the enactment of this ordinance or amendment or prior to the application of this ordinance or amendment to its location by reason of annexation.
- 11.2.28. *Off-Premise Sign*. A sign that at any time bears a message related to a commercial establishment, activity, product, or service which is sold, produced, manufactured, available or furnished at a place other than the premises on which the sign is located.
- 11.2.29. *Portable Sign*. Any sign that is designed to be transported, including, but not limited to, such signs:
  - 1. With wheels removed;

- 2. With chassis or support constructed without wheels;
- 3. Designed to be transported by trailer or wheels;
- 4. Converted to an A- or T-frame sign;
- 5. Attached temporarily to the ground, structure, or other signs; or
- 6. Mounted on a vehicle for advertising purposes, parked, and visible from the public right-of-way, except signs identifying the related business when the vehicle is being used in the normal dayto-day operations of that business.
- 11.2.30. *Projecting Sign*. An attached sign, other than a wall sign, permanently affixed at more or less a right angle to the exterior façade of the building to which it is attached.



Projecting Sign

- 11.2.31. *Real Estate Sign*. Any sign pertaining to the sale, lease, or rental of land or buildings. Includes "Property for Sale,""For Rent," and "For Lease" signs.
- 11.2.32. *Roof Sign.* A sign that is mounted on the roof of a building or which is wholly dependent upon a building for support and which projects above the highest point of a building with a flat roof or the eave line of a building with a gambrel, gable or hip roof; or the deck line of a building with a mansard roof. A sign integrated into a mansard roof and that does not project above the deck line of such roof shall be considered a "mansard sign" and not a "roof sign."







Roof Signs

- 11.2.33. *Sign*. Any identification, description, illustration or device illuminated or nonilluminated that directs attention to a product, services, place, activity, person, institution, business, idea, issue or solicitation, including any permanently installed or situated merchandise or any emblem, painting, banner, pennant, placard or temporary sign designed to advertise, identify or convey information.
- 11.2.34. *Sign Area*. The entire area of a sign within a single, continuous perimeter enclosing the extreme limits of writing, representation, emblem, or any figure or character, together with any frame or other material or color forming an integral part of the display or used to differentiate such sign from the background against which it is placed.
- 11.2.35. Sign Copy Area. See "Copy Area".
- 11.2.36. *Sign Face*. The entire area of a sign on which copy could be placed.
- 11.2.37. *Sign Height*. The vertical distance measured from the adjacent thoroughfare, grade level at the sign or upper surface of the nearest curb other than an elevated roadway, whichever

permits the greatest height, to the highest point of said sign.



Sign Height (from grade level)

- 11.2.38. *Sign Permit*. A permit for the installation of a sign issued by the Building Official once such a sign complies with the regulations of this ordinance and/or any variance granted by the Board of Zoning Adjustment.
- 11.2.39. *Sign Structure*. Any structure that supports, has supported, or is capable of supporting a sign, including decorative cover.
- 11.2.40. *Snipe Sign.* A sign made of any material when tacked, nailed, posted, pasted, glued, or otherwise attached to: trees, poles, stakes, rocks, fences or other object visible from but not in the public right-of-way; trees, light or utility poles, park benches, bus shelters, waste receptacles, street markers, traffic control devices, guard rails, or similar objects located on public property or right-ofway. Historical markers and official signs identifying a natural feature are not considered "Snipe Signs".
- 11.2.41. *Temporary Sign*. A sign intended to display commercial messages of a transitory or temporary nature. Any such sign not permanently embedded in the ground, or not permanently affixed to a building or sign structure that is permanently embedded in the ground, is considered a temporary sign.
- 11.2.42. *Unlawful Sign*. A sign erected after the effective date of this ordinance and which is not in conformance with the

provisions of said ordinance; a sign which the Building Official may declare as unlawful where it poses a danger to public safety by reason of dilapidation or abandonment; or, a nonconforming sign for which a permit required under a previous sign ordinance was not obtained.

11.2.43. *Wall Sign*. A sign attached, painted or erected against or on a building wall with the face in a parallel plane to the plane of the building wall.



Wall Sign

- 11.2.44. *Window Sign*. Any sign attached, affixed, painted or otherwise imprinted on a window, whether applied to the interior or exterior surface of the glass. This shall also include signage attached, affixed, painted or imprinted on glass doors.
- 11.2.45. *Wind Sign*. A sign consisting of one or more flags, pennants, ribbons, spinners, streamers or captive balloons or other objects or material fastened in such a manner as to move freely upon being subjected to pressure by wind, whether the sign contains a commercial message or not. Wind signs exclude holiday or community decorations.

#### §11.3. General Provisions

- 11.3.1. License Required. Sign contractors must be licensed by the City. No person shall perform any work or service for any person or for any government entity for compensation, in or in connection with the erection, construction, enlargement, alteration, repair, moving, improvement, maintenance, conversion or manufacture of any sign, or any work or service in connection with causing any such work to be done unless such person shall first have obtained a sign contractor's license from the City and paid the license fees provided for by the City License Code, or shall be represented by a duly licensed agent or subcontractor.
- 11.3.2. Permit Fees. A sign permit fee, as may be set from time to time by the Council, shall accompany each application for a sign permit. Additional building and electrical permit and inspection fees as established by Chapter 5 of the City Code of Ordinances and shall be applied as applicable.

Specific sign permit procedures can be obtained by contacting the Department of Building Safety, hereinafter referred to as "the Department".

11.3.3. Building and Electrical Permits. Building permits and electrical permits for all signs shall be obtained as required by the International Building Code and National Electrical Code, respectively. Compliance with the requirements of the building code and electrical code in effect at the time of any installation, modification or repair of a sign is required, in addition to conformance with this Article and all other applicable codes and ordinances of the City. Applications for required sign permits and related electrical and building permits may be submitted simultaneously and will be

processed together, within the time limits established in this Ordinance.

- 11.3.4. Sign Permit.
  - 1. Any person, organization, or corporation desiring to erect, construct, enlarge, move, alter, or convert any sign in the City must obtain a "Sign Permit" for each sign as required by §11.3.2, except for those actions that do not require a permit under the provisions of \$11.3.5. Application instructions are available from the Department. Application shall be made to the Department. Every sign permit shall become null and void if work has not commenced within 120 days of the issuance date of the permit. If the work permitted by a sign permit is suspended or abandoned for 120 days anytime after commencement, a new permit shall be obtained. Temporary sign permits shall be obtained as required in §11.8. Additionally, any sign permit shall become null and void if the sign varies in any respect from the approved design or location.
  - 2. All nonconforming signs on a premises shall be removed or shall be made to conform with these regulations as part of the work under any (permanent) sign permit being applied for.
- 11.3.5. Actions Not Requiring a Permit. The following signs and actions related to signs shall be exempt from the permit requirements of this Ordinance but shall be subject to all other standards of this Ordinance. Certain temporary signs are subject to temporary permits, see §11.8.
  - Changing of the commercial message on an existing painted or printed sign, marquee, changeable copy sign or a similar conforming sign, whether electrical, illuminated, electronic message center or non-illuminated painted message, provided that the copy

on an electronic message board shall not change more frequently than allowed under  $\underline{\$11.5.1}$ .

- Painting, repainting, cleaning, or other normal maintenance and repair of a sign not involving structural changes. Any maintenance or repair to improve the structural integrity of the sign shall require a Sign Permit and design drawings submitted, if applicable. Repainting the entire sign face shall also require a Sign Permit.
- 3. Installation of permanent signs smaller than four sq. ft. where such signs are permitted by this ordinance, contain no commercial message and involve no electrical installation.
- 4. Installation of signs exempt from these regulations as defined in  $\underline{\$11.4.2}$ .
- 5. Installation of signs subject to other standards as defined in  $\S11.4.3$ .
- 6. Installation of signs permitted in all districts as defined in <u>§11.4.4</u>.
- 7. Temporary Signs announcing the sale or rent of property. One (1) on-premises sign, not exceeding an area of six and one-half (6.5) sq. ft. on a residential lot nor thirty-two (32) sq. ft. on a nonresidential lot shall be permitted per lot but shall not interfere with traffic visibility at intersections of public streets and/or private drives; and shall be removed within four (4) days after a sale, lease or rental.
- 11.3.6. Sign Contractor's Requirements. As a condition to issuance of a business license as required in §11.3.1, all persons engaged in the business of installing or maintaining signs which involves in whole or in part, the erection, alteration, relocation, or maintenance of a sign or other sign work in or immediately adjacent to a public right-of-way shall

agree to hold harmless and indemnify the City, its officials, agents, and employees from any and all claims of personal injury or property damage resulting from the erection, alteration, relocation or maintenance of a sign or other sign work.

- 11.3.7. Permission to Install. No person shall erect, construct, alter, or maintain any sign upon any property or building without the consent of the owner or person entitled to possession of the property or building if any, or their authorized representatives.
- 11.3.8. Denial. The Department may, in writing, suspend or revoke a permit issued under the provisions of this Ordinance whenever the permit is issued on the basis of a misstatement of fact or fraud. When a sign permit is denied by the Department, a written statement shall be provided to the applicant with the reason for the denial. The applicant may appeal the decision to the BZA.
- 11.3.9. Time Limits. The Department shall, within five days of receipt of an application for a sign permit: approve the application; deny the application, stating the specific reasons for denial, with reference to specific sections of this ordinance; or return the application to the applicant as incomplete, specifying exactly what additional submittals are required to make the application complete.
- 11.3.10. Prior Variances. All prior variances on permanent signs not in compliance with this Ordinance shall come in compliance in the time frame specified in this Ordinance. Temporary signs which are inconsistent with the provisions of this ordinance shall be removed or brought into conformance within five (5) days after the passage of this ordinance, regardless of whether such a sign may be subject to a variance allowing such

inconsistency. The BZA may grant a subsequent variance in accordance with  $\S12.4$ .

- 11.3.11. Administrative Enforcement
  - 1. Procedure. If at any time the Department, after an inspection, determines that a sign has been erected, maintained, modified, or abandoned, or any combination thereof, in violation of any provision of this Article, the Department shall proceed in accordance with this subsection. Upon such determination, the Department shall prepare a notice which shall describe the sign and its location and which shall state, if the violation or violations are not corrected within ten (10) working days after receipt for permanent signs or within 24 hours after receipt when violations pertain to temporary, portable, or other nonpermanent types of signs, the sign, including the sign face, supports, and all structural members pertaining to said sign, shall be removed and the cost of said removal billed to the property owner and/or sign owner. All notices mailed by the Department shall be sent by certified mail, return receipt requested, or personally served by an employee or agent of the City. Any time periods provided for in this Article relative to compliance shall be deemed to commence on the date of receipt noted on the certified mail return receipt. All notices shall be mailed to the owner of the property on which said sign is located as shown on the latest available tax maps and/or the owner of the sign itself.
  - 2. Removal of Signs on Private Property. If, after the notice required by §11.3.11.1, the sign owner does not correct the matter identified within thirty (30) working days, the Department may cause to be removed, any sign that endangers the public safety, such as an abandoned,

dangerous, or materially, electrically, or structurally defective sign, or a sign for which no sign permit has been issued.

- 3. Signs in the Public Right-of-Way. Except where specifically permitted in <u>§11.4.5</u>, any sign erected in the public right-ofway or on public property shall be deemed abandoned and may be removed by the Department without notice or compensation to the owner. Removal by the Department shall not affect penalties applicable for the unlawful erection or placement of the sign in the public rightof-way or on public property.
- 11.3.12. Substitution of Message. Any sign allowed under this Article, may contain, in lieu of any other message or copy, any lawful noncommercial message.
- 11.3.13. Maintenance and Other Requirements
  - 1. Maintenance of Signs. Every sign, including but not limited to those signs for which permit fees are required, shall be maintained in good structural condition at all times. The Building Official or his authorized agent shall inspect and have the authority to order the painting, repair, alteration, or removal of any sign which has become dilapidated, abandoned, unlawful or which constitutes a physical hazard to public safety after fifteen (15) days has lapsed from the Notice of Violation or Certified Letter to the property owner, last known owner, manager or employee of the business. Any repair, painting, alteration or removal will be at the expense of the property owner or business owner, as applicable.
  - 2. Obsolete Sign Copy. Any sign copy that advertises or identifies a use no longer conducted on the property on which said sign is erected must have the sign copy covered or removed within 30 days after written notification from the Department.

However, obsolete sign copy may only be covered for six months, at which time such copy shall have been removed. The Department shall send written notice to that effect. Upon failure to comply with such notice, the Building Official is authorized to cause removal of such sign copy and any expense incident thereto shall be paid by the owner of the building, structure, or land on which the sign is located.

3. Nonconforming Signs associated with spaces or property remaining unoccupied for a period in excess of 270 consecutive days, shall be removed.

# §11.4. General Sign Regulations

- 11.4.1. Prohibited Signs. It shall be unlawful to erect, cause to be erected, maintain or cause to be maintained, any sign not expressly authorized by, or exempted from these regulations. The following signs are expressly prohibited in all zoning districts:
  - 1. Banner Signs and their temporary support posts except as allowed for temporary signs in  $\underline{\$11.8}$ .
  - 2. Signs that are in violation of the Building Code or Electrical Code adopted by the City of Vestavia Hills.
  - 3. Portable signs.
  - 4. Off-premise signs.
  - 5. Beacons and searchlights.
  - 6. Inflatable signs, figures, and tethered balloons.
  - 7. Roof signs.
  - 8. Wind signs.
  - Any sign that simulates or imitates in size, color, lettering or design any traffic sign or signal, or that makes use of words, symbols, or characters in such a

manner to interfere with, mislead or confuse pedestrian or vehicular traffic.

- 10. Any sign consisting of any moving, rotating, flashing, or otherwise animated light or component, except for permitted message boards.
- 11. Strips or strings of lights outlining lot lines or sales areas. This prohibition does not include neon and LED lighting on buildings. If neon or LED is used to depict wording or logos, it will be calculated as part of the overall allowable signage. Outlining or other specialized lighting that does not include a commercial message or logo but that is used as an element of building design may be allowed with approval by the Design Review Board.
- 12. Signs that emit audible sound, odor, visible matter such as smoke or steam, or involve the use of live animals.
- 13. Signs or sign structures that interfere in any way with free use of any fire escape, emergency exit, or standpipes, or that obstruct any window to such an extent that light or ventilation is reduced to a point below that required by any provision of the Zoning Regulations or any other ordinance of the City;
- 14. Signs that are of such intensity or brilliance, including LED and electronic message boards, as to cause glare or impair the vision of motorists, cyclists, or pedestrians, including flashing light signs on parked vehicles; see also <u>§11.5.1</u> <u>Regulations for Message Boards</u>.
- 15. Snipe signs, excluding those specifically permitted under <u>§11.4.5 Signs allowed in</u> <u>Rights-of-Way</u>.
- 16. Signs legible from a public right-of-way that use the word "stop" or "danger" or otherwise present or imply the need or requirement of stopping, caution, the

existence of danger, or which for any reason are likely to be confused with a traffic control sign specified by the Alabama Manual of Uniform Traffic Control Devices.

- Signs with a commercial message on any broadcasting or telecommunications tower or any antenna, except call letters of a broadcasting station.
- 18. Vehicles or trailers, which contain commercial messages, where such a vehicle or trailer is parked so that the advertising is legible from the public right-of-way and such vehicle or trailer is not used in the regular conduct of the business which it advertises, to include delivery vehicles.

Nothing in this ordinance shall prohibit or limit the outdoor display of products where such displays are allowed under the zoning ordinance. This ordinance shall, however, apply to any sign, banner, pennant, or other attention-attracting device affixed to a product displayed outdoors.

- 11.4.2. Exempt Signs. Signs listed in this subsection are entirely exempt from this Ordinance, except that such signs shall conform to the requirements of the City of Vestavia Hills Building and Electrical Codes, including the application for a building and electrical permits, and any other applicable ordinance or regulation within this jurisdiction.
  - 1. Any sign installed in a building or enclosed space and not legible from the public right-of-way or from private or public property other than the property on which it is located.
  - 2. Any sign with a sign area of less than four sq. ft. and less than four (4) feet in height (if freestanding), that is not separately lighted and that is not legible from the public right-of-way or from

private or public property other than the property on which it is located.

- 3. Official signs.
- 4. Stadium signs. Scoreboards and incidental advertising signs intended to be viewed from within a stadium.
- 5. Any sign erected within a Planned Unit Development (PUD) established and approved pursuant to the provisions of  $\underline{\$6.9}$  of the Zoning Ordinance as amended.
- 11.4.3. Signs Subject to Other Standards. Signs listed in this Section shall be exempt from the permit requirements of this Ordinance; but, shall, to the maximum extent allowed by law, be subject to the other standards of this ordinance. Where a sign is erected pursuant to a statute or a court order, the sign may exceed the size standards of this ordinance or otherwise deviate from the standards set forth in this ordinance to the extent that the statute or court order expressly required the larger size or other deviation. In all other respects, such signs shall conform to the standards of this ordinance. This sub-section shall apply to the following types of signs:
  - 1. Signs conforming to the Manual of Uniform Traffic Control Devices and bearing no commercial message;
  - 2. Signs bearing no commercial message and installed by employees or officials of the City, a state or federal agency in the course of their governmental duties;
  - 3. Signs required by a state or federal statute;
  - 4. Signs required by an order of a court of competent jurisdiction;
  - 5. Signs installed by public utilities in their rights-of-way or on their facilities and bearing no commercial message other

than such messages necessary to identify the use;

- 6. Signs installed by a transit company with a franchise or other right to operate in the City, where such signs are installed along its routes and relate to schedules or other information about the transit route;
- 11.4.4. Signs Permitted in All Districts. The following signs are allowed without a sign permit and are not to be included in determination of the allowable numbers, type and area of a sign that requires a sign permit. If a sign otherwise falling under this section is electrified, it will require an electrical permit. Signs subject to this Section shall conform to the requirements specified:
  - 1. Address Numbers. Signs used for the purpose of identifying the E-911 address of any building shall not be counted toward sign area provided such signs are not larger than two (2) square foot in area.
  - 2. Incidental signs, whether freestanding or attached, that are smaller than four (4) sq. ft. in area and less than four (4) feet in height;
  - 3. Memorial Signs. Signs or tablets, names of buildings and date of erection, when cut into any masonry surface or inlaid so as to be part of the building or when constructed of bronze or other incombustible material, provided that no such sign shall exceed six sq. ft. in area nor shall any such sign be separately illuminated.
  - 4. Non Commercial Flags. Flags that do not contain a commercial message must be displayed in accordance with the applicable protocol. No premise shall contain more than four flags.
  - 5. Window Signs. Window signs that total no more than thirty-three (33) percent of

the window area per window. A window sign may be made of paper or other material and will not be considered a banner if affixed to the inside of a window. A lighted window sign is subject to requirements of the City Electrical Code.

- 6. Non-commercial Signs. In addition to any other permanent or temporary signage otherwise provided for in this Article, each occupied lot shall be permitted an aggregate sign area of fifteen (15) sq. ft. for non-commercial speech, which shall not be illuminated, shall not exceed six and one-half (6.5) sq. ft. in area per sign and shall not exceed five (5) feet in height. In addition, the following provisions shall apply to noncommercial signage during an election, which shall include 180 days preceding and including the day of a governmental election; and, whenever a run-off election is scheduled, the 180 day period shall be extended through the date of the run-off election:
  - a. Signs may be placed on private property, buildings, or motor vehicles. With permission of the owner, signs may be placed on the property and portions of the street right-of-way maintained by the owner, provided that no sign shall be placed in any state right-of-way nor protrude into or over paved or improved streets, sidewalks, or gutters. All signs shall be removed within forty-eight (48) hours after the election has been determined. For municipal elections, the locational allowances herein shall not apply until the final day of filing of statements for candidacy.
  - b. The aggregate non-commercial sign area for non-residentially-zoned, occupied lots shall be increased to thirty-two (32) sq. ft. Non-commercial

signs shall be subject to a maximum sign area of thirty-two (32) sq. ft. and a maximum height of eight (8) ft.

- c. Motor vehicles displaying signage may not be parked, except in the normal course of business, in a parking lot, on a public street, or similar public location
- d. Notwithstanding the above, any signs deemed a hazard to safety are prohibited and subject to removal by the City.
- 7. Property Management Signs. Signage that identifies the entity responsible for the management or leasing of property is permitted in all districts provided it is: 1) incorporated into a permitted freestanding, wall, or projecting sign or 2) is incorporated into or meets the criteria for an exempt sign pursuant to \$11.4.2. In no case, shall additional freestanding, wall or projecting sign area or an additional freestanding, wall or projecting sign be permitted for conveying property management information.
- 11.4.5. Signs allowed in Rights-of-Way. The following signs, and no other signs, are allowed in the public right-of-way:
  - 1. Signs conforming to the Alabama Manual of Uniform Traffic Control Devices and bearing no commercial message;
  - 2. Signs bearing no commercial message and installed by employees or officials of the City, a state or federal agency in the course of their governmental duties;
  - 3. Signs required by a state or federal statute;
  - 4. Signs required by an order of a court of competent jurisdiction;
  - 5. Election or campaign signs installed pursuant to <u>§11.4.4.6.a;</u>

- 6. Signs installed by public utilities in their rights-of-way or on their facilities and bearing no commercial message other than such messages necessary to identify the user; and
- 7. Signs installed by a transit company with a franchise or other right to operate in the City, where such signs are installed along its routes and relate to schedules or other information about the transit route.

### §11.5. Regulations for Certain Sign Types

- 11.5.1. Message Boards. Message boards on which the message is changed electronically shall be permitted only in those districts in which "message board" is listed as a permitted sign type and shall be subject to the following additional restrictions.
  - 1. Sign display technology shall be programmed so that the message or image on the sign changes no more often than every eight seconds.
  - 2. There shall be no effects of movement, flashing, scintillation, or similar effects in the individual images.
  - 3. Changes of image shall be substantially instantaneous as seen by the human eye and shall not use fading, rolling, window shading, dissolving or similar effects as part of the change.
  - 4. Message boards shall use automatic level controls to reduce light levels at night and under cloudy or other darkened conditions, in accordance with the following standards. All electronic or digital display unit message boards shall have installed ambient light monitors, and shall at all times allow such monitors to automatically adjust the brightness level of the electronic message board based on ambient light conditions. Maximum brightness levels shall not exceed 5,000 nits when measured from

the sign's face at its maximum brightness, during daylight hours and 500 nits when measured from the sign face at its maximum brightness between dusk and dawn, i.e., the time of day between sunrise and sunset.

- 5. Any sign using video technology which malfunctions, fails, or ceases to operate in its usual or normal programmed manner causing therein motion, movement, flashing or any other similar effects, shall be repaired or disconnected within twenty-four (24) hours by the owner or operator of such sign.
- 6. The area consisting of electric or electronic message board elements shall not exceed 200 sq. ft..
- 7. The following limitations shall apply to the location of signs using video technology for a message board:
  - a. A sign on which the video technology includes 100 or more sq. ft. of sign area shall not be erected within 500 feet of property falling in one of the city's residential zoning districts, although this restriction shall not apply to the city's mixed use districts and commercial districts allowing residential uses.
  - b. A sign on which the video technology includes twenty (20) or more sq. ft. of sign area but less than 100 sq. ft. of sign area shall not be erected within 200 feet of property falling in one of the city's residential zoning districts, although this restriction shall not apply to the city's mixed use districts and commercial districts allowing residential use.
  - c. A sign on which the video technology includes less than twenty (20) sq. ft. of sign area shall not be erected within 100 feet of property zoned and use exclusively for single family uses: it is

the express intent of this provision to allow the use of such technology on signs for institutional uses located in residential districts, provided that the required separation is maintained.

- 11.5.2. Freestanding and Detached Canopy Signs. Except as otherwise provided for integrated business centers, nonresidential uses shall be limited to one freestanding sign and one detached canopy sign per establishment. However, establishments fronting on more than one thoroughfare shall be permitted one freestanding sign and one detached canopy sign per frontage, subject to the following:
  - 1. Freestanding Signs.
    - a. The width of the base shall be no less than eighty (80) percent of, and no greater than 120 percent of, the width of the permitted copy area. The BZA may alter the base requirements of the sign, but such shall not be less than fifty (50) percent of the copy area permitted.
    - b. Maximum sign height shall be based upon the classification of the street along which the sign is placed, as follows:
    - (1) Arterial: fifteen (15) ft
    - (2) Collector: ten (10) ft
    - (3) Local Street: eight (8) ft
    - c. The sign may be illuminated or nonilluminated.
    - d. The sign shall be no closer than ten (10) feet to the edge of pavement of any street and no closer than twenty (20) feet from a sign on an adjoining property. No sign shall be placed on the right-of-way.
    - e. The sign may contain a message board, which shall count as part of the total copy area permitted.

- 2. Detached Canopy Signs.
  - a. The sign shall be flat against the surface of the canopy, which shall extend no closer than two (2) feet horizontally to the curb line of any public thoroughfare nor eight (8) feet vertically from the finished surface directly below.
  - b. The permanently-affixed copy area shall not exceed an area equal to twenty-five (25) percent of the surface area of the detached canopy, which surface area shall not be counted as part of the sign area.
- 11.5.3. Attached Signs. Each establishment shall be allowed attached signage on each facade or on any elevation that faces a public parking lot or a parking lot directly associated with the establishment. No more than two forms of attached signage (i.e., one wall sign and one awning sign) shall be permitted on one elevation, subject to the maximum attached sign area permitted on any one elevation. Attached sign copy area, including the maximum aggregate copy area for attached signage permitted on multiple elevations, shall be as described in Table 11.5.3 and as provided in Paragraphs 1 and 2 following.
  - 1. For attached signs placed less than 250 feet from the nearest thoroughfare rightof-way: Where an establishment, per this Section, may be permitted attached signage on more than one elevation, the aggregate, attached sign copy area on each elevation shall not exceed the area specified in Row 1. Each such establishment is permitted an aggregate copy area for all permitted attached signs as specified in ROW 2.

For example, if an establishment with a GFA of 2,500 sq. ft. is permitted attached signage on each of two elevations, the

amount in Row 2 (40 sq. ft.) is multiplied by "2" to determine how much copy area may be distributed among the two permitted attached sign locations. A total of 80 sq. ft. of attached sign copy area would be permitted with no individual sign being larger than 50 sq. ft.

 For attached signs placed 250 feet or more from the nearest thoroughfare rightof-way: Where an establishment, per this Section, may be permitted attached signage on more than one elevation, the aggregate, attached sign copy area on each elevation shall not exceed the area specified in Row 3. Each such establishment is permitted an aggregate copy area for all permitted attached signs as specified in Row 4.

For example, if an establishment with a GFA of 2,500 sq. ft. is permitted attached signage on each of two elevations, all of which are 250 feet or more from the nearest thoroughfare right-of-way, the amount in Row 4 (48 sq. ft.) is multiplied by "2" to determine how much copy area may be distributed among the two permitted attached sign locations. A total of 96 sq. ft. of attached sign copy area would be permitted with no individual sign being larger than 60 sq. ft.

3. Wall Signs. Where permitted, wall signs shall not extend out from the face of the building more than 18 inches.

| Table 11.5.3 Attached Sign Area                                                                 |                             |                            |                             |                                    |
|-------------------------------------------------------------------------------------------------|-----------------------------|----------------------------|-----------------------------|------------------------------------|
| For attached signage placed less than 250 feet from the nearest thoroughfare                    |                             |                            |                             |                                    |
| GFA of<br>building or<br>tenant space                                                           | 2,000<br>sq. ft.<br>or less | 2,001-<br>5,000<br>sq. ft. | 5,001-<br>10,000<br>sq. ft. | 10,001<br>sq. ft.<br>or<br>greater |
| 1. max. copy<br>area per sign                                                                   | 32 sq.<br>ft.               | 50 sq.<br>ft.              | 70 sq.<br>ft.               | 100 sq.<br>ft.                     |
| 2. max.<br>aggregate<br>copy area<br>(per no. of<br>permitted<br>sign<br>locations)             | 28 sq.<br>ft.               | 40 sq.<br>ft.              | 55 sq.<br>ft.               | 70 sq.<br>ft.                      |
| For wall signs placed 250 feet or more from the nearest thoroughfare                            |                             |                            |                             |                                    |
| 3. adjusted<br>max. copy<br>area                                                                | 48 sq.<br>ft.               | 60 sq.<br>ft.              | 80 sq.<br>ft.               | 120 sq.<br>ft.                     |
| 4. adjusted<br>max.<br>aggregate<br>copy area<br>(per no. of<br>permitted<br>sign<br>locations) | 42 sq.<br>ft.               | 48 sq.<br>ft.              | 60 sq.<br>ft.               | 84 sq.<br>ft.                      |

- 4. Projecting Signs. Where permitted, projecting signs may be either illuminated or non-illuminated, provided no other signs for such establishment are located on the same building wall. Additionally:
  - a. Such sign(s) shall not project outward more than thirty-six (36) inches from the face of the building and shall have a minimum clearance of ten (10) feet above the ground level or sidewalk to the lowest point on the sign.



Maximum Projection of Projecting Sign

- b. Such sign(s) shall not project into public right-of-way nor exceed sixteen (16) sq. ft. in sign area.
- c. A bottom of a projecting sign shall not extend vertically above the window sill of the second story of a multi-story building to which it is attached.



Projecting Sign on multi-story building

5. Awning, Attached Canopy and Marquee Signs. Where permitted, awning and attached canopy signs may be painted on, applied to, or otherwise be a part of the fabric or other non-structural material. Additionally,:

- a. The sign shall be flat against the surface of the awning or canopy, which shall extend no closer than two (2) feet horizontally to the curb line of any public thoroughfare nor eight (8) feet vertically from the finished surface directly below.
- b. Awning signs shall not be internallyilluminated.
- c. The permanently-affixed copy area of canopy or marquee signs shall not exceed an area equal to twenty-five (25) percent of the surface area of the canopy, marquee or architectural projection upon which such sign is affixed or applied, which surface area shall not be counted toward allowable sign area.

## §11.6. Signs Permitted By District

- 11.6.1. Business and Office Districts (B-1, B-1.2, B-2, O-1, O-2). Each City licensed business or other organization shall be permitted the following types of signage. For integrated business centers, refer to <u>§11.7</u>.
  - Freestanding Signs, subject to <u>§11.5.2</u>. Freestanding signs shall not exceed 40 sq. ft. in copy area, except that where two (2) freestanding signs are permitted, each shall not exceed thirty-two (32) sq. ft. of copy area.
  - 2. Detached canopy sign subject to §11.5.2.2.
  - 3. Attached Signs, subject to  $\underline{\$11.5.3}$ .
    - a. Wall sign, subject to <u>§11.5.3.3</u> or projecting sign, subject to <u>§11.5.3.4</u>.
    - b. Awning, attached canopy, or marquee sign, subject to <u>§11.5.3.5</u>.
  - Message Board, subject to <u>§11.5.1</u>. Message board shall be included within, not in addition to, any freestanding or attached sign permitted under Paragraph

1 or 3 above. Not more than one message board shall be permitted per premises.

- 5. Temporary signs allowed under \$11.8;
- 6. Other signs expressly allowed under <u>§11.4.4 Signs Permitted in All Districts</u> or other sections of this Article.
- 11.6.2. Commercial Districts (B-3). Each Citylicensed business or other organization shall be permitted the following types of signage. For integrated business centers, refer to \$11.7.
  - Freestanding Signs, subject to <u>§11.5.2</u>. Freestanding signs shall not exceed 80 sq. ft. in copy area. Each shall be no more than ten (10) feet long.
  - 2. Detached canopy sign subject to \$11.5.2.2.
  - 3. Attached Signs, subject to \$11.5.3.
    - a. Wall Sign, subject to <u>§11.5.3.3</u> or Projecting Sign, subject to <u>§11.5.3.4</u>.
    - b. Awning, Attached Canopy, or Marquee Sign, subject to <u>§11.5.3.5</u>.
  - Message Board, subject to <u>§11.5.1</u>. Message board shall be included within, not in addition to, any freestanding or attached sign permitted under Paragraph 1 or 3 above. Not more than one message board shall be permitted per premises.
  - 5. Temporary signs allowed under  $\underline{\$11.8}$ .
  - 6. Other signs expressly allowed under <u>§11.4.4 Signs Permitted in All Districts</u> or other sections of this Article.
- 11.6.3. Institutional (INST-1). Each City licensed business or institution shall be permitted the following types of signage:
  - Freestanding Sign, subject to <u>§11.5.2</u>. Such sign shall not exceed thirty-two (32) sq. ft. in copy area. Such sign shall be no more than eight (8) feet long.
  - 2. Attached Signs, subject to  $\underline{\$11.5.3}$ .

- a. Wall Sign. Permitted subject to <u>§11.5.3.3</u>.
- b. Projecting Sign, subject to <u>§11.5.3.4</u>.
- c. Awning, Attached Canopy, and Marquee Signs, subject to <u>§11.5.3.5</u>.
- Message Board, subject to <u>§11.5.1</u>. Message board shall be included within, not in addition to, any freestanding or attached sign permitted under Paragraph 1 or 2 above. Not more than one message board shall be permitted per premises.
- 4. Places of Public Assembly. Places of assembly shall be allowed one additional freestanding or attached sign not to exceed twenty (20) sq. ft. in copy area or an additional twenty (20) sq. ft in copy area that may be used to increase the maximum copy area of a freestanding or wall sign otherwise permitted in this §11.6.3.
- 5. Temporary signs allowed under  $\underline{\$11.8}$ .
- 6. Other signs expressly allowed under <u>§11.4.4 Signs Permitted in All Districts</u> or other sections of this Article.
- 11.6.4. Residential Districts. The following signs shall be permitted for each neighborhood within an E-2, R-1, R-2, R-3, R-4, R-5, R-6, R-7, R-8, R-9 or RC-1 District:
  - 1. Any dispute over whether a proposed sign will serve a "neighborhood" shall be referred to the Planning Commission for determination of the boundaries of the neighborhood. If the Commission fails to determine the boundaries of the proposed neighborhood within sixty (60) days of the submittal of an application for a neighborhood sign to the Building Official, then the neighborhood shall be deemed to be that area designated in the original application, and the application processed accordingly.
  - 2. One freestanding sign shall be permitted at each principal entrance to the

neighborhood. Sign shall not exceed thirty-two (32) sq. ft. of copy area. If there are walls on both sides of the entrance to the development or neighborhood, then one wall sign per side is permitted in lieu of a freestanding sign, each not to exceed sixteen (16) sq. ft. in copy area.

- a. A "principal entrance" shall be considered to be that place where property included within the neighborhood abuts a collector or thoroughfare shown on the city's master street plan or other transportation plan;
- b. There shall not be more than one "principal entrance" for each 20 dwelling units in a neighborhood, provided that a neighborhood as defined in this Article shall be entitled to at least one such sign;
- c. The permitted signs shall be located on private property owned in common by residents of the neighborhood, or, with the permission of the property owner, on private property owned by one or more individuals and located at a principal entrance to the neighborhood;
- d. The permitted neighborhood sign(s) shall bear no commercial message;
- e. The permitted neighborhood sign(s) may be lighted by direct white light but shall not otherwise be illuminated.
- Street signs shall be of the standard design used commonly in the City, or of such other design as may be approved by the Council. Location of such signs shall be approved by the City Engineer.
- 4. As a temporary use accessory to the permitted activity of lawful subdivision development, one temporary sign shall be permitted at each principal entrance to

the subdivision in accordance with the following:

- a. There shall in no case be more than one such sign for a subdivision or development with fifty (50) or fewer lots included in the subdivision or development and no more than two such signs for any other subdivision or development.
- b. Such sign shall not be illuminated and shall not exceed twenty-four (24) sq. ft. in area;
- c. Such sign shall be removed upon the earlier of: installation of a permanent neighborhood identification sign; or sale of more than ninety (90) percent of the lots in the subdivision.
- d. Sign permit is renewable on an annual basis.
- 11.6.5. Signs Allowed for Individual Residential Units in Agricultural and Residential Districts. The following signs shall be allowed for individual dwelling units within an A-1, E-2, R-1, R-2, R-3, R-4, R-5, R-6, R-7, R-8, R-9 or RC-1 District:
  - 1. One wall sign, not to exceed two sq. ft. in area shall be permitted for each dwelling unit. Such sign may not contain a commercial message. Such sign shall not be illuminated.
  - 2. Each occupied lot shall be permitted no more than two temporary signs at one time that contain a commercial message, which shall not be illuminated, shall not exceed six and one-half (6.5) sq. ft. in area and shall not exceed five (5) feet in height. The only commercial messages permitted on such signs are messages related to commercial activity lawfully and temporarily conducted on the premises, including the lawful, occasional sale of personal property (such as through a garage sale or a yard sale) or the sale, rental or lease of the

premises. Signs related to the sale of personal property shall be removed within twenty-four (24) hours after the end of the sale. Signs related to the sale, lease or rental of the premises shall be removed no later than four (4) days from the date on which the deed, lease or other document representing the transaction is completed.

## §11.7. Signs Permitted for Integrated Business Centers

For integrated business centers, sign area, height, and number of signs shall be in accordance with the standards of this Section.

- 11.7.1. Freestanding Signs.
  - The number, area and height of freestanding signs shall be in accordance with Table 11.7. Allowable sign height is determined by the maximum sign height permitted in <u>§11.5.2.1</u> plus the additional height permitted in <u>Table 11.7</u>. Spacing between freestanding signs along the same frontage, where permitted, shall be no less than 200 feet.
  - 2. No freestanding sign shall be built on berms or manmade structures to add height to the sign.
  - Freestanding signs may include message board elements, subject to <u>§11.5.1</u>. The message board shall be considered part of the permitted aggregate freestanding sign area.
- 11.7.2. Attached Signs. Tenants shall be allowed attached (wall, projecting or awning/canopy) signage complying with <u>§11.5.3</u> and in accordance with the following:
  - 1. Each ground level tenant space with frontage on the exterior of the building shall be allowed attached signage pursuant to  $\underline{\$11.5.3}$ .

| Table 11.7 Freestanding Signage for Integrated<br>Business Centers |                                                                                                                                                                                     |  |  |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| GFA of Center                                                      | Area, Number and Height of Signs                                                                                                                                                    |  |  |
| More than<br>1,000,000 sq.<br>ft.                                  | Max. aggregate sign area: 1,000 sq. ft.<br>Max. number of signs: 4<br>Max. area of each sign: 500 sq. ft.<br>Additional height permitted: 25 ft                                     |  |  |
| 500,001-<br>1,000,000 sq.<br>ft.                                   | Max. aggregate sign area: 750 sq. ft.<br>Max. number of signs: 3<br>Max. area of each sign: 400 sq. ft.<br>Additional height permitted: 20 ft                                       |  |  |
| 100,000-<br>500,000 sq. ft.                                        | Max. aggregate sign area: 500 sq. ft.<br>Max. number of signs: 1 per street<br>frontage up to 2 total<br>Max. area of each sign: 280 sq. ft.<br>Additional height permitted: 15 ft  |  |  |
| 50,000-99,999<br>sq. ft.                                           | Max. aggregate sign area: 320 sq. ft.<br>Max. number of signs: 1 per street<br>frontage up to 2 total<br>Max. area of each sign: 180 sq. ft.<br>Additional height permitted: 10 ft  |  |  |
| 10,000-49,999<br>sq. ft.                                           | Max. aggregate sign area: 160 sq. ft.<br>Max. number of signs: 1 per street<br>frontage up to 2 total<br>Max. area of each sign: 100 sq. ft.<br>Additional height permitted: 7.5 ft |  |  |
| Less than<br>10,000 sq. ft.                                        | Max. aggregate sign area: 100 sq. ft.<br>Max. number of signs: 1 per street<br>frontage up to 2 total<br>Max. area of each sign: 60 sq. ft.<br>Additional height permitted: 5 ft    |  |  |

- 2. Except as provided for ground floor tenants in Paragraph 1 above, for multistory buildings, each tenant space with its own exterior public entrance shall be permitted one attached sign.
- For multi-story buildings in which upper level tenants are accessed through a common, ground level entrance, one attached sign not to exceed twenty (20) sq. ft. in copy area in addition to any other permitted attached signage, shall be permitted at such ground level entrance for building and/or tenant identification.

### §11.8. Temporary Signs in Non-residential Districts

Temporary signs shall be allowed in non-residential zoning districts as follows:

- 11.8.1. Applicability. This section shall apply to the following zoning districts: B-1, B-1.2, B-2, B-3, O-1, O-2, Inst-1 and MXD.
- 11.8.2. Temporary Sign Permits. Each temporary sign allowed by this section shall require a temporary sign permit along with a date sticker that must be attached to such temporary sign. Anyone that is required to have a business license in the city must have a current business license at the address where the temporary sign is to be located before a temporary sign permit can be issued. Temporary signs may be permitted only intermittently throughout the year. A permit is required for each sign. No less than thirty (30)days shall pass before the second permit can be issued. In the event a new business is located at the same address, then the new business license holder shall be exempt from the temporary sign permits issued to the previous occupant.
- 11.8.3. General Provisions. Unless specifically provided for otherwise in this Section, the following shall apply to all temporary signs in non-residential districts:
  - 1. A temporary sign may be a wall sign or a freestanding sign, but shall not be permitted in a public right-of-way.
  - 2. Duration of Display. Each temporary sign shall not be displayed for more than thirty (30) days in a one year period.
  - 3. There shall be no more than one temporary sign per address at any one time.
  - 4. Content. Any sign allowed under this section may contain: any noncommercial message; a commercial message pertaining to goods, services or other commercial transactions available on the premises or that will be available on the premises when construction is complete. Signs seeking employees for a business

shall be considered to pertain to commercial transactions available on the premises and shall be allowed.

- 11.8.4. Rules for Types of Temporary Signs.
  - 1. Temporary Sign Where Permanent Sign not Installed. For any premises which is occupied or for which a building permit has been issued, and for which the permanent sign allowed by \$11.6 or §11.7 has not been installed, one temporary sign shall be allowed from the date of occupancy or the date of issuance of the building permit, whichever comes first, until the date of installation of the permanent sign not to exceed sixty (60) days. The temporary sign shall not exceed the size allowed for the permanent sign or thirty-two (32) sq. ft., whichever is smaller, and, if freestanding, shall not exceed eight (8) feet in height.
  - 2. Grand Opening Banners. Each new non-residential use may have one (1) banner per frontage announcing the opening of the establishment. Such banners shall be limited to an aggregate area of thirty-two (32) sq. ft. per establishment and, if freestanding, shall not exceed eight (8) ft in height. Newly established integrated business centers shall be permitted an aggregate area of forty (40) sq. ft. but shall be limited to one (1) banner per frontage of such center regardless of the number of new uses.
  - Other Temporary Signs. Other temporary signs shall not exceed twenty-four (24) sq. ft. in area and, if detached, shall not exceed six (6) feet in height.
  - 4. Temporary Signs for Non-Profit Organizations. Temporary signs for nonprofit 501(c)-3 organizations, such as for charitable fundraising events, that conform to the limitations of this Section shall require a permit as provided in

<u>§11.8.2</u>; however, the permit shall be at no cost. The location, number and size of the signs shall be at the direction of the Mayor. Such signs shall be removed within forty-eight (48) hours following the event. Failure to remove signs in a timely manner may affect issuance of future permits.

#### §11.9. Nonconforming Conditions

- 11.9.1. Conditions. Any sign that is not specifically permitted, or that does not comply with all provisions of this Ordinance, yet which existed and was maintained as such, as of the effective date of this Ordinance, shall be considered a nonconforming sign.
- 11.9.2. Alterations. A nonconforming sign shall not, after the effective date of this Ordinance, be enlarged, structurally altered, or extended unless such sign shall be made to comply with all the provisions of this Ordinance. Sign faces may be replaced on a nonconforming sign, but no change may be made in the technology of a nonconforming sign unless such sign is made to comply with all of the provisions of this Article.

For purposes of this section, prohibited changes in technology include but are not necessarily limited to: conversion of a single-faced sign to a tri-vision sign; addition of electronic message board technology to a sign; addition of any other form of changeable copy technology – manual, mechanical or electronic – to a sign; conversion from internally lighted to externally lighted or vice versa; or addition of exposed bulbs.

A nonconforming sign may not be replaced by another nonconforming sign. Minor repairs and maintenance of nonconforming signs, such as repainting and electrical repairs, shall be permitted. However, no changes in the location, size, or shape of any nonconforming sign shall be permitted except to make the sign comply with all provisions of this Ordinance.

- 11.9.3. Compliance. The Department shall require all nonconforming signs to be removed or made to conform to all provisions of this Ordinance, by the owner of the property upon which the sign is located, upon the occurrence of any of the following events:
  - 1. Damage or deterioration of the sign to the extent that the Department Official or its authorized agent determines that the sign is structurally unsound.
  - 2. Any proposed alteration or repairs to a sign that would prolong the useful life of the sign or that would involve an expenditure of more than fifty (50) percent of the original cost of the sign.
  - 3. Within ten (10) years from the effective date of this ordinance; or if a business with a nonconforming sign has a written plan on file in the Department to replace the nonconforming sign within fifteen (15) years of the effective date of this ordinance. A written sign replacement plan must include site plan, sign dimensions, sign materials, and location. However, this shall not apply to nonconforming neighborhood signs existing on or prior to the effective date of these regulations. Such nonconforming neighborhood signs shall still be subject to Paragraphs 1 and 2 immediately above.
  - For any message board on which the message is changed electronically, to achieve compliance with the requirements of <u>§11.5.1</u> by January 1, 2011.
  - 5. Where there is any application for a permit for a new or replacement permanent sign on the same site as the

nonconforming sign, except that this provision shall not apply to integrated business centers as defined herein.

## §11.10. Legal Status Provisions

- 11.10.1. Generally. If any part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term, or word of this Article is declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, the declaration of such unconstitutionality shall not affect any other part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term, or word of this chapter.
- 11.10.2. Severability where less speech results. Without diminishing or limiting in any way the declaration of severability set forth above in §11.10.1, or elsewhere in this Ordinance, if any part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term or word of this chapter is declared unconstitutional shall not affect any other part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term or word of this Article, even if such severability would result in a situation where there would be less speech, whether by subjecting previously exempt signs to permitting or otherwise.
- 11.10.3. Severability of provisions pertaining to prohibited signs. Without diminishing or limiting in any way the declaration of severability set forth above in §11.10.1, or elsewhere in this Ordinance, if any part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term or word of this Article or any other laws declared unconstitutional by valid judgment or decree of any court of competent jurisdiction, the declaration of such unconstitutionality shall not affect any other part, section, subsection,

paragraph, subparagraph, sentence, phrase, clause, term or word of this chapter that pertains to prohibited signs, including specifically those signs and sign types prohibited and not allowed under §11.4.1. Furthermore, if any part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term or word of this ordinance is declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, the declaration of such unconstitutionality shall not affect any other part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term or word of this ordinance.

11.10.4. Severability of prohibition on offpremise signs. If any part section, subsection, paragraph, subparagraph, sentence, phrase, clause, term or word of this Article and/or any other provisions of this Ordinance are declared invalid or unconstitutional by the valid judgment or decree of any court of competent jurisdiction, the declaration of such unconstitutionality shall not affect the prohibition on off-premise signs as contained herein.

#### Article 12 BOARD OF ZONING ADJUSTMENT

## §12.1. Powers and Duties of the Board of Zoning Adjustment

The Board of Zoning Adjustment, hereinafter referred to as the "BZA", as prescribed by <u>Code of Alabama</u>, 1975, Section 11-52-80, as amended, shall have the following powers and authority.

## §12.2. Administrative Review

The BZA shall have hear and decide appeals where it is alleged that an error exists in any order, requirements, decision or determination made by an administrative official in the enforcement of this Ordinance, in accordance with the following.

- 12.2.1. All appeals shall be filed in writing on forms prescribed by the Board and made available by the Zoning Official. Any such appeal shall be filed with the Zoning Official within fifteen (15) days of the date of the action being appealed. The Zoning Official shall forthwith transmit to the BZA papers constituting the record upon which the action appealed was taken.
- 12.2.2. In exercising the power of administrative review the BZA must apply, not vary, the terms of the Ordinance.
- 12.2.3. An appeal stays all proceedings in furtherance of the action appealed therefrom, unless the Zoning Official certifies to the BZA after the notice of appeal has been filed, that by reason of facts cited in such certification a stay would, in the Zoning Official's opinion, cause imminent peril to life or property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the BZA or by a court of record.

- 12.2.4. The BZA shall select a reasonable time and place for hearing the appeal. Notice shall be provided in accordance with §12.7 Notice Requirement.
- 12.2.5. The BZA may affirm, reverse wholly or in part, or modify the Zoning Official's decision, order, or determination as in its opinion ought to be done, and to that end shall have all the powers of the Zoning Official.

Furthermore, the BZA may classify a use, which is not specifically mentioned, along with a comparable permitted use for purpose of the use regulations of any Zoning District.

# §12.3. Special Exceptions

The BZA shall hear and decide requests for approval of Special Exceptions uses in accordance with the following:

- 12.3.1. Special Exception uses shall require the submission of an application to the BZA. Such application shall be filed with the Zoning Official at least thirty (30) days before the scheduled hearing date before the BZA. The application shall be filed by the property owner or their authorized agent on a form made available by the Zoning Official. Notice shall be provided fifteen (15) days in advance and as otherwise in accordance with §12.7 Notice Requirement.
- 12.3.2. The BZA shall review the application for compliance with this Ordinance and all other applicable codes and ordinances of the City. In particular the BZA shall determine that satisfactory provisions have been made concerning the following, among other considerations of this Ordinance:
  - 1. Access to and from the property and the proposed structure and/or uses, with particular attention to vehicular and pedestrian safety and convenience, traffic flow and control, and emergency access.

- 2. The location and accessibility of offstreet parking and loading areas.
- 3. The location and accessibility of refuse and service areas and their potentially adverse affects upon surrounding properties.
- 4. The screening and buffering of potentially adverse views and activities from surrounding properties.
- 5. Control of noise, glare, odor, surface water runoff, and other potentially disturbing impacts upon surrounding properties.
- 6. The availability, location, and capacity of utilities.
- 7. The location and scale of signs and lighting with particular reference to traffic safety, glare, and visual compatibility with surrounding properties.
- 8. The bulk, density, and lot coverage of structures, and yards and open areas, with reference to their compatibility with the character of the surrounding area.
- 12.3.3. The Board may impose such conditions for approval that it deems necessary in the particular case to protect the public interest and the intent of the Comprehensive Plan and this Ordinance in relation to the items listed above and as may otherwise be reasonably necessary. Such conditions shall apply to the land, structure, and use for which the Special Exception is granted and not to a particular person. Violations of conditions lawfully attached to any Special Exception shall be deemed to be violations of this Ordinance.
- 12.3.4. A Special Exception granted by the BZA shall lapse and be of no effect if, after the expiration of one (1) year from the date of such action by the BZA, no construction or change in use pursuant to

such Special Exception has taken place, provided that the BZA may, for good cause shown, specify a longer period of time in conjunction with its action to grant the Special Exception.

## §12.4. Variances

The BZA may authorize upon appeal in specific cases such variances from the terms of this Ordinance as will not be contrary to the public interest, where, owing to special conditions, a literal enforcement of the provisions of this Ordinance will result in unnecessary hardship, and so that the spirit of the Ordinance shall be observed and substantial justice done. Such variance may be granted in such individual case of unnecessary hardship upon a finding by the BZA that the conditions outlined below do. in fact, exist. In no case shall the BZA grant a variance that permits the permanent use of land, building or structure for a use prohibited within the district in which the land, building or structure is located. Nor shall the BZA grant a variance, which permits the extension or addition of a nonconforming use or in any way makes a nonconforming use more permanent.

It is the intent of this Ordinance that variances be used only to overcome some physical condition of a parcel of land, which poses a practical difficulty to its development and prevents its owner from using it in conformance with this Ordinance. Any variance granted shall be the minimum adjustment necessary for the reasonable use of the land.

12.4.1. Procedure. Applications shall be filed with the Zoning Official at least thirty (30) days before the scheduled hearing date before the BZA. The property owner or authorized agent shall file the application on a form made available by the Zoning Official. Notice shall be provided fifteen (15) days in advance and

otherwise in accordance with <u>§12.7</u> Notice Requirement.

- 12.4.2. Before any variance is granted, the BZA must find that *all* of the following conditions exist:
  - 1. There are extraordinary and exceptional conditions, which are peculiar to the piece of property in question because of its size, shape or topography, that are not applicable to other lands or structures in the same district.
  - 2. Granting the variance requested will not confer upon the applicant any special privileges that are denied to other owners of property in the District in which the property is located.
  - 3. All literal interpretations of the provisions of this Ordinance would deprive the applicant of rights commonly enjoyed by other owners of property in the district in which the property is located.
  - 4. The requested variance will be in harmony with the purpose and intent of this Ordinance and will not be injurious to the neighborhood or to the general welfare.
  - 5. The special circumstances are not the intended result of the actions of the applicant (i.e., self-imposed hardship)
  - 6. The variance requested is the minimum variance that will make possible the legal use of the land, building or structure.
  - That no non-conforming use of neighboring lands, structures, or buildings in the same district, and no permitted or non-conforming use of lands, structures, or building in other districts shall be considered grounds for the issuance of a variance.
  - 8. That the variance will not allow the permanent establishment of a use not permissible under the terms of this

Ordinance in the district involved, or any use expressly or by implication prohibited by the terms of this Ordinance in said district.

- 12.4.3. In proving that an unnecessary hardship has been imposed on the property as a result of the strict interpretation of this Ordinance, the following conditions cannot be considered pertinent to the determination of whether or not an unnecessary hardship exists.
  - 1. Proof that a variance would increase the financial return from the land
  - 2. Personal or economic hardship
  - 3. Self-imposed hardship

In other words, hardship alone is not sufficient to permit variance. It must be an "unnecessary hardship". Mere financial loss of a kind, which might be common to all of the property owners in a district, is not an "unnecessary hardship".

12.4.4. A Variance granted by the BZA shall lapse and be of no effect if, after the expiration of one (1) year from the date of such action by the BZA, no construction pursuant to such Variance has taken place, provided that the BZA may, for good cause shown, specify a longer period of time in conjunction with its action to grant the Variance.

# §12.5. Abatement Order

The BZA may require the conduct of any use, conforming or non-conforming, which results in unreasonable noise, smoke, gas, vibration, fumes, dust, fire, radio interference or explosion hazard or nuisance to surrounding property to be modified or changed to abate such hazard to health, comfort, and convenience. The BZA may direct the Building Official to issue an abatement order, but such order may be directed only after a public hearing by the said Board, notice of which shall be sent by registered mail to the owners and/or operators of the property in which the use is conducted in addition to due notice by advertisement in a newspaper of general circulation. A hearing to consider issuance of an abatement order shall be held by the BZA either upon petition signed by a person affected by the hazard or nuisance and such order shall specify the date by which the hazard or nuisance shall be abated.

#### §12.6. Rehearings

- 12.6.1. All decisions rendered by the BZA shall be final and binding upon all parties. No appeal of an administrative decision, or decision on an application for a variance or a special exception shall be reheard, and no further application shall be accepted once a decision has been rendered except under one or more of the following conditions:
  - 1. New evidence or information pertinent to the request has been discovered which was not available to the applicant at the time of the original hearing.
  - 2. The decision resulted from an error in procedures required by this Ordinance or State law and made by the BZA, the Zoning Official, or any other City Officials.
  - The decision resulted from an error in substantive law under the provisions of this Ordinance or the <u>Code of Alabama</u>, 1975, as amended.
- 12.6.2. Where no error is alleged and no new evidence is available, a new or more effective presentation by the applicant shall not constitute grounds for rehearing a decision of the BZA. Any applicant wishing a rehearing shall appear before the BZA to present one or more of the qualifying conditions listed in this Section.

12.6.3. If the BZA finds that one or more of the qualifying conditions exist, the applicant may submit a new application. This new application shall be heard at a subsequent BZA meeting, and shall be subject to all regular advertising and procedural requirements. Allowing a new application does not obligate the BZA to grant the request.

#### §12.7. Notice Requirement

The BZA shall not grant any variance, exception or conduct any other public hearing regarding any other request without first giving written notice a minimum of fifteen (15) days prior to the proposed date of such public hearing to all owners of property located adjacent or contiguous to the boundaries of the property which is subject to the requested variance, exception or other business, as shown by the records of the office of the Tax Assessor of the applicable County on a date not more than ninety (90) days prior to the date of such notice. Such notice shall state the street address of the property, if any, which is the subject of the proposed variance, exception or other request to such proposal and that the said property owner is welcome to attend the public hearing and invited to speak on the issue if he or she so desires. Such notice shall be deemed given when deposited in the United States mail, certified mail-return receipt requested, first class postage prepaid, addressed to such property owners at their addresses as shown on the records of the office of the Tax Assessor of the applicable County on the date such owners are determined. Any error in the address of any notice shall not invalidate the giving of notice, provided that no more than five (5)percent of the total number of notices given with respect to the applicable hearing contain any such error.

# §12.8. Appeals from Action of the Board of Adjustment

Any party aggrieved by any final judgment or decision of the BZA may, within fifteen (15) days thereafter appeal there from to the circuit court or court of like jurisdiction, by filing with the BZA a written notice of appeal specifying the judgment or decision from which appeal is taken. In case of such appeal, the BZA shall cause a transcript of the proceedings in the case to be certified to the court to which the appeal is taken and the cause in such court shall be tried *de novo*.

Service of a notice of appeal on the City Clerk by an aggrieved party within the fifteen (15) day appeal time constitutes service on the BZA. This page intentionally left blank.

### Article 13 ADMINISTRATION, ENFORCEMENT, AMENDMENTS, PENALTIES

#### §13.1. Zoning Official

The Zoning Official is hereby authorized, and it shall be his/her duty to enforce and administer the provisions of this Ordinance. The Zoning Official shall give information upon request as to the provisions of this Ordinance and shall interpret the meaning of the Ordinance in the course of enforcement. This official shall have the right to enter upon any premises at any reasonable time prior to the issuance of a Certificate of Occupancy for the purpose of making inspections of buildings or premises necessary to carry out his/her duties in the enforcement of this Ordinance.

### §13.2. Building Permit; Design Review

- 13.2.1. Building permit required. No building, sign or other structure shall be erected, moved, extended or enlarged, or structurally altered, until the Building Official has issued a Building Permit for such work. The Building Official shall not issue a Building Permit until conformance with the provisions of the Zoning Ordinance is certified by the City Clerk, City Engineer and Fire Marshal. In no case shall a zoning approval be issued for the construction or alteration of a structure not in conformity with the provisions of this Ordinance.
  - 1. The builder or owner shall furnish to the Building Official a foundation survey signed by a Land Surveyor licensed in the State of Alabama prior to the commencement of framing of the building.
  - It shall be unlawful to violate any of this §13.2. Violations shall be remedied in accordance with <u>§13.7 Remedies and</u> <u>Penalties for Violation</u>.

- 13.2.2. Design review required.
  - 1. For any application related to a nonresidential development or landscaping or architectural elements within common areas of residential subdivisions, the Building Official shall not issue any Building Permit until completion of design review as certified by the Design Review Board.
  - Design review applications shall be submitted at least fifteen (15) working days in advance of the next regularly scheduled DRB meeting. The Zoning Official shall submit to the Design Review Board for its review, and thus shall require of the applicant, in addition to any other supporting information as required by this Ordinance, information concerning, as applicable:
    - a. Site Plan, including:
    - location and size of proposed structures, open spaces and parking areas shown in relation to lot lines, adjacent streets, sidewalks, existing buildings, and existing parking areas
    - (2) location and size of proposed accesses to public streets including spacing from adjacent intersections and driveways on abutting properties
    - (3) description of vehicular use areas, including circulation pattern, loading areas, and vehicle stacking space, if applicable
    - (4) location of all proposed and existing sidewalks and other pedestrian facilities on and adjacent to the site
    - (5) location and type of drainage improvements and facilities, including detention or retention basins, shown in relation to lot lines, adjacent streets, sidewalks, buildings, parking areas and open spaces

- b. Architectural Plans, including floor plans, building elevations and proposed facade materials and colors;
- c. the current use and zoning of abutting properties;
- d. Landscaping Plan, including:
- required landscaping areas with plant materials labeled and shown in relation to lot lines, adjacent streets, buildings and parking areas
- (2) location, size, function and furnishings for proposed open spaces shown in relation to lot lines, adjacent streets, sidewalks, buildings and parking areas
- (3) vehicles, equipment, and materials to be stored on the property during construction
- (4) soil preparation methods, bedding and mulching, and planting details
- (5) proposed material schedule showing common name, size, spacing, quantity, and installation instructions

   differentiating existing and new landscaping
- (6) proposed screening and buffers, including location of all uses and structures to be screened; and
- e. Lighting Plan, including the location of proposed exterior lighting fixtures shown in relation to lot lines, adjacent streets, sidewalks, existing buildings, parking areas, open spaces, and any existing fixtures on-site or within 50 ft of the site boundary and the height, method of shielding and intensity of proposed exterior lighting fixtures
- f. Signage Plan, including sign locations shown in relation to lot lines, adjacent streets, sidewalks, proposed and existing buildings, and signs within 50 ft of the site boundary and the area, height, design, colors and materials of all proposed signs

## §13.3. Conditional Uses

- 13.3.1. Application. All requests for Conditional Uses shall be submitted on applications made available by the City Clerk. Applications shall be submitted at least twenty-five (25) working days prior to the next regularly scheduled meeting of the Commission and accompanied by maps, drawings, statements and/or other documentation as necessary to determine compliance with the criteria of this <u>§13.3</u>.
- 13.3.2. Public Hearing. Upon acceptance of an application, the Commission shall consider the application during a public hearing. The Commission shall, after the public hearing, make a recommendation to the Council. Following the recommendation by the Commission, the Council shall hold a public hearing regarding the application and upon completion of said hearing, shall approve with conditions or deny the request within the time limit required by law.

The recommendation by the Commission may be to approve or deny the application, which said recommendation shall be advisory only. Zoning is a legislative matter decided by the Council. The Council shall not be bound by the recommendation of the Commission.

- 13.3.3. Expiration and Revocation.
  - Approval of a Conditional Use shall be considered exercised when the use has been established or when the Building Permit has been issued and substantial construction accomplished. A Conditional Use approval shall lapse and be of no effect if, after the expiration of one (1) year from the date of Council approval, no construction or change in use pursuant to such Conditional Use has taken place, provided that the Council may, for good cause shown, specify a

longer period of time in conjunction with its action to approve a Conditional Use.

- When such use is abandoned or discontinued for a period of one (1) year, it shall not be reestablished, unless authorized by the Council. Conditional Use approval shall be revoked when the applicant fails to comply with the conditions imposed by the Council.
- 13.3.4. Determination. Conditional Uses shall only be approved upon a finding that all of the following criteria are satisfied:
  - 1. The use will not, under the circumstances of the particular case, be detrimental to the health, safety or general welfare of the surrounding area.
  - 2. The use is necessary or desirable and provides a service or facility that contributes to the general well-being of the surrounding area.
  - 3. The request is consistent with all applicable provisions of the Comprehensive Plan.
  - 4. The request shall not adversely affect adjacent properties.
  - 5. The request is compatible with the existing or allowable uses of adjacent properties.
  - 6. The request can demonstrate that adequate public facilities, including roads, drainage, potable water, sanitary sewer, and police and fire protection exist or will exist to serve the requested use at the time such facilities are needed.
  - 7. The request can demonstrate adequate provision for maintenance of the use and associated structures.
  - 8. The request has minimized, to the degree possible, adverse effects on the natural environment.
  - 9. The request will not create undue traffic congestion.

10. That such development will comply with all applicable regulations and conditions specified within this Ordinance.

The Council shall describe and have recorded in the minutes, the conditions imposed on the development to assure satisfaction of these criteria.

# §13.4. Amendments

The provisions of this Ordinance, including the Zoning map, may from time to time be amended, supplemented, changed, modified, or repealed by the Council in accordance with Alabama Law.

- 13.4.1. Petition to Amend. Petitions to amend this Ordinance with respect to rezoning land may be initiated only upon filing of an application with the Commission by the owner of the land or the owner's authorized agent, in which case a notarized letter is required. Any member of the Council may initiate the rezoning of any land by introduction of a resolution for such purpose. An application for any change of zoning shall be filed in the office of the Commission at least twenty-five (25) working days prior to the next regularly scheduled meeting of the Commission. The petition shall state the nature of the proposed amendment, and a legal description of the property involved and the names and addresses of the owner(s) of the property. No application shall be taken out without descriptive information as to how the petitioner proposes to utilize the parcel of land (plot plan, drawings, sketches, et cetera).
- 13.4.2. Action on Petition. The Commission shall consider the petition at the first regularly scheduled meeting following the proper filing of the petition. The Commission shall, after the public hearing, make recommendations to the Council. The recommendations of the

Commission shall be advisory only, and shall not be binding on the Council. No amendment to the Ordinance shall become effective unless it has been submitted to the Commission for a recommendation.

- 13.4.3. Notice of Public Hearing. Notice of a public hearing to consider a change in zoning classification must be given to the public as required by Act 1123 of the 1973 Legislature of the State of Alabama and those requirements set forth in the <u>Code of Alabama</u>, 1975. No changes or amendments in the provisions of this Ordinance shall become effective until after a public hearing in relation thereto, at which parties in interest and citizens shall have an opportunity to be heard, in accordance with the following.
  - 1. Petitioner shall furnish City Clerk with names and addresses of owners of record of property within 500 feet, as shown in the records of the Applicable County Tax Assessor.
  - 2. For the purposes of this §13.4.3, the phrase "change in zoning classification" shall include, without limitation, any change, modification or amendment of zoning district boundaries.
  - 3. The Commission shall not conduct any public hearing proposing the recommendation for change in the zoning classification of any property within the City without first giving written notice a minimum of fifteen (15) days prior to the proposed date of the public hearing, to all owners of property located in whole or in part within 500 feet from the boundaries of the property which is the subject of the proposed change in zoning classification, as shown by the records of the office of the applicable County Tax Assessor.
  - 4. The Council shall not enact any change in the zoning classification of any

property subject to the zoning jurisdiction of the City without first giving written notice a minimum of fifteen (15) days prior to the proposed date of such enactment to all owners of property located in whole or in part within 500 feet from the boundaries of the property which is the subject of the proposed change in zoning classification, as shown by the records of the office of the applicable County Tax Assessor on a date not more than one year prior to the date of such notice. Such notice shall state the street address of the property, if any, which is the subject of the proposed change in zoning classification and shall also state that a protest may be filed with respect to such proposed change and that said property owner is welcome to attend the public hearing to speak on the issue if he or she so desires. Such notice shall be deemed given when deposited in the United States mail, first class postage prepaid, addressed to such property owners at their addresses as shown on the records of the office of the applicable County Tax Assessor on the date of such owners are determined. Any error in the address of any such notice shall not invalidate the giving of notice pursuant to this Ordinance, provided that no more than five (5) percent of the total number of notices given with respect to any proposed change in zoning classification contain any such error.

- 5. For purposes of this Ordinance, the term "written notice by United States mail" shall mean "certified mail-return receipt requested".
- 13.4.4. Time Limit. After the Council has voted on an application for rezoning, another application for the same kind of rezoning of the same tract or parcel of land, or change of the same portion of the Zoning Ordinance will not be considered until a period of one (1) year has elapsed from

the date of such action by the Council. Further, a withdrawal of the application for rezoning after hearing held by the Commission, but prior to the hearing by the Council shall also require a one (1) year period of time before another application may be submitted. Provided, however that the Commission and/or Council may adjust this time period if in the opinion of a majority of the Commission and/or Council, an unusual situation or circumstance exists which would warrant another hearing. In other words, the Commission and Council have the discretion to hear rezoning requests at any time when it is determined by the said Commission and/or Council that it will promote the health, safety, morals and general welfare to do so or that there are other justifiable reasons for warranting such rezoning hearing.

- 13.4.5. Procedures for Creation of Certain Residential Zoning Districts.
  - For applications for rezoning to an R-5, R-7 or R-8 District, the Commission shall consider the preliminary plot plan simultaneously with its recommendation to the Council on the rezoning request as provided herein. For applications for rezoning to an R-9 District, the Commission may consider the preliminary plot plan prior to its recommendation to the Council on the rezoning request.
  - 2. Materials to Accompany Application. An application for rezoning shall be accompanied by a vicinity map and preliminary plot plan as required by the City Subdivision Regulations. For R-9 applications, the following information shall be provided with the preliminary plot plan:
    - a. The location, grouping, and height of all facilities and proposed land uses.

- b. The number of residential units produced, their location, setbacks, building areas (including building areas for covered and uncovered porches, stoops, decks, etc., number of stories, accommodations/requirements for accessory structures for storage, gazebos, etc., indicating those areas to be occupied, buffer areas and details of proposed buffering, and the location and nature of any non-residential uses.
- c. A preliminary vehicular and pedestrian circulation system, including driveways, walkways, parking areas, and streets to be dedicated.
- 3. Subject to the applicant's preliminary plot plan (and with any suggested modifications) the Commission shall recommend that the Council approve or disapprove the request.
- 4. If the Council approves said rezoning, the applicant shall be generally bound by said preliminary plot plan and all details submitted and presented in the zoning request pursuant to Paragraph 2 above.
- 5. Deviations from Approved Preliminary Plot Plan
  - a. Minor changes to the approved preliminary plot plan may be approved by Zoning Official or City Engineer.
  - b. Substantial changes to the approved preliminary plot plan must be approved by the Commission.

### §13.5. Zoning of Annexed Property

- 13.5.1. Annexed Property. All territory annexed to the City of Vestavia Hills, Alabama shall be subject to the laws, rules, regulations and ordinances of the said City. All territory annexed to the City shall be zoned in accordance with the following procedure.
- 13.5.2. Jurisdiction over Annexed Property. All territory brought within the corporate

limited of the City by annexation shall be subject to the laws, rules, regulations and ordinances of the City, including specifically but not limited to the Zoning Ordinance, Subdivision Regulations and the City Building Code. The Council shall have and exercise the authority over the territory within the corporate limits of the City.

- 13.5.3. Authority. Pursuant to the authority vested in the City by the provisions of Title 11-52-70, et seq., <u>Code of Alabama</u>, 1975, the Council shall zone all property annexed to the corporate limits of the City.
- 13.5.4. Intents and Purpose. In accordance with the provisions of Act Number 300 of the 1955 session of the Alabama Legislature, (<u>Code of Alabama</u> Recompiled, 1958, Appendix Section 985, Volume 14 at page 397), the Council intends to zone and regulate annexed territory as to the kind, character and use and structures and improvements. It is the intent of the Council that all real property located within the municipal boundaries shall be governed by the laws, rules, regulations and ordinances of the City rather than by those of the County.

The City follows the annexation procedure outlined in Act Number 32 of the 1964 session of the Alabama legislature to extend the corporate limits. Said act requires that the municipality shall hold a public hearing to determine the truth of the matters set forth in the Petition for annexation and consider any written protests or objections regarding the proposed annexation. The public hearing on the annexation petition must not be less than ninety (90) days from the date of publication. It is the intent of the Council to conduct a public hearing on the zoning of the annexed territory immediately following the public hearing on the annexation petition. An ordinance zoning the annexed territory shall be adopted immediately after enactment of the ordinance annexing said property. The terms of this Ordinance however, shall not preclude or prohibit the City from extending its corporate limits in any other way or manner that may now or hereafter be authorized by Alabama Law.

- 13.5.5. Zoning Classification.
  - 1. The application to zone or rezone the property sought to be annexed shall be initiated by the property owner or the owner's authorized agent by filing a petition concurrently with the petition for annexation. Any member of the Council may also initiate the rezoning of said territory by introduction of resolution for such purposes. The zoning classification to be applied for shall be that Vestavia Hills classification closest to and most compatible with the applicable County classification in effect on the property at the time of filing the petition for annexation except as provided in Paragraph 2 immediately below. Should two different City zoning classifications be close to and compatible with the County classification, then the City classification imposing greater restrictions shall be applied for.
  - 2. A petitioner may request rezoning to a City zoning classification not otherwise compatible with the County zoning classification in effect on the concerned property. In such case, the request shall be considered according to the procedure set forth in <u>§13.4 Amendments</u>. If the request is denied, the Council shall have the authority to classify the property in accordance with Paragraph 1 above. In any case, the property, upon annexation, shall be rezoned to a City zoning classification.

13.5.6. Notice Requirements. Notice shall be in accordance with <u>§13.4.3 Notice of Public</u> <u>Hearing</u> for other zoning amendments.

## §13.6. Temporary Emergency Relief

The Zoning Official upon approval by the Council is hereby granted authority to provide immediate emergency relief to applicants requesting such relief by issuing permits authorizing installation of mobile homes on applicant's property under the following conditions:

- 13.6.1. Such permit shall be temporary and not exceed one (1) year from date of issuance.
- 13.6.2. Such permit shall not be transferable.
- 13.6.3. Prior to issuance of such permit, the Zoning Official shall, with discretion, be reasonably satisfied that the applicant's requested relief is necessary and the need thereof was approximately caused by damage resulting from fire or natural disasters.

# §13.7. Remedies and Penalties for Violation

It shall be unlawful to erect, construct, reconstruct, alter, maintain, use or occupy any land in violation of any regulation in, or any provision of this Ordinance, or any amendment thereof, enacted or adopted under the authority of this Act. Any person, firm or corporation violating any such regulation, provision or amendment shall be guilty of a misdemeanor, and upon conviction thereof, shall be punished in accordance with Title 11-45-9, Code of Alabama, for a misdemeanor violation for each such offense. Each and every day during which such illegal erection, construction, reconstruction, alteration, maintenance, use or occupancy continues shall be deemed a separate offense. Provided, however, that prior to any criminal prosecution the Zoning or Building Official or his agent shall give a written notice or citation to the person, firm or corporation

violating any provision of this Ordinance stating the rule or regulation being violated and notifying the said person, firm or corporation to cease and desist such violation immediately, otherwise said person will be prosecuted as provided herein. In case any building or structure is, or is proposed to be erected, constructed, reconstructed, altered, maintained, used or occupied in violation of any regulation or provision of this Ordinance or amendment thereof, enacted or adopted by the City, said Official or any other appropriate authority or any adjacent or neighboring property owner who would be specifically damaged by such violation, may, in addition to other remedies provided by law, institute injunction, mandamus, abatement or any other appropriate action or actions, proceeding or proceedings to prevent, enjoin, abate or remove such unlawful erection, construction, reconstruction, alteration, maintenance, use or occupancy.

The Zoning or Building Official may intervene in any action, suit or other proceedings wherein there is involved any amendment thereof, enacted or adopted by the City. When said Official so intervenes hereunder, that official shall be deemed to be, and shall be treated as an original party to the action, suit or proceedings. It is the intent of this Section that any action, suit or proceedings in which the Zoning or Building Official intervenes shall proceed the same as if that Official has been an original party, insofar as any statute, act or rule prohibiting an entire change in parties is concerned. The provisions of this Section shall apply to any action, suit or proceedings pending at the time of its adoption.

# §13.8. Certificate of Occupancy Required

No land or building or other structure or part thereof hereafter erected, moved or altered in its use shall be used until the Building Official, after approval of the Fire Marshal, shall have issued a Certificate of Occupancy stating that such land or structure or part thereof is found to be in conformity with provisions of this Ordinance.

Within five (5) working days after the owner or his agent has notified the Building Official that a building or premises or part thereof is ready for occupancy or use, it shall be the duty of the Building Official to make a final inspection thereof, and to issue a Certificate of Occupancy if the building or premises or part thereof is found to conform with the provisions of this Ordinance or, if such Certificate is refused, to state the refusal in writing with the cause.

#### §13.9. Fees

The following requests shall be subject to application fees pursuant to City Ordinance #2342 Schedule of Fees, as amended. All funds collected under the provisions of this Ordinance shall be paid to the City of Vestavia Hills, Alabama.

- 13.9.1. Requests before the City Council.
  - 1. Rezoning
  - 2. Conditional Use
  - 3. PUD or MXD Master Plan approval
- 13.9.2. Special Provisions Rezoning, Conditional Use and PUD Application Fees. The fee and charge shall be retained by the City and shall not be conditioned upon or related to the action taken with respect to said application.
  - 1. In the event of a request for withdrawal or postponement within fifteen (15) working days of a hearing date, there shall be no refund.
  - 2. If a hearing at a later date is desired, an additional fee in the amount of the initial fee shall be charged.

- 13.9.3. Request before the BZA. The following shall be assessed an application fee for the filing of a request before the BZA.
  - 1. Variance request
  - 2. Special Exception request
  - 3. Other applications to appear before the BZA
- 13.9.4. Special Provisions, BZA Fees. The fee shall be retained by the City and shall not be conditioned upon or related to the action taken with respect to said applications.
  - 1. In the event of a request for withdrawal or postponement within twenty (20) working days of a hearing date, there shall be no refund of said fees.
  - 2. If a hearing at a later date is desired, an additional fee in the same amount as the initial fee shall be charged.
- 13.9.5. Design Review Fee. An application fee shall be assessed for each review before the DRB.
- 13.9.6. Publication and Mailing Expenses. The applicant shall be responsible for publication and mailing expenses necessarily incurred by the City for mailings and publication as required by Alabama law and the terms and provisions of this Ordinance.
- 13.9.7. Fee Exemptions. The following groups are exempt from all the above application fees, but shall not be exempt from mailing and publication expenses: places of worship, Vestavia Hills City and/or School Board owned properties, properties owned by the County, County School Board, State or Federal Government and projects funded entirely by the City.

#### Article 14 LEGAL STATUS PROVISIONS

#### §14.1. Interpretation and Purpose

In their interpretation and application the provisions of this Ordinance shall be considered the minimum requirements adopted for the promotion of the public health, safety, morals, convenience, order, prosperity, and general welfare of the community. Where other ordinances or regulations, which may be adopted hereafter, impose greater restrictions than those specified herein, compliance with such other ordinances or regulations is mandatory. This Ordinance shall not lessen the requirements of plats, deeds, or private contract when such requirements are more restrictive than the provisions of this Ordinance.

### §14.2. Savings Clause

If any section, clause, provision, or portion of this Ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, clause, provision or portion of this Ordinance, which is not in and of itself invalid or unconstitutional.

### §14.3. Repealing Clause

This Ordinance does not repeal or rescind any other ordinance previously adopted and enacted by the City of Vestavia Hills, which zoned or rezoned property located within the corporate boundaries of the said municipality. To the contrary, any and all previously adopted ordinances which have zoned or rezoned any land within the City of Vestavia Hills be and are hereby reaffirmed.

This Ordinance amends, codifies and republishes the Zoning Code of the City of Vestavia Hills, which provides the kind, character and use of structures and improvements that may be erected or made within the these zoning districts. It does not repeal any portion of the previously enacted Zoning Code except for those provisions, which are in direct conflict with the terms and provisions of this Ordinance Number 3099.

### §14.4. Effective Date

This Ordinance shall become effective immediately upon its approval, adoption and publication as required by law.

**APPROVED and ADOPTED** this the 27th day of June, 2022.

Ashley C. Curry Mayor

Attested by:

Rebecca Leavings, City Clerk

#### **CERTIFICATION:**

I, Rebecca H. Leavings, as City Clerk of the City of Vestavia Hills, Alabama, hereby certify that the above and foregoing copy of 1 (one) Ordinance Number 3099 is a true and correct copy of such Ordinance that was duly adopted by the City Council of the City of Vestavia Hills on the 27th day of June, 2022, as same appears in the official records of said City.

Posted at Vestavia Hills City Hall, Vestavia Hills New Merkel House, and Vestavia Hills Civics Center this the \_\_\_\_\_ day of \_\_\_\_\_, 2022.

Rebecca Leavings City Clerk
# CITY OF VESTAVIA HILLS

# SUBDIVISION REGULATIONS



Adopted by the Planning and Zoning Commission of the City of Vestavia Hills, Alabama on

April 8, 2010 Amended December 12, 2013 Amended July 9, 2015

# TABLE OF CONTENTS

| Article 1 AUTHORITY AND JURISDICTION1-1                |
|--------------------------------------------------------|
| §1.1. Authority1-1                                     |
| §1.2. Jurisdiction1-1                                  |
| §1.3. Application of Regulations1-1                    |
| §1.4. Separability and Severability1-1                 |
| §1.5. Amendments                                       |
| §1.6. Penalties1-2                                     |
| Article 2 DEFINITIONS2-1                               |
| §2.1. Purpose2-1                                       |
| §2.2. Interpretation2-1                                |
| §2.3. Use of Words2-1                                  |
| §2.4. Definition of Terms Used                         |
| Article 3 DESIGN STANDARDS                             |
| §3.1. Conformity to City, County or Regional Plans 3-1 |
| §3.2. Street Layout                                    |
| §3.3. Access Management                                |
| §3.4. Sidewalks                                        |
| §3.5. Blocks and Lots                                  |
| §3.6. Building Restrictions                            |
| §3.7. Public Uses                                      |
| §3.8. Erosion Control Plan                             |
| §3.9. Easements                                        |
| §3.10. Street and Subdivision Names                    |
| §3.11.Private Subdivisions                             |
| Article 4 IMPROVEMENTS4-1                              |
| §4.1. General Requirements 4-1                         |
| §4.2. Roadways and Sidewalks4-1                        |
| §4.3. Utilities                                        |
| §4.4. Storm Water, Drainage and Grading                |
| §4.5. Markers                                          |
| §4.6. Regulatory, Street and Miscellaneous Signs       |
| Article 5 REQUIRED IMPROVEMENTS, BOND5-1               |
| §5.1. Improvements                                     |
| §5.2. Bond and Surety, Amount and Release5-1           |
| §5.3. Inspections and Acceptance                       |
| Article 6 PROCEDURES                                   |
| §6.1. Preliminary Plat6-1                              |
| §6.2. Engineering Plan                                 |
| §6.3. Final Plat6-4                                    |
| §6.4. Combined Preliminary and Final Plat6-5           |
| §6.5. Subdivision, Resubdivisions, and Exceptions      |
| FOREWORD                                               |

The Legislature has vested in municipalities the power to control the subdivision of land within their town limits and within their police jurisdiction. The purpose of this delegation of authority is merely to enable each town to prescribe rules for the orderly development of property consistent with previous development of the town and according to comprehensive and well-designed plans. In this way only can existing values be protected and the integrated growth and future of the town and its inhabitants be assured. In Vestavia Hills, authority over such subdivision control is vested in the Vestavia Hills Planning and Zoning Commission, which has adopted these Subdivision Regulations to govern the conduct of its work.

It is not the purpose of this regulation of the subdivision of property to interfere unreasonably with the plans of property owners. The regulations are relatively simple and are entirely consistent with every considerate use of private property. It is the desire of the Planning and Zoning Commission to give careful and immediate attention to every application. A study of the Regulations and strict adherence to them by the property owner will further this objective.

To facilitate the administration of these Subdivision Regulations for both the prospective developers of property and the Commission, it is suggested that a prepreliminary sketch of a proposed subdivision be presented to the Commission for review and discussion. The Commission will then have an opportunity to interpret any of the requirements in the Regulations about which the developer may be in doubt and thereby eliminate much of the possibility of improperly designed plat being submitted for preliminary approval.

# Article 1 AUTHORITY AND JURISDICTION

# §1.1. Authority

Under the authority of Act No. 82-693, Acts of Legislature, State of Alabama, 1982 and as amended by Act No, 84-454, Acts of Legislature, State of Alabama, 1984, which sections are hereby made a part of these regulations, the Vestavia Hills Planning and Zoning Commission, hereinafter referred to as "the Commission", at its meeting on April 8, 2010, adopted by resolution the following regulations, a copy of which has been certified to the Probate Judges of Jefferson and Shelby Counties.

# §1.2. Jurisdiction

From and after the date of adoption, these regulations shall govern all subdivision of land within the corporate limits of Vestavia Hills, hereinafter referred to as "the City", as now or hereafter established, plus such added territory as is shown on the map attached hereto and made a part hereof.

# §1.3. Application of Regulations

From and after the date of these Subdivision Regulations, every plat of land that is a subdivision, as defined herein, shall be prepared, presented for approval, and recorded as required herein.

All development within the subdivision jurisdiction of the City of Vestavia Hills, including land-lease developments and condominiums, whether or not plats or deeds are to be recorded, and including the construction of two or more buildings or primary structures, together with the necessary drives and ways of access, that may or may not be subdivided into lots, blocks and streets, shall be subject to the provisions of these Regulations. These provisions shall also be deemed to include single principal structures and additions proposed to an existing multiple building or site development. Plans for all such developments shall be submitted to and for approval by the Commission.

No building permit and no Certificate of Occupancy shall be issued for any parcel of land created by subdivision, as defined herein, unless a Final Plat of such subdivision has been approved and recorded as required by these regulations. No grading, excavation, or other disturbance of land; and no construction of any public or private improvements for the purpose of constructing a subdivision shall take place or be commenced except in conformity with these regulations.

No subdivider, proposing to make or having made a subdivision, shall proceed with any construction work on the proposed subdivision, including grading, before obtaining Preliminary Plat approval and shall not convey title to any lot before obtaining from the Commission Notice of Final Plat Approval and acceptance of the plat.

# §1.4. Separability and Severability

The provisions of these Regulations are severable. Should any Article, Section, Subsection or provision of these Subdivision Regulations be declared by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of the Subdivision Regulations as a whole or any part thereof other than the part so declared to be invalid or unconstitutional.

# §1.5. Amendments

The Commission may from time to time amend these Regulations. These Regulations and amendments thereto may be recommended to be changed and amended by the Commission after a public hearing by giving due notice as required by law and subsequently approved by the Commission.

# §1.6. Penalties

The City of Vestavia Hills shall initiate any appropriate action or procedure to prevent the unlawful subdivision of land and to prevent occupancy of such subdivision of land under the authority conferred by Section 13 Act No. 84-454, State of Alabama.

# Article 2 DEFINITIONS

# §2.1. Purpose

Certain terms used in these Regulations shall have the meanings defined by this Article. In the event that a term is not listed in this Article; or is not defined elsewhere in the City Zoning Ordinance, the City Code, or Sections 11-52-30 through 11-52-36 of the 1975 <u>Code of Alabama</u>, as amended; then the conventional meaning of such term shall apply.

# §2.2. Interpretation

The Zoning Official of the City of Vestavia Hills is hereby authorized to make a final determination of any term used in these Regulations. In case of a dispute over such interpretation a written appeal of the Zoning Official's determination may be filed with the Commission. Such appeal must be filed within fifteen (15) days of such determination.

# §2.3. Use of Words

In the interpretation of these Regulations, the provisions and rules of this Section shall be observed and applied, except where the context clearly requires otherwise.

Words used or defined in one tense or form shall include other tenses and derivative forms. Words in the singular shall include the plural; and words in the plural shall include the singular. The masculine gender shall include the feminine; and the feminine gender shall include the masculine. The word "shall" is mandatory. The word "may" is permissive. The word "person" includes an individual, firm, association, organization, partnership, trust, company, or corporation.

In case of any conflict between the text of these Regulations and any caption, illustration, figure, or other graphic material, the text shall govern.

# §2.4. Definition of Terms Used

As used in these regulations, the following words or phrases shall have the following meaning or definition:

- 2.4.1. *Access*. A way or means of approach to provide vehicular or pedestrian entry or exit to a property.
- 2.4.2. *Applicant*. A landowner, including his heirs, successors and assignees, or developer authorized to represent a property for which an application for development has been filed.
- 2.4.3. *Application*. Any application required to be filed and accepted prior to start of construction or development including, but not limited to, an application for the approval of a subdivision plat or plan; or for the acceptance of a development plan.
- 2.4.4. *Building Setback.* The line, generally parallel to a lot line or street right-of-way line, indicating the minimum distance between the lot line and the face of the building, as required by the Zoning Ordinance. In those cases where the Building Line and the Building Setback are not identical, the greater of the two shall take precedence.
- 2.4.5. *City*. The City of Vestavia Hills, Alabama.
- 2.4.6. *City Attorney*. The licensed attorney designated by the City Council to furnish legal assistance in the administration and enforcement of these Regulations.
- 2.4.7. *Commission*. The Planning and Zoning Commission of the City of Vestavia Hills, Alabama.
- 2.4.8. *Council or City Council*. The City Council of the City of Vestavia Hills, Alabama.
- 2.4.9. *County*. Jefferson or Shelby County, Alabama, as applicable to the subdivision application.

- 2.4.10. *Cross Access*. A driveway providing access between two or more abutting lots so that a driver need not enter the public thoroughfare system to access one of said sites from another. Cross access is privately maintained and shall not include the term "alley".
- 2.4.11. *Culvert*. A structure with appurtenant works, which carries a watercourse under or through an embankment or fill.
- 2.4.12. *Curb* or *Curb Line*. The inside vertical face of a masonry curb, the center line of a valley gutter, or the edge of the pavement where no curbs or gutters exist.
- 2.4.13. *Dead End Street*. A street having no outlet at one end.
- 2.4.14. *Detention Basin or Detention Pond*. A basin designed to drain completely after retarding stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate.
- 2.4.15. *Development*. Any of the following activities:
  - 1. The improvement of one (1) lot or more abutting lots, tracts or parcels of land for any purpose involving:
    - a. a group of two (2) or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or
    - b. the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features;
  - 2. A subdivision of land.

- 3. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.
- 2.4.16. *Drainage Easement*. A right granted by a landowner to a grantee, allowing the use of private land for storm water management purposes.
- 2.4.17. *Drainage Facilities*. Structural and nonstructural elements designed to collect stormwater runoff and convey it away from structures and through the roadway right-of-way in a manner, which adequately drains sites and roadways and minimizes the potential for flooding and erosion.
- 2.4.18. *Engineer or Registered Engineer*. An engineer properly licensed and registered in the State of Alabama.
- 2.4.19. *Engineering Plan*. Plans prepared by an engineer registered in the State of Alabama showing details of the design and construction of required improvements in a proposed subdivision.
- 2.4.20. *Erosion*. The wearing away of the ground surface as a result of the movement of wind, water, and/or ice.
- 2.4.21. *Erosion Control*. Measures and actions that are to be taken to control potential erosion and sedimentation problems.
- 2.4.22. *Final Plat Approval*. The official action of the Commission taken on a preliminarily approved plat, after all conditions, engineering plans and other requirements have been completed or fulfilled and the required improvements installed, or guarantees properly posted for their completion; or approval conditioned upon the posting of such guarantees.
- 2.4.23. *Final Plat.* The map or plan or record of all or a portion of a subdivision, and any

accompanying materials, which is presented for final approval as required in these Regulations.

- 2.4.24. *Frontage Road.* A street parallel to and adjacent to a major highway or street that provides access to abutting properties.
- 2.4.25. *Grade*. The slope of land or a built feature such as a street, specified in percentage terms.
- 2.4.26. *Grading*. The movement of dirt, top soil, grass, native material, landscaping or other forms of surface material which will result in a difference of six (6) inches or greater from the original elevation.
- 2.4.27. *Grading Plan.* A map of a proposed development defining existing and proposed elevations, watercourses, vegetative cover and drainage patterns, including one (1) foot contours, spot elevations, and flow arrows. The plan also describes the limits and depths of excavations, fills and removal of native vegetation.
- 2.4.28. *Health Department*. The Health Department of the applicable county and/or the State of Alabama Health Department.
- 2.4.29. *Highway*. A road or street that forms a part of the existing or projected Federal Aid Highway System or the State Highway System.
- 2.4.30. *Land Surveyor or Registered Land Surveyor*. A land surveyor properly licensed and registered in the State of Alabama.
- 2.4.31. *Maintenance Bond*. Financial security filed by the developer with the City to secure structural integrity of all required improvements as well as the functioning of said improvements for an initial period of time.

- 2.4.32. *Monument*. A permanent object serving to mark a boundary.
- 2.4.33. *Open Space*. Land, not covered by parking areas, rights-of-way or buildings other than recreational structures, pools and stormwater facilities, which is landscaped or left in a natural state as may be required by the provisions of these Regulations or of the Zoning Ordinance.
- 2.4.34. *Owner*. The person having the right of legal title to, beneficial interest in, or a contractual right to purchase a lot or parcel of land.
- 2.4.35. *Passage, Pedestrian*. A pedestrian-only connector that provides shortcuts through long blocks or from a cul-de-sac to an adjacent street.
- 2.4.36. *Performance Bond*. Financial security filed by the developer with the City to assure the construction of all required improvements at a specified time in the future. Also referred to as a "Bond".
- 2.4.37. Planning Commission. The Planning and Zoning Commission of the City of Vestavia Hills, Alabama, created under the authority of Sections 11-52-2 and 3 of the <u>Code of Alabama</u>, 1975, as amended.
- 2.4.38. *Planting Strip*. The portion of the street between the curb and the sidewalk.
- 2.4.39. *Plat.* An exact and detailed map or plan of a subdivision or land development and related written material indicating the manner or layout of a road, parcel, and/or subdivision to be submitted to the City of Vestavia Hills for approvals and/or recording purposes.
- 2.4.40. *Preliminary Plat*. A map and related materials indicating the proposed layout of a development submitted for preliminary approval in accordance with these Regulations.

- 2.4.41. *Preliminary Plat Approval*. The conferral of certain rights prior to final approval after specific elements of a development plan have been agreed upon by the Planning Commission and the applicant.
- 2.4.42. *Private Street*. Any street for vehicular travel, which is privately owned and maintained.
- 2.4.43. *Probate Judge*. The Judge of Probate for Jefferson or Shelby County, Alabama, as applicable to the application.
- 2.4.44. *Public Improvement*. Any improvement, facility, or service, together with customary improvements and appurtenances thereto, necessary to provide for public needs as: vehicular and pedestrian circulation systems, storm sewers, flood control improvements, water supply and distribution facilities, sanitary sewage disposal and treatment, public utility and energy services.
- 2.4.45. *Reserve Strip*. A strip of land, smaller than a lot, and retained in private ownership as a means of controlling access to land dedicated or intended to be dedicated to street or other public use.
- 2.4.46. *Resubdivision*. A combination, recombination, or splitting of previously recorded lots or tracts of contiguous land for the purpose of creating additional lots or enlarging existing ones.
- 2.4.47. *Retention Basin or Retention Pond*. A basin designed to capture stormwater runoff with its primary release of water being through the infiltration of said water into the ground. Retention basins normally contain some pooling of water.
- 2.4.48. *Roadway* or *Travelway*. The portion of the street available for vehicular traffic, or, in other words, the portion between curbs.

- 2.4.49. *Shared Access*. A driveway, alley, or other access facility connecting two or more contiguous sites to a public street.
- 2.4.50. *Sidewalk.* A paved path provided for pedestrian use, and usually located at the side of a road and within the street right-of-way.
- 2.4.51. Sight Distance. The length of street visible to the driver of a passenger vehicle at any given point in the street when viewing is unobstructed by traffic. See also "Sight Triangle, Clear" and "Intersection Sight Distance".
- 2.4.52. Significant Change in Trip Generation. A change in the use of a property, including land, structures, or facilities, or an expansion of the size of structures or facilities causing an increase in the trip generation of the property exceeding ten (10) percent (either peak or daily) and 100 vehicles per day more than the existing use for all streets under local jurisdiction; or exceeding twenty-five (25) percent (either peak or daily) and 100 vehicles per day more than the existing use for all streets under local jurisdiction; or exceeding twenty-five (25) percent (either peak or daily) and 100 vehicles per day more than the existing use for all roads under state jurisdiction.
- 2.4.53. *Stopping Sight Distance*. The distance required by a motorist to stop a vehicle traveling at or near the design speed of a thoroughfare before reaching a trafficcontrolled intersection or stationary object in their path.
- 2.4.54. *Street*. Any street, avenue, boulevard, road, parkway, viaduct, drive, or other right-of-way provided for vehicular traffic and travel.
- 2.4.55. *Street Classification*. The functional classification of streets based upon their individual function, as follows:
  - 1. *Arterial*. A street that distributes traffic to and from collectors. Arterials include

U.S. Highway 31, U.S. Highway 280, and Columbiana Road.

- 2. *Collector*. A street that collects traffic from local streets and connects with minor and major arterials. Collector streets include, but are not limited to, Acton Road, Altadena Road, Cahaba Heights Road, Cahaba River Road, Crosshaven Drive, Dolly Ridge Road, Green Valley Road, Massey Road, Rocky Ridge Road, Shades Crest Road, and Tyler Road.
- 3. *Local*. A street used primarily to provide access to abutting properties.
- 4. *Marginal Access Street*. A service road that runs parallel to an arterial street. Its purpose is to separate through traffic from local traffic, and to provide controlled access to abutting properties.
- 2.4.56. *Street, Half.* A street, or any extension of an existing street, along and roughly parallel to a lot line such that less than the entire required right-of-way and thoroughfare improvements, longitudinally, would be located on one property.
- 2.4.57. *Street, Stub.* A portion of a street used as an extension to an abutting lot that may be developed in the future.
- 2.4.58. *Subdivider*. Any person who, having an interest in land, causes it directly or indirectly, to be divided into a subdivision as defined herein.
- 2.4.59. Subdivision. The division or redivision of a subdivision, lot, tract, or parcel of land into two or more lots, plats, sites, or other divisions of land for the purpose, whether immediate or future, of sale or of building development. All subdivisions are developments. See "Development".
- 2.4.60. *Subdivision Regulations*. The Subdivision Regulations of the City of Vestavia Hills, Alabama.

- 2.4.61. *Surety*. A legally-binding agreement with the City by which a developer assures the construction of improvements required by these Regulations. See also "Performance Bond."
- 2.4.62. *Swale*. A constructed watercourse shaped or graded in earth materials and stabilized with vegetation, for the conveyance and water quality improvement of storm runoff.
- 2.4.63. *These Regulations or Standards*. The City of Vestavia Hills Subdivision Regulations together with all applicable design and construction requirements, all of which constitute the comprehensive development regulations of the City of Vestavia Hills, Alabama.
- 2.4.64. *Valley Gutter*. A concrete channel with a "V"-shaped profile installed at roadside to capture and convey storm runoff.
- 2.4.65. *Watercourse*. A permanent or intermittent stream, river, brook, run, creek, channel, swale, pond, lake or other body of surface water, carrying or holding surface water, whether natural or manmade.
- 2.4.66. *Water Supply*. The system made up of water sources, treatment facilities, and conveyance systems to provide potable water to the community.
- 2.4.67. Zoning Ordinance or City Zoning Ordinance. The Zoning Ordinance of the City of Vestavia Hills, Alabama.

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#### Article 3 DESIGN STANDARDS

All subdivisions shall conform to all applicable State and local regulations.

The design standards of this Section shall be the minimum standards allowable for development. Standards above the minimum may be required by the Commission or the City Engineer. Detailed construction specifications and engineering requirements may be obtained from the City Engineer and from the Public Works and Engineering Standards, hereinafter referred to as the "Public Works Manual". The Commission shall not grant any waiver of the requirements of this Section unless recommended by the City Engineer.

For the purposes of this Article, residential developments or portions thereof shall be categorized as follows: 1) low density - lots of 20,001 –30,000 sf; 2) medium density - lots of 10,000-20,000 sf; 3) high density - lots less than 10,000 sf and any duplex, triplex, townhouse or multiple family development.

# §3.1. Conformity to City, County or Regional Plans

All proposed subdivisions shall conform to any Town, City, County or Regional Plan and to the City Zoning Ordinance. Whenever, a tract to be subdivided embraces any part of a street, so designated on any City, County, or Regional Plan, such part of such proposed public way shall be platted by the subdivider in the same location and at the same width as indicated on such City, County, or Regional Plan.

# §3.2. Street Layout

Public streets shall be designed, constructed and paved in accordance with all applicable requirements of this §3.2 and the Public Works Manual. The design standards of this Section are intended to ensure connectivity throughout the City street network to prevent unnecessary congestion on major streets and to ensure safe access and mobility for motorists, pedestrians, bicyclists, transitusers and the handicapped.

3.2.1. The street layout shall be in conformity with a plan for the most advantageous development of the entire neighboring area. All proposed streets shall be in alignment with existing planned or platted streets with which they are to connect.

> The minimum right-of-way widths for new streets shall be in accordance with the following. However, the Commission may approve a modification, after a recommendation of the City Engineer, to address horizontal curves, additional lanes, adjustments to street design elements (i.e., sidewalks, planting strips, etc.), and similar project or site specific issues, and as further provided in the Public Works Manual:

- 1. Low density residential:
  - a. local street -45 ft
  - b. collector street 50 ft
- 2. Medium density residential:
  - a. local street 50-55 ft
  - b. collector street 55-60 ft
- 3. High density residential:
  - a. local street 50 ft
  - b. collector street 55 ft
- 4. Neighborhood mixed use or neighborhood non-residential:
  - a. local street 65 ft
  - b. collector street 70 ft
- 5. General mixed use or non-residential
  - a. local street 70 ft
  - b. collector street 75 ft
- 6. Frontage road 45 ft

- 3.2.2. Connectivity
  - 1. The street layout of a subdivision shall provide for the continuation and connection of streets between adjacent properties whenever such continuation and connection is necessary for the convenient movement and circulation of traffic, effective police and fire protection, access by public service vehicles, and efficient provision of utilities; and in accordance with the policies of the Comprehensive Plan. See Figure 3.2.2.
  - 2. Street networks shall be designed to disperse traffic flow among multiple local streets. The number of culs-de-sac should be minimized to avoid undue congestion on internal collector streets and to assure convenient route options for emergency access.
  - 3. The platting of any land, the purpose of which is to deny access to rights-of-way, is prohibited.
  - 4. Existing streets that abut a subdivision shall be continued, and the continuations shall be in alignment with them and at least as wide as the existing street unless a reduction in width is approved by the Commission. The street layout shall also provide stub streets for future continuation into unsubdivided lands to meet the purposes stated herein.
  - 5. If the adjacent property is undeveloped, the right-of-way to be continued shall extend to the property line. The area necessary for the temporary turnaround outside the normal right-of-way shall be contained within a temporary easement, which shall automatically dissolve when the street is extended and approved by the City. The Commission may limit the length of such temporary dead-end streets in accordance with the standards herein. The paving or improvement of

right-of-way to the boundary with the adjoining property may not be required. The intention is that the paving and utilities be extended far enough to serve the subdivision lots; and the right-of-way and/or easements extended so that the streets and utilities can be extended into adjoining property as needed.





- 3.2.3. Relation to Topography. Proposed streets shall be adjusted to the contour of the land so as to produce usable lots and streets of reasonable gradient.
- 3.2.4. Horizontal and Vertical Alignment and Stopping Sight Distance. Streets shall be designed to eliminate sharp curves.
  - 1. No street improvements shall be approved with intersections with offsets of less than 125 feet as measured between centerlines.
  - 2. Streets shall intersect as nearly at right angles as possible and in no case shall

intersect at an angle of less than sixty (60) degrees.

3. Design speeds shall be designated by the project engineer on profile sheets submitted with the preliminary plans and shall be in accord with the design speeds provided in the Public Works Manual. Minimum stopping sight distances and street curvature shall be in accordance with the Manual. See Figure 3.2.4.

#### Stopping Sight Distance

Line of sight between a motorist (at stopping sight distance) and upcoming intersection should be clear of elevation changes that obscure the view of the upcoming intersection.



Figure 3.2.4 Stopping sight distance, elevation and plan view

4. Grades of all streets shall comply with good engineering practices, shall not exceed fifteen (15) percent, and shall not be less than 0.5 percent. Waivers, for minor dead-end streets with low traffic volumes only, may be considered by the City Engineer when submitted in writing. Grades approaching intersections shall not exceed five (5) percent for a distance of not less than 100 feet from the intersection centerline. Grades of circles shall not be more than five (5) percent for the last 100 feet of paving.

- 3.2.5. Relation to Highways and Railroad Rights-of-Way. Wherever the proposed subdivision contains, or is adjacent to, a railroad right-of-way, or highway, provision shall be made for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land between such streets and the railroad or highway. See also §3.3 <u>Access Management</u>.
- 3.2.6. Street Design Standards. Streets shall be designed in accordance with the classifications provided in §3.2.1. Adequate widths shall be provided to accommodate roadway construction and utility location. Subdivisions along existing or dedicated or platted streets where rights-of-way are inadequate shall provide additional rights-of-way to meet these standards.
  - 1. The applicant shall provide or dedicate additional right-of-way and/or easement if it is determined by the City Engineer that the additional right-of-way and/or easement is necessary for street improvements, such as acceleration/deceleration lanes, as established on the approved Access Plan in accordance with <u>§3.3</u>.
  - 2. On low density residential streets, paved turnouts may be required for access of mail trucks to mailboxes.
  - 3. Half Streets. Wherever there exists a dedicated or platted half street adjacent to the tract to be subdivided, the other half shall be platted. No new half streets shall be platted.
  - 4. Existing Streets. Subdivisions that adjoin or include existing streets shall dedicate additional right-of-way (ROW) as necessary to meet the minimum standards specified in the Public Works Manual. When any part of the

subdivision is on both sides of the existing street the entire additional ROW shall be provided. When the subdivision is located only on one (1) side of an existing street, one half  $\binom{1}{2}$  of the required ROW, measured from the centerline of the existing ROW, shall be provided. In rolling or hilly terrain, construction easements may be required to ensure that appropriate front and back slopes are developed.

- 3.2.7. Alleys
  - 1. Alleys may be approved by the Commission in medium and higher density residential developments as alternative locations for rear access, above-ground utilities, garbage pick-up, and/or mail service.
  - 2. Alleys shall be required in commercial or industrial districts where it is determined by the Commission that alleys will be necessary in providing safe access to abutting sites in accordance with the provisions of §3.3 Access Management.
  - 3. Alleys shall have a minimum right-ofway width of twenty (20) feet and be dimensioned subject to the Public Works Manual.
- 3.2.8. Sight Triangle
  - 1. An unobstructed, clear sight triangle shall be established at all intersections according to required intersection sight distances.
  - 2. Minimum intersection sight distances shall be in accordance with the Public Works Manual and as shown in Figures 3.2.8.



intersection intersection

- Figure 3.2.8 Sight triangle. Plan and elevation views
- 3.2.9. Reserve Strips. Reserve strips controlling access to streets, alleys, and public grounds shall not be permitted unless their control is placed with the Council under conditions approved by the Commission.
- 3.2.10. Dead End Streets. Dead end streets, longer than 150 feet shall have a vehicular turnaround as approved by the City Engineer in accordance with the Public Works Manual.

Alternative designs, including hammerheads, eyebrows and closes (see Figure 3.2.10), may be approved by the City Engineer where such alternative best suits the natural features of the site and provides sufficient access for emergency response vehicles.



Figure 3.2.10 Cul-de-sac alternatives

- 3.2.11. Intersections
  - 1. Submission of a grading plan showing existing and proposed contours at one (1) foot intervals and a detailed design for intersections which are unusual or are located on difficult terrain may be required by the Commission.
  - 2. Curb radii at intersections shall be in accordance with the Public Works Manual and the following.
    - a. Curb radii at intersections shall be sized to provide safe turning movements appropriate to the desired travel speed along the intersecting streets. Larger radii shall be required along streets with higher design speeds and at intersections where frequent turns by large vehicles are expected. On local streets, especially in residential areas, the smallest curb radius should be used to slow vehicular turning movements (while accommodating turning movements by

emergency vehicles) and provide short crossing distances for pedestrians.

b. Where on-street parking is/will be near the intersection corner, the effective radius should control (See Figure 3.2.11). This allows a shorter crossing distance for pedestrian convenience while still accommodating wider turning movements for larger vehicles.





 Property line corners at street intersections shall be rounded by an arc, the minimum radius of which shall be ten (10) feet. In business districts, a chord may be substituted for the arc.

# §3.3. Access Management

The street layout shall be made according to good land planning and access management practices for the type of development proposed and shall be coordinated with the existing and planned street systems of the surrounding areas. The standards of this §3.3 shall apply to all streets.

3.3.1. Purpose. The purposes of this Subsection are to promote the overall safety of motorists, bicyclists, and pedestrians; to reduce interference with through traffic by other vehicles entering, leaving, and crossing streets; to assure safe access to and from streets by emergency vehicles; and to preserve the traffic capacity of streets. Refer to Figure 3.3.1.



Recommended

Figure 3.3 Access Management Patterns

- 3.3.2. General Conditions and Requirements. The location and design of vehicular accesses from arterial, collector, and nonresidential local streets proposed with a subdivision shall be specified in an Access Plan submitted to the City Engineer for review and recommendation to the Commission for action. No curbs or rights-of-way shall be cut, paved, or otherwise altered until a permit for the access has been secured from the City and/or any other governmental agency owning or controlling the street right-ofway.
  - 1. Approval for Specific Use. Accesses existing as of the effective date of these standards, are approved for the existing use only. Accesses approved under these

standards shall be approved for the use specified in the Access Plan. Changes in use that would increase traffic or change the types of vehicles accessing the site shall require a new approval of access. When a site existing at the time of these standards is redeveloped so as to create a "significant increase in trip generation", the existing driveways shall be brought into conformity with these requirements.

- 2. Expiration of Approval. Access Plans for non-residential uses, including related off-site street improvements, shall be constructed within two (2) years of approval, or the approval shall terminate.
- Prohibition of Unsafe Access. Notwithstanding any other provisions of these standards, an access, which demonstrates a potential threat or danger to the public and/or which could affect the safe, efficient flow of traffic, may be denied, based on commonly accepted and applied traffic engineering principles.
- 3.3.3. Access Plan. An Access Plan is required for subdivision, resubdivision, development, redevelopment and changes in use. The Access Plan may be submitted as a part of the site plan, or, in the case of the issuance of a residential building permit, the information may be included on the plot plan. A separate access permit shall be required for each dwelling. The Access Plan shall specify the intended use of the property. Refer to Appendix A for Access Plan requirements.
- 3.3.4. Guidelines. For all developments, redevelopments, and changes in use, the City Engineer shall provide a recommendation to the Commission regarding requests for access:
  - 1. Access to a corner lot should be permitted only from the street of lesser classification or lower average daily

traffic, except as otherwise specified herein.

- 2. Access to streets shall be provided to lots by means of shared access (alleys or shared driveways), frontage access drives, or direct access (non-shared driveways). The number and location of access points shall be in accordance with Table 3.3 and measured as shown in Figure 3.3.4.
- 3. Exceptions for local streets. Minimum separation distance may be reduced, provided that, if approved by the City Engineer, the following conditions exist, based on commonly accepted and applied traffic engineering principles: shared access is not possible; exceptional topographic or site conditions exist at the

driveway location (such as in-place utility or drainage features) which would make strict application of the standard exceptionally and/or practically difficult or unduly harsh; application of this Subsection would conflict with other provisions of these regulations; and where the reduction would not constitute a threat or danger to the safe and efficient flow of traffic.



Figure 3.3.4 Measuring Driveway separation

| Table 3.3 Access Management Criteria (Notes)                 |                                                                                                         |                          |                                     |                                          |  |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|------------------------------------------|--|
|                                                              | Number of accesses permitted                                                                            | Minimum required spacing |                                     |                                          |  |
| Use and Street Type                                          |                                                                                                         | from<br>intersection     | between<br>driveways<br>on same lot | between<br>driveways on<br>separate lots |  |
| Arterials regardless of use                                  | 1 access for lots with street frontage $< 600 \text{ ft}^{(1)}$                                         | 250 ft                   | 250 ft                              | 250 ft                                   |  |
| Non-residential and<br>Multi-family uses on<br>Collectors    | 1 access for lots with street frontage $<300 \text{ ft}^{(1)}$                                          | 200 ft                   | 150 ft                              | 150 ft                                   |  |
| Single-family dwellings on Collectors                        | 1 access for lots with street frontage $\leq$ 125 ft <sup>(1)</sup>                                     | $200 \text{ ft}^{(2)}$   | 50 ft                               | 150 ft                                   |  |
| Non-residential and<br>Multi-family uses on<br>Local Streets | 1 access for lots with street frontage $<125$ ft $^{(1)}$                                               | 150 ft                   | 100 ft                              | 75 ft                                    |  |
| Single-family dwellings<br>on Local Streets                  | 1 access per lot with street frontage $<100$ ft or<br>2 access per lot with street frontage $\le100$ ft | 150 ft <sup>(2)</sup>    | 50 ft                               | 10 ft                                    |  |

<sup>1</sup> Lots with greater street frontage may have a second driveway, provided that the Commission may approve additional driveways based on trip generation or topography, and it is determined that the impact to traffic safety and movement on the street will be minimal.

 $^{2}$  A corner lot abutting two (2) local streets may have a driveway with less than the above required distance from the intersecting street, if, in the opinion of the City Engineer, the driveway will not adversely affect traffic safety and movement on the streets.

- 4. Access Easements. In the subdivision of property, the Commission may require shared access easements or other conditions that require multiple lots to have shared access to arterials or collector streets such as through the use of alleys, shared driveways, or frontage or access roads. Such requirements shall be considered for both residential and non-residential subdivisions where application of the access spacing standards of this Subsection would prevent direct access along arterials and collector streets. Access roads should be used only when they can be designed properly to provide safe and efficient access for properties.
  - a. Shared access easements should be provided wherever it is possible to construct a continuous access drive or alley connecting one street to another. In such cases, the access drive or alley shall be constructed by the developer and may be considered for maintenance by the City. Where it is not feasible to create such an easement, the Commission may require a private access easement as described below.
  - b. Where private access easements are used, the subdivision plat shall state that the transfer of lots shall be subject to the provision of such easements, which shall provide for a guaranteed, unrestricted, right of access to all other owners providing such easements and that the owners of lots subject to private access easements shall be required to execute an agreement specifying responsibility for construction and perpetual maintenance of the easements and drives in accordance with the approved Access Plan. The agreement shall specify that the parties thereto shall

hold the City harmless from liabilities resulting from unsafe conditions on private access easements. Copies of the agreements shall be filed with the City Clerk. Construction on private access easements shall not be commenced until all agreements are filed. Copies of all subsequent amendments to the agreements shall also be filed with the City Clerk.

- 5. At access points, adequate throat length shall be provided for stacking space, as specified in the Public Works Manual. The minimum length may be increased, provided the City Engineer finds that anticipated traffic volumes and commonly accepted and applied traffic engineering principles justify the need for longer, controlled throat length.
- 6. Acceleration and Deceleration Lanes, Storage and Turn Lanes.
  - a. Acceleration Lanes for Non-residential Uses. In instances of unusual topography or for traffic safety considerations, the City Engineer may require the construction of an acceleration lane for non-residential uses. The length of taper and total length shall be determined based on commonly accepted and applied traffic engineering principles.
  - b. Deceleration Lanes. Approval of access to an arterial or a collector may be conditioned upon construction of a deceleration lane as provided in the Public Works Manual. The minimum dimensions of the deceleration lane may be reduced, provided that, it is determined by the City Engineer that, the following conditions exist, based on commonly accepted and applied traffic engineering principles: exceptional topographic constraints or unusual site conditions at the driveway location (such as in-place utility or

drainage features) which would make strict application of the standard exceptionally and/or practically difficult or unduly harsh; and the reduction would not constitute a threat or danger to the safe and efficient flow of traffic.

- c. Left-turn storage lanes. Approval of access to an arterial or to a collector may be conditioned upon the provision of a left-turn storage lane. The requirement and design of each storage lane, including the paved approach, bay, and departure tapers, shall be determined from the recommendations of a traffic study and approved by the City Engineer based on commonly accepted and applied traffic engineering principles.
- d. Turn Lanes on Collectors and Local Streets. Right and left turn lanes at intersections may be required by the City Engineer based upon existing or required traffic studies. Such lanes shall be accommodated in the dedication of additional right-of-way widths on existing streets or in the planned right-of-way of proposed streets. Design requirements, including width and storage length, shall be determined from the recommendations of the applicable traffic study and approved by the City Engineer based on commonly accepted and applied traffic engineering principles. Continuous two-way left-turn lanes shall be discouraged and a median shall be provided to control access between intersections on collector streets.

# §3.4. Sidewalks

Sidewalks shall be provided on both sides of streets in high density residential developments and any non-residential or mixed-use developments. Sidewalks shall be required on only one side of streets in low density and medium density residential developments. However, in medium density residential development, the Commission may require sidewalks on both street sides when the development is located within <sup>1</sup>/<sub>4</sub> mile of a school, place of assembly, park, transit stop, or shopping area. This distance shall be measured along the connecting streets (and/or off-street pedestrian ways) forming the shortest route from the development site. Sidewalks shall not be required in residential development in which the average lot size is greater than 30,000 square feet.

The Commission may modify or waive these requirements where it finds that topography or other constraints would make such sidewalks impractical or undesirable. Sidewalks shall be designed and constructed in accordance with the Public Works Manual.

- 3.4.1. A planting strip as required in the Manual shall be provided between the back of curb and sidewalk, except where the Commission determines that topography; tree preservation or conservation; right-of-way characteristics; or other conditions dictate that the planting strip requirement be modified.
- 3.4.2. Pedestrian ramps in accordance with the requirements of the American Disabilities Act (ADA) shall be provided at intersections of streets requiring sidewalks.
- 3.4.3. The width of sidewalks along culs-de-sac in residential subdivisions may be reduced to four (4) feet.
- 3.4.4. Culs-de-sac within medium or higher density residential subdivisions or districts may be required to provide a permanent pedestrian passage to adjacent streets. An easement of at least twelve (12) feet in width shall be provided.

Design of the passage shall be as approved by the City Engineer.



Figure 3.4.3 Pedestrian passage between cul-de-sacs

# §3.5. Blocks and Lots

- 3.5.1. Length and Width of Blocks
  - Blocks shall not exceed 1,320 feet in length and shall be wide enough to allow two (2) tiers of lots of appropriate depth, except where abutting upon major streets, limited access streets, or railroads, or where other situations make this requirement impracticable.
  - 2. One or more improved pedestrian passages, not less than ten (10) feet in width, shall be provided and entirely cross any block that is more than 800 feet long.
  - 3. Blocks shall be laid out with special attention given to the type of use contemplated and requirements of <u>§3.3</u> <u>Access Management</u>.
  - 4. Blocks intended for commercial or industrial use shall be designed specifically for such use, with consideration of off-street loading and unloading, and off-street parking facilities, and access thereto.
- 3.5.2. Lots
  - 1. No building lots shall be platted in areas subject to flooding, or in areas which for other reasons are unsuitable for such use.
  - 2. The size, shape and orientation of lots shall be appropriate for the location of the proposed subdivision and for the type

of development contemplated, and shall conform to the following:

- a. Every lot shall abut on a dedicated public street unless specifically exempted by the Zoning Ordinance.
- b. Double-frontage lots shall be avoided when practical. Double frontage lots will be permitted only where necessary to provide separation of residential development from major streets or to overcome specific disadvantages of topography and orientation. A planted buffer at least ten (10) feet wide and across which there shall be no right of access shall be provided along the line of lots abutting such major street or disadvantageous use.
- c. Reverse frontage lots shall be avoided in blocks platted exclusively for residential use.
- d. Lot lines shall generally be perpendicular to the street except on curves where they may be radial.
- e. Lots shall meet or exceed the area requirements of the applicable County Health Department. Within the Subdivision Jurisdiction limits and outside the municipal limits, the size and shape of lots shall be such as the Commission deems appropriate for the type of development contemplated. Within the city limits, all lots shall comply with the minimum area and dimensional standards of the Zoning Ordinance. The Commission may impose greater requirements if it finds that a proposed subdivision, though meeting minimum zoning requirements, would impose an undue burden on the City in furnishing public services to the area.
- 3. Flag lots shall not be permitted.
- 4. Where easements for public utilities, storm or sanitary sewers are

contemplated, the lot lines shall be located in such manner as to facilitate the construction of such improvements and the maintenance thereof.

5. When land is subdivided into parcels larger than normal, building lots shall be designed so as to allow for future resubdivision and extension of future streets.

# **§3.6.** Building Restrictions

No final plat of land within the jurisdiction of the Zoning Ordinance shall be approved unless the building restrictions to be established conform with the minimum zoning requirements.

# §3.7. Public Uses

Wherever a park, neighborhood recreational space, school site, or other areas for public use shown on an official map or plan adopted by the Commission is located in whole or in part within the proposed subdivision, the Commission shall seek to secure reservation of the necessary land for such use. Such reservation shall remain in effect only during the duration of the preliminary proposal to afford the appropriate government agency the opportunity to coordinate its acquisition of such area with the development of the proposed subdivision.

#### §3.8. Erosion Control Plan

The project engineer shall submit for approval an erosion control plan with the preliminary plat application. This plan shall denote proposed locations for erosion control measures to be used during construction and maintained until such time as all areas have been stabilized. The erosion controls shall be in place and shall be inspected and approved before actual construction begins. Where erosion problems arise after completion of construction, the City Engineer may require corrective measures be installed before final acceptance of subdivision by the City and release of surety. Erosion control measures shall be in accordance with City Ordinance #1788 Erosion and Sedimentation Control, as amended.

# §3.9. Easements

Upon recommendation of the City Engineer, the Commission may require public easement for poles, wires, conduits, storm and sanitary sewers, gas and water lines, and similar public services and utilities. Such easements shall not exceed twenty (20) feet in width unless additional area is needed, and shall as far as possible be centered on lot lines.

- 3.9.1. Easements shall not be less than ten (10) feet in width, including five (5) feet on each side of a shared lot line. Where there exists a storm water ditch, creek or any other such watercourse, the easement shall be of sufficient width that such watercourse may be installed and maintained efficiently, minimum ten (10) feet. The location of any storm water ditch, creek or watercourse shall not be changed without the approval of the Commission upon recommendation of the City Engineer.
- 3.9.2. Easements shall be required in all drainage ways including, but not limited to, swales, ditches, culverts or storm drainage pipe. Required width shall be in accordance with commonly accepted engineering practices as approved by the City Engineer.

#### §3.10. Street and Subdivision Names

- 3.10.1. Street names for all subdivision plats shall be subject to approval of the Commission.
- 3.10.2. Subdivision names for plats shall be subject to the approval of the Commission and shall not duplicate either materially or phonetically the name of any plat, street, development or

subdivision already recorded in the City, in any adjacent city or county properties in the immediate vicinity of said proposed subdivision.

#### §3.11. Private Subdivisions

- 3.11.1. Improvements within proposed private subdivisions and condominium subdivisions shall meet regular subdivision standards and the private status shall not be effective nor shall the subdivision be legal until final plat recording.
- 3.11.2. A gate may be established after construction to limit access.
- 3.11.3. The private or condominium status of the subdivision shall be clearly stated on the recorded final plat.
- 3.11.4. As long as the subdivision maintains its private or condominium status, all private streets, structures, and drainage shall be maintained by the developer and/or property owners. This shall be clearly stated to those who purchase a parcel(s) within the subdivision and shall be stated in writing on each property deed or conveyance of any interest therein. The procedure for accomplishing this shall be outlined in a letter by the owner(s) and/or developer to the City Clerk.
- 3.11.5. A proposal for a private subdivision or condominium subdivision shall not be considered or approved if the proposed development prevents access to or "land locks" adjacent property.
- 3.11.6. If a private subdivision or condominium subdivision is recorded in the County Probate Office and all of the property owners at some future date desire to eliminate it and substitute in its place a regular subdivision with city-maintained streets, the owners must petition the Council for tentative approval. If the

Council gives tentative approval of the petition, the owners shall submit subdivision plans to the Commission including improvements and repairs that are required to be made by the owners according to this Section and other City specifications effective on the date of the petition. The subdivision shall then be subject to the procedures for approval of a subdivision as contained in Article 5 Procedures.

#### Article 4 IMPROVEMENTS

#### §4.1. General Requirements

All improvements required under these regulations shall be constructed in accordance with the specifications and under the supervision of the City Engineer and to its satisfaction. All sewers, drains, water and gas lines, and other underground structures shall in general not be located under the roadway and shall be installed before streets, sidewalks or alleys are paved, with connections to the property line at each lot and permanently marked.

#### §4.2. Roadways and Sidewalks

All roadways and sidewalks shall be constructed in accordance with the Public Works Manual.

#### §4.3. Utilities

4.3.1. Sanitary Sewers. All proposed subdivisions located in the sewer service area, as defined by the applicable County Sewer System or similar agency, shall be provided with sanitary sewerage systems, where feasible, as approved by the County Engineer.

> Sanitary sewers shall be of sufficient size to provide for future extensions to serve all tributary areas. Proposed subdivisions located within service areas of publicly operated sanitary sewer systems shall:

- Be required to install a sanitary sewer system, including collector and lateral lines and necessary appurtenances serving all lots within the proposed development. Such construction shall be in accordance with applicable regulations and specifications as adopted by the Council and/or County Commission; and
- 2. Be required to connect to such sanitary system, which is located adjacent to the

proposed development. If proposed development is not located adjacent to a public sewer, the developer shall cap the system in accordance with regulations and specifications as adopted by the Council and/or County Commission.

- 4.3.2. Water System. All subdivisions shall be provided with water distribution systems as approved by the City Engineer and the applicable Water Authority.
- 4.3.3. Fire Hydrants. The number, location and spacing of fire hydrants shall be consistent with the following guidelines, though such may be modified upon a recommendation by the Fire Marshal:
  - 1. Fire hydrant spacing shall not be greater than 500 feet.
  - 2. Single-family dwellings shall not be located further than 400 feet from a fire hydrant. Non-residential lots shall be located no further than 250 feet from a fire hydrant.
  - 3. Hydrants shall be placed in the planting strip between the curb and sidewalk. In the absence of a planting strip, the location shall be as approved by the Fire Marshal.
- 4.3.4. Above-ground and Underground Utilities
  - 1. Underground utilities are required in all high density residential and mixed-use developments.
  - 2. For all other developments, aboveground utilities shall be permitted and shall be located in mid-block alleys or utility easements.
  - 3. Utility poles shall be installed as specified by the City Engineer and utility company.
- 4.3.5. Utility appurtenances where required, such as transformer installations, sewage pumping stations, water tanks, pressureregulating stations, and other similar

facilities shall be located and installed as approved by the City Engineer or designated utility authority.

# §4.4. Storm Water, Drainage and Grading

The design and construction of subdivisions shall be in accordance with the applicable requirements of Article II Erosion and Sedimentation Control and Article III Flood Damage Prevention in Noncoastal Communities in Chapter 5.5 of the City of Vestavia Hills <u>Code of Ordinances</u> and the following:

- 4.4.1. Storm Water Detention
  - 1. Developments, which produce an increase in the amount of storm water runoff, may be required to construct storm water detention or retention ponds or other approved types of detention/retention devices.
  - 2. When required, the developer shall submit detailed engineering plans to the City Engineer including historical runoff, developed runoff, retention/detention basin details, method of discharge, and other information as required for review. The developer shall also include the method of maintenance for the detention/retention pond after the development is completed.
- 4.4.2. All subdivisions shall be provided with adequate storm sewers. Storm sewers shall be of sufficient size to provide for future extensions to serve all tributary areas.
- 4.4.3. Land within the hundred-year floodplain shall be clearly marked on all subdivision plats. Such areas shall not be developed in any way, which reduces the floodplain's capacity to store and convey stormwater. Areas subject to periodic flooding or excessive flows or surface runoff will not be acceptable for development unless the applicant makes

necessary provisions to eliminate such flooding.

- 4.4.4. All lots shall be graded in accordance with a grading plan approved by the City Engineer, which plan shall provide the following minimum requirements and as otherwise required by the Public Works Manual, unless more stringent requirements are deemed necessary and so specified by the City Engineer.
  - 1. No lot shall shed channeled surface runoff water on to any other lot, unless such runoff is contained within an easement provided, graded and dedicated for such purpose.
  - 2. No street pavement shall shed surface runoff water on to any lot.
- 4.4.5. No subdivision or part thereof shall shed storm runoff, either as surface runoff or an outfall from storm sewerage structures, on to any adjacent land unless such runoff is contained within an existing drainage easement, ditch, structure or right-of-way. And provided further, that such existing drainage easement, ditch, structure or right-of-way provides outfall to an established drainage channel, as approved by the City Engineer.
- 4.4.6. Where permitted, swales and ditches shall be designed so as not to create hazardous erosion. Well-defined natural drainage swales, which are to be left undisturbed, may be considered by the City Engineer to be utilized without any improvements, provided a drainage easement includes complete drainage way. Where drainage swales are being constructed or where natural drainage ways are disturbed, erosion control measures designed by the subdivision engineer and approved by the City Engineer shall be provided.

4.4.7. Before subdivision construction is begun a bond in an amount determined by the City Engineer, sufficient to cover the cost of drainage ditches and storm sewers shall be posted guaranteeing the completion of the same in accordance with these regulations. See Article 5 for bonding requirements. [Ord. # 236, 1972]

#### §4.5. Markers

The corners of all lots and the beginning and ending of all curves on property lines shall be accurately marked on the ground with onehalf (1/2) inch diameter iron rods at least eighteen (18) inches long driven flush with the surface of the ground.

#### §4.6. Regulatory, Street and Miscellaneous Signs

- 4.6.1. The developer will be responsible for the placement of proper signing of new streets. A signing plan shall be submitted to the City Engineer for approval. Regulatory and warning signs shall be in accordance with Manual on Uniform Traffic Control Devices (MUTCD). Street name signs not in accordance with the MUTCD shall not be maintained by the City.
- 4.6.2. All necessary signing for construction areas shall be the responsibility of the developer.
- 4.6.3. Traffic control devices shall conform to the latest Manual on Uniform Traffic Control Devices.

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#### Article 5 REQUIRED IMPROVEMENTS, BOND

#### §5.1. Improvements

Over the course of the subdivision approval process, a total of four bonds will be required on the part of the Developer to ensure completion of planned public improvements in accordance with city standards and to cover maintenance of the improvements for a set amount of time. This section outlines the bonding requirements and how they coincide with the subdivision platting process. All bonds filed with the City are subject to an annual review and potential increase based on current costs for construction labor and materials as determined by the City Planner and City Engineer.

# §5.2. Bond and Surety, Amount and Release

- 5.2.1. Subdivision Performance Bond Upon approval of preliminary plat but prior to construction, the applicant shall execute a Subdivision Agreement as provided in Appendix B and file such Agreement with the City Engineer. A Subdivision Performance Bond shall be required to ensure the fulfillment of such agreement and shall be in the form of a Bond approved by the City Engineer, or designee. Said bond amount shall be set at 115% of the estimated cost of all public improvements.
- 5.2.2. Subdivision Maintenance Bond Concurrently with the Subdivision Performance Bond, a Subdivision Maintenance Bond shall also be filed with the City Engineer. Said bond amount shall be set at 15% of the estimated cost of all public improvements and shall extend for a period of three (3) years.
- 5.2.3. Final Wearing Surface Performance Bond Once construction is substantially complete, a binder course of pavement has been installed and prior to the recording of the Final Plat, the applicant

shall file a Final Wearing Surface Performance Bond in an amount equivalent to 125% of the cost of the remaining public improvements. Said bond shall be in the form of a Bond approved by the City Engineer, or designee. A schedule of estimated costs for all items to be bonded shall be submitted by the project engineer for review by the City Engineer. This schedule shall clearly describe the items, quantities, unit cost and total cost of the remaining improvements. Following successful filing of said Final Wearing Surface Performance Bond, if all constructed public improvements constructed to date have been inspected and approved by the City Engineer, the City Engineer may issue a written release of the previously filed Subdivision Performance Bond.

5.2.4. Final Wearing Surface Maintenance Bond The Final Wearing Surface Performance Bond and the Subdivision Maintenance Bond shall be retained in the Office of the City Engineer until all inspections of the constructed improvements are complete, the Council accepts dedication by way of adoption of a Resolution and a Final Wearing Surface Maintenance Bond has been filed.

> The amount of the Final Wearing Surface Maintenance Bond shall be equivalent to 10% of the previously filed Final Wearing Surface Performance Bond and shall be in the form of a Bond approved by the City Engineer, or designee. Upon the approval of the City Engineer of the submitted Final Wearing Surface Maintenance bond, the City Engineer shall issue a written release of the previously submitted Subdivision Maintenance Bond and the Final Wearing Surface Performance Bond.

The City Engineer shall secure from all applicants a statement in which said applicant shall agree to maintain all improvements in good repair for a period of one (1) year after the acceptance of such improvements by the Council.

The subdivider shall keep such Final Wearing Surface Maintenance bond in full force and effect for the duration of the period in which it is required. Following that one year, the applicant shall obtain the approval of the City Engineer in order to release said Final Wearing Surface Maintenance bond.

#### §5.3. Inspections and Acceptance

The City Engineer shall regularly supervise inspection for defects in the construction of required improvements. If the City Engineer finds, upon inspection, that any of the required improvements have not been constructed in accordance with the City's construction standards and specifications, the applicant shall be responsible for completing the improvements. All testing shall be the responsibility of the applicant and shall be done by a testing laboratory, approved by the city, and approved by the City Engineer.

- 5.3.1. Upon completion of the improvements, the applicant shall file with the City Engineer a statement stipulating the following:
  - 1. That all required improvements are complete;
  - 2. That the improvements are in compliance with the minimum standards specified by the City for their construction;
  - 3. That the applicant knows of no defects from any cause in those improvements; and
  - 4. That the improvements are free and clear of any encumbrance or lien.

5.3.2. The applicant shall also file with the City Engineer an agreement dedicating said improvements to the City. Upon completion of the required improvements, the City Engineer shall file with the City Clerk a statement either certifying that those improvements have been completed in the specified manner, or listing the defects in those improvements. The Council may, at its discretion, accept the dedication of any part of the required land and improvements, provided that all statements and agreements specified above have been received for that portion of the subdivision. If the City Engineer has certified that the required improvements are complete and free from defect, then upon receipt of all the statements and agreements detailed above, the Council shall accept the dedication of the specified land and improvements.

#### Article 6 PROCEDURES

#### §6.1. Preliminary Plat

- 6.1.1. Before any land is subdivided or any subdivision is recorded, the subdivider or his agent shall file a preliminary plat of said subdivision with the City Clerk requesting approval by the Commission of the proposed subdivision.
- 6.1.2. The preliminary plat, prepared in accordance with the requirements set forth in the preceding Article 3 and in this Article, shall be filed with the application to the Commission prior to the completion of final surveys of streets and lots and before the start of any grading or construction work upon the proposed streets and before any map of said subdivision is recorded and preferably before any map is made in form suitable for recording. The Commission shall determine whether preliminary plat is in proper form and shall not receive and consider such map as filed until it is submitted in accordance with the requirements hereof.
- 6.1.3. Pre-Application. Whenever the subdivision or development of land is proposed, the subdivider or developer is urged to consult early and informally with City Staff. In this way the developer can obtain the assistance of the City Engineer and City departments, and facilitate the subsequent preparation of the subdivision plat or development plan.
  - 1. The subdivider may present a lot layout sketch. This sketch may be freehand, but shall be drawn to scale. The information submitted should include the location of the proposed subdivision in relation to the surrounding area; existing features such as highways; drainage facilities; lakes, woodlands, other significant natural and built features; the general topography of the site; and the proposed

pattern of streets, lots, and blocks. The lot layout sketch should be submitted to the Commission. Copies may be distributed to other City departments for comment.

- 2. Although not required, the lot layout sketch is included in the review process to allow the subdivider and local officials to discuss the proposed subdivision in an informal setting, and to deal with issues and correct errors and/or problems during the early stages of the project.
- 3. Upon receiving favorable consideration, the applicant may proceed to prepare the preliminary plat for the subdivision. Neither the applicant nor the Commission shall be bound by the preapplication review; and it is expressly understood that favorable consideration by the Commission at the pre-application stage of the process shall not be construed as preliminary or tentative approval, nor bind either party.
- 6.1.4. Application Requirements. The applicant shall, in addition, submit four (4) full construction sets of the preliminary plat, one (1) vicinity sketch, fifteen (15) full size clean "lot line" prints (folded to a size approximately 8 1/2" x 11") and one (1) copy of lot line print sized to  $8 \frac{1}{2}$ " x 11". Said copies shall be submitted to the City Clerk at least twenty (20) days prior to the regular scheduled meeting of the Commission. An electronic copy in portable document format (PDF) of all required materials shall also be provided. The Commission shall forward one (1) copy to the City Engineer who shall submit written recommendations to the Commission by the time of its initial hearing on said plat.
- 6.1.5. Information on Plat. Refer to Appendix A for submittal requirements.

- 6.1.6. Building Restrictions. If the proposed subdivision does not lie within the force and effect of an existing Zoning Ordinance, the preliminary plat shall be accompanied by a plan indicating the proposed use of the lots and by the instrument to be used in establishing restrictions.
- 6.1.7. Vicinity Sketch. A vicinity sketch or key map at a scale not more than 400 feet to the inch shall be shown on or accompany the Preliminary Plat. This map shall show all existing subdivisions, streets and tract lines of acreage parcels, together with the names and addresses of the record owners of parcels of all land immediately adjoining the proposed subdivision. It shall also show how streets and alleys may in the proposed subdivision may connect with existing and proposed street and alleys in neighboring subdivisions or undeveloped property, to produce the most advantageous development of the entire neighboring area.
- 6.1.8. Fees and Notice
  - 1. To partially defray costs of filing said application, notifying interested parties, investigation, and holding a hearing on a preliminary plat, a fee, as may be set from time to time by the Council, shall be paid to the City by the applicant at the time of filing of the application, together with the cost of giving legal notice.
  - 2. Preliminary plats shall be considered by the Commission at a public hearing. Notice of the time and place at which a preliminary plat will be considered shall be sent to the subdivider and to the owner(s) of the land. The owners of all abutting property shall also be notified by certified mail of the hearing at least fourteen (14) days prior to such hearing.
- 6.1.9. Preliminary Plat Approval

- 1. The Commission review of this Preliminary Plat shall be governed by the procedure set forth in Title 37, Chapter 16, Article 3, Section 799, of the <u>Code of</u> <u>Alabama</u>.
- 2. Approval of the preliminary plat is authorization that the applicant may proceed with appropriate applications for the staking of streets and lots in preparation for construction of improvements and for final platting pursuant to the bonding requirements set forth in Article 5 Required Improvements; Bonding.
- 3. Tentative approval of the Commission is revocable and is to be considered only as approval of the design, with the understanding that the Commission, the City Engineer, Water Authority, and the County Health Department will examine the grades of streets, the types of improvements, the layout of drainage and sewerage system and the water system, and may modify any engineering or construction details submitted by the subdivider whenever required for the protection of the public interest.
- 4. Before starting construction, necessary arrangements must be made between the applicant and the City Engineer for adequate laboratory and construction inspection to insure that the proposed improvements comply with the requirements of the City and County.
- 5. Tentative approval shall be effective for twelve (12) months unless extended by the Commission. Subdivisions, the Final Plats of which are not submitted within this time limit, must be re-submitted for tentative approval as new subdivisions; provided, however, that if a Final Plat of a part of the subdivision shall have been submitted and approved within the twelve (12) month period, the tentative approval of the Preliminary Plat shall

automatically be extended for a period of twelve (12) months from the date of approval of such Final Plat of part of the subdivision, and the same automatic extension shall govern in subsequent cases of submission of a Final Plat of part of the subdivision; provided, further, that at any time after the expiration of the initial twelve (12) month period during which the Preliminary Plat approval is effective, the Commission may notify the subdivider of changes it will require to meet new or changed conditions. A corrected Preliminary Plat with all conditions fulfilled shall be submitted prior to the construction or installation of any improvements.

6. Upon tentative approval of a Preliminary Plat by the Commission, the Commission shall notify the subdivider by separate letter of such approval.

# §6.2. Engineering Plan

The purpose of the Engineering Plan is to provide information, including drawings and specifications, for the construction or installation of the improvements. To this end, the subdivider should consult with the City Engineer and with other officials and agencies concerned with construction or installation of improvements. The Engineering Plans may include only the portion of the approved Preliminary Plat, which the subdivider proposes to develop at the time.

6.2.1. After approval of the Preliminary Plat and prior to the construction or installation of any of the improvements, the subdivider shall prepare and submit to the City Engineer four (4) sets of black or blue line prints of the Engineering Plan. The Engineering Plan shall be reviewed by the appropriate authorities, and the review shall take into consideration, in addition to the requirements set out in these regulations, conformance with the applicable standards and regulations of the City and of other agencies concerned.

- 6.2.2. The Engineering Plan shall show accurately, and in sufficient detail for their construction or installation, the design of all proposed improvements in the subdivision. At a minimum it shall provide the following information:
  - 1. Profiles showing existing ground surface and proposed street grades, including extensions for a reasonable distance beyond the limits of the proposed subdivision.
  - 2. Typical cross sections of the proposed grading, roadways, and sidewalks; and profiles of all sanitary and storm sewer lines.
  - 3. The location, sizes, and invert elevations of existing and proposed sanitary sewer and drainage facilities; the location and sizes of existing and proposed water lines; and any other data relating to utilities and drainage facilities that may be necessary to complete their installation.
  - 4. The location and results of soil percolation tests if individual sewage disposal systems are proposed.
  - 5. The Engineering Plan shall be signed and sealed by a Registered Engineer or Land Surveyor.
  - 6. The City Engineer shall notify the subdivider of the approval or disapproval of the Engineering Plan. In the case of approval, specific changes, if any, required to be made shall be stated. In the case of disapproval, the grounds for such disapproval shall be stated.

#### §6.3. Final Plat

The purpose of the final plat, together with all the information and attendant items required herein, is to provide an accurate record of street and property lines and other elements being established on the land, and the condition of their use. The final plat shall conform substantially to the preliminary plat as approved. All inspections and testing must be completed and the construction approved by the City Engineer prior to the final plat being placed on the agenda for Commission action.

- 6.3.1. Application Requirements. The final plat shall be drawn upon mylar film, on sheets measuring no more than twentyfour (24) by thirty-six (36) inches; and at a scale of one inch equals one hundred (100) feet or other appropriate scale as approved by the City Engineer. Where necessary the final plat may consist of several sheets, accompanied by an index sheet showing the entire subdivision. The original and fifteen (15) black and white prints shall be submitted to the City Engineer at least fifteen (15) business days prior to the date on which the Commission will consider the Final Plat.
- 6.3.2. Information on the Plat. Refer to Appendix A for submittal requirements.
- 6.3.3. The Final Plat shall also be accompanied by the following, as appropriate:
  - 1. A copy of the protective covenants, if any, as they are to be recorded. If the subdivision contains common open space, retention ponds or other amenities for the use of the residents of the subdivision, provisions shall be made for a homeowner or residents association or other means for maintaining the common open space or other amenity.
  - 2. A statement signed by the City Engineer that the subdivider has complied in full with one of the following alternatives:

- a. All streets shown on the plat have been graded and improved; and all sewage, water, and drainage facilities have been installed in accordance with the requirements of these regulations, with the action of the Commission in giving tentative approval to the subdivision, and in accordance with City specifications.
- b. A performance bond, approved as to form by the City Attorney and with surety satisfactory to the Commission, securing the design and installation of these improvements, utilities, and facilities within the period fixed by the Commission.
- 3. Receipt of a certificate from a Registered Land Surveyor that permanent monuments of suitable size and material have been placed for each lot corner in the subdivision, and that a satisfactory survey defines such permanent monuments in relation to located section corners or fractional corners of the Survey of Public Lands.
- 6.3.4. Final Plat Approval
  - Final approval of the plat will be given upon (1) fulfillment of all conditions attached to, and in conformance with, the Preliminary Plat; and (2) certification of the proper installation of the improvements and compliance with these Regulations. The Commission shall act upon the Final Plat within thirty (30) days or the Final Plat shall be deemed to have been approved.
  - 2. Approval of the Final Plat by the Commission shall not be deemed to constitute or affect an acceptance by the public of the dedication of any street or other proposed public ways or lands shown on the Final Plat. Acceptance of dedicated lands by the Council must occur prior to recording the Final Plat.

- 3. Approval of the Final Plat by the Commission shall be null and void if the plat is not recorded in the office of the Probate Judge within sixty (60) days after the date of approval, unless application for an extension of time is made in writing during said sixty (60) day period to the Commission and granted.
- 4. If the plat is disapproved the ground for disapproval shall be stated upon the records of the Commission.
- 6.3.5. Fees and Notice
  - 1. To partially defray costs of filing said application, notifying interested parties, investigation, and holding a hearing on a final plat, a fee, as may be set from time to time by the Council, shall be paid to the City by the applicant at the time of filing of the application, together with the cost of giving legal notice.
  - 2. Notice by certified mail to abutting lot owners shall be mailed ten (10) days prior to the hearing on the final plat.

#### §6.4. Combined Preliminary and Final Plat

A subdivider may submit a combined request for both Preliminary Plat and Final Plat approval. In such cases all requirements for both Preliminary and Final Plat approval must be met.

# §6.5. Subdivision, Resubdivisions, and Exceptions

- 6.5.1. Approval Required. All subdivisions shall be subject to the provisions of these Regulations and subject to approval in accordance with this Section. No development activity or sale, rental, or lease of land subdivided shall proceed without written approval in accordance with these Regulations.
- 6.5.2. Exceptions to Required Approval. Notwithstanding the preceding

paragraph, the following subdivisions are exempt from the provisions of these Regulations and from any requirement for approval to subdivide. The City may require documentation to substantiate a claim of exemption.

- 1. Subdivision of land by testamentary or in testate provisions;
- 2. Subdivision of land by court order including, but not limited to, judgments of foreclosure; and
- Subdivision of land, which existed prior to the effective date of these Regulations as a single contiguous parcel and is not within a recorded subdivision and which involves no roadway, drainage, or other public improvements into no more than two parcels, including remnant parcels.
#### PRELIMINARY PLAT REQUIREMENTS

The Preliminary Plat shall be drawn at a horizontal scale of 100 feet or less to the inch and at a vertical scale of twenty (20) feet or less to the inch and shall include the following:

- 1. The proposed name of the subdivision.
- 2. The name and address of the owner and subdivider of the plat and of any mortgage or holder of any encumbrance on the property to be subdivided; also, the name and address of the designer of the plat, who shall be a registered architect, engineer, landscape architect or land surveyor, licensed to practice in the State of Alabama.
- 3. North point, scale and date.
- 4. The boundary line (accurate in scale) of the tract to be subdivided, accurately located with reference to established Section, Township and Range lines.
- 5. Contours with intervals of five (5) feet or less, referred to sea level datum.
- 6. The names of adjacent subdivisions, or the names and addresses of recorded owners of adjoining parcels of unsubdivided land.
- 7. The location, widths, and names of all existing or platted streets or other public ways within or adjacent to the said tract, existing permanent buildings, railroad right-of-way and other important features, such as section lines, political subdivisions or corporate lines.
- 8. Existing sewers, water mains, culverts or other underground structures within the said tract and immediately adjacent thereto with pipe sizes, grades and locations identified.
- 9. All parcels of land intended to be dedicated for public use, together with the purpose and the conditions or limitations of such dedications, if any.
- 10. The layout, names and widths of proposed streets, alleys and easements. Plan and profile drawings of each street with tentative grades.
- 11. The cross section of proposed streets showing the width of roadways, location and width of curbs and sidewalks, and the location and size of utility mains.
- 12. Plan and profile drawings of proposed sanitary and storm water sewers, with grades and pipe sizes indicated.
- 13. The layout, number and approximate dimensions of proposed lots.
- 14. The placement of necessary extension of public utility installations, including:
  - Electricity, water, gas and telephone services. Said plans to be approved, in writing, by the public utility company concerned.
  - Proposed sewer line and/or other sewage disposal facilities to be approved by the County Sanitary Engineer and/or the County Health Department.
- 15. Restrictions and limitations on the use of land and improvements to be incorporated in and made a part of said plat or subdivision. Where the plat of land falls within the force and effect of a Zoning Ordinance, these restrictions and limitations must conform with such Zoning Ordinance.

16. A statement that any lot transferred will have a minimum width, substantially the same as those of the platted lots, and that only one (1) principal building will be permitted on any such lot unless otherwise permitteby the Zoning Ordinance.

#### FINAL PLAT REQUIREMENTS

The Final Plat shall be drawn to the scale of one (1) inch equal to 100 feet or less, and shall show:

- The boundary lines with accurate distance and bearings; the exact location and width of all existing and recorded streets intersecting the boundary of the tract. All survey data shall be according to the *Minimum Technical Standards for Land Surveying in the State of Alabama*, latest edition, as published by the Alabama Society of Professional Land Surveyors. At least two (2) corners of the subdivision shall be referenced to the State Plane Coordinate System if an established and proven point is within one half (<sup>1</sup>/<sub>2</sub>) mile of the subdivision.
- 2. Primary control points approved by the City Engineer or County Engineer, as appropriate; or description and ties to such control points; to which all dimensions, angles, bearings, and similar data on the plat shall be referred.
- 3. An accurate location of the subdivision in reference to the real estate records of Jefferson County.
- 4. The exact layout including:
  - Streets and alleys, with their names and numbers.
  - The length of all arcs, radii, internal angles, points of curvature, length and bearing of the tangents.
  - All easements for rights-of-way provided for public services or utilities and any limitations of the easements.
  - All lot numbers and lines with accurate dimensions in feet and hundredths, and with bearings and angles to street and alley lines.
- 5. The accurate location, material and approximate size of all monuments and markers.
- 6. The accurate outline of all property which is offered for dedication for public use with the purpose indicated thereon.
- 7. Building setback lines.
- 8. Private restrictions:
  - Boundaries of each type of use restrictions.
  - Other private restrictions for each definitely restricted section of the subdivision.
- 9. Proposed name of the subdivision.
- 10. Names and addresses of the owner and subdivider of the plat and of any mortgagee or holder of any encumbrance on the property to be subdivided.
- 11. North point, scale and date.
- 12. Certificate of approval by the Planning Commission.

#### ACCESS PLAN REQUIREMENTS FOR NON-RESIDENTIAL AND MULTI-FAMILY USES

The Access Plan shall be drawn to a scale of not less than one (1) inch equals fifty (50) feet and shall include:

- 1. driveway locations and length of lot lines abutting streets;
- 2. distances from adjacent intersections;
- 3. access sight distance relative to vertical or horizontal curves and the normal operating speed/grade/lane configuration of the street;
- 4. the area proposed for street construction on the right-of-way, including the width and length of driveways and acceleration/deceleration lanes, radius of curves, typical pavement section, type of concrete curbs and relocations of sidewalks;
- 5. location of existing overhead and underground utilities, fire hydrants, and drainage structures, and proposed utility relocations;
- 6. right-of-way and street improvements proposed for dedication to the City; and
- 7. a traffic-control plan, which shall include signage to be maintained by the contractor during construction.

#### ACCESS PLAN REQUIREMENTS FOR SINGLE-FAMILY DWELLINGS AND DUPLEXES

The Access Plan shall be drawn to a scale of not less than one (1) inch equals fifty (50) feet and shall include:

- 1. the distance of the proposed driveway from lot lines, abutting streets and driveways on abutting lots;
- 2. the driveway width and radius of driveway curves; and
- 3. the location of existing utilities, drainage structures, and fire hydrants

#### CERTIFICATES

#### **APPENDIX B-1**

#### THE STATE OF ALABAMA \_\_\_\_\_ COUNTY

The Undersigned (name), Registered Land Surveyor, State of Alabama, and (name), owner(s) hereby certify that this plat or map was made pursuant to a survey and this plat or map is a true and correct maps of lands shown therein and known as (Name of subdivision or resurvey) showing the subdivisions into which it is proposed to divide said lands, giving the length and bearings of the boundaries of each lot and its number, showing the streets, alleys and public grounds, giving the bearings, length, width and name of each street, as well as the number of each lot and block, and showing the relation of the lands to the government survey (or, if the plat is a resurvey of an existing recorded subdivision, "showing the relation of the lands to the survey of (Name of subdivision) as recorded in the office of County Probate Judge in map book (Map Book No.), page (Page No.)") and that iron pins have been installed at all lot corners and curve points as shown and designated by small open circles on said plat or map. Said owner(s) also certifies (certify) that he (she, they, it) is (are) the owner(s) of said lands and that the same are not subject to any mortgage.

Dated \_\_\_\_\_ 20\_\_. (Execution and acknowledgement by Surveyor and Owner(s).

#### **APPENDIX B-2**

The Undersigned (name), Registered Land Surveyor, State of Alabama, and (name), owner(s) hereby certify that this plat or map was made pursuant to a survey made by said surveyor and this said survey and this plat or map were made at the instance of said owner(s); that this plat or map is a true and correct map of lands shown therein and known as (Name of subdivision or resurvey) showing the subdivisions into which it is proposed to divide said lands, giving the length and bearings of the boundaries of each lot and its number, showing the streets, alleys and public grounds; giving the bearings, length, width and name of each street, as well as the number of each lot and block, and showing the relation of the lands to the government survey (or, if the plat is a resurvey of an existing recorded subdivision, "showing the relation of the lands to the survey of (Name of subdivision) as recorded in the office of County Probate Judge in map book (Map Book No.), page (Page No.)"); and that iron pins have been installed at all lot corners and curve points as shown and designated by small open circles on said plat or map. Said owner(s) also certifies (certify) that he (she, they, it) is (are) the owner(s) of said lands and that the same are not subject to any mortgage, except a mortgage or mortgages held by the following mortgage(s): (Name).

Dated \_\_\_\_\_ 20\_. (Execution and acknowledgement by Surveyor, Owner(s), and Mortgagee(s). **APPENDIX B-3** 

#### STATE OF ALABAMA \_\_\_\_\_COUNTY

I, (Name), as Notary Public in and for said County and State, do hereby certify that (Name of Surveyor), whose name is signed to the foregoing certificate as a surveyor, and (Name of owner) whose name is signed to the same as owner (and (Name of mortgagee), whose name is signed to the same as mortgagee), all of whom are known to me, acknowledged before me, on this date, that after having been duly informed of the contents of said certificates, the executed same voluntarily as such individuals (or in any other capacities) with full authority thereof.

Given under my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_.

Notary Public (seal)

#### APPENDIX B-4

Having reviewed this plat, and the associated improvements by the owner for dedication to the City of Vestavia Hills (as secured by bonds), I (Name) as City Engineer, recommend approval and acceptance by the Planning and Zoning Commission, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Having reviewed this plat, and considered the recommendations of the City Engineer, the Planning and Zoning Commission hereby by majority vote, (accepts the plat for recording)(and recommends the City Council accepts the dedications shown thereon), this the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By \_\_\_\_\_, Chairman

#### APPENDIX B-5

BE IT RESOLVED, by the Vestavia Hills City Council that the assent of the body be, and the same hereby is, given to the dedication of the streets, alleys, and public grounds as shown on plat or map of (Title of plat or map), which said plat or map is certified to have been made by (Name of surveyor) as surveyor, at the instance of (Name of owner) as owner, and recommended by the Planning and Zoning Commission and; said plat or map being further identified by a recital of the approval of the City Council signed by \_\_\_\_\_\_, City Clerk, this the \_\_\_\_\_ day of

\_\_\_\_\_, 20\_\_\_.

#### APPENDIX B-6.1:

#### CITY OF VESTAVIA HILLS, ALABAMA SUBDIVISION PERFORMANCE BOND

BOND NUMBER

KNOW ALL MEN BY THESE PRESENTS, THAT WE \_\_\_\_\_\_\_ (hereinafter called the Principal) and \_\_\_\_\_\_\_ (hereinafter called the Surety) are held firmly unto the City of Vestavia Hills, Alabama (hereinafter called the Obligee), in full and just sum of \_\_\_\_\_\_\_ Dollars (\$\_\_\_\_\_\_), lawful money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves, our heirs, administrators, executors and assigns, jointly and severally, firmly by these presents.

| WHEREAS, said Principal has applied to the Obligee for appro    | oval and acceptance of a subdivision known as    |
|-----------------------------------------------------------------|--------------------------------------------------|
| and Obligee has given tentative                                 | approval and acceptance to the said subdivision, |
| provided the Principal constructs the improvements on or before | , in accordance with                             |
| the approved construction plans prepared by                     | and filed with the City Engineer.                |

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal shall promptly and faithfully construct the improvements in accordance with the approved construction plans which are made a part hereof by reference as if set out in here full, and said construction HAS BEEN approved by Obligee, within the time mentioned, then the Bond shall be null and void UPON WRITTEN ACCEPTANCE BY THE CITY; otherwise SAID BOND SHALL remain in full force and effect. The bond SHALL automatically extend without amendment for additional one-year period(s) from the expiration date, or any future expiration date, until all improvements have been constructed in accordance with approved construction plans.

Whenever, the Principal shall be, and is declared by Obligee to be in default under this agreement, the Surety may promptly remedy the default; or shall promptly:

- 1. Complete the improvements, or
- 2. Obtain a bid for submission to Obligee for completing the improvements and upon determination by Obligee and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Obligee and make available as work progresses sufficient funds to pay the cost not to exceed the cost for which the Surety may be liable hereunder, the amount of this bond.

No right of action shall accrue on this bond to or for the use of any persons or corporation other than the Obligee named herein.

SIGNED, SEALED AND DELIVERED THIS \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

| Principal<br>(Company Name) |
|-----------------------------|
| Address                     |
| Telephone Number            |
| Fax Number                  |
| Official Signature          |
|                             |

Surety (Company Name)

| Address            |
|--------------------|
| Telephone Number   |
| Fax Number         |
| Official Signature |

#### APPENDIX B-6.2:

#### CITY OF VESTAVIA HILLS, ALABAMA SUBDIVISION MAINTENANCE BOND

BOND NUMBER.

WHEREAS, said Principal has obligated himself to provide maintenance of the improvements, for said project \_\_\_\_\_\_ for a minimum term of three (3) years after completion of said improvements.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, Principal shall faithfully perform all maintenance required to keep all dedicated improvements in substantially the same condition as that in which it has been approved by the City on the pre-final inspection for a minimum period of three (3) years after said approval or upon completion and acceptance of the asphalt seal wearing course and all covered maintenance items.

Whenever, the Principal shall be, and is declared by Obligee to be in default under this agreement, the Surety may promptly remedy the default; or shall promptly:

- 1. Complete the maintenance of improvements necessary on the date of default, or
- 2. Obtain a bid for submission to Obligee for completing the maintenance and upon determination by Obligee and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Obligee to complete default items and make available as work progresses sufficient funds to pay the cost not to exceed the cost for which the Surety may be liable hereunder, the amount of this bond for any remaining part of the said minimum period or upon completion and acceptance of the asphalt seal wearing course and all covered maintenance items.

No right of action shall accrue on this bond to or for the use of any persons or corporation other than the Obligee named herein.

SIGNED, SEALED AND DELIVERED THIS \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

| Principal<br>(Company Name) |
|-----------------------------|
| Address                     |
| Telephone Number            |
| Fax Number                  |
| Official Signature          |

| Surety         |  |  |
|----------------|--|--|
| (Company Name) |  |  |

| Address            |  |
|--------------------|--|
| Telephone Number   |  |
| Fax Number         |  |
| Official Signature |  |

APPENDIX B-6.3:

#### <u>CITY OF VESTAVIA HILLS, ALABAMA</u> <u>FINAL WEARING SURFACE PERFORMANCE BOND</u>

BOND NUMBER

| WHEREAS, | said | Principal | has | received   | app  | roval | to      | construct | the   | impi  | ovements  | of |
|----------|------|-----------|-----|------------|------|-------|---------|-----------|-------|-------|-----------|----|
|          |      |           | in  | accordance | with | the   | approve | d constru | ction | plans | submitted | by |

WHEREAS, said Principal has obligated himself to install the final wearing surface with approval from the City Engineer. Said installation should not occur earlier than one (1) year after completion of said improvements, or the completion of at least 80% of said subdivision.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal shall promptly and faithfully perform the installation of the final wearing surface, then this obligation shall be null and void; The bond SHALL automatically extend without amendment for additional one-year period(s) from the expiration date, or any future expiration date, until all wearing surface improvements have been constructed in accordance with approved construction plans.

Whenever, the Principal shall be, and is declared by Obligee to be in default under this agreement, the Surety may promptly remedy the default; or shall promptly:

- 1. Complete the installation of final wearing surface, or
- 1. Obtain a bid for submission to Obligee for completing the installation of final wearing surface and upon determination by Obligee and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Obligee and make available as work progresses sufficient funds to pay the cost not to exceed the cost for which the Surety may be liable hereunder, the amount of this bond.

No right of action shall accrue on this bond to or for the use of any persons or corporation other than the Obligee named herein.

SIGNED, SEALED AND DELIVERED THIS \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

| Principal<br>(Company Name) |  |
|-----------------------------|--|
| Address                     |  |
| Telephone Number            |  |
| Fax Number                  |  |
| Official Signature          |  |
|                             |  |

Surety (Company Name)

| Address            |  |
|--------------------|--|
| Telephone Number   |  |
| Fax Number         |  |
| Official Signature |  |

#### APPENDIX B-6.4:

#### CITY OF VESTAVIA HILLS, ALABAMA FINAL WEARING SURFACE MAINTENANCE BOND

BOND NUMBER

WHEREAS, said Principal has obligated himself to provide maintenance of the improvements, for said project \_\_\_\_\_\_\_ for the term of one (1) year after completion of said improvements.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT, Principal shall faithfully perform maintenance of the final wearing surface for a period of one (1) year from the date of installation.

Whenever, the Principal shall be, and is declared by Obligee to be in default under this agreement, the Surety may promptly remedy the default; or shall promptly:

- 1. Complete the maintenance, or
- 2. Obtain a bid for submission to Obligee for completing the maintenance and upon determination by Obligee and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Obligee and make available as work progresses sufficient funds to pay the cost not to exceed the cost for which the Surety may be liable hereunder, the amount of this bond.

No right of action shall accrue on this bond to or for the use of any persons or corporation other than the Obligee named herein.

SIGNED, SEALED AND DELIVERED THIS \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

| Principal<br>(Company Name) |
|-----------------------------|
| Address                     |
| Telephone Number            |
| Fax Number                  |
| Official Signature          |

| Surety<br>(Company Name) |
|--------------------------|
| Address                  |
| Telephone Number         |
| Fax Number               |
| Official Signature       |

#### APPENDIX B-7: IMPROVEMENT AND MAINTENANCE AGREEMENT

#### STATE OF ALABAMA )

#### \_\_\_\_COUNTY)

| WITNESS THIS AGREEMENT, made and entered into on this the day of                                           |
|------------------------------------------------------------------------------------------------------------|
| ,, by and between,                                                                                         |
| hereinafter referred to as "Subdivider", and the City of Vestavia Hills, Alabama, a municipal corporation, |
| organized and operating under the laws of the State of Alabama, hereinafter referred to as "City".         |

#### WITNESSETH THESE RECITALS:

| WHEREAS, Subdivid                  | , is the owner                             |                        |
|------------------------------------|--------------------------------------------|------------------------|
| and/or duly authorized agent of    | the owner, of the real estate and improven | nents situated at      |
|                                    | _ in the City of Vestavia Hills,           | County, Alabama, which |
| said real estate is more particula | arly described as follows:                 |                        |
|                                    |                                            |                        |
|                                    |                                            |                        |
|                                    |                                            |                        |
|                                    |                                            | _; and                 |

WHEREAS, the Subdivider desires to subdivide and develop the above described property in conformity with the terms, provisions and conditions of the Subdivision Regulations for the City of Vestavia Hills; and

**WHEREAS**, Subdivider has filed a written application, together with black-line print copies of a preliminary plat, of proposed subdivision of said property with the Vestavia Hills Planning and Zoning Commission requesting approval by the City of said proposed subdivision; and

WHEREAS, the Subdivision Regulations of the City of Vestavia Hills, Alabama, provide for, among other things, street and roadway, sidewalk, utilities and stormwater improvements; and whereas the City of Vestavia Hills, Alabama, in an effort to promote the health, safety and general welfare of the City, requires that all subdividers guarantee that all improvements meet the requirements of the City's Subdivision Regulations; and

WHEREAS, the Vestavia Hills Planning and Zoning Commission is willing to approve the preliminary plat upon the execution and delivery of this agreement by the undersigned Subdivider; and

WHEREAS, Subdivider is willing to execute and deliver this Agreement.

**NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:** That Subdivider and City mutually agree as follows:

- 1. Subdivider shall build and construct the streets, roadways and all other improvements shown on the preliminary plat and the final plat at the sole expense of said Subdivider, all in accordance with the terms of this Agreement and the Subdivision Regulations of the City of Vestavia Hills.
- 2. All improvements required under this Agreement and the Subdivision Regulations shall be constructed in accordance with all applicable specifications of the City, including among others, those set forth in the Subdivision Regulations and Public Works Manual, and under the supervision of the City Council and to its satisfaction.
- 3. The work shall be inspected and/or supervised by the City Building Official and the City Engineer as directed by the City Council, to the extent necessary to determine whether or not the work performed complies with the requirements of this Agreement and the Subdivision Regulations.
- 4. All improvements shall be guaranteed to the City in writing as detailed below until final acceptance of the dedication by the City Council. The guarantees shall be secured by a surety acceptable to the City of Vestavia Hills as defined:
  - a. A Subdivision Performance Bond as detailed in Appendix B-6.1 in a minimum amount of 115% of the cost of the proposed public improvements to be constructed shall be submitted with this Agreement and approved by the City Engineer and City Planner prior to approval of the Preliminary Plat and prior to any construction upon the property. Said Subdivision Performance Bond shall be kept in full force and effect and renewed as needed until such time as the final plat is recorded in the Office of the Judge of Probate and a written release is issued from the City Engineer following the successful filing of a Final Wearing Surface Performance Bond as described in Section c below.
  - b. In addition to and concurrently with the Subdivision Performance Bond, the Subdivider shall also file a Subdivision Maintenance Bond as detailed in Appendix B-6.2 in a minimum amount of 15% of the total cost of public improvements to be constructed.
  - c. Following approval of the final plat, a Final Wearing Surface Performance Bond as detailed in Appendix B-6.3 in a minimum amount of 125% of the cost of the public improvements remaining to be constructed along with the final seal shall be submitted and approved by the City Engineer and the City Planner. The City Engineer shall inspect all constructed improvements and issue a written release of the Subdivision Performance Bond. Said approval and release are required prior to the recordation of the final plat in the Office of the Judge of Probate.

- d. Following acceptance of dedication by the City Council and prior to the release of the sureties in Subsections b and c (above), the Subdivider shall submit a Final Wearing Surface Maintenance Bond as detailed in Appendix B-6.4 in a minimum amount of 10% of the previously filed Final Wearing Surface Performance Bond required in Subsection c (above) and approved by the City Engineer and the City Planner . At the expiration of a minimum period of one (1) year from the date of acceptance by the City Council, at the request of the Subdivider, the City Engineer shall conduct a final inspection of all public improvements. If no deficiencies are found or upon completion of repairs of any existing deficiencies, the City Engineer shall issue a written release of said surety.
- 5. Subdivider shall offer dedication of all streets and roadways and all other applicable improvements shown on the preliminary plat and final plat as approved by the Vestavia Hills Planning and Zoning Commission. Approval of the plat, however, shall not be deemed to constitute an acceptance by the public of any improvements shown upon the plat. In order to dedicate improvements shown on a plat of a subdivision, it is necessary that the dedication be accepted by the City Council. Acceptance of a dedication can only be accomplished by the approval of a formal written resolution adopted at a regular scheduled meeting or a special meeting called for that specific purpose following an offer of dedication by the Subdivider and an inspection and recommendation of the City Engineer.
- 6. The City shall not accept the dedication until such time as 80% of the lots in the subdivision as shown on the plat have been developed with the construction of a home or other building. In no event shall an acceptance be made by the City until such time as the City Engineer has furnished written confirmation to the City Council that all work has been performed by the Subdivider in accordance with this Agreement, the Subdivision Regulations, Public Works Manual and any other City requirements. If it is found that the subdivision is substantially completed (in excess of 80%) and the remaining lots are held by individual property owners with no immediate plans for construction, the Subdivider may offer the improvements for dedication and the City Council in its sole discretion, may decide to accept said improvements. If accepted by the City Council, sureties may be obtained from the owners of the remaining lots at the time in which construction is commenced to warranty and ensure no damage to the public improvements during construction to said lot.
- 7. Subdivider shall keep all streets, roadways and other improvements shown on the plat of the subdivision in good repair until such time as the City accepts the dedication and also during the guarantee period of one (1) year as provided hereinabove.
- 8. Subdivider shall keep the sureties as required in paragraph 4 above in full force and effect continuously during the period beginning on the date of approval of the preliminary plat and ending upon the expiration of the one year guarantee following acceptance of dedication by the City Council as herein provided. Said sureties shall be reviewed with the Subdivider on an annual basis by the City Engineer and the City Planner. If the City Engineer and City Planner determine that the cost of completing said public improvements has risen based upon current costs for construction labor and materials and said surety is not within the stated guidelines of Section 4, the City Engineer and City Planner shall require the Subdivider to increase any and all bonds detailed in Section 4 to the required minimums.

- 9. Members of the general public shall have the right to use all streets and roadways shown on the preliminary plat and final plat for purposes of motor vehicular traffic, transportation and intercommunication after the initial application of paving at all times prior to acceptance of dedication by the City.
- 10. Should the Subdivider and/or the surety bonding the performance of the work fail or refuse to complete the work as provided herein in conformity with the Vestavia Hills Subdivision Regulations, then in such event, the City may cause the same to be made at Subdivider's expense and the cost thereof shall be a lien on such property, prior to all other liens, except for taxes, and the same may be collected as other debts are collected for liens enforced.
- 11. The condition, restrictions, covenants and limitations recited in this instrument shall be binding upon the undersigned Subdivider and his, her or its respective heirs, successors and assigns. These covenants are to run with the land described in the premises above and shall be binding on all parties and persons until such time as the City accepts the dedication as hereinabove provided. These covenants shall be released and null and void after acceptance of dedication by the City of Vestavia Hills, Alabama and completion of the warranty period following dedication.
- IN WITNESS WHEREOF, the parties hereto have set their hands and seals on this the

day of \_\_\_\_\_\_, \_\_\_\_.

SUBDIVIDER

WITNESSED BY:

#### CITY OF VESTAVIA HILLS, ALABAMA

BY\_\_\_\_\_ City Manager

ATTESTED BY:

City Clerk

# CITY OF VESTAVIA HILLS

# PUBLIC WORKS MANUAL Engineering Standards



Adopted by the Planning and Zoning Commission of the City of Vestavia Hills, Alabama on

April 8, 2010

## BIRMINGHAM METROPOLITAN PLANNING ORGANIZATION (MPO)

Project Title: Consultant: City of Vestavia Hills Development Regulations KPS Group, Inc.

Prepared For:

City of Vestavia Hills, Alabama

Date Adopted by the Vestavia Hills Planning April 8, 2010 and Zoning Commission:

Web Location:

http://www.bhammpo.org/buildingcommuniteslibrary

For further information, please contact William R. Foisy, Director of Planning, <u>bfoisy@rpcgb.org</u> or Cissy Edwards Crowe, Public Information Officer, <u>cedwards@rpcdb.org</u> Regional Planning Commission of Greater Birmingham, Birmingham, Alabama

This program was financed in part by the U.S. Department of Transportation, Federal Highway Administration, the Federal Transit Administration, the Alabama Department of Transportation, and produced by the Regional Planning Commission of Greater Birmingham, as staff to the MPO, in fulfillment of requirements set forth in Title 23 USC 134 and as amended by Public Law 109-59 SAFETEA-LU 2005.

## BIRMINGHAM METROPOLITAN PLANNING ORGANIZATION (MPO)

### MPO and Advisory Committee Officers

### Fiscal Year 2009

#### Birmingham Metropolitan Planning Organization (MPO)

Randy Cole, Chairman Doug Brewer, Vice Chairman Thomas Henderson, Secretary Shelby County Engineer Mayor, City Of Graysville Mayor, City of Center Point

#### **Transportation Citizens Committee (TCC)**

Ouida Fritschi, Chairman Doris Powell, Vice Chairman South/Southeast Jefferson County Representative City of Birmingham Representative

#### **Transportation Technical Committee (TTC)**

| David Hunke, Chairman          | Shelby County Planning Services Supervisor |
|--------------------------------|--------------------------------------------|
| Gregory Dawkins, Vice Chairman | City of Birmingham Traffic Engineer        |

### **Regional Planning Commission of Greater Birmingham (RPCGB)** (Staff to the MPO)

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#### TABLE OF CONTENTS

| Article 1 DESIGN STANDARDS                          | 1-1 |
|-----------------------------------------------------|-----|
| §1.1. Street Design Standards                       | 1-1 |
| §1.2. Dead End Streets and Cul-de-sacs              | 1-2 |
| §1.3. Road Shoulders                                | 1-4 |
| §1.4. Driveways                                     | 1-4 |
| §1.5. Alleys                                        | 1-5 |
| §1.6. Stopping Sight Distances and Street Curvature | 1-6 |
| §1.7. Intersection Curb Radii                       | 1-6 |
| §1.8. Access Management                             | 1-7 |
| Article 2 CONSTRUCTION STANDARDS                    | 2-1 |
| §2.1. Clearing and Grubbing                         | 2-1 |
| §2.2. Embankment                                    | 2-1 |
| §2.3. Sub-grade                                     | 2-1 |
| §2.4. Bases                                         | 2-1 |
| §2.5. Paving Requirements                           | 2-1 |
| §2.6. Culverts                                      | 2-2 |
| §2.7. Swales and Ditches                            | 2-2 |
| §2.8. Headwalls                                     | 2-2 |
| §2.9. Combination Curb and Gutters, Valley Curbs    | 2-2 |
| §2.10. Inlets                                       | 2-3 |
| §2.11. Sidewalks                                    | 2-3 |
| §2.12. Drainage and Grading                         | 2-4 |
| §2.13. Utilities                                    | 2-5 |
| §2.14. Road and Street Inspection and Testing       | 2-5 |

#### Article 1 DESIGN STANDARDS

#### §1.1. Street Design Standards

| Table 1.1 Street Design Standards (Notes)                                                                                                                                                                                                                                                                                                   |                                               |                                               |                        |                        |                        |                        |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|------------------------|------------------------|------------------------|------------------------|--|
| Specifications are based on two-lane road sections. The Commission, upon a recommendation by the City Engineer, may require a median, turn lanes, acceleration and deceleration lanes, or additional travel lanes where trips generated by anticipated uses or where City, County, or regional plans require increased design improvements. |                                               |                                               |                        |                        |                        |                        |  |
| Street Type                                                                                                                                                                                                                                                                                                                                 | Low Density                                   | y Residential                                 |                        | Medium Dens            | ity Residentia         | 1                      |  |
|                                                                                                                                                                                                                                                                                                                                             | Local                                         | Collector                                     | Local 1                | Collector 1            | Local 2                | Collector 2            |  |
| 1. Design Speed<br>Posted Speed                                                                                                                                                                                                                                                                                                             | 25-35 mph<br>20-25 mph                        | 30-40 mph<br>25-30 mph                        | 25-35 mph<br>20-25 mph | 25-40 mph<br>20-30 mph | 25-35 mph<br>20-25 mph | 25-40 mph<br>20-30 mph |  |
| 2. On-Street Parking (parallel)                                                                                                                                                                                                                                                                                                             | none                                          | none                                          | 7 ft<br>one side       | 7 ft<br>one side       | 7 ft<br>one side       | 7 ft<br>one side       |  |
| 3. Curb Type/Width (all applicable sides)                                                                                                                                                                                                                                                                                                   | 20"<br>valley curb<br>or swale <sup>(1)</sup> | 20"<br>valley curb<br>or swale <sup>(1)</sup> | 2 ft<br>curb/gutter    | 2 ft<br>curb/gutter    | 2 ft<br>curb/gutter    | 2 ft<br>curb/gutter    |  |
| 4. Min. Planting Strip (both sides)                                                                                                                                                                                                                                                                                                         | 3 ft <sup>(1)</sup>                           | 3 ft <sup>(1)</sup>                           | 4 ft                   | 4 ft                   | 4 ft                   | 4 ft                   |  |
| 5. Min. Sidewalk width <sup>(2,3)</sup>                                                                                                                                                                                                                                                                                                     | 4 ft <sup>(2)</sup><br>one side               | 4 ft <sup>(2)</sup><br>one side               | 5 ft<br>one side       | 5 ft<br>one side       | 5 ft<br>both sides     | 5 ft<br>both sides     |  |
| 6. Min. Travel Lane Width                                                                                                                                                                                                                                                                                                                   | 11 ft                                         | 12 ft                                         | 10 ft                  | 11 ft                  | 10 ft                  | 11 ft                  |  |
| 7. Prohibitive Median: Min.<br>Width (where required) <sup>(4)</sup>                                                                                                                                                                                                                                                                        | none                                          | 11 ft                                         | none                   | 11 ft                  | none                   | 11 ft                  |  |
| 8. Min. Travelway (edge of pavement to edge of pavement) <sup>(5)</sup>                                                                                                                                                                                                                                                                     | 22 ft                                         | 24 ft                                         | 27 ft                  | 29 ft                  | 27 ft                  | 29 ft                  |  |
| 9. Min. ROW <sup>(6)</sup>                                                                                                                                                                                                                                                                                                                  | 45 ft                                         | 50 ft                                         | 50 ft                  | 55 ft                  | 55 ft                  | 60 ft                  |  |

<sup>1</sup> A vegetative swale with a minimum width of sixty-six (66) inches may be provided as a substitute for a valley curb and planting strip.

 $^{2}$  Where sidewalks are provided, curb and gutter shall also be installed with the minimum planting strip between the sidewalk and curb; OR a valley curb may be used and the planting strip shall be increased to five (5) foot minimum width between the sidewalk and valley curb.

<sup>3</sup> Sidewalk width may be reduced to four (4) feet on residential culs-de-sac. ROW may be reduced accordingly.

<sup>4</sup> Generally, medians are not required. However, where left turn lanes at intersections may be required, a median may be required to limit access between intersections.

<sup>5</sup> Travelway width does not include curb and/or gutter width. Where additional travel lanes (including turn, acceleration, and deceleration lanes) are required by the Commission, travelway width shall be adjusted by adding travel lane widths as listed in Row 6.

<sup>6</sup> Minimum right-of-way includes widths required for curb and gutter or valley curb. Where swales are used, right-of-way width shall be calculated as needed to accommodate width of swales. Width of median, if required, not included.

| Table 1.1 (cont.) Street Design Standards (Notes)                                                                                                                                                                                                                                                                                           |                     |                     |                                               |                     |                                         |                     |                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|-----------------------------------------------|---------------------|-----------------------------------------|---------------------|--------------------------------|
| Specifications are based on two-lane road sections. The Commission, upon a recommendation by the City Engineer, may require a median, turn lanes, acceleration and deceleration lanes, or additional travel lanes where trips generated by anticipated uses or where City, County, or regional plans require increased design improvements. |                     |                     |                                               |                     |                                         |                     |                                |
| Street Type                                                                                                                                                                                                                                                                                                                                 | High I<br>Resid     | Density<br>ential   | Neighborhood Mixed-<br>Use or Non-Residential |                     | General Mixed-Use or<br>Non-Residential |                     | Frontage Road                  |
|                                                                                                                                                                                                                                                                                                                                             | Local               | Collector           | Local                                         | Collector           | Local                                   | Collector           |                                |
| 1. Design Speed                                                                                                                                                                                                                                                                                                                             | 25-35 mph           | 25-40 mph           | 25-35 mph                                     | 32-40 mph           | 25-35 mph                               | 32-40 mph           | 25-40 mph                      |
| Posted Speed                                                                                                                                                                                                                                                                                                                                | 20-25 mph           | 20-30 mph           | 20-25 mph                                     | 25-30 mph           | 20-25 mph                               | 25-30 mph           | 20-30 mph                      |
| 2. On-Street Parking <sup>(1)</sup><br>(parallel)                                                                                                                                                                                                                                                                                           | 7 ft<br>one side    | 7 ft<br>one side    | 7 ft<br>both sides                            | 7 ft<br>both sides  | 7 ft<br>both sides                      | 7 ft<br>both sides  | optional, on<br>developed side |
| 3. Curb Type/Width                                                                                                                                                                                                                                                                                                                          | 2 ft<br>curb/gutter | 2 ft<br>curb/gutter | 2 ft<br>curb/gutter                           | 2 ft<br>curb/gutter | 2 ft<br>curb/gutter                     | 2 ft<br>curb/gutter | 2 ft<br>curb/gutter            |
| 4. Min. Planting<br>Strip/Tree Well                                                                                                                                                                                                                                                                                                         | 4 ft<br>both sides  | 4 ft<br>both sides  | 4 ft<br>both sides                            | 4 ft<br>both sides  | 4 ft<br>both sides                      | 4 ft<br>both sides  | 4 ft<br>developed side         |
| 5. Min. Sidewalk Width                                                                                                                                                                                                                                                                                                                      | 5 ft<br>both sides  | 5 ft<br>both sides  | 6 ft<br>both sides                            | 6 ft<br>both sides  | 8 ft<br>both sides                      | 10 ft<br>both sides | 5 ft<br>developed side         |
| 6. Min. Travel Lane<br>Width                                                                                                                                                                                                                                                                                                                | 10 ft               | 11 ft               | 10 ft                                         | 11 ft               | 10 ft                                   | 11 ft               | 11 ft                          |
| 7. Min. Travelway<br>(edge of pavement to<br>edge of pavement) <sup>(3)</sup>                                                                                                                                                                                                                                                               | 27 ft               | 29 ft               | 34 ft                                         | 36 ft               | 34 ft                                   | 36 ft               | 22 ft                          |
| 8. Min. ROW <sup>(4)</sup>                                                                                                                                                                                                                                                                                                                  | 50 ft               | 55 ft               | 65 ft                                         | 65 ft               | 70 ft                                   | 75 ft               | 45 ft                          |

<sup>1</sup> For angled parking, increase parking width to 18 feet and increase travelway and Total ROW widths accordingly.

<sup>2</sup> Sidewalk width may be reduced to four (4) feet on residential culs-de-sac. ROW may be reduced accordingly.

<sup>3</sup> Travelway width does not include curb and gutter width. Where additional travel lanes (including turn, acceleration, and deceleration lanes) are required by the Commission, travelway width shall be adjusted by adding travel lane widths as listed in Row 6.

<sup>4</sup> Total right-of-way includes widths required for curb and gutter.

#### §1.2. Dead End Streets and Cul-de-sacs

- 1.2.1. For the purposes of these standards, the length of a dead end street shall be measured from the center line of the street from which the dead end street takes access to the center of the turnaround at the end of said dead end street, or in the absence of a turnaround to the end of the pavement. Vehicular turnarounds shall be required as follows:
  - 1. New dead end streets of 150 feet or less in length shall not require a vehicular turnaround.
  - 2. Dead end streets of 151-600 ft in length shall have a cul-de-sac turnaround unless a hammerhead is approved by the City Engineer for dead end streets with low traffic volumes.

- 3. Dead end streets, regardless of whether a turnaround is provided, shall not exceed 600 feet in length.
- 1.2.2. Cul-de-sacs shall terminate with an outside gutter radius of not less than fifty (50) feet. To reduce increases in stormwater runoff, a planted circle should be installed with a mountable curb and low maintenance plants at the center of the cul-de-sac. The circle shall be dimensioned to accommodate a twenty (20) ft wide driving surface at the front of the cul-de-sac and a twenty-five (25) ft wide driving surface at the back, or as otherwise approved by the City Engineer and Fire Marshal to provide maneuvering space to avoid damage to the planting circle and any curbing.



1.2.3. For streets with a width of twenty-eight (28) feet or greater, hammerhead "L" and "T" turnarounds shall be designed in accordance with Figure 1.2A and Figure 1.2B respectively. For streets less than twenty-eight (28) feet wide, hammerhead turnarounds shall be designed in accordance with Figure 1.2C.



Figure 1.2A Hammerhead "L" turnaround Figure 1.2B Hammerhead "T" turnaround



Figure 1.2C Hammerhead "T" turnaround

#### §1.3. Road Shoulders

Shoulders, where required, shall be a minimum of eight (8) feet back of the curb line, or as required by the of City Engineer, with a rise of not less than eight (8) inches nor more than fifteen (15) inches from the flow line of the gutter. In large lot subdivisions and entrance roads with a projected average weekday traffic volume less than 400, the minimum shoulder width shall be four (4) feet. Shoulder widths on roads without curbs and gutters shall be in accordance with AASHTO standards.

#### §1.4. Driveways

- 1.4.1. The width of driveways, measured at the nearest points of the radius returns, shall meet the requirements of Table 1.4.1. Requests for driveways shall be reviewed in accordance with Ordinance #1811.
  - 1. Driveways to non-residential uses may exceed the maximum width, provided that it is determined by the City Engineer that the need to provide safer turning movements and/or the number of trips generated for truck traffic to or from the property will justify the need for additional driveway widths and/or lanes.
  - 2. Driveways, in which ingress and egress lanes are separated by a raised median, may exceed the maximum two-way width, provided that the individual ingress or egress lane will not exceed the width limits for one-way traffic. Additionally, monuments, walks, vegetation, or signage shall conform to all applicable sight distance requirements.

|                                          | V<br>XX 74 1 41          |         |  |  |
|------------------------------------------|--------------------------|---------|--|--|
| Dri                                      | veway Width              |         |  |  |
| Use                                      | Minimum                  | Maximum |  |  |
| Residential (to individual<br>lwellings) | 12 ft                    | 20 ft   |  |  |
| Non-residential Uses                     |                          |         |  |  |
| One-Way Traffic                          | 15 ft                    | 20 ft   |  |  |
| Two-Way Traffic                          | 24 ft                    | 36 ft   |  |  |
| Driveway Radius                          |                          |         |  |  |
| Inc                                      | Radius of Curve* in Feet |         |  |  |
| Jse                                      | Minimum                  | Maximum |  |  |
| Residential                              | 5                        | 15      |  |  |
| Non-Residential                          |                          |         |  |  |
| Arterial                                 | 25                       | 40      |  |  |
| Collector                                | 25                       | 30      |  |  |
| Local                                    | 10                       | 25      |  |  |

3. Radius of driveway curve. The radius of curve connecting the edge of the acceleration or deceleration lane or through-traffic lane to the edge of the driveway shall meet the requirements of Table 1.4.1.

1.4.2. Driveway grades (vertical profile) shall be subject to the limitations as shown in Figure 1.4.2 and in Table 1.4.2. Any driveway grade which exceeds the recommended grades requires approval of the City Engineer. Within ten (10) feet of the curb line, or in the absence of a curb, the edge of pavement, the driveway grade shall not exceed six (6) percent.



 $^{(1)}$  The value of  $G_1$  is limited by shoulder slope or presence of sidewalk, but shall not exceed the maximum grade provided.

| Table 1.4.2 Driveway Grades at Street Edge |                                |         |         |         |  |  |
|--------------------------------------------|--------------------------------|---------|---------|---------|--|--|
|                                            | Driveway Grade (D) $G_1$ $G_2$ |         |         |         |  |  |
|                                            | Desirable                      | Maximum | Maximum | Maximum |  |  |
| Industrial                                 | <1%                            | 3%      | 6%      | 15%     |  |  |
| Other Non-residential                      | <3%                            | 6%      | 6%      | 5-8%    |  |  |
| Residential                                | <6%                            | 15%     | 6%      | 5-8%    |  |  |

| Figure | 142   | Driveway | Grade | at Street | Edge |
|--------|-------|----------|-------|-----------|------|
| riguit | 1.7.2 | Direway  | Orauc |           | Luge |

1.4.3. Pavement Markings, Signage. Driveways with more than one (1) ingress or egress lane shall have the pavement surfaced marked in accordance with the requirements of the Manual on Uniform Traffic Control Devices, latest revision. The pavement markings and signage shall be continually maintained by the owner in good condition and visible to drivers at all times.

#### §1.5. Alleys

Where required or provided, alleys shall have the minimum dimensions shown in Table 1.5. Where deemed necessary for public safety, the City Engineer may require a wider pavement width. Paving shall be as approved by the City Engineer.

| Table 1.5 Alley Requirements         |                |                        |  |  |
|--------------------------------------|----------------|------------------------|--|--|
|                                      | Min. ROW width | Min. Pavement<br>Width |  |  |
| Single-family                        | 20 ft          | 12 ft                  |  |  |
| Multi-family and Non-<br>Residential | 24 ft          | 20 ft                  |  |  |

| Table 1.6 Sight Distance Requirements (Notes) |                                                |                                                      |                                         |  |  |  |
|-----------------------------------------------|------------------------------------------------|------------------------------------------------------|-----------------------------------------|--|--|--|
| Street Design<br>Speed (mph)                  | Stopping Sight<br>Distance (ft) <sup>(1)</sup> | Intersection Sight<br>Distance (ft) <sup>(1,2)</sup> | Min. Radius of Street<br>Curvature (ft) |  |  |  |
| 15                                            | 75                                             | 170                                                  | 125                                     |  |  |  |
| 20                                            | 110                                            | 225                                                  | 150                                     |  |  |  |
| 25                                            | 150                                            | 280                                                  | 175                                     |  |  |  |
| 30                                            | 200                                            | 335                                                  | 250                                     |  |  |  |
| 35                                            | 250                                            | 390                                                  | 375                                     |  |  |  |
| 40                                            | 305                                            | 445                                                  | 550                                     |  |  |  |
| 45                                            | 360                                            | 500                                                  | 700                                     |  |  |  |
| 50                                            | 425                                            | 555                                                  | 1000                                    |  |  |  |

#### §1.6. Stopping Sight Distances and Street Curvature

<sup>1</sup> Distances are intended as a minimum guideline. Site conditions such as grades, traffic volumes, signalization types, etc. may warrant increases in desired sight distances.

<sup>2</sup> The provided intersection sight distances are recommended for stopped cars to safely cross or merge left onto a roadway with traffic moving at the design speed indicated in the left-most column.

#### §1.7. Intersection Curb Radii

For streets with parallel on-street parking, curb radii at intersections shall be consistent with the lower values in the "Curb Radius" column in Table 1.7. In the absence of on-street parking, the higher number shall govern. For streets with angled parking, the lesser number may be further reduced by the City Engineer.

| Table 1.7 Intersection Curb Radius      |                      |             |                             |                      |  |
|-----------------------------------------|----------------------|-------------|-----------------------------|----------------------|--|
| Street Type                             | On-street<br>Parking | Curb Radius | Effective Turning<br>Radius | Curb Type            |  |
| Low Density Residential Local           | no                   | 20-24 ft    | 20-24 ft                    | valley curb or swale |  |
| Low Density Residential<br>Collector    | no                   | 20-24 ft    | 20-24 ft                    | valley curb or swale |  |
| Medium Density Residential<br>Local     | yes                  | 15-18 ft    | 22-25 ft                    | curb and gutter      |  |
| Medium Density Residential<br>Collector | yes                  | 18-21 ft    | 25-28 ft                    | curb and gutter      |  |
| Neighborhood Mixed-Use Local            | yes                  | 15-18 ft    | 22-26 ft                    | curb and gutter      |  |
| Neighborhood Mixed-Use<br>Collector     | yes                  | 18-21 ft    | 25-29 ft                    | curb and gutter      |  |
| General Mixed-Use Local                 | yes                  | 12-15 ft    | 20-23 ft                    | curb and gutter      |  |
| Core Mixed-Use Collector                | yes                  | 15-18 ft    | 22-26 ft                    | curb and gutter      |  |
| Frontage Road                           | yes                  | 18-21 ft    | 25-29 ft                    | curb and gutter      |  |

#### §1.8. Access Management

- 1.8.1. Spacing shall be provided between intersections and driveways as required by §3.3 Access Management of the Subdivision Regulations.
- 1.8.2. Traffic Impact Study. The City Engineer may require a Traffic Impact Study by an engineer, using the standard format specified by the Institute of Transportation Engineers (ITE) publication <u>Traffic Access and Impact Studies for Site Development</u>, dated 1991, or the latest subsequent edition, to assess the traffic impacts of a proposed access to adjacent and nearby streets and intersections when the expected number of trips generated by the proposed use exceeds an estimated 1,000 vehicle trips per day or 100 peak hour vehicle trips per day. In addition, the City Engineer may require a Traffic Impact Study for sites that generate less than 1,000 vehicle trips per day, or 100 peak hour vehicle trips per day, if the sites are located at or near high-volume intersections or other locations where the use may constitute a threat or danger to the safe and efficient flow of traffic. The City Engineer may waive this provision if a recent, valid traffic study has been completed, from which needed traffic data can be extrapolated.

Unless otherwise specified by the City Engineer, the study shall address trip generation and directional distribution, traffic assignment to streets and access locations, twenty-four (24) hour and a.m. and p.m. peak hour traffic forecasting (on-site and off-site), capacity analysis and level of service for adjacent streets and nearby intersections before and after the proposed full development, and recommendations for street improvements and traffic control installation and/or modifications to existing signals. The traffic data used in the study shall be consistent with the use and density data as referenced in Trip Generation, sixth edition, 1997, published by ITE, or the latest edition; current city and state traffic counts for surrounding streets; and the marketing study for the proposed use.

- 1.8.3. Throat Length. Driveways for non-residential uses must extend a minimum of sixty (60) feet into the property from the lot line abutting the street before the edge of the driveway may be intersected by an aisle or another drive and thirty (30) feet before the edge of the driveway may be intersected by an off-street parking space.
- 1.8.4. Deceleration Lanes. Deceleration lanes shall be required for each access to arterial or collector streets where the proposed use will increase traffic volumes on the existing street to a total in excess of 1,000 vehicle trips per day or 100 peak-hour vehicle trips per day.

The deceleration lane, a minimum of twelve (12) feet wide, measured from the face of the curb (for curb sections without a monolithic gutter), the edge of the gutter (for a monolithic curb and gutter section), or the edge of the shoulder line (for a non-curbed section to the center of the lane line), shall be constructed with the length measured from the centerline of the access point according to the criteria in Table 1.8B.

| Table 1.8B Minimum Deceleration Lane |                 |              |  |  |  |
|--------------------------------------|-----------------|--------------|--|--|--|
| Speed Limit                          | Length of Taper | Total Length |  |  |  |
| 35 mph or less                       | 75 ft           | 200 ft       |  |  |  |
| 40 to 45 mph                         | 110 ft          | 250 ft       |  |  |  |
| 50 to 55 mph                         | 150 ft          | 300 ft       |  |  |  |

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#### Article 2 CONSTRUCTION STANDARDS

#### §2.1. Clearing and Grubbing

All areas that receive fill material shall be cleared of vegetation, trees, stumps, large rocks, and other objectionable or unsuitable material prior to placing fill material.

#### §2.2. Embankment

The City Engineer or designated agent shall determine what material is suitable for embankment. Natural ground areas shall be properly compacted prior to placing embankment. Embankment material shall be placed in uniform lifts of ten (10) inches or less and compacted to ninety-five (95) percent of standard density as determined by ALDOT (Alabama Department of Transportation) standards. In-place density method pursuant to ALDOT standards may be used.

#### §2.3. Sub-grade

Finish grade shall conform to the lines, grades and cross-section as shown on the approved plan unless specific permission is acquired in writing from the City Engineer. All sub-grade construction shall be compacted to a 95 percent of modified Proctor density as determined by ASTH designation D-1557, as revised from time to time.

#### §2.4. Bases

Prior to placing any base material, the subgrade shall be prepared and tested. The type material to be used for base and required thickness shall be stated on the approved plan.

Base material consisting of crushed rock, stone particles, or slag shall contain an approved filler of sand or other fine mineral filler. Required six (6) inch base of this material shall be spread without segregation and may be placed and compacted to full depth in one (1) layer. Required base layer greater than six (6) inches shall be placed in approximately equal layers. Compaction shall be by vibratory, steel wheel rollers or other approved rollers to obtain a density of 100 percent when tested as determined by ALDOT standards method. In place density method pursuant to ALDOT standards may be used.

#### §2.5. Paving Requirements

All public streets, alleys and driveways shall be paved and conform to the following minimum requirements:

- 2.5.1. A two (2) inch bituminous binder and a one (1) inch seal course on a suitable primed macadam base eight (8) inches thick on a properly drained and compacted sub-grade is required.
- 2.5.2. Minimum plant mix requirements for all residential streets will be as follows:

Binder - 140 lbs. per square yard Seal - 80 lbs. per square yard.

2.5.3. Greater thickness may be required dependent upon street classification as provided in the Subdivision Regulations. Should any problem be encountered with the sub-grade, base, or binder layers, or should much immediate construction traffic be projected following road construction, the City Engineer may require the placement of seal course of plant mix be delayed for a minimum period of six (6) months. If problems are encountered relative to pavement thickness, coring or plant mix may be required. Double Bituminous Surface Treatment pavement on an approved crushed stone base may be approved, where curbs and gutters are not required, for the following cases:

- 1. Entrance roads into subdivided areas where projected average weekday volumes will not exceed 400.
- 2. Roads serving large lot subdivisions.
- 2.5.4. On all roadways the seal course shall not be applied until one (1) year after the binder has been properly installed. Before the seal is applied, all work previously required shall be repaired to meet minimum City standards.

#### §2.6. Culverts

A special design drawing shall be required for any drainage structure having a required end area of twenty (20) sq. ft. or more. Reinforced concrete drainage structures shall be constructed in accordance with standard drawings and specifications approved by the City Engineer. Standard specification drawings for many minor structures may be obtained through ALDOT or some concrete companies.

- 2.6.1. Reinforced concrete pipe and arch pipe class and installation shall be in accordance with current specifications of ALDOT.
- 2.6.2. Corrugated metal pipe and arch pipe culverts shall be fully coated with a sphalt with a paved invert or fully coated with a polymeric coating. Gauge, corrugations and installation shall be in accordance with current specifications of ALDOT.
- 2.6.3. All storm drainpipes shall be a minimum of eighteen (18) inches and subject to review and approval by the City Engineer.

#### §2.7. Swales and Ditches

- 2.7.1. The minimum flow line slope for paved ditches shall be 0.33% and shall be 1.0% for unpaved ditches.
- 2.7.2. Eight (8) inches of masonry, stone, tile, concrete block or brick walls shall have a minimum flair or one (1) inch per foot and a maximum flair of six (6) inches per foot. Culvert pipe may be utilized if such sewers and drainage ditches shall be of sufficient size to provide for future extensions into adjacent areas.

#### §2.8. Headwalls

Headwall with wing walls and end walls shall be installed on pipe culverts. Headwalls for pre-cast concrete or brick masonry construction shall be approved by the City Engineer. Headwalls for pipe sizes larger than forty-eight (48) inches shall be shown on the approved plans. Headwalls for multi-line installation shall be shown on the approved plans.

#### §2.9. Combination Curb and Gutters, Valley Curbs

- 2.9.1. Portland cement concrete having a compressive strength of 3000 PSI at twenty-eight (28) days shall be used. Granite, as approved by the City Engineer, may be substituted. Combination curb and gutter and valley curbs shall be constructed of Portland cement concrete. Installation shall be on a prepared sub-grade and conform to the cross-section shown on the plans. The surface finish of the concrete shall have a light broomed or burlap drag texture. The edges shall be smoothed with a radius type tool.
- 2.9.2. Transverse contraction joints shall be constructed at intervals not exceeding twenty (20) feet in combination curb and gutter and valley curb. Joint depth shall be no less than 1/5 of the cross-section and concrete. Sawed contraction joints shall be done early after the concrete has set to prevent the formation of uncontrolled cracking. Expansion joints shall be constructed at immovable structures and at points of

curvature for short radius curves. Filler material for expansion joints shall be approved by the City Engineer or authorized agent. Construction joints may be either expansion or butt-type joints.

- 2.9.3. No combination curb and gutter, valley curb or sidewalk shall be placed on frozen or soft earth or when other unsuitable conditions exist.
- 2.9.4. Gutters shall be constructed of 3,000 PSI concrete six (6) inches thick. Valley gutters shall not be less than thirty (30) inches wide.
- 2.9.5. Combination curb and gutter shall be used where negative grade entering or within a circle exceeds two (2) percent.

#### §2.10. Inlets

Inlet design for installation on eighteen (18) inch through forty-two (42) inch pipe shall be approved by the City Engineer. Depth for this type inlet shall not exceed six (6) feet from invert of inlet to top of pipe. Storm drain inlet shall not be supported by the storm drainpipe. Special design installation shall be required for pipes larger than forty-two (42) inches in diameter. This design shall be submitted with street drainage plan for approval by the City Engineer.

#### §2.11. Sidewalks

Sidewalks shall be constructed in accordance with the specifications shown in Figure 2.11 and as provided herein.

- 2.11.1. Sidewalk installation shall be on an unfrozen prepared sub-grade.
- 2.11.2. Concrete mix: straight cement mix, no fly ash, ochre coloring added at 25 lbs./yd., maximum 5 inch slump.
- 2.11.3. Sidewalks shall have expansion joints at all concrete-to-concrete connections, such as driveways, curbs, curb ramps and private sidewalks and every thirty (30) ft on straight runs. One-half (1/2) inch expansion joints shall be provided between all fixed objects including steps and walls.
- 2.11.4. Five (5) foot wide sidewalks shall have contraction joints every five (5) feet; wider sidewalks shall have contraction joints spaced as required by the City Engineer.
- 2.11.5. All construction debris shall be removed and disposed off site.
- 2.11.6. Contact City Engineer for final approval of work.



Figure 2.11 Sidewalk Specifications

2.11.7. The cross slope of a sidewalk shall be a minimum of 0.25 inch per foot and a maximum of 0.5 inch per foot sloping to the street. The planting strip between the curb and the edge of the sidewalk shall have minimum cross slopes as provided in Table 2.11. In cases of extreme topography, the City Engineer may permit greater cross slopes within planting strips only. Adjustments to such cross slopes should be gradual to avoid abrupt grade changes.

| Table 2.11 Planting Strip Slope Requirements |                  |               |                                             |
|----------------------------------------------|------------------|---------------|---------------------------------------------|
| Centerline Grade of Street                   | 1 -4%            | 4.1-8%        | Greater than 8%                             |
| Planting Strip Cross Slope                   | 0.5" inch per ft | 1 inch per ft | 1 <sup>1</sup> / <sub>2</sub> " inch per ft |

#### §2.12. Drainage and Grading

- 2.12.1. The finished slope along the bottom centerline of any lot drainage easement shall not be less than one (1) percent.
- 2.12.2. The side slopes of any lot drainage easement shall not be greater than 4 (horizontal) to 1 (vertical).

#### §2.13. Utilities

- 2.13.1. Water, gas, and sanitary mains, and appurtenances if applicable, will be constructed prior to installation of paving with all mains being extended for service to all lots so that no subsequent cutting of pavement will be required to permit service to all lots.
- 2.13.2. Permits for utility installation on existing or proposed rights-of-way. Any person, firm, or corporation wishing to place a utility facility within a street right-of-way shall apply to the agency controlling said street on the proper prescribed utility permit forms.
- 2.13.3. Location and Trench Backfill. Utilities shall generally be located a minimum of six (6) feet from the edge of existing or proposed paving. In areas where location less than the minimum is approved, incompressible backfill material (sand, slag, crushed stone or gravel) shall be required.
- 2.13.4. Backfill for utilities crossing any proposed roadway section shall conform to the ALDOT Standard Specifications for Highways and Bridges in force at the time of installation.
- 2.13.5. Incompressible backfill material may be used to backfill such open trenches in lieu of compacted backfill material. The material used shall be of a type approved by the City Engineer for this purpose.
- 2.13.6. All open cuts, under existing paving shall be backfilled with compacted stone. The stone used must be of a type approved by the City Engineer for this purpose. A permanent pavement patch shall be in accordance with the typical repair section made available by the City Engineer.
- 2.13.7. Cased and Uncased Construction. All polyvinyl chloride (PVC) pipe used for water lines shall be encased with a casing approved by the Public Works Director, City Engineer or authorized agent.

#### §2.14. Road and Street Inspection and Testing

- 2.14.1. Notification of Work. It shall be the duty and responsibility of the developer or contractor to give notification to the City Engineer, twenty-four (24) hours prior to starting each phase of construction and to notify the City Engineer the day work is resumed after a delay for any reason. This includes all phases of construction, clearing, grading, drainage, gutters, inlets, base, surfacing and any work that pertains to streets or development. Failure to notify as specified may be grounds for non-acceptance.
- 2.14.2. Inspection. The contractor and developer shall be notified of any unacceptable work found by the City Engineer or authorized agent.
- 2.14.3. Testing. Testing shall be at the cost of the developer and shall be by a testing company approved by the City.
- 2.14.4. Embankment density tests shall be required by the City Engineer or authorized agent. Subgrade and base minimum density testing shall include one test representative of each 1000 linear feet of each street or portion thereof. Additional tests may be required by the City Engineer or authorized agent.
- 2.14.5. See §2.5 regarding density requirements.
### **ORDINANCE NUMBER 2916**

AN ORDINANCE TO REPEAL ORDINANCE NUMBER 2429 AND AMENDING SECTION 5.5-200 THROUGH SECTION 5.5-311 OF THE VESTAVIA HILLS CODE OF ORDINANCES AND ADOPTING A FLOOD DAMAGE PREVENTION ORDINANCE FOR THE CITY OF VESTAVIA HILLS, ALABAMA

BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF VESTAVIA HILLS, ALABAMA AS FOLLOWS:

(1) Ordinance Number 2429, adopted and approved by the Vestavia Hills City Council onJanuary 28, 2013, is hereby repealed in its entirety; and

(2) Sections 5.5-200 through 5.5-311 of the Vestavia Hills Code of Ordinances entitled "ARTICLE III. FLOOD DAMAGE PREVENTION IN NONCOASTAL/REVERINE COMMUNITIES" is amended and Ordinance Number 2916 is hereby adopted in its entirety as follows:

#### ARTICLE 1

### Statutory Authorization, Findings of Fact, Purpose And Objectives

#### **<u>SECTION A</u> <u>STATUTORY AUTHORIZATION</u>**

The Legislature of the State of Alabama has in Title 11, Chapter 19, Sections 1-24, Chapter 45, Sections 1-11, Chapter 52, Sections 1-84, and Title 41, Chapter 9, Section 166 of the Code of Alabama, 1975, authorized local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City Council, of Vestavia Hills, Alabama, does ordain as follows:

### SECTION B FINDINGS OF FACT

- (1) The flood hazard areas of Vestavia Hills, Alabama are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- (2) These flood losses are caused by the occupancy in flood hazard areas of uses vulnerable to floods, which are inadequately elevated, flood proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.

## <u>SECTION C</u> <u>STATEMENT OF PURPOSE</u>

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (2) restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
- (3) control filling, grading, dredging and other development which may increase flood damage or erosion;
- (4) prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands; and
- (5) control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters.

#### SECTION D OBJECTIVES

The objectives of this ordinance are:

- (1) to protect human life and health;
- (2) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- (3) to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas,
- (4) to minimize expenditure of public money for costly flood control projects;
- (5) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (6) to minimize prolonged business interruptions, and
- (7) to ensure that potential home buyers are notified that property is in a flood area.

# ARTICLE 2 GENERAL PROVISIONS

# SECTION A LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all Areas of Special Flood Hazard within the jurisdiction of Vestavia Hills, Alabama.

## SECTION B BASIS FOR AREA OF SPECIAL FLOOD HAZARD

The Areas of Special Flood Hazard identified by the Federal Emergency Management Agency in its **Flood Insurance Study (FIS), dated February 20, 2013**, with accompanying maps and other supporting data **and any revision thereto**, are adopted by reference and declared a part of this ordinance. For those land areas acquired by a municipality through annexation, the current effective FIS and data for Jefferson County, Alabama are hereby adopted by reference. Areas of Special Flood Hazard may also include those areas known to have flooded historically or defined through standard engineering analysis by governmental agencies or private parties but not yet incorporated in the FIS.

When Preliminary Flood Insurance Studies and Flood Insurance Rate Maps have been provided by FEMA to the City of Vestavia Hills:

- (1) Prior to the issuance of a Letter of Final Determination (LFD) by FEMA, the use of the preliminary flood hazard data shall only be required where no base flood elevations and/or floodway areas exist or where the preliminary base flood elevations or floodway area exceed the base flood elevations and/or floodway widths in the effective flood hazard data provided by FEMA. Such preliminary data may be subject to revision through valid appeals.
- (2) Upon the issuance of a Letter of Final Determination (LFD) by FEMA, the revised flood hazard data shall be used and replace all previously effective flood hazard data provided by FEMA for the purposes of administrating these regulations.

Where adopted regulatory standards conflict, the more stringent base flood elevation shall prevail. Preliminary FIS data may be subject to change by a valid appeal.

# SECTION C: ESTABLISHMENT OF A FLOODPLAIN DEVELOPMENT PERMIT

A Development Permit shall be required in conformance with the provisions of this ordinance PRIOR to the commencement of any development activities in identified areas of special flood hazard and **community flood hazard areas** within the community.

# SECTION D. <u>COMPLIANCE</u>

No structure or land shall hereafter be located, extended, converted or altered without **full compliance** with the terms of this ordinance and other applicable regulations.

## SECTION E. <u>ABROGATION AND GREATER RESTRICTIONS</u>

This ordinance is not intended to repeal, abrogate, or impair any existing ordinance, easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

## SECTION F. <u>INTERPRETATION</u>

In the interpretation and application of this ordinance all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body, and (3) deemed neither to limit nor repeal any other powers granted under state statutes.

### SECTION G. WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur; flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Areas of Special Flood Hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of City of Vestavia Hills or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

## SECTION H. <u>PENALTIES FOR VIOLATION</u>

- (1) <u>Notice of Violation</u>. If the community determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, or the provisions of this ordinance, it shall issue a written notice of violation, by certified return receipt mail, to such applicant or other responsible person. Where the person is engaged in activity covered by this ordinance without having first secured a permit, the notice shall be served on the owner or the responsible person in charge of the activity being conducted on the site. The notice of violation shall contain:
  - (a) The name and address of the owner or the applicant or the responsible person;
  - (b) The address or other description of the site upon which the violation is occurring;
  - (c) A statement specifying the nature of the violation;
  - (d) A description of the remedial measures necessary to bring the action or inaction into compliance with the permit or this ordinance and the date for the completion of such remedial action;
  - (e) A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed, and;
  - (f) A statement that the determination of violation may be appealed to the community by filing a written notice of appeal within ten (10) days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient).
- (2) <u>Additional Enforcement Actions.</u> If the remedial measures described in the Notice of Violation have not been completed by the date set forth for such completion in the Notice of Violation, any one or more of the following enforcement actions may be enacted against the person to whom the Notice of Violation was directed. Before taking any of the following actions or imposing any of the following penalties, the City of Vestavia Hills shall first notify the applicant or other responsible person in writing of its intended action. The City of Vestavia

Hills shall provide reasonable opportunity, of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient) to cure such violation. In the event the applicant or other responsible person fails to cure such violation after such notice and cure period, the City of Vestavia Hills may take or impose any one or more of the following enforcement actions or penalties:

- (a) <u>Stop Work Order</u>: The community may issue a stop work order, which shall be served on the applicant or other responsible person. The stop work order shall remain in effect -until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.
- (b) <u>Withhold or revoke Certificate of Occupancy</u>: The community may refuse to issue and/or revoke a certificate of occupancy for the building or other improvements and/or repairs conducted or being conducted on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein.
- (c) Suspension, revocation, or modifications of permit: The community may suspend, revoke, or modify the permit authorizing the development project. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated (upon such conditions as the community may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
- (d) <u>Penalties</u>: Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$500.00 or imprisoned for not more than 30 days, or both, and in addition, shall pay all costs and expenses involved in the case: Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Vestavia Hills from taking such other lawful actions as is necessary to prevent or remedy any violation.
- (e) Section 1316 Declaration: Section 1316 of the National Flood Insurance Act authorizes FEMA to deny flood insurance to a property declared by the State, County, or Municipal government to be in violation of the local floodplain management ordinance. A Section 1316 declaration shall be used when all other legal means to remedy a violation have been exhausted and the structure is noncompliant. Once invoked, the property's flood insurance coverage will be terminated and no new or renewal policy can be issued; no flood insurance claim can be paid on any policy on the property, and disaster assistance will be denied.

The declaration must be in writing (letter or citation), from the community to the property owner and the applicable FEMA Regional Office, and must contain the following items:

- i. The name(s) of the property owner(s) and address or legal description of the property sufficient to confirm its identity and location;
- ii. A clear and unequivocal declaration that the property is in violation of a cited State or local law, regulation or ordinance;
- iii. A clear statement that the public body making the declaration has authority to do so and a citation to that authority;
- iv. Evidence that the property owner has been provided notice of the violation and the prospective denial of insurance; and
- v. A clear statement that the declaration is being submitted pursuant to section 1316 of the National Flood Insurance Act of 1968, as amended.

If a structure that has received a Section 1316 declaration is made compliant with the community's floodplain management ordinance, then the Section 1316 declaration can be rescinded by the community and flood insurance eligibility restored.

(3) <u>Administrative appeal: judicial review.</u> Any person receiving a Notice of Violation may appeal the determination of the community, including but not limited to the issuance of a stop work order, the assessment of an administratively-imposed monetary penalty, the suspension, revocation, modification, or grant with condition of a permit by the community upon finding that the holder is in violation of permit conditions, or that the holder is in violation of any applicable ordinance or any of the community's rules and regulations, or the issuance of a notice of bond forfeiture.

The Notice of Appeal must be in writing and must be received within ten (10) days from the date of the Notice of Violation. A hearing on the appeal shall take place within thirty days from the date of receipt of the Notice of Appeal by the Floodplain Administrator.

- (4) All <u>appeals</u> shall be heard and decided by the community's designated Appeal Board, which shall be City of Vestavia Hills Board of Zoning Adjustments, or their designees. The Appeal Board shall have the power to affirm, modify, or reject the original penalty, including the right to increase or decrease the amount of any monetary penalty and the right to add or delete remedial actions required for correction of the violation and compliance with the community's flood damage prevention ordinance, and any other applicable local, state, or federal requirements. The decision of the Appeal Board shall be final.
- (5) A judicial review can be requested by any person aggrieved by a decision or order of the community, after exhausting his/her administrative remedies. They shall have the right to appeal de novo to the Jefferson County Civil Court.

## SECTION I. <u>SAVINGS CLAUSE</u>

If any section, subsection, sentence, clause, phrase, or word of this ordinance is for any reason held to be noncompliant with 44 Code of Federal Regulation 59-78, such decision shall not affect the validity of the remaining portions of this ordinance.

#### SECTION J. <u>REPEALER</u>

Ordinance Number 2429 of the <u>City of Vestavia Hills</u>, Alabama is hereby repealed. This Repealer shall not, however, effect, terminate, or preclude any rights, duties, requirements or terms which arose or existed while said Ordinance was in effect, all of which are specifically preserved.

#### ARTICLE 3

#### **ADMINISTRATION**

#### SECTION A DESIGNATION OF FLOODPLAIN ADMINISTRATOR

The City Engineer is hereby appointed to administer and implement the provisions of this ordinance.

#### SECTION B PERMIT PROCEDURES

Application for a Development Permit shall be made to the Floodplain Administrator on forms furnished by the community **PRIOR** to any development activities, and may include, but not be limited to, the following: Plans in duplicate drawn to scale showing the elevations of the area in question and the nature, location, dimensions, of existing or proposed structures, fill placement, storage of materials or equipment, and drainage facilities.

Specifically, the following procedures and information are required for all projects in the Special Flood Hazard Areas within the jurisdiction of City of Vestavia Hills:

#### (1) Application Stage

Plot plans are to include:

- (a) The Base Flood Elevation (BFE) where provided as set forth in Article 2, Section B; Article 4, Section C; or Article 5, Section D;
- (b) Boundary of the Special Flood Hazard Area and floodway(s) as delineated on the FIRM or other flood map as determined in Article 2, Section B;
- (c) Flood zone designation of the proposed development area as determined on the FIRM or other flood map as determined in Article 2, Section B;
- (d) Elevation in relation to mean sea level (or highest adjacent grade) of the regulatory lowest floor level, including basement, of all proposed structures;
- (e) Elevation in relation to mean sea level to which any non-residential structure will be flood proofed;
- (f) Design certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the flood-proofing criteria of Article 4, Sections B(2) and E(2);
- (g) A Foundation Plan, drawn to scale, that shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include, but are not limited to, the proposed method of elevation (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls) and description of any flood openings

required in accordance with Article 4, Sections B(1), B(3), D(7), and E(1) when solid foundation perimeter walls are used.

- (h) Usage details of any enclosed areas below the lowest floor shall be described.
- (i) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
- (j) Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development including current and proposed locations of the watercourse. An engineering report shall be provided on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream. The affected properties shall be depicted on a map or on the plot plan.
- (k) Certification of the plot plan by a licensed professional engineer or surveyor in the State of Alabama is required.

#### (2) <u>Construction Stage</u>

For all new construction and substantial improvements, the permit holder shall provide to the Floodplain Administrator an as-built certification of the regulatory floor elevation or flood-proofing level **using appropriate FEMA elevation or floodproofing certificate** immediately after the lowest floor or flood proofing is completed.

- (a) When flood proofing is utilized for non-residential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.
- (b) <u>Any work undertaken prior to submission of these certifications shall be at the</u> permit holder's risk.
- (c) The Floodplain Administrator shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.
- (d) The Floodplain Administrator shall make periodic inspections of projects during construction throughout the Special Flood Hazard Areas within the jurisdiction of the community to ensure that the work is being done according to the provisions of the local ordinance and the terms of the permit. Members of his or her inspections/engineering department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- (e) The Floodplain Administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.

(f) In any lot or lots/areas that will be or have been removed from the special flood hazard area utilizing a Letter of Map Revision Based on Fill (LOMR-F), the top of fill level must meet the community's freeboard elevation at that location. If the top of fill level is below the freeboard elevation, all new structures, additions to existing buildings or substantial improvement must meet the required community freeboard elevation.

## (3) <u>Finished Construction</u>

Upon completion of construction, a FEMA elevation certificate (FEMA Form 81-31), which depicts all finished construction elevations, is required to be submitted to the Floodplain Administrator prior to issuance of a Certificate of Occupancy.

- (a) If the project includes a floodproofing measure, a FEMA floodproofing certificate is required to be submitted by the permit holder to the Floodplain Administrator.
- (b) The Floodplain Administrator shall review the certificate(s) data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance.
- (c) In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.
- (d) Documentation regarding completion and compliance with the requirements stated in the permit application and with Article 3, Section B(1) of this ordinance shall be provided to the local Floodplain Administrator at the completion of construction or records shall be maintained throughout the Construction Stage by inspectors for the Floodplain Administrator. Failure to provide the required documentation shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.
- (e) All records that pertain to the administration of this ordinance shall be maintained and made available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.

# SECTION C DUTIES AND RESPONSIBILITIES OF THE ADMINISTRATOR

Duties of the Floodplain Administrator shall include, but shall not be limited to:

- (1) Review all development permits to assure that the permit requirements of this ordinance have been satisfied; and <u>assure that development sites are reasonably safe from flooding.</u>
- (2) Review copies of all necessary permits from governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. Maintain such permits permanently with floodplain development permit file.
- (3) When Base Flood Elevation data or floodway data have not been provided in accordance with Article 2, Section B then the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other sources in order to administer the provisions of Article 4.

- (4) Verify and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the regulatory floor level, including basement, of all new construction or substantially improved structures in accordance with Article 3, Section B.
- (5) Verify and record the actual elevation, in relation to mean sea level to which any new or substantially improved structures have been flood-proofed, in accordance with Article 4, Sections B(2) and E(2).
- (6) When flood proofing is utilized for a structure, the Floodplain Administrator shall obtain certification of design criteria from a registered professional engineer or architect in accordance with Article 3, Section B(1)(c) and Article 4, Section B(2) or E(2).
- (7) Notify adjacent communities and the Alabama Department of Natural Resources prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA), and the Alabama Department of Economic and Community Affairs/Office of Water Resources/NFIP State Coordinator's Office.
- (8) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to FEMA and State to ensure accuracy of community flood maps through the Letter of Map Revision process. Assure flood carrying capacity of any altered or relocated watercourse is maintained.
- (9) Where interpretation is needed as to the exact location of boundaries of the Areas of Special Flood Hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Ordinance.
- (10) All records pertaining to the provisions of this ordinance shall be maintained in the office of the Floodplain Administrator and shall be open for public inspection.
- (11) In addition, the Floodplain Administrator and his or her designated staff is hereby authorized and directed to enforce the provisions of this ordinance. The Administrator is further authorized to render interpretations of this ordinance, which are consistent with its spirit and purpose.
  - (a) Right of Entry
    - i. Whenever necessary to make an inspection to enforce any of the provisions of this ordinance, or whenever the Administrator has reasonable cause to believe that there exists in any building or upon any premises any condition or ordinance violation which makes such building, structure or premises unsafe, dangerous or hazardous, the Administrator may enter such building, structure or premises at all reasonable times to inspect the same or perform any duty imposed upon the Administrator by this ordinance.
    - ii. If such building or premises are occupied, the Administrator shall first present proper credentials and request entry. If such building, structure, or premises are unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of such building or premises.

- iii. If entry is refused, the Administrator shall have recourse to every remedy provided by law to secure entry.
- iv. When the Administrator shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building, structure, or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Administrator for the purpose of inspection and examination pursuant to this ordinance.
- (b) Stop Work Orders
  - i. Upon notice from the Administrator, work on any building, structure or premises that is being performed contrary to the provisions of this ordinance shall immediately cease.
  - ii. Such notice shall be in writing and shall be given to the owner of the property, or to his or her agent, or to the person doing the work, and shall state the conditions under which work may be resumed.
- (c) Revocation of Permits
  - i. The Administrator may revoke a permit or approval, issued under the provisions of this ordinance, in case there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
  - ii. The Administrator may revoke a permit upon determination that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the structure for which the permit was issued is in violation of, or not in conformity with, the provisions of this ordinance.

## ARTICLE 4

## PROVISIONS FOR FLOOD HAZARD REDUCTION

## SECTION A <u>GENERAL STANDARDS</u>

In ALL Areas of Special Flood Hazard the following provisions are required:

- (1) Require copies of all necessary permits from governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. Maintain such permits be on file.
- (2) New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse and lateral movement of the structure.
- (3) New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage.
- (4) New construction and substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage:

- (a) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- (c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (5) All heating and air conditioning equipment and components, all electrical, ventilation, plumbing, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (6) Manufactured homes shall be anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State requirements for resisting wind forces.
- (7) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (8) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- (9) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (10) Any alteration, repair, reconstruction or improvement to a structure which is not compliant with the provisions of this ordinance, shall be undertaken only if the non- conformity is not furthered, extended or replaced.
- (11) Proposed new construction and substantial improvements that are partially located in an area of special flood hazard shall have the entire structure meet the standards for new construction.
- (12) Proposed new construction and substantial improvements that are located in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations shall have the entire structure meet the standards for the most hazardous flood hazard risk zone and the highest base flood elevation.

# SECTION B SPECIFIC STANDARDS

In ALL Areas of Special Flood Hazard designated as A1-30, AE, AH, A (with engineered or estimated base flood elevation), the following provisions are required:

 <u>Residential and Non-residential Structures</u> - Where base flood elevation data is available, new construction and substantial improvement of any structure or manufactured home <u>shall</u> <u>have the lowest floor</u>, <u>including basement</u>, <u>elevated no lower than one foot</u> <u>above the</u> <u>base flood elevation</u>. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Article 4, Section B(3).

(2) <u>Non-Residential Structures</u> - New construction and substantial improvement of any non-residential structure located in A1-30, AE, or AH zones, <u>may be floodproofed in lieu of elevation</u>. <u>The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to one (1) foot above the base flood elevation</u>, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in Article 3, Section C(6).

Dry floodproofing is allowed only where flood velocities are less than or equal to five feet per second. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. A Flood Emergency Operation Plan and an Inspection and Maintenance Plan must be provided by the design professional for the building. Such certification shall be provided to the Floodplain Administrator.

- (3) Enclosures for Elevated Buildings All new construction and substantial improvements of existing structures that include ANY fully enclosed area below the base flood elevation, located below the lowest floor formed by the foundation and other exterior walls shall be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of flood waters.
  - (a) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
    - Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding (if a structure has more than one enclosed area below the base flood elevation, each shall have openings on exterior walls);
    - (ii) The bottom of all openings shall be no higher than one foot above grade; and
    - (iii) Openings may be equipped with screens, louvers, valves and other coverings and devices provided they permit the automatic flow of floodwater in both directions.
  - (b) So as not to violate the "Lowest Floor" criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area.
  - (c) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms. All interior walls, ceilings and floors below the base flood elevation shall be unfinished and/or constructed of flood resistant materials.
  - (d) Mechanical, electrical or plumbing devices shall not be installed below the Base Flood Elevation. The interior portion of such enclosed area(s) shall be void of utilities except for essential lighting and power as required.
  - (e) Property owners shall be required to execute a flood openings/venting affidavit acknowledging that all openings will be maintained as flood vents, and that the

elimination or alteration of the openings in any way will violate the requirements for enclosures below the base flood elevation. Periodic inspections will be conducted by the Floodplain Administrator to ensure compliance.

- (f) Property owners shall agree, certify, and declare to the following conditions and restrictions placed on the affected property as a condition for granting a permit. A binding agreement, referred to as a Non-conversion Agreement, is required to be executed and recorded with the Deed. It shall obligate the Owner to the following terms and conditions:
  - (i) That the enclosed area(s) shall remain fully compliant with all parts of the section Enclosures for Elevated Buildings of this Ordinance unless otherwise modified to be fully compliant with the applicable sections of the Flood Damage Prevention Ordinance in effect at the time of conversion.
  - (*ii*) A duly appointed representative of the City of Vestavia Hills is authorized to enter the property for the purpose of inspecting the exterior and interior of the enclosed area to verify compliance with the Agreement and Permit.
  - *(iii)* The community may take any appropriate legal action to correct any violation pertaining to the Agreement and the subject Permit.
- (4) <u>Standards for Manufactured Homes and Recreational Vehicles</u> Where base flood elevation data are available:
  - (a) All manufactured homes placed and substantially improved on:
    - (i) individual lots or parcels,
    - (ii) in new or substantially improved manufactured home parks or subdivisions,
    - (iii) in expansions to existing manufactured home parks or subdivisions, or
    - (iv) on a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor including basement elevated no lower than one foot above the base flood elevation.
  - (b) Manufactured homes placed and substantially improved in an existing manufactured home park or subdivision may be elevated so that either:
    - (i) the lowest floor of the manufactured home is elevated no lower than one foot above the level of the base flood elevation, or
    - (ii) where no Base Flood Elevation exists, the manufactured home chassis and supporting equipment is supported by reinforced piers or other foundation elements of at least equivalent strength and a maximum of 60 inches (five feet) above grade and must meet the standards of Article 4, Section D(5).
  - (c) All Manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
  - (d) All recreational vehicles placed on sites must either:
    - be on the site for fewer than 180 consecutive days, fully licensed and ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions; or
    - (ii) the recreational vehicle must meet all the requirements for "New Construction," including the anchoring and elevation requirements of Article 4, Section B, provisions (3)(a) and (3)(c).

- (5) <u>Require, until a regulatory floodway is designated</u>, that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the City of Vestavia Hills FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than <u>one</u> <u>foot</u> at any point within the community.
- (6) <u>Accessory Structures (also referred to as appurtenant structures)</u> This provision generally applies to new and substantially improved accessory structures. When an accessory structure complies with all other provisions of this ordinance (including floodway encroachment), represents a minimal investment (less than \$1000), and meets the requirements outlined below, these structures may be wet-floodproofed and do not have to be elevated or dry floodproofed.

Accessory structures include, but are not limited to, residential structures such as detached garages, storage sheds for garden tools or woodworking, gazebos, picnic pavilions, boathouses, small pole barns, and similar buildings. The following provisions apply to accessory structures built below the base flood elevation:

- (a) A permit shall be required prior to construction or installation.
- (b) Must be low value (less than \$1000) and not be used for human habitation.
- (c) Use must be restricted to parking of personal vehicles or limited storage (low-cost items that cannot be conveniently stored in the principal structure).
- (d) Must be designed with an unfinished interior and constructed with flood damageresistant materials below the BFE.
- (e) Must be adequately anchored to prevent flotation, collapse, or lateral movement.
- (f) Must have adequate flood openings as described in Article 4, Section A (5) and be designed to otherwise have low flood damage potential.
- (g) Shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- (h) Any mechanical and other utility equipment in the structure must be elevated to or above the BFE or must be floodproofed.
- (i) Under limited circumstances communities may issue variances to permit construction of wet-floodproofed accessory structures. Communities should not grant variances to entire subdivisions for accessory structures, especially detached garages. Variances should only be reviewed and issued on an individual or case-bycase basis and be based on the unique characteristics of the site.

## SECTION C FLOODWAYS

Located within Areas of Special Flood Hazard established in Article 2, Section B, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:

(1) The community shall select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base

flood, without increasing the water surface elevation of that flood more than one foot at any point;

- (2) Encroachments, including fill, new construction, placement of manufactured homes, substantial improvements, and other development, are prohibited.
- (3) As long as no fill, structures (including additions), or other impediments to flow are added, permissible uses within the floodway may include: lawns, gardens, athletic fields, play areas, picnic grounds, and hiking/biking/horseback riding trails, general farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife, and related uses. The uses in this subsection are permissible only if and to the extent that they do not cause any increase in flood levels during the base flood discharge.

## SECTION D BUILDING STANDARDS FOR STREAMS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS (APPROXIMATE A-ZONES)

Located within the Areas of Special Flood Hazard established in Article 2, Section B, where streams exist but no base flood data have been provided (Approximate A-Zones), the following provisions apply:

- Base flood elevation data shall be provided for subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty (50) lots or five (5) acres, whichever is the lesser.
- (2) When base flood elevation data or floodway data have not been provided in accordance with Article 2, Section B then the Floodplain Administrator shall obtain, review, and reasonably utilize any scientific or historic Base Flood Elevation and floodway data available from a Federal, State, or other source, in order to administer the provisions of Article 4. ONLY if data are not available from these sources, then Article 4, Section D, provisions (5) and (6) shall apply:
- (3) No encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty-five feet, whichever is greater, measured from the top of the stream bank, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (4) All development in Zone A must meet the requirements of Article 4, Section A and Section B(1) through B(4).
- (5) In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor (for the lowest enclosed area; including basement) elevated no less than three (3) feet above the highest adjacent grade. If the requirement as set forth in Article 4, Section B(1) and (2) require the lowest floor to be elevated no less than one foot about the base flood elevation, then the structure for this condition shall be elevated no less than four (4) feet about the highest adjacent grade.

- (6) In the absence of a base flood elevation, a manufactured home must also meet the elevation requirements of Article 4, Section B(4)(b)(ii) in that the structure must be elevated to a maximum of 60 inches (5 feet).
- (7) Openings sufficient to facilitate automatic equalization of flood water hydrostatic forces on exterior walls shall be provided in accordance with standards of Article 4, Section B(3)(a). The Floodplain Administrator shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
- (8) Fill within the area of special flood hazard shall result in no net loss of natural floodplain storage. The volume of loss of floodwater storage due to filling in the special flood hazard area shall be offset by providing an equal volume of flood storage by excavation or other compensatory measures at or adjacent to the development site. Any excavation or other measures taken for compensatory storage shall be properly designed to provide protection against erosion or overgrowth of vegetation in order to preserve the storage volume. Proper maintenance measures shall also be undertaken to ensure the intended storage volume remains in perpetuity.

## SECTION E STANDARDS FOR AREAS OF SHALLOW FLOODING (AO ZONES)

Areas of Special Flood Hazard established in Article 2, Section B may include designated "AO" shallow flooding areas. These areas have base flood depths of one to three feet (1'-3') above ground, with no clearly defined channel. The following provisions apply:

(1) All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM) plus one foot of freeboard. If no depth number is specified, the lowest floor, including basement, shall be elevated at least three (3) feet above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Article 4, Section B(3), "Enclosures for Elevated Buildings".

The Floodplain Administrator shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

(2) New construction and the substantial improvement of a non-residential structure may be flood-proofed in lieu of elevation. <u>The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to the specified flood level in Article 4, Section E(1) or three (3) feet (if no depth number is specified), above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and as required in Article 3, Section B(1)(c) and (2).</u>

(3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

## SECTION F <u>STANDARDS FOR SUBDIVISIONS</u>

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage.
- (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and;
- (4) Base flood elevation data shall be provided for all new subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than fifty lots or five acres; whichever is the lesser.
- (5) All subdivision and other development proposals which involve disturbing more than 1 acre of land shall include a stormwater management plan which is designed to limit peak runoff from the site to predevelopment levels for the one, ten, and 25-year rainfall event. These plans shall be designed to limit adverse impacts to downstream channels and floodplains. Single residential lots involving less than one acre of land disturbance are not subject to this regulation.
- (6) All preliminary plans for platted subdivisions shall identify the flood hazard area and the elevation of the base flood.
- (7) All final subdivision plats will provide the boundary of the special flood hazard area, the floodway boundary, and the base flood elevations.
- (8) In platted subdivisions, all proposed lots or parcels that will be future building sites shall have a minimum buildable area outside the natural (non-filled) 1% chance annual floodplain. The buildable area shall be, at a minimum, large enough to accommodate any primary structure and associated structures such as sheds, barns, swimming pools, detached garages, on-site sewage disposal systems, and water supply wells, where applicable.

# SECTION G. CRITICAL FACILITIES

Construction of new and substantially improved critical facilities shall be located outside the limits of the special flood hazard area (one percent annual chance floodplain). Construction of new critical facilities shall be permissible within the SFHA only if no feasible alternative site is available and access to the facilities remains available during a 0.2 percent chance flood.

- (1) Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above the base flood elevation at the site (or to the 0.2 percent chance flood elevation whichever is greater).
- (2) Floodproofing and sealing measures must be implemented to ensure that any and all on-site toxic substances will not be displaced by or released into floodwaters.

- (3) Multiple access routes, elevated to or above the 0.2 percent flood elevation, shall be provided to all critical facilities to the maximum extent possible.
- (4) Critical facilities must be protected to or above the 0.2 percent chance flood and must remain operable during such an event.
  - a. The community's flood response plan must list facilities considered critical in a flood.
  - b. Other facilities in low risk flood zones that may also be needed to support flood response efforts must be included on the critical facility list.
- (5) The use of any structure shall not be changed to a critical facility, where such a change in use will render the new critical facility out of conformance with this section.

### ARTICLE 5

### VARIANCE PROCEDURES

### SECTION A. DESIGNATION OF VARIANCE AND APPEALS BOARD

The Board of Zoning Adjustments as established by the City Council of Vestavia Hills, Alabama shall hear and decide requests for appeals or variance from the requirements of this ordinance.

### SECTION B. <u>DUTIES OF BOARD</u>

The Board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Administrator in the enforcement or administration of this ordinance. Any person aggrieved by the decision of the Board of Zoning Adjustments may appeal such decision to the Jefferson County Circuit Court, as provided in State of Alabama statute.

## SECTION C. <u>VARIANCE PROCEDURES</u>

In reviewing requests for variance, the Board of Zoning Adjustments shall consider all technical evaluations, relevant factors, and standards specified in other sections of this ordinance, and:

- (1) Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Article are met, no reasonable alternative exists, the development is protected by methods that minimize flood damage during the base flood, and it creates no additional threats to public safety.
- (2) Variances shall not be issued within any designated floodway if ANY increase in flood levels during the base flood discharge would result.

62

- (3) The evaluation must be based on the characteristics unique to that property and not be shared by adjacent parcels. The characteristics must pertain to the land itself, not to the structure, its inhabitants, or its owners.
- (4) Variances should never be granted for multiple lots, phases of subdivisions, or entire subdivisions.
- (5) The danger of life and property due to flooding or erosion damage including materials that may be swept onto other lands to the injury of others.
- (6) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner and the community.
- (7) The safety of access to the property during flood conditions for daily traffic and emergency vehicles.
- (8) The importance of the services provided by the proposed facility to the community.
- (9) The necessity of the facility to be at a waterfront location, where applicable.
- (10) The compatibility of the proposed use with existing and anticipated development based on the community's comprehensive plan for that area.
- (11) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
- (12) The costs associated with providing governmental services to the development during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and community infrastructure such as streets, bridges, and culverts.

Upon consideration of factors listed above, and the purpose of this ordinance, the Board of Zoning Adjustments may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

# SECTION D. VARIANCES FOR HISTORIC STRUCTURES

Variances may be issued for the repair or rehabilitation of Historic Structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a Historic Structure and the variance is the minimum to preserve the historic character and design of the structure.

# SECTION E. <u>CONDITIONS FOR VARIANCES</u>

The provisions of this Ordinance are minimum standards for flood loss reduction, therefore any deviation from the standards must be weighed carefully. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

- (1) A variance may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the procedures of Sections E(3), E(4), F(1) and F(2) of this Article.
- (2) In the instance of a Historic Structure, a determination is required that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
- (3) A variance shall be issued <u>ONLY</u> when there is:
  - (a) A finding of good and sufficient cause;
  - (b) A determination that failure to grant the variance would result in exceptional hardship; and
  - (c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (4) A variance shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (5) Variances shall not be issued "after the fact."

## SECTION F. VARIANCE NOTIFICATION AND RECORDS

- (1) Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that specifies the difference between the base flood elevation and the elevation of the proposed lowest floor and stating that the issuance of such a variance could:
  - a. result in rate increases in the hundreds and possibly thousands of dollars annually depending on structure and site-specific conditions; and
  - b. increase the risk to life and property resulting from construction below the base flood level.
- (2) The Floodplain Administrator shall maintain a record of all variance actions and appeal actions, including justification for their issuance. Report any variances to the Federal Emergency Management Agency Region 4 and the Alabama Department of Economic and Community Affairs/Office of Water Resources upon request.
- (3) A copy of the notice shall be recorded by the Floodplain Administrator in the Office of the City Clerk and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

# ARTICLE 6 DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

A Zone means the Area of Special Flood Hazard without base flood elevations determined.

<u>Accessory Structure (also referred to as appurtenant structures)</u> means a structure which is located on the same parcel of property as a principal structure to be insured and the use of which is incidental to the use of the principal structure. They should constitute a minimal initial investment, may not be used for human habitation, and be designed to have minimal flood damage potential. These structures are used solely for parking (two-car detached garages or smaller) or limited storage (small, low cost storage sheds). They are included under the general definition of structure and are consequently subject to all floodplain management regulations pertaining to structures.

Addition (to an existing building) means any improvement that increases the square footage of a structure. These include lateral additions added to the front, side, or rear of a structure, vertical additions added on top of a structure, and enclosures added underneath a structure. NFIP regulations for new construction apply to any addition that is considered a perimeter expansion or enclosure beneath a structure. If it is considered to be a substantial improvement (more than 50% of market value) to a structure, the existing structure will also need to be treated as new construction.

Depending on the flood zone and details of the project, the existing building may not have to be elevated. The determining factors are the common wall and what improvements are made to the existing structure. If the common wall is demolished as part of the project, then the entire structure must be elevated. If only a doorway is knocked through it and only minimal finishing is done, then only the addition has to be elevated.

AE Zone means the Area of Special Flood Hazard with base flood elevations determined.

<u>AH Zone</u> means an area of one percent chance of shallow flooding where depths are between one to three feet (usually shallow ponding), with base flood elevations shown.

<u>AO Zone</u> means an area of one percent chance of shallow flooding where depths are between one to three feet (usually sheet flow on sloping terrain), with depth numbers shown.

<u>Appeal</u> means a request for a review of the <u>City Engineer's</u> interpretation of any provision of this ordinance.

<u>AR/AE, AR/AH, AR/AO, and AR/A Zones</u> means a flood zone that results from the decertification of a previously accredited flood protection system or levee that is in the process of being restored to provide a one percent chance or greater level of flood protection. After restoration is complete, these areas will still experience residual flooding from other flooding sources.

<u>A99 Zone</u> means that part of the special flood hazard area inundated by the one percent annual chance flood to be protected from the one percent chance flood by a Federal flood protection system or levee under construction, no base flood elevations are determined.

<u>Area of shallow flooding</u> means a designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet, and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

<u>Area of special flood hazard</u> (also see "Special flood hazard area") means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. In the absence of official designation by the Federal Emergency Management Agency, Areas of Special Flood Hazard shall be those designated by the local community and referenced in Article 2, Section B.

**Base flood** means the flood having a one percent chance of being equaled or exceeded in any given year (also referred to as the "one percent chance flood").

**Base flood elevation** means the computed elevation to which floodwater is anticipated to rise during the base flood. It is also the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year. Base Flood Elevations are shown in the FIS and on the Flood Insurance Rate Map (FIRM) for zones AE, AH, A1–A30, AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, V1–V30 and VE.

**Basement** means any portion of a building having its floor sub grade (below ground level) on all sides.

**Building** (also see **Structure**) means (1) A structure with 2 or more outside rigid walls and a fully secured roof, that is affixed to a permanent site; or (2) a manufactured home (a "manufactured home," also known as a mobile home, is a structure built on a permanent chassis, transported to its site in 1 or more sections, and affixed to a permanent foundation); or (3) a travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

<u>**Community**</u> means a political entity and/or its authorized agents or representatives that have the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

<u>Community Rating System (CRS)</u> means a program developed by the Federal Insurance Administration to provide incentives for those communities in the Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

<u>Critical facility</u> (aka, critical action) means facilities for which the effects of even a slight chance of flooding would be too great. The minimum floodplain of concern for critical facilities is the 0.2 percent chance flood level. Critical facilities include, but are not limited to facilities critical to the health and safety of the public such as: emergency operations centers, designated public shelters, schools, nursing homes, hospitals, police, fire and emergency response installations, vital data storage centers, power generation and water and other utilities (including related infrastructure such

as principal points of utility systems) and installations which produce, use or store hazardous materials or hazardous waste (as defined under the Clean Water Act and other Federal statutes and regulations).

**<u>D</u>** Zone means an area in which the flood hazard is undetermined.

**Dam** means any artificial barrier, including appurtenant works, constructed to impound or divert water, waste water, liquid borne materials, or solids that may flow if saturated. All structures necessary to maintain the water level in an impoundment or to divert a stream from its course will be considered a dam.

**Development** means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials.

**Dry Floodproofing** means any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate flood damages to real estate or improved real estate property, water, and sanitary facilities, structures, and their contents. Structures shall be floodproofed with a minimum of 12 inches above the base flood elevation (more is recommended). Dry floodproofing of a pre-FIRM residential structure that has not been substantially damaged or improved is allowed. Dry floodproofing of a post-FIRM residential building is not allowed. Non-residential structures may be dry floodproofed in all flood zones with the exception of the Coastal High Hazard Area or the Coastal AE Zone.

**Elevated building** means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, pilings, posts, columns, piers, or shear walls.

<u>Elevation Certificate</u> means a FEMA form used as a certified statement that verifies a building's elevation information.

**Encroachment** means the advance or infringement of uses, plant growth, fill, excavation, buildings, structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

**Existing Construction** means any structure for which the "start of construction" commenced before March 4, 1988 [i.e., the effective date of the FIRST floodplain management code or ordinance adopted by the community as a basis for that community's participation in the National Flood Insurance Program (NFIP)] or before January 1, 1975, for FIRMs effective before that date. Existing construction may also be referred to as existing structures.

**Existing manufactured home park or subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed before March 4, 1988.

**Expansion to an existing manufactured home park or subdivision** means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

<u>Flood</u> or <u>flooding</u> means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- a. The overflow of inland or tidal waters; or
- b. The unusual and rapid accumulation or runoff of surface waters from any source.
- c. Mudslides which are proximately caused by flooding as described in part "b." of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- d. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually highwater level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in part "a." of this definition.

**Flood Hazard Boundary Map (FHBM)** means an official map of a community, issued by the Federal Insurance Administration, where the boundaries of areas of special flood hazard have been designated as Zone A.

**Flood Insurance Rate Map (FIRM)** means an official map of a community, on which the Federal Emergency Management Agency has delineated the areas of special flood hazard and/or risk premium zones applicable to the community.

<u>Flood Insurance Study</u>/ <u>Flood Elevation Study</u> means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide and/or flood-related erosion hazards.

Floodplain means any land area susceptible to being inundated by water from any source.

**Floodplain management** means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

**Floodplain management regulations** means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state, or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

**Floodproofing** means any combination of structural and nonstructural additions, changes or adjustments to structures, which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitation facilities or structures with their contents.

**Floodway (Regulatory Floodway)** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**Floodway fringe** means that area of the special flood hazard area on either side of the regulatory floodway.

**Flood Protection Elevation** means the base flood elevation plus the community freeboard. In areas where no base flood elevations exist from any authoritative source, the flood protection elevation can be historical flood elevations or base flood elevations determined and/or approved by the floodplain administrator plus freeboard.

**<u>Freeboard</u>** means a factor of safety usually expressed in feet above the Base Flood Elevation (BFE) for purposes of floodplain management which tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed. Used to determine the level for a building's lowest floor elevation or level of floodproofing required to be in compliance with the community's floodplain management regulations.

**Functionally dependent facility** means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facility that are necessary for the loading and unloading of cargo or passengers, and shipbuilding, and ship repair facilities. The term does not include long-term storage or related manufacturing facilities.

**Hardship** (as related to variances of this ordinance) means the <u>exceptional</u> difficulty that would result from a failure to grant the requested variance. The City of Vestavia Hills requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

<u>Highest adjacent grade</u> means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

Historic Structure means any structure that is;

- a. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register:
- b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district:

- c. Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or
- d. Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:
  - i. By an approved state program as determined by the Secretary of the Interior, or
  - ii. Directly by the Secretary of the Interior in states without approved programs.

**Letter of Map Change (LOMC)** is an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, and Flood Insurance Studies. LOMC's are broken down into the following categories:

### Letter of Map Amendment (LOMA)

An amendment based on technical data showing that a property was incorrectly included in a designated SFHA, was not elevated by fill (only by a natural grade elevation), and will not be inundated by the one percent chance flood. A LOMA amends the current effective FIRM and establishes that a specific property is not located in a SFHA.

### Letter of Map Revision (LOMR)

A revision based on technical data that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination concerning whether a structure or parcel has been elevated by fill above the BFE and is, therefore, excluded from the SFHA.

### Conditional Letter of Map Revision (CLOMR)

A formal review and comment by FEMA as to whether a proposed project complies with the minimum NFIP floodplain management criteria. A CLOMR does not revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

**Levee** means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

**Levee System** means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

**Lowest adjacent grade** means the point of the ground level immediately next to a building. This may be the sidewalk, patio, deck support, or basement entryway immediately next to the structure after the completion of construction. It does not include earth that is placed for aesthetic or landscape reasons around a foundation wall. It does include natural ground or properly compacted fill that comprises a component of a building's foundation system.

**Lowest floor** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that

such enclosure is not built so as to render the structure in violation of other provisions of this ordinance.

<u>Manufactured home</u> means a building, transportable in one or more section, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

<u>Manufactured home park or subdivision</u> means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

<u>Market value</u> means the property value (as agreed between a willing buyer and seller), excluding the value of land as established by what the local real estate market will bear. Market value can be established by independent certified appraisal; replacement cost depreciated by age of building (Actual Cash Value); or adjusted assessed values.

**Mean Sea Level** means the average height of the sea for all stages of the tide. It is used as a reference for the base flood elevations shown on a community's Flood Insurance Rate Map (FIRM). For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum.

<u>National Flood Insurance Program (NFIP)</u> means the federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the Federal Government and the private insurance industry.

**National Geodetic Vertical Datum (NGVD)** means as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

<u>New construction</u> means ANY structure (see definition) for which the "start of construction" commenced after March 4, 1988 and includes any subsequent improvements (including additions) to such structures.

<u>New manufactured home park or subdivision</u> means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after March 4, 1988.

**Non-Residential** means, but is not limited to; small business concerns, churches, schools, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, and hotels and motels with normal room rentals for less than 6 months duration.

North American Vertical Datum (NAVD) of 1988 means a vertical control, corrected in 1988, used as a reference for establishing varying elevations within the floodplain.

**Obstruction** means, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channel construction, bridge, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of

water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

<u>One Percent Flood</u> (aka 100-Year Flood) is the flood that has a one percent chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A or V is subject to inundation by the one percent chance flood. Over the life of a 30-year loan, there is a 26-percent chance of experiencing such a flood within the SFHA.

<u>Participating Community</u> is any community that voluntarily elects to participate in the NFIP by adopting and enforcing floodplain management regulations that are consistent with the standards of the NFIP.

<u>**Permit</u>** means and official document or certificate issued by the City Official that authorizes performance of a specific activity.</u>

<u>Post-FIRM Construction</u> means new construction and substantial improvements for which start of construction occurred after December 31, 1974, or on or after the effective date of the initial FIRM of the community, whichever is later.

<u>**Pre-FIRM Construction**</u> means new construction and substantial improvements for which start of construction occurred on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later.

**<u>Probation</u>** means an action taken by FEMA to formally notify participating communities of the first of the two NFIP sanctions due to their failure to correct violations and deficiencies in the administration and enforcement of the local floodplain management regulations.

<u>Public safety and nuisance</u> means anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle means a vehicle which is:

- a. Licensed and titled as a recreational vehicle or park model;
- b. Built on a single chassis;
- c. 400 square feet or less when measured at the largest horizontal projection;
- d. Has no attached deck, porch, or shed;
- e. Has quick-disconnect sewage, water, and electrical connectors;
- f. Designed to be self-propelled or permanently towable by a light duty truck; and
- g. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**<u>Regular Program</u>** means the second phase of the community's participation in the NFIP in which second layer coverage is available based upon risk premium rates only after FEMA has completed a flood risk study for the community.

### Regulatory floodway see Floodway.

**Remedy a violation** means to bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

**<u>Repetitive Loss</u>** means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damages occurred.

**<u>Repetitive Loss Property</u>** means any insurable structure for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling 10-year period, since 1978. At least two of the claims must be more than ten (10) days apart but, within ten years of each other. A repetitive loss property may or may not be currently insured by the NFIP.

<u>Section 1316</u> means no new flood insurance policy or federal disaster assistance shall be provided for any property which the Administrator finds has been declared by a duly constituted State or local zoning authority or other authorized public body, to be in violation of State or local laws, regulations or ordinances which are intended to discourage or otherwise restrict land development or occupancy in floodprone areas. If the structure is made compliant with the applicable community's floodplain management ordinance, then the Section 1316 declaration can be rescinded by the community and flood insurance and disaster assistance eligibility restored.

Severe Repetitive Loss Structure means any insured property that has met at least one of the following paid flood loss criteria since 1978, regardless of ownership:

- a. Four or more separate claim payments of more than \$5,000 each (including building and contents payments); or
- b. Two or more separate claim payments (building payments only) where the total of the payments exceeds the current market value of the property.

In either case, two of the claim payments must have occurred within ten years of each other. Multiple losses at the same location within ten days of each other are counted as one loss, with the payment amounts added together.

<u>Special flood hazard area (SFHA)</u> means that portion of the floodplain subject to inundation by the base flood and/or flood-related erosion hazards as shown on a FHBM or FIRM as Zones A, AE, AH, AO, AR, AR/AE, AR/AO, AR/AH, AR/A, A99, or VE.

**Start of construction** (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)) means the date the development or building permit was issued (includes substantial improvement), provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of the structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any

work beyond the stage of excavation, and includes the placement of a manufactured home on a foundation.

"Permanent construction" does not include initial land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of buildings appurtenant to the permitted structure, such as garages or sheds not occupied as dwelling units or part of the main structure. (*NOTE: accessory structures are NOT exempt from any ordinance requirements*). For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

<u>Structure</u> means a walled and roofed building, including a liquid or gas storage tank, that is principally above ground, as well as a manufactured home.

**Substantial damage** means damage of any origin sustained by a structure whereby the cost of restoring the structure to it before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. Substantial damage also means flood related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damages occurred.

**Substantial improvement** means any combination of reconstruction, alteration, or improvement to a building, taking place during a 10-year period, in which the cumulative percentage of improvement equals or exceeds 50 percent of the current market value of the structure before the "start of construction" of the initial improvement. Any subsequent improvement project costs shall be added to the initial costs for the initial improvement project. At the end of a 10-year period from the initial improvement project, an updated valuation for the structure can be used for the next time period. This term includes structures which have incurred "repetitive loss" or "substantial damage", regardless of the actual repair work performed. The market value of the building should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring.

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include either:

- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions (provided that said code deficiencies were not caused by neglect or lack of maintenance on the part of the current or previous owners) or;
  - b. Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

<u>Substantially improved existing manufactured home parks or subdivisions</u> is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50

percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

<u>Suspension</u> means the removal, with or without probation, of a participating community from the NFIP because the community failed to adopt and enforce the compliant floodplain management regulations required for participation in the NFIP.

**Variance** means a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance.

<u>Violation</u> means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in the Code of Federal Regulations (CFR) §44, Sec. 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) and corresponding parts of this ordinance is presumed to be in violation until such time as that documentation is provided.

Watercourse means any flowing body of water including a river, creek, stream, or a branch.

<u>Water surface elevation</u> means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, the North American Vertical Datum (NAVD) of 1988, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

**Wet floodproofing** means a method of construction which allows water to enter a structure in such a way that will minimize damage to the structure and its contents. Wet floodproofing is appropriate for functionally dependent use and uses that facilitate open space use by variance only, structures utilized for parking or limited storage, or when all other techniques are not technically feasible. Wet floodproofing shall not be utilized as a method to satisfy the requirements of this ordinance for bringing substantially damaged or improved structures into compliance. Wet floodproofing is not allowed in lieu of complying with the lowest floor elevation requirements for new residential buildings.

<u>X Zones (shaded)</u> are areas of 0.2 percent chance flood that are outside of the SFHA subject to the one percent chance flood with average depths of less than one foot, or with contributing drainage area less than one square mile, and areas protected by certified levees from the base flood.

X Zones (unshaded) are areas determined to be outside the 0.2 percent chance floodplain.

<u>Zone</u> means a geographical area shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

# ARTICLE 7 SEVERABILITY

If any section, clause, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

### **EFFECTIVE DATE**

This Ordinance Number 2916 shall become effective immediately upon posting and publication as required by Alabama law.

DONE, ORDERED, ADOPTED and APPROVED this the 24<sup>th</sup> day of February, 2020.

Oshley C. Curry Ashley Curry

Mayor

ATTESTED BY: **Rebecca** Leavings City Clerk

#### **CERTIFICATION:**

I, Rebecca Leavings, as City Clerk of the City of Vestavia Hills, Alabama, hereby certify that the above and foregoing copy of 1 (one) Ordinance Number 2916 is a true and correct copy of such Ordinance that was duly adopted by the City Council of the City of Vestavia Hills on the 24<sup>th</sup> day of February, 2020 as same appears in the official records of said City.

Posted at Vestavia Hills Municipal Center, Vestavia Hills New Merkle House, Vestavia Hills Civic Center and Vestavia Hills Library in the Forest this the Carof Carof, 2020.

**Rebecca** Leavings

City Clerk

Ordinance Number 2262 Page 1

#### **ORDINANCE NUMBER 2262**

AN ORDINANCE OF THE CITY OF VESTAVIA HILLS ADOPTING THE 2009 EDITION OF THE INTERNATIONAL PROPERTY MAINTENANCE CODE WITH AMENDMENTS AND APPENDIX A TO BE KNOWN AS THE "2009 CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE", REGULATING AND GOVERNING THE CONDITIONS AND MAINTENANCE OF ALL PROPERTY, BUILDINGS, AND STRUCTURES; BY PROVIDING THE STANDARDS FOR SUPPLIED UTILITIES AND FACILITIES AND OTHER PHYSICAL THINGS AND CONDITIONS ESSENTIAL TO ENSURE THAT STRUCTURES ARE SAFE, SANITARY AND FIT FOR OCCUPATION AND USE; AND THE CONDEMNATION OF BUILDINGS AND STRUCTURES UNFIT FOR HUMAN OCCUPANCY AND USE, AND THE DEMOLITION OF SUCH EXISTING STRUCTURES IN THE CITY OF VESTAVIA HILLS; PROVIDING FOR THE **ISSUANCE** OF PERMITS AND **COLLECTION OF FEES THEREFOR.** 

# BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VESTAVIA HILLS, ALABAMA AS FOLLOWS:

Section 1. A certain document, three (3) copies of which are on file in the office of the Building Safety and Inspections Department of the City of Vestavia Hills, being marked and designated as the International Property Maintenance Code, 2009 edition, and Appendix A as published by the International Code Council and amended by the City of Vestavia Hills, be and is hereby adopted as the "2009 City of Vestavia Hills Property Maintenance Code" (the "Property Maintenance Code") for the City of Vestavia Hills, in the State of Alabama for regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use, and the demolition of such existing structures as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of said Property Maintenance Code on file in the office of the Building Safety and Inspections Department of the City of Vestavia Hills are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section 2. The Property Maintenance Code, as amended, is attached and incorporated in to this Ordinance Number 2262 as though written therein and marked as Exhibit A.

**Section 3.** This Code is to be applied as a companion to existing ordinances regulating property maintenance. Where, in a specific case, different city ordinances specify different requirements, the most restrictive shall govern.

Section 4. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 5. That nothing in this ordinance or in the Property Maintenance Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby revised as cited in Section 2 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 6. This ordinance shall become effective immediately upon the passage and approval thereof by the City Council of the City of Vestavia Hills, Alabama and the publication and/or posting thereof as required by Alabama law.

DONE, ORDERED, APPROVED AND ADOPTED this the 13<sup>th</sup> day of July, 2009.

Mary Lee Mce Council President, Pro-Tem

ATTESTED BY:

Rebecca Leavings City Clerk
APPROVED BY:

Alberto C. Zaragoza, Jr. Mayor

# **CERTIFICATION:**

I, Rebecca Leavings, as City Clerk of the City of Vestavia Hills, Alabama, hereby certify that the above and foregoing copy of 1 (one) Ordinance Number 2187 is a true and correct copy of such Ordinance that was duly adopted by the City Council of the City of Vestavia Hills on the 13<sup>th</sup> day of July 2009 as same appears in the official records of said City.

Posted at Vestavia Hills Municipal Center, Vestavia Hills Public Library, and Vestavia Hills Recreational Center this the 20 day of 4000.

Rebecca Leavings

City Clerk

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# TABLE OF CONTENTS

~

| CHAPTER 1A DMINISTRATION1 |                                                           |  |
|---------------------------|-----------------------------------------------------------|--|
| PAR                       | T 1—SCOPE AND APPLICATION1                                |  |
| Section                   | on                                                        |  |
| 101                       | General                                                   |  |
| 102                       | Applicability                                             |  |
| PAR                       | T 2—ADMINISTRATION AND<br>ENFORCEMENT                     |  |
| 103                       | Department of Property Maintenance                        |  |
| 104                       | Duties and Powers of the Code Official                    |  |
| 105                       | Approval                                                  |  |
| 106                       | Violations                                                |  |
| 107                       | Notices and Orders                                        |  |
| 108                       | Unsafe Structures and Equipment                           |  |
| 109                       | Emergency Measures                                        |  |
| 110                       | Demolition                                                |  |
| 111                       | Means of Appeal                                           |  |
| 112                       | Stop Work Order                                           |  |
| CHA                       | PTER2 DEFINITIONS9                                        |  |
| Section                   | on                                                        |  |
| 201                       | General                                                   |  |
| 202                       | General Definitions                                       |  |
| CHA                       | PTER 3 GENERAL REQUIREMENTS 12                            |  |
| Sectio                    | on                                                        |  |
| 301                       | General,                                                  |  |
| 302                       | Exterior Property Areas                                   |  |
| 303                       | Swimming Pools, Spas and Hot Tubs                         |  |
| 304                       | Exterior Structure                                        |  |
| 305                       | Interior Structure                                        |  |
| 306                       | Component Serviceability                                  |  |
| 307                       | Handrails and Guardrails17                                |  |
| 308                       | Rubbish and Garbage                                       |  |
| 507                       | rest Enhination                                           |  |
| СНА                       | PTER 4 LIGHT, VENTILATION AND<br>OCCUPANCY LIMITATIONS 19 |  |
| Sectio                    | 'n                                                        |  |
| 401                       | General                                                   |  |

402

| 404    | Occupancy Limitations                    |
|--------|------------------------------------------|
| СНА    | PTER 5 PLUMBING FACILITIES AND           |
|        | FIXTURE REQUIREMENTS                     |
| Sectio | n -                                      |
| 501    | General                                  |
| 502    | Required Facilities                      |
| 503    | Toilet Rooms                             |
| 504    | Plumbing Systems and Fixtures            |
| 505    | Water System                             |
| 506    | Sanitary Drainage System                 |
| 507    | Storm Drainage                           |
| СНА    | PTER 6 MECHANICAL AND ELECTRICAL         |
|        | REQUIREMENTS                             |
| Sectio | on                                       |
| 601    | General                                  |
| 602    | Heating Facilities                       |
| 603    | Mechanical Equipment                     |
| 604    | Electrical Facilities                    |
| 605    | Electrical Equipment                     |
| 606    | Elevators, Escalators and Dumbwaiters 24 |
| 607    | Duct Systems                             |
| СНА    | PTER 7 FIRE SAFETY                       |
|        | REQUIREMENTS                             |
| Sectio | m                                        |
| 701    | General                                  |
| 702    | Means of Egress                          |
| 703    | Fire-resistance Ratings                  |
| 704    | Fire Protection Systems                  |
| СНА    | PTER 8 REFERENCED STANDARDS29            |
| 4 D D  | ENDIV & DOADDING STANDADD 3              |
| Sectio |                                          |
| A 101  | General                                  |
| A 102  | Materials                                |
| A 103  | Installation                             |
|        |                                          |

# CHAPTER 1 SCOPE AND ADMINISTRATION

# PART 1—SCOPE AND APPLICATION

### SECTION 101 GENERAL

**101.1 Title.** These regulations shall be known as the *International Property Maintenance Code* of City of Vestavia Hills, hereinafter referred to as "this code."

**101.2 Scope.** The provisions of this code shall apply to all existing residential and nonresidential structures and all existing *premises* and constitute minimum requirements and standards for *premises*, structures, equipment and facilities for light, *ventilation*, space, heating, sanitation, protection from the elements, life safety, safety from fire and other hazards, and for safe and sanitary maintenance; the responsibility of *owners*, *operators* and *occupants*; the *occupancy* of existing structures and *premises*, and for administration, enforcement and penalties.

**101.3 Intent.** This code shall be construed to secure its expressed intent, which is to ensure public health, safety and welfare insofar as they are affected by the continued *occupancy* and maintenance of structures and *premises*. Existing structures and *premises* that do not comply with these provisions shall be altered or repaired to provide a minimum level of health and safety as required herein.

**101.4 Severability.** If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

### SECTION 102 APPLICABILITY

**102.1** General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Where, in a specific case, different sections of this code specify different requirements, the most restrictive shall govern.

**102.2 Maintenance.** Equipment, systems, devices and safeguards required by this code or a previous regulation or code under which the structure or *premises* was constructed, altered or repaired shall be maintained in good working order. No *owner, operator* or *occupant* shall cause any service, facility, equipment or utility which is required under this section to be removed from or shut off from or discontinued for any occupied dwelling, except for such temporary interruption as necessary while repairs or alterations are in progress. The requirements of this code are not intended to provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures. Except as otherwise specified herein, the *owner* or the *owner*'s designated agent shall be

responsible for the maintenance of buildings, structures and *premises*.

**102.3** Application of other codes. Repairs, additions or alterations to a structure, or changes of *occupancy*, shall be done in accordance with the procedures and provisions of the adopted version of the *International Building Code*, *International Fuel Gas Code*, *International Mechanical Code* and NFPA 70. Nothing in this code shall be construed to cancel, modify or set aside any provision of the *Municipal code of the City of Vestavia Hills*.

**102.4 Existing remedies.** The provisions in this code shall not be construed to abolish or impair existing remedies of the jurisdiction or its officers or agencies relating to the removal or demolition of any structure which is dangerous, unsafe and insanitary.

**102.5 Workmanship.** Repairs, maintenance work, alterations or installations which are caused directly or indirectly by the enforcement of this code shall be executed and installed in a *workmanlike* manner and installed in accordance with the manufacturer's installation instructions.

**102.6 Historic buildings.** The provisions of this code shall not be mandatory for existing buildings or structures designated as historic buildings when such buildings or structures are judged by the *code official* to be safe and in the public interest of health, safety and welfare.

**102.7 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 8 and considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing shall apply.

**102.8 Requirements not covered by code.** Requirements necessary for the strength, stability or proper operation of an existing fixture, structure or equipment, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the *code official*.

**102.9** Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

**102.10 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

## PART 2—ADMINISTRATION AND ENFORCEMENT

### SECTION 103 DEPARTMENT OF PROPERTY MAINTENANCE INSPECTION

**103.1 General.** The *code official* shall be responsible for all property maintenance inspections under this code.

**103.2** Appointment. The *code official* shall be appointed by the Mayor of the jurisdiction.

**103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the mayor, the *code official* shall have the authority to appoint a deputy, compliance officer, inspector, or other employees. Such employees shall have powers as delegated by the *code official*.

103.4 Liability. The code official or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties. Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

103.5 Fees. A schedule of fees is hereby established to defray the expense of administration and enforcement of this ordinance by resolution of the governing body. A table of charges for the City of Vestavia Hills expense to correct and abate said conditions is as follows:

Removal of rubbish, trash or tires – actual cost plus 50% or \$1000.00, whichever is greater;

Cutting and removal of vegetation; abatement of pooled water – actual cost plus 50% or \$500.00, whichever is greater;

Removal of junk vehicles, Abatement of any other public nuisance or hazardous condition – actual cost plus 50% or \$500.00 whichever is greater.

### SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL

104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the

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effect of waiving requirements specifically provided for in this code.

**104.2 Inspections.** The *code official* shall make all of the required inspections, or shall accept reports of inspection by *approved* agencies or individuals. All reports of such inspections shall be in writing and be certified by a responsible officer of such *approved* agency or by the responsible individual. The *code official* is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

**104.3 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or whenever the *code official* has reasonable cause to believe that there exists in a *structure* or upon a *premises* a condition in violation of this code, the *code official* is authorized to enter the structure or *premises* at reasonable times to inspect or perform the duties imposed by this code, provided that if such *structure* or *premises* is occupied the *code official* shall present credentials to the *occupant* and request entry. If such structure or *premises* is unoccupied, the *code official* shall first make a reasonable effort to locate the *owner* or other person having charge or control of the *structure* or *premises* and request entry. If entry is refused, the *code official* shall have recourse to the remedies provided by law to secure entry.

**104.4 Identification.** The *code official* shall carry proper identification when inspecting *structures* or *premises* in the performance of duties under this code.

**104.5** Notices and orders. The *code official* shall issue all necessary notices or orders to ensure compliance with this code.

**104.6 Department records.** The *code official* shall keep official records of all business and activities of the department specified in the provisions of this code. Such records shall be retained in the official records for the period required for retention of public records.

### SECTION 105 APPROVAL

**105.1** Modifications. The code official, with the mayors approval shall have the power to authorize upon application in writing by the owner or the owner's representative in specific cases such modifications from the requirements of the terms of this code as will not be contrary to the public interest, where, owing to special conditions, a literal enforcement of the provisions of the Code will result in unnecessary hardship so that the spirit of the ordinance shall be observed and substantial justice done; provided, however:

1. Any such modification does not pose an unreasonable threat to the health, safety and welfare of any occupant of the property; and

2. That the owner or owner's representative submits an alternative plan to the code official that is an acceptable alternative to the requirements of this code.

The particulars of such modification, when granted or allowed, and the decision of the code official thereon, shall be kept within the records of the city and a signed copy furnished to the applicant. Any refusal of a request for modification hereunder may be appealed by the applicant. Any refusal of a request for modification here under may be

appealed by the applicant as provided for under this code. The application for modification and the final decision of the code official shall be in writing and shall be officially recorded in the permanent records of the department.

**105.2** Alternative materials, methods and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

**105.3 Required testing.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *code official* shall have the authority to require tests to be made as evidence of compliance at no expense to the jurisdiction.

**105.3.1 Test methods.** Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *code official* shall be permitted to approve appropriate testing procedures performed by an *approved* agency.

**105.3.2 Test reports.** Reports of tests shall be retained by the *code official* for the period required for retention of public records.

**105.4 Used material and equipment.** The use of used materials which meet the requirements of this code for new materials is permitted. Materials, equipment and devices shall not be reused unless such elements are in good repair or have been reconditioned and tested when necessary, placed in good and proper working condition and *approved* by the *code official*.

**105.5** Approved materials and equipment. Materials, equipment and devices *approved* by the *code official* shall be constructed and installed in accordance with such approval.

**105.6 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

### SECTION 106 VIOLATIONS

**106.1 Unlawful acts.** No person, firm or corporation, whether as owner, lessee, sub-lessee, agent, or occupant, shall erect, construct, enlarge, alter, repair, move, improve, remove, demolish, equip, use, occupy or maintain any building or premises, or cause or permit the same to be done, contrary to or in violation of any of the provisions of this code or any order issued by the code official hereunder.

**106.2 Notice of violation.** The *code official* shall serve a notice of violation or order in accordance with Section 107.

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**106.3 Prosecution of violation.** Any person failing to comply with a notice of violation or order served in accordance with Section 107 shall be deemed guilty of a misdemeanor or civil infraction as determined by the local municipality, and the violation shall be deemed a *strict liability offense*. If the notice of violation is not complied with; the *code official* shall institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful *occupancy* of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto. Any action taken by the authority having jurisdiction on such *premises* shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate.

106.4 Violation penalties. Any person, firm, corporation or agent, who shall violate any provision of this article or the code herein adopted, or who fails to comply therewith or with any of the requirements thereof, shall be subject to a class C misdemeanor and upon conviction thereof, be punished by a fine of not less than fifty dollar (\$50.00) or more than five hundred dollars (\$500.00) or by imprisonment for not more than six (6) months, or by both such fine and imprisonment, as provided for in section 1-5 of the Municipal Code of the City of Vestavia Hills, Alabama and in section 11-45-9 of the Code of Alabama (1975). In lieu of placing persons in violation of this ordinance under custodial arrest, a summons and complaint may be issued in accordance with section 11-45-9.1 of the Code of Alabama (1975). Each day that a violation of any provision continues after notice is given to the responsible party shall be deemed a separate offense and shall be punished as provided above. Further, a violation of any of the provisions of this code or any part of this ordinance is hereby declared to be a nuisance prejudicial to the public health and safety of the citizens of the City of Vestavia Hills, and the city may elect to proceed to abate said nuisance and to collect the costs thereof.

**106.4.1** Alternative penalty. Following the issuance of an ordinance non-compliance ticket and at any time until the close of business on the last business day before the day set for trial, any person accused of a violation of any section of this code may elect to enter a guilty plea (and proof of abatement) to the offense with the municipal court magistrate, waive the right to trial before the municipal court, and pay a fine to the court in accordance with the following schedule:

First offense: \$50.00 plus costs of court.

Second offense: \$100.00 plus costs of court. Third offense: Mandatory court appearance.

Multiple offenses for one lot, place, structure, or premises shall be cumulative within twelve (12) months from the date of the first offense. Repeat ticket for the same offense may be issued following ten (10) day intervals. The right to elect a guilty plea, waive trial and pay the fine is terminated following the second offense within said twelve (12) month period. If such alternative election is made, any violation of the City of Vestavia Hills Property Maintenance Code shall be prosecuted based upon this fee schedule which supersedes all others contained with the Municipal Code of the City of Vestavia Hills, Alabama. However, if the defendant is found

guilty by the municipal court, this fee schedule is not binding on the court and the court may impose a fine and/or imprisonment and court costs in accordance with the provisions of section 1-5 of the Municipal Code of the City of Vestavia Hills, Alabama.

**106.5** Abatement of violation. In case of any unlawful acts, the code official may institute an appropriate action or proceeding at law to exact the penalty provided in section 106.4. The *code official* may also ask the city's legal representative to proceed at law or in equity against the person responsible for the violation for the purpose of ordering that person:

(i) To restrain, correct or remove the violation or refrain from any further execution of work;

(ii) To restrain, or correct the erection, installation maintenance, repair, or alteration of such structure;

(iii) To require the removal of work in violation; or

(iv) To prevent the occupancy of the structure that is not in compliance with the provisions of this code.

### SECTION 107 NOTICES AND ORDERS

**107.1** Notice to person responsible. Whenever the *code official* determines that there has been a violation of this code or has grounds to believe that a violation has occurred, notice shall be given in the manner prescribed in Sections 107.2 and 107.3 to the person responsible for the violation as specified in this code. Notices for condemnation procedures shall also comply with Section 108.3.

**107.2 Form.** Such notice prescribed in Section 107.1 shall be in accordance with all of the following:

- 1. Be in writing.
- Include a description of the real estate sufficient for identification.
- Include a statement of the violation or violations and why the notice is being issued.
- Include a correction order allowing a reasonable time to make the repairs and improvements required to bring the *dwelling unit* or structure into compliance with the provisions of this code.
- 5. Inform the property owner of the right to appeal.
- Include a statement of the right to file a lien in accordance with Section 106.3.

**107.3 Method of service.** Such notice shall be deemed to be properly served if a copy thereof is:

- 1. Delivered personally;
- 2. Sent by certified or first-class mail addressed to the last known address; or
- 3. If the notice is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice for 10 days.

107.4 Unauthorized tampering. Signs, tags or seals posted or

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affixed by the *code official* shall not be mutilated, destroyed or tampered with, or removed without authorization from the *code official*.

107.5 Penalties. Penalties for noncompliance with orders and notices shall be as set forth in Section 106.4.

**107.6 Transfer of ownership.** It shall be unlawful for the *owner* of any *dwelling unit* or structure who has received a compliance order or upon whom a notice of violation has been served to sell, transfer, mortgage, lease or otherwise dispose of such *dwelling unit* or structure to another until the provisions of the compliance order or notice of violation have been complied with, or until such *owner* shall first furnish the grantee, transferee, mortgage or lessee a true copy of any compliance order or notice of violation issued by the *code official* and shall furnish to the *code official* a signed and notarized statement from the grantee, transferee, mortgagee or lessee, acknowledging the receipt of such compliance order or notice of violation and fully accepting the responsibility without condition for making the corrections or repairs required by such compliance order or notice of violation.

### SECTION 108 UNSAFE STRUCTURES AND EQUIPMENT

**108.1 General.** When a structure or equipment is found by the *code official* to be unsafe, or when a structure is found unfit for human *occupancy*, or is found unlawful, such structure shall be *condemned* pursuant to the provisions of this code.

**108.1.1** Unsafe structures. An unsafe structure is one that is found to be a nuisance or dangerous to the life, health, property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn the occupants in the event of fire, or because such structure is so decayed, dilapidated, structurally unsafe or of such faulty construction or unstable foundation, that partial or complete collapse is possible. No structure may be boarded up for more than six (6) months. An unsafe structure includes any structure boarded up for more than six (6) months unless granted a waiver by the code official, and approved by the mayor.

**108.1.2 Unsafe equipment.** Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or within the structure which is in such disrepair or condition that such equipment is a hazard to life, health, property or safety of the public or *occupants* of the *premises* or structure.

**108.1.3 Structure unfit for human occupancy.** A structure is unfit for human occupancy whenever the code official finds that such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is insanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

108.1.4 Unlawful structure. An unlawful structure is one found in whole or in part to be occupied by more persons than permitted under this code, or was erected, altered or occupied contrary to law.

108.1.5 Dangerous structure or premises. For the purpose of this code, any structure or premises that have any or all of the conditions or defects described below shall be considered dangerous:

- Any door, aisle, passageway, stairway, exit or other means of egress that does not conform to the *approved* building or fire code of the jurisdiction as related to the requirements for existing buildings.
- The walking surface of any aisle, passageway, stairway, exit or other means of egress is so warped, worn loose, torn or otherwise unsafe as to not provide safe and adequate means of egress.
- 3. Any portion of a building, structure or appurtenance that has been damaged by fire, earthquake, wind, flood, *deterioration*, *neglect*, abandonment, vandalism or by any other cause to such an extent that it is likely to partially or completely collapse, or to become *detached* or dislodged.
- 4. Any portion of a building, or any member, appurtenance or ornamentation on the exterior thereof that is not of sufficient strength or stability, or is not so *anchored*, attached or fastened in place so as to be capable of resisting natural or artificial loads of one and one-half the original designed value.
- 5. The building or structure, or part of the building or structure, because of dilapidation, *deterioration*, decay, faulty construction, the removal or movement of some portion of the ground necessary for the support, or for any other reason, is likely to partially or completely collapse, or some portion of the foundation or underpinning of the building or structure is likely to fail or give way.
- 6. The building or structure, or any portion thereof, is clearly unsafe for its use and *occupancy*.
- 7. The building or structure is *neglected*, damaged, dilapidated, unsecured or abandoned so as to become an attractive nuisance to children who might play in the building or structure to their danger, becomes a harbor for vagrants, criminals or immoral persons, or enables persons to resort to the building or structure for committing a nuisance or an unlawful act.
- 8. Any building or structure has been constructed, exists or is maintained in violation of any specific requirement or prohibition applicable to such building or structure provided by the *approved* building or fire code of the jurisdiction, or of any law or ordinance to such an extent as to present either a substantial risk of fire, building collapse or any other threat to life and safety.
- A building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, faulty construction or arrangement, inadequate light,

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*ventilation*, mechanical or plumbing system, or otherwise, is determined by the *code official* to be unsanitary or unfit for human habitation.

- 10. Any building or structure, because of a lack of sufficient or proper fire-resistance-rated construction, fire protection systems, electrical system, fuel connections, mechanical system, plumbing system or other cause, is determined by the *code official* to be a threat to life.
- 11. Any portion of a building remains on a site after the demolition or destruction of the building or structure or whenever any building or structure is abandoned so as to constitute such building or portion thereof as an attractive nuisance or hazard to the public.

**108.2** Closing of vacant structures. If the structure is vacant and unfit for human habitation and *occupancy*, and is not in danger of structural collapse, the *code official* is authorized to post a placard of condemnation on the *premises* and order the structure closed up so as not to be an attractive nuisance. Upon failure of the *owner* to close up the *premises* within the time specified in the order, the *code official* shall cause the *premises* to be closed and secured through any available public agency or by contract or arrangement by private persons and the cost thereof shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate and may be collected by any other legal resource.

**108.2.1** Authority to disconnect service utilities. The *code* official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section 102.7 in case of emergency where necessary to eliminate an immediate hazard to life or property or when such utility connection has been made without approval. The *code official* shall notify the serving utility and, whenever possible, the *owner* and *occupant* of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection the *owner* or *occupant* of the building structure or service system shall be notified in writing as soon as practical thereafter.

**108.3** Notice. Whenever the *code official* has *condemned* a structure or equipment under the provisions of this section, notice shall be posted in a conspicuous place in or about the structure affected by such notice and served on the *owner* or the person or persons responsible for the structure or equipment in accordance with Section 107.3. If the notice pertains to equipment, it shall also be placed on the *condemned* equipment. The notice shall be in the form prescribed in Section 107.2.

108.4 Placarding. Upon failure of the *owner* or person responsible to comply with the notice provisions within 10 days, the *code official* shall post on the *premises* or on defective equipment a placard bearing the word "Condemned" and a statement of the penalties provided for occupying the *premises*, operating the equipment or removing the placard.

**108.4.1 Placard removal.** The *code official* shall remove the condemnation placard whenever the defect or defects upon which the condemnation and placarding action were

based have been eliminated. Any person who defaces or removes a condemnation placard without the approval of the *code official* shall be subject to the penalties provided by this code.

**108.5 Prohibited occupancy.** Any occupied structure *condeemed* and placarded by the *code official* shall be vacated as ordered by the *code official*. Any person who shall occupy a placarded *premises* or shall operate placarded equipment, and any *owner* or any person responsible for the *premises* who shall let anyone occupy a placarded *premises* or operate placarded equipment shall be liable for the penalties provided by this code.

**108.6** Abatement methods. The owner, operator or occupant of a building, premises or equipment deemed unsafe by the code official shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other approved corrective action.

**108.7 Record.** The *code official* shall cause a report to be filed on an unsafe condition. The report shall state the *occupancy* of the structure and the nature of the unsafe condition.

### SECTION 109 EMERGENCY MEASURES

109.1 Imminent danger. When, in the opinion of the code official, there is imminent danger of failure or collapse of a building or structure which endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the structure, or when there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors or the presence of toxic fumes, gases or materials, or operation of defective or dangerous equipment, the code official is hereby authorized and empowered to order and require the occupants to vacate the premises forthwith. The code official shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure Is Unsafe and Its Occupancy Has Been Prohibited by the Code Official." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition or of demolishing the same.

**109.2 Temporary safeguards.** Notwithstanding other provisions of this code, whenever, in the opinion of the *code official*, there is *imminent danger* due to an unsafe condition, the *code official* shall order the necessary work to be done, including the boarding up of openings, to render such structure temporarily safe whether or not the legal procedure herein described has been instituted; and shall cause such other action to be taken as the *code official* deems necessary to meet such emergency.

**109.3** Closing streets. When necessary for public safety, the *code official* shall temporarily close structures and close, or order the authority having jurisdiction to close, sidewalks, streets, *public ways* and places adjacent to unsafe structures, and prohibit the same from being utilized.

109.4 Emergency repairs. Reference Code of Alabama 11-40-30.

109.5 Costs of emergency repairs. Costs incurred in the performance of emergency work shall be paid by the jurisdiction.

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The legal counsel of the jurisdiction shall institute appropriate action against the *owner* of the *premises* where the unsafe structure is or was located for the recovery of such costs.

**109.6 Hearing.** Any person ordered to take emergency measures shall comply with such order forthwith. Any affected person shall thereafter, upon petition directed to the City Council, be afforded a hearing as described in this code.

### SECTION 110 DEMOLITION

**110.1 General.** The code official, with the approval of the mayor may order the owner of any structure which is:

(i) Dangerous, unsafe, unsanitary, or otherwise unfit for human habitation or occupancy such that it is unreasonable to repair the structure;

(ii) A public nuisance;

(iii) Vacant or abandoned for more than six (6) months;

(iv) Boarded up for more than six (6) months;

 (v) Under construction where there has been a cessation of normal construction activity for a period of more than three (3) months; or

(vi) In violation of the provisions of this code for more than six (6) months

(vii) More that 75% of structure is demolished for addition, and no actual construction is performed.

To demolish and remove such structure to include, but not be limited to, the removal of the concrete foundations and their components, porches, steps walkways, and curbs; or if such structure is capable of being made safe by repairs, to repair and make safe and sanitary or to demolish or remove at owner's option. Demolition of a structure shall proceed as set forth in the Code of Alabama (1975) 11-40-30.

110.2 Notices and orders. Whenever the code official finds that a building or structure is unsafe to the extent that it is a public nuisance, the official shall give the owner and all mortgagees of record notice to remedy the unsafe or dangerous condition or to demolish the same within a reasonable time set out in the notice, which time shall not be less than thirty (30) days or subject the building or structure to be demolished by the City of Vestavia Hills and the cost thereof assessed against the property. The notice should be complete, comprehensive and set forth all reasons supporting the decision make by the official.

**110.3 Hearing Process.** The owner of the building or structure within the time specified in the notice, but not more than thirty (30) days from the date the notice is given, shall file a written request for a hearing before the City Council, together with objections to the finding by the code official.

The City Council shall hold the public hearing not less than five (5) nor more than thirty (30) days after the request for such hearing.

If no request for a hearing is requested, then the City Council, after the expiration of thirty (30) days from the date the notice is given, shall determine whether or not the building or structure is unsafe to the extent that it is a public nuisance.

If it is determined by the City Council that the building or structure is unsafe to the extent that it is a public nuisance, the City Council shall order the building to be demolished. The demolition may be accomplished by the City of Vestavia Hills by the use of its own forces or the City of Vestavia Hills may provide by contract for the demolition.

Any person aggrieved by the decision of the City Council at the hearing may within ten (10) days thereafter appeal to the Circuit Court of Jefferson County.

The City Clerk shall, upon receiving the notice from the Court, file with the Court a copy of the findings and determination of the governing body in its proceedings.

**110.4 Salvage materials.** When any structure has been ordered demolished and removed, the governing body or other designated officer under said contract or arrangement aforesaid shall have the right to sell the salvage and valuable materials at the highest price obtainable. The net proceeds of such sale, after deducting the expenses of such demolition and removal, shall be promptly remitted with a report of such sale or transaction, including the items of expense and the amounts deducted, for the person who is entitled thereto, subject to any order of a court. If such a surplus does not remain to be turned over, the report shall so state.

#### SECTION 111 MEANS OF APPEAL

111.1 Means for appeal. All appeals must be referred to the City Council.

### SECTION 112 STOP WORK ORDER

**112.1** Authority. Whenever the *code official* finds any work regulated by this code being performed in a manner contrary the provisions of this code or in a dangerous or unsafe manner, the *code official* is authorized to issue a stop work order.

112.2 Issuance. A stop work order shall be in writing and shall be given to the *owner* of the property, to the *owner*'s agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work is authorized to resume.

**112.3 Emergencies.** Where an emergency exists, the *code official* shall not be required to give a written notice prior to stop ping the work.

**112.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be issued a summons to appear before the City of Vestavia Hills magistrate.



# CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

# CHAPTER 2 DEFINITIONS

### SECTION 201 GENERAL

**201.1** Scope. Unless otherwise expressly stated, the following terms shall, for the purposes of this code, have the meanings shown in this chapter.

**201.2 Interchangeability.** Words stated in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

201.3 Terms defined in other codes: Where terms are not defined in this property maintenance code and are defined in the Municipal Code of the City of Vestavia Hills, NEC Electrical Code, International Building Code, International Fire Code, International Mechanical Code, International Plumbing Code, International Fuel Gas Code, International Residential Code and in the zoning code of the City of Vestavia Hills, such terms shall have the meanings ascribed to them as in those codes.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

201.5 Parts. Whenever the words "dwelling unit," "dwelling," "premises," "building," "rooming house," "rooming unit," "housekeeping unit" or "story" are stated in this code, they shall be construed as though they were followed by the words "or any part thereof."

# SECTION 202 GENERAL DEFINITIONS

ABANDONED MOTOR VEHICLE. Any motor-driven vehicle, regardless of size, which is left unattended on real property not owned by the vehicle owner for a period exceeding 48 hours without consent of such property owner.

ANCHORED. Secured in a manner that provides positive connection.

**APPROVED.** Approved by the code official or compliance officer.

**BASEMENT.** That portion of a building which is partly or completely below grade.

**BATHROOM.** A room containing plumbing fixtures including a bathtub or shower.

**BEDROOM.** A room in a dwelling that may be occupied for sleeping purposes. Every room which is at least seventy (70) square feet in floor area, having at least one window facing directly to the outdoors, which is not the kitchen, living room, dining room, bathroom, closet, hall, storage or utility space or similar area, shall be a bedroom.

**CODE OFFICIAL.** The official who is charged with the administration and enforcement of this code, or any duly authorized representative.

**COMPLIANCE OFFICER.** Employee designated by the code official to investigate and enforce the provisions of this code.

CONDEMN. To adjudge unfit for occupancy.

**DETACHED.** When a structural element is physically disconnected from another and that connection is necessary to provide a positive connection.

**DETERIORATION.** To weaken, disintegrate, corrode, rust or decay and lose effectiveness.

[B] DWELLING UNIT. A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

**EASEMENT.** That portion of land or property reserved for present or future use by a person or agency other than the legal fee *owner*(s) of the property. The *easement* shall be permitted to be for use under, on or above a said lot or lots.

**EQUIPMENT SUPPORT.** Those structural members or assemblies of members or manufactured elements, including braces, frames, lugs, snuggers, hangers or saddles, that transmit gravity load, lateral load and operating load between the equipment and the structure.

**EXTERIOR PROPERTY.** The open space on the *premises* and on adjoining property under the control of *owners* or *operators* of such *premises*.

**GARBAGE.** The animal or vegetable waste resulting from the handling, preparation, cooking and consumption of food.

**GUARD.** A building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level.

HABITABLE SPACE. Space in a structure for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, storage or utility rooms or spaces, cellars, porches, breezeways, garages, attic spaces which do not comply with building/zoning code requirements and similar areas are not habitable rooms, areas, or spaces.

HOUSEKEEPING UNIT. A room or group of rooms forming a single *habitable space* equipped and intended to be used for living, sleeping, cooking and eating which does not contain, within such a unit, a toilet, lavatory and bathtub or shower.

IMMINENT DANGER. A condition which could cause serious or life-threatening injury or death at any time.

**IMPROVED PARKING SURFACE.** An improved area consisting of gravel, asphalt or concrete dedicated to the parking of various motor vehicles, trailers, boats, and etc.

**INFESTATION.** The presence, within or contiguous to, a structure or *premises* of insects, rats, vermin or other pests. **INOPERABLE MOTOR VEHICLE.** Inoperable motor vehicle. Any motor-driven vehicle, regardless of size, which

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is incapable of being self-propelled upon the public streets of the city or which does not meet the requirements for operation upon the public streets of the city, including a current motor vehicle license. A motor vehicle shall be considered abandoned or disabled if it is in a state of evident disuse, neglect or abandonment. Evidence of disuse, neglect or abandonment may include, without limitation, factors such as: the vehicle being wrecked or inoperable; the vehicle being partially dismantled, having no engine, transmission, or other major or necessary parts; the vehicle having no valid license tag; there being vegetation underneath the vehicle as high as the vehicle body or frame; there being refuse or debris collected under the vehicle; the vehicle being used solely for storage purposes; or the vehicle being in any physical state rendering it inoperable or unsightly to the neighborhood.

LABELED. Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the abovelabeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

LET FOR OCCUPANCY OR LET. To permit, provide or offer possession or occupancy of a dwelling, dwelling unit, rooming unit, building, premise or structure by a person who is or is not the legal owner of record thereof, pursuant to a written or unwritten lease, agreement or license, or pursuant to a recorded or unrecorded agreement of contract for the sale of land.

MINOR. A person who has not arrived at the age of majority as defined in section 26-1-1, Code of Alabama (1975).

NEGLECT. The lack of proper maintenance for a building or structure.

OCCUPANCY. The purpose for which a building or portion thereof is utilized or occupied.

OCCUPANT. Any individual living or sleeping in a building, or having possession of a space within a building.

OPENABLE AREA. That part of a window, skylight or door which is available for unobstructed ventilation and which opens directly to the outdoors.

OPERATOR. Any person who has charge, care or control of a structure or premises which is let or offered for occupancy.

OWNER. Any person, agent, operator, firm or corporation having a legal or equitable interest in the property; or recorded in the official records of the state, county or municipality as holding title to the property; or otherwise having control of the property, including the guardian of the estate of any such person, and the executor or administrator of the estate of such person if ordered to take possession of real property by a court.

PERSON. An individual, corporation, partnership or any other group acting as a unit.

PEST ELIMINATION. The control and elimination of insects, rodents or other pests by eliminating their harborage places; by removing or making inaccessible materials that

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serves as their food or water; by other approved pest elimination methods.

POOLED WATER. Small body of non-flowing standing water or standing water found in containers, tires or ornamental fixtures that is in a condition conducive to the harboring of mosquito larvae.

PREMISES. A lot, plot or parcel of land, easement or public way, including any structures thereon.

PUBLIC WAY. Any street, alley or similar parcel of land essentially unobstructed from the ground to the sky, which is deeded, dedicated or otherwise permanently appropriated to the public for public use.

**ROOMING HOUSE.** A building arranged or occupied for lodging, with or without meals, for compensation and not occupied as a one- or two-family dwelling.

ROOMING UNIT. Any room or group of rooms forming a single habitable unit occupied or intended to be occupied for sleeping or living, but not for cooking purposes.

RUBBISH. Combustible and noncombustible waste materials; the term shall include the residue from the burning of wood, coal and other combustible materials, paper, rags, cartons, boxes, wood, excelsior, rubber, leather, tree branches, yard trimmings, tin cans, metals, mineral matter, glass, crockery and dust and other similar materials. Also useless or rejected objects or junk.

[B] SLEEPING UNIT. A room or space in which people sleep, which can also include permanent provisions for living, eating and either sanitation or kitchen facilities, but not both. Such rooms and spaces that are also part of a *dwelling unit* are not sleeping units.

STRICT LIABILITY OFFENSE. An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as a part of its case. It is enough to prove that the defendant either did an act which was prohibited, or failed to do an act which the defendant was legally required to do.

STRUCTURE. That which is built or constructed or a portion thereof.

TENANT. A person, corporation, partnership or group, whether or not the legal owner of record, occupying a building or portion thereof as a unit.

TOILET ROOM. A room containing a water closet or urinal but not a bathtub or shower.

ULTIMATE DEFORMATION. The deformation at which failure occurs and which shall be deemed to occur if the sustainable load reduces to 80 percent or less of the maximum strength.

VEHICLE. A device normally required to be licensed and intending to transport persons or property and which is drawn, driven, or otherwise transported on land, air or water.

VENTILATION. The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space.

WORKMANLIKE. Executed in a skilled manner; e.g., generally plumb, level, square, in line, undamaged and without marring adjacent work.

YARD. An open space on the same lot with a structure



CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

# CHAPTER 3 GENERAL REQUIREMENTS

# SECTION 301 GENERAL

**301.1 Scope.** The provisions of this chapter shall govern the minimum conditions and the responsibilities of persons for maintenance of structures, equipment and *exterior property*.

**301.2 Responsibility.** The owner of the premises shall maintain the structures and exterior property in compliance with these requirements, except as otherwise provided for in this code. A person shall not occupy as owner-occupant or permit another person to occupy premises which are not in a sanitary and safe condition and which do not comply with the requirements of this chapter. Occupants of a dwelling unit, rooming unit or housekeeping unit are responsible for keeping in a clean, sanitary and safe condition that part of the dwelling unit, rooming unit, housekeeping unit or premises which they occupy and control.

**301.3 Vacant structures and land.** All vacant structures and *premises* thereof or vacant land shall be maintained in a clean, safe, secure and sanitary condition as provided herein so as not to cause a blighting problem or adversely affect the public health or safety. No structure shall be maintained which is:

(i) Dangerous, unsafe, unsanitary, or otherwise unfit for human habitation or occupancy;

(ii) A public nuisance;

(iii) Vacant or abandoned for more than six (6) months;

(iv) Boarded up for more than six (6) months;

(v) Under construction where there has been a cessation of normal construction activity for a period of more than six (6) months; or

(vi) In violation of the provisions of this code for more than six (6) months.

(vii) More that 75% of structure is demolished for addition, and no actual construction is performed.

## SECTION 302 EXTERIOR PROPERTY AREAS

**302.1 Sanitation.** All *exterior property* and *premises* shall be maintained in a clean, safe and sanitary condition. The *occupant* shall keep that part of the *exterior property* which such *occupant* occupies or controls in a clean and sanitary condition. It shall be unlawful for any person to permit any old broken lumber, rusted or unused equipment, old pipe, or other used, discarded and worn, unsightly articles or materials to remain in any yard or open area owned, occupied or in the possession of such person for a period of more than five (5) days. Further, it shall be unlawful for the owner or occupant of a building, structure or property to utilize the premises of such property for the open storage of any abandoned motor vehicle, icebox, refrigerator, stove, glass, building material rubbish or other similar items. It shall be the duty and responsibility of every such owner and/or

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occupant to keep the premises of such property clean and to remove from the premises upon notice from the code official all such abandoned items listed above, including but not limited to, weeds, dead trees, trash, garbage, etc.

**302.1.1** Attractive nuisances. No person shall permit any physical condition or use of property or its appurtenances which constitutes an attractive danger to children, including but not limited to, open wells, swimming pools, shafts, basements, excavations or pits, unsafe fences or structures, or discarded refrigerators or freezers with doors attached

**302.2 Grading and drainage.** All *premises* shall be graded and maintained to prevent the erosion of soil and to prevent the accumulation of stagnant water thereon, or within any structure located thereon.

Exception: Approved retention areas and reservoirs.

**302.3 Sidewalks and driveways.** All sidewalks, walkways, stairs, driveways, parking spaces and similar areas shall be kept in a proper state of repair, and maintained free from hazardous conditions.

**302.4 Weeds.** All premises and exterior property shall be maintained free from weeds or plant growth in excess of 8 inches. All noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens."

Section 302.4.1 Notice. The city shall notify in writing the owner of any lot, place or area within the city or the agent of such owner or the occupant to cut, destroy or remove any weeds, grass, trash, rubbish or noxious matter found growing, lying or located on such owner or occupant's property or upon the sidewalk or street right-of-way abutting the property and that, upon the failure of the owner or agent or occupant to do so. The city will cause such weeds, grass, rubbish or noxious matter to be cut, destroyed or removed. Such notice shall be made in accordance with section 107 herein. In lieu of notice by certified mail, a notice may be posted on the property upon which the violation is alleged to exist and at the office of code enforcement, and proof of posting shall be by affidavit of the person posting the notice, which affidavit shall include a copy of the notice posted and the date, and the place of its posting. Notice by posting may run concurrently with, or may follow an attempt or attempts to provide notice by hand delivery or by mail.

Section 302.4.2 Clearing by city. Upon failure, neglect or refusal of any owner, agent or occupant notified as provided in this article to cut, destroy or remove weeds, grass, trash, rubbish or noxious matter growing, lying or located upon such owner or occupant's property or upon the sidewalk or street right-of-way abutting property, within ten days of posting the property as provided for in this article, or within

ten days upon receipt of the written notice provided for in this article or within five days after the date of such notice, if the notice is returned to the city because of the inability of the post office to make delivery thereof, provided the notice was properly addressed to the last known address of such owner, agent or occupant, the city may, in addition to any other penalties provided for in this code, pay for the cutting, destroying or removing of such weeds, grass, trash, rubbish or noxious matter or effect the removal by the city.

Section 302.4.3 Charges. When the city has effected the removal of obnoxious growth or has paid for its removal the actual *cost* plus 50% or \$500.00 whichever is greater; including administrative costs, shall be charged to the owner or occupant of such property. Charges shall comply with the fee schedule in section 103.5.

Section 302.4.4 Lien. Where the full amount due the city is not paid by such owner or occupant within 30 days after the cutting, destroying or removal of weeds, grass, trash, rubbish or noxious matter as set forth in sections 302.4 and 302.4.4, such charges are declared a lien upon such property.

**302.5 Rodent harborage.** All structures and *exterior property* shall be kept free from rodent harborage and *infestation*. Where rodents are found, they shall be promptly exterminated by *approved* processes which will not be injurious to human health. After extermination, proper precautions shall be taken to eliminate rodent harborage and prevent reinfestation.

**302.6 Exhaust vents.** Pipes, ducts, conductors, fans or blowers shall not discharge gases, steam, vapor, hot air, grease, smoke, odors or other gaseous or particulate wastes directly upon abutting or adjacent public or private property or that of another *tenant*.

**302.7 Accessory structures.** All accessory structures, including *detached* garages, fences and walls, shall be maintained structurally sound and in good repair.

**302.8** Motor vehicles. Except as provided for in other regulations, no more than one (1) inoperable, wrecked, abandoned, or unregistered motor vehicle shall be parked, kept or stored on any premises, and no vehicle shall at any time be in a state of partial or major disassembly, disrepair, or in the process of being stripped or dismantled. Painting of vehicles is prohibited unless conducted inside an approved spray booth. All such vehicles shall be screened from view from all public or private street rights-of-way by virtue of storage within an enclosed building or being screened by privacy fencing, topography, and/or vegetation. Exceptions:

(i) A vehicle of any type is permitted to undergo major overhaul, including body work, provided that such work is performed inside a structure or similarly enclosed area designed and approved for such purposes; and

(ii) Commercial property properly zoned for automobile repairs (i.e., body shops).

**302.8.1 Commercial Vehicles.** At no time shall commercial vehicle Class 3 (10,001-14,000 lbs. GVW) and above be allowed to park over night on residential property.

**Exception:** Personal moving vehicle for a period not to exceed 48 hours.

Section 302.8.2 No person shall park or cause to be parked any motor vehicle, recreational vehicle, trailer, ATV motorcycle, boat, motorized equipment, golf cart, lawnmower or any other item deemed in violation by the City's code official or his designated agent upon any surface other than an improved parking surface as defined in this code. Further, all recreational vehicles, trailers or boats must be parked on an improved parking surface in an area located behind the front setback of said residential lot as defined in the City's Zoning Ordinance unless such vehicle or boat is being prepared for an imminent use in which case, such parking shall be limited to a period not to exceed 48 hours. For corner lots, said parking shall be provided in an area not located adjacent to any public street or right-of-way.

**Exception:** Any property not having an improved parking space at the time of adoption will be exempt from the requirement of section 302.8.1. However the above parking setback restrictions are applicable.

**302.9 Defacement of property.** No person shall willfully or wantonly damage, mutilate or deface any exterior surface of any structure or building on any private or public property by placing thereon any marking, carving or graffiti.

It shall be the responsibility of the *owner* to restore said surface to an *approved* state of maintenance and repair.

### SECTION 303 SWIMMING POOLS, SPAS AND HOT TUBS

**303.1 Swimming pools.** All swimming pools must comply with adopted version of the International Residential Code.

### SECTION 304 EXTERIOR STRUCTURE

**304.1 General.** The exterior of a structure shall be maintained in good repair, structurally sound and sanitary so as not to pose a threat to the public health, safety or welfare.

**304.1.1 Unsafe conditions.** The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the *International Building Code* or the *International Existing Building Code* as required for existing buildings:

- The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength;
- The anchorage of the floor or roof to walls or columns, and of walls and columns to foundations is not capable of resisting all nominal loads or load effects;
- 3. Structures or components thereof that have reached their limit state;
- 4. Siding and masonry joints including joints between

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the building envelope and the perimeter of windows, doors and skylights are not maintained, weather resistant or water tight;

- Structural members that have evidence of *deterioration* or that are not capable of safely supporting all nominal loads and load effects;
- Foundation systems that are not firmly supported by footings, are not plumb and free from open cracks and breaks, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects;
- Exterior walls that are not *anchored* to supporting and supported elements or are not plumb and free of holes, cracks or breaks and loose or rotting materials, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects;
- Roofing or roofing components that have defects that admit rain, roof surfaces with inadequate drainage, or any portion of the roof framing that is not in good repair with signs of *deterioration*, fatigue or without proper anchorage and incapable of supporting all nominal loads and resisting all load effects;
- Flooring and flooring components with defects that affect serviceability or flooring components that show signs of *deterioration* or fatigue, are not properly *anchored* or are incapable of supporting all nominal loads and resisting all load effects;
- Veneer, cornices, belt courses, corbels, trim, wall facings and similar decorative features not properly anchored or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects;
- Overhang extensions or projections including, but not limited to, trash chutes, canopies, marquees, signs, awnings, fire escapes, standpipes and exhaust ducts not properly *anchored* or that are *anchored* with connections not capable of supporting all nominal loads and resisting all load effects;
- 12. Exterior stairs, decks, porches, balconies and all similar appurtenances attached thereto, including guards and handrails, are not structurally sound, not properly anchored or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects; or
- 13. Chimneys, cooling towers, smokestacks and similar appurtenances not structurally sound or not properly anchored, or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects.

#### **Exceptions:**

- 1. When substantiated otherwise by an *approved* method.
- 2. Demolition of unsafe conditions shall be permitted when *approved* by the *code offi*-

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cial.

304.2 Protective treatment. All exterior surfaces, including but not limited to, doors, door and window frames, cornices, porches, trim, balconies, decks and fences, shall be maintained in good condition. Exterior wood surfaces, other than decayresistant woods, shall be protected from the elements and decay by painting or other protective covering or treatment. Peeling, flaking and chipped paint shall be eliminated and surfaces repainted. All siding and masonry joints, as well as those between the building envelope and the perimeter of windows, doors and skylights, shall be maintained weather resistant and water tight. All metal surfaces subject to rust or corrosion shall be coated to inhibit such rust and corrosion, and all surfaces with rust or corrosion shall be stabilized and coated to inhibit future rust and corrosion. Oxidation stains shall be removed from exterior surfaces. Surfaces designed for stabilization by oxidation are exempt from this requirement.

**[F] 304.3 Premises identification.** Buildings shall have *approved* address numbers placed in a position to be plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

**Exception:** Such premises identification shall not be required where address numbers are placed on the mailbox in front of the building and placed in such a position to be plainly legible and visible from the street or road fronting the property.

**304.4 Structural members.** All structural members shall be maintained free from *deterioration*, and shall be capable of safely supporting the imposed dead and live loads.

**304.5 Foundation walls.** All foundation walls shall be maintained plumb and free from open cracks and breaks and shall be kept in such condition so as to prevent the entry of rodents and other pests.

**304.6 Exterior walls.** All exterior walls, Doors, Windows, and Garage doors, shall be free from holes, breaks, and loose or rotting materials; and maintained weatherproof and properly surface coated where required to prevent deterioration.

**304.7 Roofs and drainage.** The roof and flashing shall be sound, tight and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or *deterioration* in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair and free from obstructions. Roof water shall not be discharged in a manner that creates a public nuisance.

**304.8 Decorative features.** All cornices, belt courses, corbels, terra cotta trim, wall facings and similar decorative features shall be maintained in good repair with proper anchorage and in a safe condition.

**304.9 Overhang extensions.** All overhang extensions including, but not limited to canopies, marquees, signs, metal awnings, fire escapes, standpipes and exhaust ducts shall be

**304.10** Stairways, decks, porches and balconies. Every exterior stairway, deck, porch and balcony, and all appurtenances attached thereto, shall be maintained structurally sound, in good repair, with proper anchorage and capable of supporting the imposed loads.

**304.11 Chimneys and towers.** All chimneys, cooling towers, smoke stacks, and similar appurtenances shall be maintained structurally safe and sound, and in good repair. All exposed surfaces of metal or wood shall be protected from the elements and against decay or rust by periodic application of weather-coating materials, such as paint or similar surface treatment.

**304.12 Handrails and guards.** Every handrail and *guard* shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

**304.13 Window, skylight and door frames.** Every window, skylight, door and frame shall be kept in sound condition, good repair and weather tight.

**304.13.1 Glazing.** All glazing materials shall be maintained free from cracks and holes.

**304.13.2 Openable windows.** Every window, other than a fixed window, shall be easily openable and capable of being held in position by window hardware.

**304.14 Insect screens.** During the period from January to December, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of not less that 16 mesh per inch (16 mesh per 25 mm) and every door shall have a self-closing device in good working condition.

**Exception:** Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

**304.15 Doors.** All exterior doors, door assemblies and hardware shall be maintained in good condition. Locks at all entrances to *dwelling units* and *sleeping units* shall tightly secure the door. Locks on means of egress doors shall be in accordance with Section 702.3.

**304.16 Basement hatchways.** Every *basement* hatchway shall be maintained to prevent the entrance of rodents, rain and surface drainage water.

**304.17 Guards for basement windows.** Every *basement* window that is openable shall be supplied with rodent shields, storm windows or other *approved* protection against the entry of rodents.

**304.18 Building security.** Doors, windows or hatchways for *dwelling units*, room units or *housekeeping units* shall be pro-

vided with devices designed to provide security for the *occupants* and property within.

**304.18.1 Doors.** Doors providing access to a *dwelling unit*, *rooming unit* or *housekeeping unit* that is rented, leased or let shall be equipped with a deadbolt lock designed to be readily openable from the side from which egress is to be made without the need for keys, special knowledge or effort and shall have a lock throw of not less than 1 inch (25 mm). Such deadbolt locks shall be installed according to the manufacturer's specifications and maintained in good working order. For the purpose of this section, a sliding bolt shall not be considered an acceptable deadbolt lock.

**304.18.2 Windows.** Operable windows located in whole or in part within 6 feet (1828 mm) above ground level or a walking surface below that provide access to a *dwelling unit, rooming unit or housekeeping unit* that is rented, leased or let shall be equipped with a window sash locking device.

**304.18.3 Basement hatchways.** *Basement* hatchways that provide access to a *dwelling unit, rooming unit* or *house-keeping unit* that is rented, leased or let shall be equipped with devices that secure the units from unauthorized entry.

### SECTION 305 INTERIOR STRUCTURE

**305.1 General.** The interior of a structure and equipment therein shall be maintained in good repair, structurally sound and in a sanitary condition. *Occupants* shall keep that part of the structure which they occupy or control in a clean and sanitary condition. Every *owner* of a structure containing a *rooming house, housekeeping units*, a hotel, a dormitory, two or more *dwelling units* or two or more nonresidential occupancies, shall maintain, in a clean and sanitary condition, the shared or public areas of the structure and *exterior property*.

**305.1.1 Unsafe conditions.** The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the *International Building Code* or the *International Existing Building Code* as required for existing buildings:

- 1. The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength;
- The anchorage of the floor or roof to walls or columns, and of walls and columns to foundations is not capable of resisting all nominal loads or load effects;
- Structures or components thereof that have reached their limit state;
- 4. Structural members are incapable of supporting nominal loads and load effects;
- Stairs, landings, balconies and all similar walking surfaces, including guards and handrails, are not structurally sound, not properly anchored or are anchored with connections not capable of supporting all nominal loads and resisting all load effects;
- 6. Foundation systems that are not firmly supported by

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footings are not plumb and free from open cracks and breaks, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects.

### **Exceptions:**

- 1. When substantiated otherwise by an *approved* method.
- Demolition of unsafe conditions shall be permitted when approved by the code official.

**305.2 Structural members.** All structural members shall be maintained structurally sound, and be capable of supporting the imposed loads.

**305.3 Interior surfaces.** All interior surfaces, including windows and doors, shall be maintained in good, clean and sanitary condition. Peeling, chipping, flaking or abraded paint shall be repaired, removed or covered. Cracked or loose plaster, decayed wood and other defective surface conditions shall be corrected.

**305.4 Stairs and walking surfaces.** Every stair, ramp, landing, balcony, porch, deck or other walking surface shall be maintained in sound condition and good repair.

**305.5 Handrails and guards.** Every handrail and *guard* shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

**305.6 Interior doors.** Every interior door shall fit reasonably well within its frame and shall be capable of being opened and closed by being properly and securely attached to jambs, headers or tracks as intended by the manufacturer of the attachment hardware.

### SECTION 306 COMPONENT SERVICEABILITY

**306.1 General.** The components of a structure and equipment therein shall be maintained in good repair, structurally sound and in a sanitary condition.

**306.1.1 Unsafe conditions.** Where any of the following conditions cause the component or system to be beyond its limit state, the component or system shall be determined as unsafe and shall be repaired or replaced to comply with the *International Building Code* as required for existing buildings:

- 1. Soils that have been subjected to any of the following conditions:
  - 1.1. Collapse of footing or foundation system;
  - Damage to footing, foundation, concrete or other structural element due to soil expansion;
  - 1.3. Adverse effects to the design strength of footing, foundation, concrete or other structural element due to a chemical reaction from the soil;

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- 1.4. Inadequate soil as determined by a geotechnical investigation;
- 1.5. Where the allowable bearing capacity of the soil is in doubt; or
- 1.6. Adverse effects to the footing, foundation, concrete or other structural element due to the ground water table.
- 2. Concrete that has been subjected to any of the following conditions:
  - 2.1. Deterioration;
  - 2.2. Ultimate deformation;
  - 2.3. Fractures;
  - 2.4. Fissures;
  - 2.5. Spalling;
  - 2.6. Exposed reinforcement; or
  - 2.7. Detached, dislodged or failing connections.
- 3. Aluminum that has been subjected to any of the following conditions:
  - 3.1. Deterioration;
  - 3.2. Corrosion;
  - 3.3. Elastic deformation;
  - 3.4. Ultimate deformation;
  - 3.5. Stress or strain cracks;
  - 3.6. Joint fatigue; or
  - 3.7. Detached, dislodged or failing connections.

Masonry that has been subjected to any of the following conditions:

- 4.1. Deterioration:
- 4.2. Ultimate deformation;
- 4.3. Fractures in masonry or mortar joints;
- 4.4. Fissures in masonry or mortar joints:
- 4.5. Spalling;
- 4.6. Exposed reinforcement; or
- 4.7. Detached, dislodged or failing connections.

Steel that has been subjected to any of the following conditions:

- 5.1. Deterioration;
- 5.2. Elastic deformation;
- 5.3. Ultimate deformation;
- 5.4. Metal fatigue; or
- 5.5. Detached, dislodged or failing connections.
- 6. Wood that has been subjected to any of the following conditions:
  - 6.1. Ultimate deformation;
  - 6.2. Deterioration;
  - Damage from insects, rodents and other vermin;
6.4. Fire damage

6.5.Significant splits and checks;

- 6.6, Horizontal shear cracks;
- 6.7. Vertical shear cracks;
- 6.8. Inadequate support;
- 6.9. *Detached*, dislodged or failing connections; or

6.10. Excessive cutting and notching.

#### **Exceptions:**

- 1. When substantiated otherwise by an *approved* method.
- Demolition of unsafe conditions shall be permitted when approved by the code official.

#### SECTION 307 HANDRAILS AND GUARDRAILS

**307.1** General. Every exterior and interior flight of stairs having more than four risers shall have a handrail on one side of the stair and every open portion of a stair, landing, balcony, porch, deck, ramp or other walking surface which is more than 30 inches (762 mm) above the floor or grade below shall have guards. Handrails shall not be less than 34 inches (864 mm) high or more than 38 inches (965 mm) high measured vertically above the nosing of the tread or above the finished floor of the landing or walking surfaces. Guards shall not be less than 36 inches (914 mm) high above the floor of the landing, balcony, porch, deck, or ramp or other walking surface.

Exception: Guards shall not be required where exempted by the adopted building code.

#### SECTION 308 RUBBISH AND GARBAGE

**308.1 Accumulation of rubbish or garbage.** All *exterior property* and *premises*, and the interior of every structure, shall be free from any accumulation of *rubbish* or garbage.

**308.2 Disposal of rubbish.** Every *occupant* of a structure shall dispose of all *rubbish* in a clean and sanitary manner by placing such *rubbish* in *approved* containers.

**308.3 Disposal of garbage.** Every *occupant* of a structure shall dispose of garbage in a clean and sanitary manner by placing such garbage in an *approved* garbage disposal facility or *approved* garbage containers.

#### SECTION 309 PEST ELIMINATION

**309.1 Infestation.** All structures shall be kept free from insect and rodent *infestation*. All structures in which insects or rodents are found shall be promptly exterminated by *approved* processes that will not be injurious to human health. After extermination, proper precautions shall be taken to prevent reinfestation.

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**309.2 Owner.** The *owner* of any structure shall be responsible for extermination within the structure prior to renting or leasing the structure.

**309.3 Single occupant.** The *occupant* of a one-family dwelling or of a single-*tenant* nonresidential structure shall be responsible for extermination on the *premises*.

**309.4 Multiple occupancy.** The owner of a structure containing two or more dwelling units, a multiple occupancy, a rooming house or a nonresidential structure shall be responsible for extermination in the public or shared areas of the structure and exterior property. If infestation is caused by failure of an occupant to prevent such infestation in the area occupied, the occupant and owner shall be responsible for extermination.

**309.5 Occupant.** The *occupant* of any structure shall be responsible for the continued rodent and pest-free condition of the structure.

**Exception:** Where the *infestations* are caused by defects in the structure, the *owner* shall be responsible for extermination.

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### CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

## **CHAPTER 4**

# LIGHT, VENTILATION AND OCCUPANCY LIMITATIONS

#### SECTION 401 GENERAL

**401.1 Scope.** The provisions of this chapter shall govern the minimum conditions and standards for light, *ventilation* and space for occupying a structure.

**401.2 Responsibility.** The *owner* of the structure shall provide and maintain light, *ventilation* and space conditions in compliance with these requirements. A person shall not occupy as *owner-occupant*, or permit another person to occupy, any *premises* that do not comply with the requirements of this chapter.

401.3 Alternative devices. In lieu of the means for natural light and *ventilation* herein prescribed, artificial light or mechanical *ventilation* complying with the *International Building Code* shall be permitted.

#### SECTION 402 LIGHT

**402.1 Habitable spaces.** Every *habitable space* shall have at least one window of *approved* size facing directly to the outdoors or to a court. The minimum total glazed area for every *habitable space* shall be 8 percent of the floor area of such room. Wherever walls or other portions of a structure face a window of any room and such obstructions are located less than 3 feet (914 mm) from the window and extend to a level above that of the ceiling of the room, such window shall not be deemed to face directly to the outdoors nor to a court and shall not be included as contributing to the required minimum total window area for the room.

**Exception:** Where natural light for rooms or spaces without exterior glazing areas is provided through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.33 m<sup>2</sup>). The exterior glazing area shall be based on the total floor area being served.

402.2 Common halls and stairways. Every common hall and stairway in residential occupancies, other than in one- and two-family dwellings, shall be lighted at all times with at least a 60-watt standard incandescent light bulb for each 200 square feet  $(19 \text{ m}^2)$  of floor area or equivalent illumination, provided that the spacing between lights shall not be greater than 30 feet (9144 mm). In other than residential occupancies, means of egress, including exterior means of egress, stairways shall be illuminated at all times the building space served by the means of egress is occupied with a minimum of 1 footcandle (11 lux) at floors, landings and treads.

**402.3 Other spaces.** All other spaces shall be provided with natural or artificial light sufficient to permit the maintenance of sanitary conditions, and the safe *occupancy* of the space and utilization of the appliances, equipment and fixtures.

#### SECTION 403 VENTILATION

**403.1 Habitable spaces.** Every *habitable space* shall have at least one openable window. The total openable area of the window in every room shall be equal to at least 45 percent of the minimum glazed area required in Section 402.1.

**Exception:** Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.33 m<sup>2</sup>). The *ventilation* openings to the outdoors shall be based on a total floor area being ventilated.

**403.2 Bathrooms and toilet rooms.** Every *bathroom* and *toilet room* shall comply with the *ventilation* requirements for *habitable spaces* as required by Section 403.1, except that a window shall not be required in such spaces equipped with a mechanical *ventilation* system. Air exhausted by a mechanical *ventilation* system from a *bathroom* or *toilet room* shall discharge to the outdoors and shall not be recirculated.

**403.3** Cooking facilities. Unless *approved* through the certificate of *occupancy*, cooking shall not be permitted in any *rooming unit* or dormitory unit, and a cooking facility or appliance shall not be permitted to be present in the *rooming unit* or dormitory unit.

#### Exceptions:

- *I.* Where specifically *approved* in writing by the *code* official.
- 2. Devices such as coffee pots and microwave ovens shall not be considered cooking appliances.

**403.4 Process ventilation.** Where injurious, toxic, irritating or noxious fumes, gases, dusts or mists are generated, a local exhaust *ventilation* system shall be provided to remove the contaminating agent at the source. Air shall be exhausted to the exterior and not be recirculated to any space.

**403.5 Clothes dryer exhaust.** Clothes dryer exhaust systems shall be independent of all other systems and shall be exhausted outside the structure in accordance with the manufacturer's instructions.

Exception: Listed and *labeled* condensing (ductless) clothes dryers.

#### SECTION 404 OCCUPANCY LIMITATIONS

**404.1 Privacy.** *Dwelling units*, hotel units, *housekeeping units, rooming units* and dormitory units shall be arranged to provide privacy and be separate from other adjoining spaces.

**404.2 Minimum room widths.** A habitable room, other than a kitchen, shall not be less than 7 feet (2134 mm) in any plan dimension. Kitchens shall have a clear passageway of not less than 3 feet (914 mm) between counterfronts and appliances or counterfronts and walls.

**404.3 Minimum ceiling heights.** *Habitable spaces*, hallways, corridors, laundry areas, *bathrooms, toilet rooms* and habitable *basement* areas shall have a clear ceiling height of not less than 7 feet (2134 mm).

#### **Exceptions:**

- In one- and two-family dwellings, beams or girders spaced not less than 4 feet (1219 mm) on center and projecting not more than 6 inches (152mm) below the required ceiling height.
- 2. Basement rooms in one- and two-family dwellings occupied exclusively for laundry, study or recreation purposes, having a ceiling height of not less than 6 feet 8 inches (2033 mm) with not less than 6 feet 4 inches (1932 mm) of clear height under beams, girders, ducts and similar obstructions.
- 3. Rooms occupied exclusively for sleeping, study or similar purposes and having a sloped ceiling over all or part of the room, with a clear ceiling height of at least 7 feet (2134 mm) over not less than one-third of the required minimum floor area. In calculating the floor area of such rooms, only those portions of the floor area with a clear ceiling height of 5 feet (1524 mm) or more shall be included.

**404.4 Bedroom and living room requirements.** Every *bedroom* and living room shall comply with the requirements of Sections 404.4.1 through 404.4.5.

**404.4.1** Room area. Every living room shall contain at least 120 square feet  $(11.2 \text{ m}^2)$  and every *bedroom* shall contain at least 70 square feet  $(6.5 \text{ m}^2)$ .

404.4.2 Access from bedrooms. *Bedrooms* shall not constitute the only means of access to other *bedrooms* or *habitable spaces* and shall not serve as the only means of egress from other *habitable spaces*.

Exception: Units that contain fewer than two bedrooms,

**404.4.3 Water closet accessibility.** Every *bedroom* shall have access to at least one water closet and one lavatory without passing through another *bedroom*. Every *bedroom* in a *dwelling unit* shall have access to at least one water closet and lavatory located in the same story as the *bedroom* or an adjacent story.

**404.4.4 Prohibited occupancy.** Kitchens and nonhabitable spaces shall not be used for sleeping purposes.

404.4.5 Other requirements. *Bedrooms* shall comply with the applicable provisions of this code including, but not limited to, the light, *ventilation*, room area, ceiling height and room width requirements of this chapter; the plumbing facilities and water-heating facilities requirements of Chapter 5; the heating facilities and electrical receptacle requirements of Chapter 6; and the smoke detector and emergency escape requirements of Chapter 7.

**404.5** Overcrowding. The number of persons occupying a *dwelling unit* shall not create conditions that, in the opinion of the *code official*, endanger the life, health, safety or welfare of the *occupants*.

**404.6 Efficiency unit.** Nothing in this section shall prohibit an efficiency living unit from meeting the following requirements:

- 1. A unit occupied by not more than two *occupants* shall have a clear floor area of not less than 220 square feet  $(20.4 \text{ m}^2)$ . A unit occupied by three *occupants* shall have a clear floor area of not less than 320 square feet  $(29.7 \text{ m}^2)$ . These required areas shall be exclusive of the areas required by Items 2 and 3.
- The unit shall be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a clear working space of not less than 30 inches (762 mm) in front. Light and *ventilation* conforming to this code shall be provided.
- The unit shall be provided with a separate bathroom containing a water closet, lavatory and bathtub or shower.
- 4. The maximum number of occupants shall be three.

**404.7 Food preparation.** All spaces to be occupied for food preparation purposes shall contain suitable space and equipment to store, prepare and serve foods in a sanitary manner. There shall be adequate facilities and services for the sanitary disposal of food wastes and refuse, including facilities for temporary storage.

#### **CHAPTER 5**

# PLUMBING FACILITIES AND FIXTURE REQUIREMENTS

#### SECTION 501 GENERAL

**501.1 Scope.** The provisions of this chapter shall govern the minimum plumbing systems, facilities and plumbing fixtures to be provided.

**501.2 Responsibility.** The *owner* of the structure shall provide and maintain such plumbing facilities and plumbing fixtures in compliance with these requirements. A person shall not occupy as *owner-occupant* or permit another person to occupy any structure or *premises* which does not comply with the requirements of this chapter.

#### [P] SECTION 502 REQUIRED FACILITIES

**502.1 Dwelling units.** Every *dwelling unit* shall contain its own bathtub or shower, lavatory, water closet and kitchen sink which shall be maintained in a sanitary, safe working condition. The lavatory shall be placed in the same room as the water closet or located in close proximity to the door leading directly into the room in which such water closet is located. A kitchen sink shall not be used as a substitute for the required lavatory.

**502.2 Rooming houses.** At least one water closet, lavatory and bathtub or shower shall be supplied for each four *rooming units*.

**502.3 Hotels.** Where private water closets, lavatories and baths are not provided, one water closet, one lavatory and one bathtub or shower having access from a public hallway shall be provided for each ten *occupants*.

**502.4 Employees' facilities.** A minimum of one water closet, one lavatory and one drinking facility shall be available to employees.

**502.4.1 Drinking facilities.** Drinking facilities shall be a drinking fountain, water cooler, bottled water cooler or disposable cups next to a sink or water dispenser. Drinking facilities shall not be located in *toilet rooms* or *bathrooms*.

**502.5 Public toilet facilities.** Public toilet facilities shall be maintained in a safe sanitary and working condition in accordance with the *International Plumbing Code*. Except for periodic maintenance or cleaning, public access and use shall be provided to the toilet facilities at all times during *occupancy* of the *premises*.

#### [P] SECTION 503 TOILET ROOMS

**503.1 Privacy.** *Toilet rooms* and *bathrooms* shall provide privacy and shall not constitute the only passageway to a hall or other space, or to the exterior. A door and interior locking device shall be provided for all common or shared *bathrooms* and *toilet rooms* in a multiple dwelling.

**503.2 Location.** *Toilet rooms* and *bathrooms* serving hotel units, *rooming units* or dormitory units or *housekeeping units*, shall have access by traversing not more than one flight of stairs and shall have access from a common hall or passageway.

**503.3 Location of employee toilet facilities.** Toilet facilities shall have access from within the employees' working area. The required toilet facilities shall be located not more than one story above or below the employees' working area and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m). Employee facilities shall either be separate facilities or combined employee and public facilities.

**Exception:** Facilities that are required for employees in storage structures or kiosks, which are located in adjacent structures under the same ownership, lease or control, shall not exceed a travel distance of 500 feet (152 m) from the employees' regular working area to the facilities.

503.4 Floor surface. In other than *dwelling units*, every *toilet* room floor shall be maintained to be a smooth, hard, nonabsorbent surface to permit such floor to be easily kept in a clean and sanitary condition.

#### [P] SECTION 504 PLUMBING SYSTEMS AND FIXTURES

**504.1 General.** All plumbing fixtures shall be properly installed and maintained in working order, and shall be kept free from obstructions, leaks and defects and be capable of performing the function for which such plumbing fixtures are designed. All plumbing fixtures shall be maintained in a safe, sanitary and functional condition.

**504.2 Fixture clearances.** Plumbing fixtures shall have adequate clearances for usage and cleaning.

**504.3 Plumbing system hazards.** Where it is found that a plumbing system in a structure constitutes a hazard to the *occupants* or the structure by reason of inadequate service, inadequate venting, cross connection, backsiphonage, improper installation, *deterioration* or damage or for similar reasons, the *code official* shall require the defects to be corrected to eliminate the hazard.

#### SECTION 505 WATER SYSTEM

**505.1 General.** Every sink, lavatory, bathtub or shower, drinking fountain, water closet or other plumbing fixture shall be properly connected to either a public water system or to an *approved* private water system. All kitchen sinks, lavatories, laundry facilities, bathtubs and showers shall be supplied with hot or tempered and cold running water in accordance with the *International Plumbing Code*.

[P] 505.2 Contamination. The water supply shall be maintained free from contamination, and all water inlets for plumb-

ing fixtures shall be located above the flood-level rim of the fixture. Shampoo basin faucets, janitor sink faucets and other hose bibs or faucets to which hoses are attached and left in place, shall be protected by an approved atmospheric-type vacuum breaker or an approved permanently attached hose connection vacuum breaker.

**505.3 Supply.** The water supply system shall be installed and maintained to provide a supply of water to plumbing fixtures, devices and appurtenances in sufficient volume and at pressures adequate to enable the fixtures to function properly, safely, and free from defects and leaks.

**505.4 Water heating facilities.** Water heating facilities shall be properly installed, maintained and capable of providing an adequate amount of water to be drawn at every required sink, lavatory, bathtub, shower and laundry facility at a temperature of not less than 110°F (43°C). A gas-burning water heater shall not be located in any *bathroom, toilet room, bedroom* or other occupied room normally kept closed, unless adequate combustion air is provided. An *approved* combination temperature and pressure-relief valve and relief valve discharge pipe shall be properly installed and maintained on water heaters.

#### [P] SECTION 506 SANITARY DRAINAGE SYSTEM

**506.1 General.** All plumbing fixtures shall be properly connected to either a public sewer system or to an *approved* private sewage disposal system.

**506.2 Maintenance.** Every plumbing stack, vent, waste and sewer line shall function properly and be kept free from obstructions, leaks and defects.

#### [P] SECTION 507 STORM DRAINAGE

**507.1 General.** Drainage of roofs and paved areas, *yards* and courts, and other open areas on the *premises* shall not be discharged in a manner that creates a public nuisance.

# CHAPTER 6 MECHANICAL AND ELECTRICAL REQUIREMENTS

#### SECTION 601 GENERAL

**601.1 Scope.** The provisions of this chapter shall govern the minimum mechanical and electrical facilities and equipment to be provided.

**601.2** Responsibility. The *owner* of the structure shall provide and maintain mechanical and electrical facilities and equipment in compliance with these requirements. A person shall not occupy as *owner-occupant* or permit another person to occupy any *premises* which does not comply with the requirements of this chapter.

#### SECTION 602 HEATING FACILITIES

**602.1 Facilities required.** Heating facilities shall be provided in structures as required by this section.

**602.2 Residential occupancies.** Dwellings shall be provided with heating facilities capable of maintaining a room temperature of  $68^{\circ}$ F ( $20^{\circ}$ C) in all habitable rooms, *bathrooms* and *toilet rooms* based on the winter outdoor design temperature for the locality indicated in Appendix D of the *International Plumbing Code*. Cooking appliances shall not be used to provide space heating to meet the requirements of this section.

**Exception:** In areas where the average monthly temperature is above  $30^{\circ}$ F (-1°C), a minimum temperature of  $65^{\circ}$ F (18°C) shall be maintained.

**602.3 Heat supply.** Every owner and operator of any building who rents, leases or lets one or more dwelling unit, rooming unit, dormitory or guestroom on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from September to May to maintain a temperature of not less that  $68\circ$ F (20 $\circ$ C) in all habitable rooms, bathrooms, and toilet rooms.

#### Exceptions:

1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the International Plumbing Code.

2. In areas where the average monthly temperature is above  $30\circ(-1\circ C)$  a minimum temperature of  $65\circ F$  (18 $\circ C$ ) shall be maintained.

**602.4 Occupiable work spaces.** Indoor occupiable work spaces shall be supplied with heat during the period from

September to May to maintain a temperature of not less than 65°F (18°C) during the period the spaces are occupied.

#### Exceptions:

- 1. Processing, storage and operation areas that require cooling or special temperature conditions.
- Areas in which persons are primarily engaged in vigorous physical activities.

**602.5 Room temperature measurement.** The required room temperatures shall be measured 3 feet (914 mm) above the floor near the center of the room and 2 feet (610 mm) inward from the center of each exterior wall.

#### SECTION 603 MECHANICAL EQUIPMENT

**603.1 Mechanical appliances.** All mechanical appliances, fireplaces, solid fuel-burning appliances, cooking appliances and water heating appliances shall be properly installed and maintained in a safe working condition, and shall be capable of performing the intended function.

**603.2 Removal of combustion products.** All fuel-burning equipment and appliances shall be connected to an *approved* chimney or vent.

**Exception:** Fuel-burning equipment and appliances which are *labeled* for unvented operation.

**603.3 Clearances.** All required clearances to combustible materials shall be maintained.

**603.4 Safety controls.** All safety controls for fuel-burning equipment shall be maintained in effective operation.

**603.5 Combustion air.** A supply of air for complete combustion of the fuel and for *ventilation* of the space containing the fuel-burning equipment shall be provided for the fuel-burning equipment.

**603.6 Energy conservation devices.** Devices intended to reduce fuel consumption by attachment to a fuel-burning appliance, to the fuel supply line thereto, or to the vent outlet or vent piping therefrom, shall not be installed unless *labeled* for such purpose and the installation is specifically *approved*.

#### SECTION 604 ELECTRICAL FACILITIES

**604.1 Facilities required.** Every occupied building shall be provided with an electrical system in compliance with the requirements of this section and Section 605.

**604.2 Service.** The size and usage of appliances and equipment shall serve as a basis for determining the need for additional

facilities in accordance with NFPA 70. *Dwelling units* shall be served by a three-wire, 120/240 volt, single-phase electrical service having a rating of not less than 60 amperes.

**604.3 Electrical system hazards.** Where it is found that the electrical system in a structure constitutes a hazard to the *occupants* or the structure by reason of inadequate service, improper fusing, insufficient receptacle and lighting outlets, improper wiring or installation, *deterioration* or damage, or for similar reasons, the *code official* shall require the defects to be corrected to eliminate the hazard.

604.3.1 Abatement of electrical hazards associated with water exposure. The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to water.

**604.3.1.1 Electrical equipment.** Electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable, flexible cords, wiring devices, ground fault circuit interrupters, surge protectors, molded case circuit breakers, low-voltage fuses, luminaires, ballasts, motors and electronic control, signaling and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

**Exception:** The following equipment shall be allowed to be repaired where an inspection report from the equipment manufacturer or *approved* manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

- 1. Enclosed switches, rated 600 volts or less;
- 2. Busway, rated 600 volts or less;
- 3. Panelboards, rated 600 volts or less;
- 4. Switchboards, rated 600 volts or less;
- 5. Fire pump controllers, rated 600 volts or less;
- 6. Manual and magnetic motor controllers;
- 7. Motor.control centers;
- Alternating current high-voltage circuit breakers;
- 9. Low-voltage power circuit breakers;
- Protective relays, meters and current transformers;
- 11. Low- and medium-voltage switchgear;
- 12. Liquid-filled transformers;
- 13. Cast-resin transformers;
- Wire or cable that is suitable for wet locations and whose ends have not been exposed to water;
- 15. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water;
- 16. Luminaires that are listed as submersible;
- 17. Motors:

 Electronic control, signaling and communication equipment.

**604.3.2** Abatement of electrical hazards associated with fire exposure. The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to fire.

**604.3.2.1 Electrical equipment.** Electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, that have been exposed to fire, shall be replaced in accordance with the provisions of the *International Building Code*.

**Exception:** Electrical switches, receptacles and fixtures that shall be allowed to be repaired where an inspection report from the equipment manufacturer or *approved* manufacturer's representative indicates that the equipment has not sustained damage that requires replacement.

#### SECTION 605 ELECTRICAL EQUIPMENT

**605.1 Installation.** All electrical equipment, wiring and appliances shall be properly installed and maintained in a safe and *approved* manner.

**605.2 Receptacles.** Every *habitable space* in a dwelling shall contain at least two separate and remote receptacle outlets. Every laundry area shall contain at least one grounded-type receptacle or a receptacle with a ground fault circuit interrupter. Every *bathroom* shall contain at least one receptacle. Any new *bathroom* receptacle outlet shall have ground fault circuit interrupter interrupter protection.

**605.3 Luminaires.** Every public hall, interior stairway, *toilet room*, kitchen, *bathroom*, laundry room, boiler room and furnace room shall contain at least one electric luminaire.

#### SECTION 606 ELEVATORS, ESCALATORS AND DUMBWAITERS

**606.1 General.** Elevators, dumbwaiters and escalators shall be maintained in compliance with ASME A17.1. The most current certificate of inspection shall be on display at all times within the elevator or attached to the escalator or dumbwaiter, be available for public inspection in the office of the building *operator* or be posted in a publicly conspicuous location *approved* by the *code official*. The inspection and tests shall be performed at not less than the periodic intervals listed in ASME A17.1, Appendix N, except where otherwise specified by the authority having jurisdiction.

**606.2** Elevators. In buildings equipped with passenger elevators, at least one elevator shall be maintained in operation at all times when the building is occupied.

**Exception:** Buildings equipped with only one elevator shall be permitted to have the elevator temporarily out of service for testing or servicing.

MECHANICAL AND ELECTRICAL REQUIREMENTS

#### SECTION 607 DUCT SYSTEMS

**607.1 General.** Duct systems shall be maintained free of obstructions and shall be capable of performing the required function.



# CHAPTER 7 FIRE SAFETY REQUIREMENTS

#### SECTION 701 GENERAL

701.1 Scope. The provisions of this chapter shall govern the minimum conditions and standards for fire safety relating to structures and exterior *premises*, including fire safety facilities and equipment to be provided.

701.2 Responsibility. The owner of the premises shall provide and maintain such fire safety facilities and equipment in compliance with these requirements. A person shall not occupy as owner-occupant or permit another person to occupy any premises that do not comply with the requirements of this chapter.

#### [F] SECTION 702 MEANS OF EGRESS

702.1 General. A safe, continuous and unobstructed path of travel shall be provided from any point in a building or structure to the *public way*. Means of egress shall comply with the *International Fire Code*.

702.2 Aisles. The required width of aisles in accordance with the *International Fire Code* shall be unobstructed.

**702.3 Locked doors.** All means of egress doors shall be readily openable from the side from which egress is to be made without the need for keys, special knowledge or effort, except where the door hardware conforms to that permitted by the *International Building Code*.

702.4 Emergency escape openings. Required emergency escape openings shall be maintained in accordance with the code in effect at the time of construction, and the following. Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are not permitted to be placed over emergency escape and rescue openings, unless approved be the code official.

#### [F] SECTION 703 FIRE-RESISTANCE RATINGS

703.1 Fire-resistance-rated assemblies. The required fireresistance rating of fire-resistance-rated walls, fire stops, shaft enclosures, partitions and floors shall be maintained.

**703.2 Opening protectives.** Required opening protectives shall be maintained in an operative condition. All fire and smokestop doors shall be maintained in operable condition. Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable.

#### [F] SECTION 704 FIRE PROTECTION SYSTEMS

704.1 General. All systems, devices and equipment to detect a fire, actuate an alarm, or suppress or control a fire or any com-

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bination thereof shall be maintained in an operable condition at all times in accordance with the *International Fire Code*.

**704.1.1** Automatic sprinkler systems. Inspection, testing and maintenance of automatic sprinkler systems shall be in accordance with NFPA 25.

**704.2 Smoke alarms.** Approved single or multiple station smoke alarms shall be installed in existing dwelling units, and hotel and lodging guestrooms. Installation shall be in accordance with the International Building Code and the International Residential Code.

704.3 Power source. In Group R occupancies and in dwellings not regulated as Group R occupancies, single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are permitted to be solely battery operated in buildings where no construction is taking place, buildings that are not served from a commercial power source and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or *basement* available which could provide access for building wiring without the removal of interior finishes.

**704.4 Interconnection.** Where more than one smoke alarm is required to be installed within an individual *dwelling unit* in Group R-2, R-3, R-4 and in dwellings not regulated as Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all *bedrooms* over background noise levels with all intervening doors closed.

#### **Exceptions:**

- Interconnection is not required in buildings which are not undergoing alterations, repairs or construction of any kind.
- 2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or *basement* available which could provide access for interconnection without the removal of interior finishes.



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# **CHAPTER 8**

# **REFERENCED STANDARDS**

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.7.

| A17.1/CSA B44-2007 | Safety Code for Elevators and Escalators                                                 |                |
|--------------------|------------------------------------------------------------------------------------------|----------------|
| number             | Title                                                                                    | section number |
| reference          |                                                                                          | in code        |
| Standard           |                                                                                          | Referenced     |
| ASME               | American Society of Mechanical Engineers<br>Three Park Avenue<br>New York, NY 10016-5990 |                |

| ASTM                  | ASTM International<br>100 Barr Harbor Drive<br>West Conshohocken, PA 19428-2959                                                 |                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Standard<br>reference |                                                                                                                                 | Referenced<br>in code |
| number                | Title                                                                                                                           | - section number      |
| F1346-91 (2003)       | Performance Specifications for Safety Covers and Labeling Requirements for All Covers<br>for Swimming Pools, Spas and Hot Tubs. |                       |

| ICC      | International Code Council<br>500 New Jersey Avenue, NW<br>6th Floor<br>Washington, DC 20001 |
|----------|----------------------------------------------------------------------------------------------|
| Standard | Referenced                                                                                   |
| number   | Title                                                                                        |
| IBC09    | International Building Code <sup>®</sup>                                                     |
| 1FC09    | International Fire Code <sup>®</sup>                                                         |
| IEBC09   | International Existing Building Code®                                                        |
| IFGC—09  | International Fuel Gas Code <sup>®</sup>                                                     |
| IMC09    | International Mechanical Code® 102.3, 201.3                                                  |
| IPC09    | International Plumbing Code <sup>®</sup>                                                     |
| IZC09    | International Zoning Code <sup>®</sup>                                                       |

| NFPA               | National Fire Protection Association<br>1 Batterymarch Park<br>Quincy, MA 02269 |                        |
|--------------------|---------------------------------------------------------------------------------|------------------------|
| Standard           |                                                                                 | Referenced             |
| reference          |                                                                                 | in code                |
| number             | Title                                                                           | section number         |
| 25-08              | Inspection, Testing and Maintenance of Water-based F                            | ire Protection Systems |
| <u>70—08</u>       | National Electrical Code.                                                       |                        |
| CITY OF VESTAVIA H | ILLS PROPERTY MAINTENANCE CODE®                                                 | 29                     |

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#### CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

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## APPENDIX A

# BOARDING STANDARD

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

#### A101 GENERAL

A101.1 General. All windows and doors shall be boarded in an *approved* manner to prevent entry by unauthorized persons and shall be painted to correspond to the color of the existing structure.

#### A102 MATERIALS

**A102.1 Boarding sheet material.** Boarding sheet material shall be minimum <sup>1</sup>/2-inch (12.7 mm) thick wood structural panels complying with the *International Building Code*.

A102.2 Boarding framing material. Boarding framing material shall be minimum nominal 2-inch by 4-inch (51 mm by 102 mm) solid sawn lumber complying with the *International Building Code*.

**A102.3 Boarding fasteners.** Boarding fasteners shall be minimum <sup>3</sup>/8-inch (9.5 mm) diameter carriage bolts of such a length as required to penetrate the assembly and as required to adequately attach the washers and nuts. Washers and nuts shall comply with the *International Building Code*.

#### A103 INSTALLATION

**A103.1 Boarding installation.** The boarding installation shall be in accordance with Figures A103.1(1) and A103.1(2) and Sections A103.2 through A103.5.

A103.2 Boarding sheet material. The boarding sheet material shall be cut to fit the door or window opening neatly or shall be cut to provide an equal overlap at the perimeter of the door or window.

A103.3 Windows. The window shall be opened to allow the carriage bolt to pass through or the window sash shall be removed and stored. The 2-inch by 4-inch (51 mm by 102 mm) strong back framing material shall be cut minimum 2 inches (51 mm) wider than the window opening and shall be placed on the inside of the window opening 6 inches minimum above the bottom and below the top of the window opening. The framing and boarding shall be predrilled. The assembly shall be aligned and the bolts, washers and nuts shall be installed and secured.

A103.4 Door walls. The door opening shall be framed with minimum 2-inch by 4-inch (51 mm by 102 mm) framing material secured at the entire perimeter and vertical members at not more than 24 inches (610 mm) on center. Blocking shall also be secured at not more than 48 inches (1219 mm) on center vertically. Boarding sheet material shall be secured with screws and nails alternating every 6 inches (152 mm) on center.

A103.5 Doors. Doors shall be secured by the same method as for windows or door openings. One door to the structure shall be available for authorized entry and shall be secured and locked in an *approved* manner.

#### APPENDIX A



# INDEX

А

| ACCESS                                       |
|----------------------------------------------|
| Emergency egress                             |
| From bedrooms                                |
| Plumbing fixtures, access for cleaning 504.2 |
| To public way                                |
| Toilet room as passageway                    |
| Water closet                                 |
| ADJACENT                                     |
| Privacy (hotel units, rooming units) 404.1   |
| ADMINISTRATION                               |
| Scope 101.2                                  |
| ACENT (See also ODEDATOD, OMNED)             |
| AGENT (See also OPERATOR, OWNER)             |
| Definition                                   |
| AIR                                          |
| Combustion air                               |
| AISLES                                       |
| Minimum width                                |
| ALTERATION                                   |
| Applicability of other codes                 |
| Condemnation                                 |
| Inspection                                   |
| Prosecution                                  |
| Unlawful acts                                |
| ANCHOR                                       |
| Anchored, definition                         |
| Architectural trim                           |
| Signs, marguees and awnings                  |
|                                              |
| Application 111.1                            |
| Board decision 1116                          |
| Board of appeals 111.2                       |
| Court review 1117                            |
| Disqualification 11123                       |
| Financial interest. 111.2.3                  |
| Hearing, emergency orders                    |
| Membership                                   |
| Notice of appeal                             |
| Postponed hearing                            |
| Records                                      |
| Right to appeal                              |
| Vote                                         |
| APPLIANCE                                    |
| Cooking 403 3 602 2                          |
| Mechanical 603 1                             |
|                                              |
| General 102.1                                |
| Referenced codes and standards 102.7         |
| Application of references 102.9              |
| Other laws 102.10                            |
|                                              |
|                                              |
| Alternatives 105.2                           |
| Alternatives                                 |
| Alternatives                                 |

| Research reports                   | 6  |
|------------------------------------|----|
| Used material and equipment        | 4  |
| APPROVED                           |    |
| Alternative materials, methods and |    |
| equipment                          | 2  |
| Definition                         | 12 |
| Energy conservation devices        | 6  |
| Fireplaces                         | 1  |
| Garbage storage facilities         | .1 |
| Modifications                      | 1  |
| Used materials and equipment       | F. |
| ARCHITECTURAL                      |    |
| Structural members                 | 4  |
| Trim                               | 8  |
| ARTIFICIAL                         |    |
| Lighting of habitable rooms        | 3  |
| Lighting of other spaces           | 3  |
| AUTOMOBILE                         |    |
| Motor vehicles                     | 8  |
| AWNING                             |    |
| Signs, marquees and awnings        | 9  |
|                                    |    |

# в

| BALCONY                  |                    |
|--------------------------|--------------------|
|                          | 37.12              |
| BASEMENT                 | Statistica and the |
| Definition               | .202               |
| Hatchways                | )4.16              |
| Windows                  | )4.17              |
| BATHROOM                 |                    |
| Common bathrooms         | 503.1              |
| Hotels                   | 502.3              |
| Lighting.                | 605.3              |
| Locks                    | 503 1              |
| Outlets required         | 605 2              |
| Drivery                  | 503.2<br>502 1     |
| Ventilation              | 003.1              |
| venthalion               | 103.2              |
| BATHTUB                  |                    |
| Required facilities.     | 502.1              |
| Rooming houses           | 502.2              |
| Sewage system            | 506.1              |
| Water-heating facilities | 505.4              |
| Water system             | 05 1               |
| BOARDING                 |                    |
| Boarding standard Appen  | div A              |
| Doarding standard        |                    |
| BOILER                   |                    |
| Unsafe equipment         | 8.1.2              |
|                          |                    |

# С

CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

()

#### INDEX

| CEILING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basement rooms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 404.3                                                                                                                                                                                                                                                            |
| Fire-resistance ratings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 703.1                                                                                                                                                                                                                                                            |
| Interior surfaces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 305.3                                                                                                                                                                                                                                                            |
| Minimum height                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 404.3                                                                                                                                                                                                                                                            |
| CHANGE, MODIFY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                  |
| Application of other codes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 102.3                                                                                                                                                                                                                                                            |
| CHIMNEY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                  |
| Exterior structure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 03.11                                                                                                                                                                                                                                                            |
| Flue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 603.3                                                                                                                                                                                                                                                            |
| CLEANING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                  |
| Access for cleaning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 504.2                                                                                                                                                                                                                                                            |
| Bathroom and kitchen floors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 305.3                                                                                                                                                                                                                                                            |
| Disposal of garbage.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 308.3                                                                                                                                                                                                                                                            |
| Disposal of rubbish                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 308.2                                                                                                                                                                                                                                                            |
| Interior sanitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 308.1                                                                                                                                                                                                                                                            |
| Interior surfaces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 305.3                                                                                                                                                                                                                                                            |
| Required plumbing facilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 502                                                                                                                                                                                                                                                              |
| Responsibility of persons                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 305 1                                                                                                                                                                                                                                                            |
| Trash containers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1832                                                                                                                                                                                                                                                             |
| Vacant structures and land                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 301 3                                                                                                                                                                                                                                                            |
| CLEARANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 001.0                                                                                                                                                                                                                                                            |
| Heating facilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 603 3                                                                                                                                                                                                                                                            |
| Plumbing fixtures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 504.2                                                                                                                                                                                                                                                            |
| CLOSING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 001.2                                                                                                                                                                                                                                                            |
| Streets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 109.3                                                                                                                                                                                                                                                            |
| Vacant structures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 108.2                                                                                                                                                                                                                                                            |
| CLOTHES DRYER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 100.2                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                  |
| Exhaust                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 403 5                                                                                                                                                                                                                                                            |
| Exhaust                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 403.5                                                                                                                                                                                                                                                            |
| Exhaust                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 403.5                                                                                                                                                                                                                                                            |
| Exhaust<br>CODE OFFICIAL<br>Condemnation.<br>Demolition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 403.5<br>.108.1<br>110                                                                                                                                                                                                                                           |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition.<br>Duties.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 403.5<br>.108.1<br>110<br>104                                                                                                                                                                                                                                    |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition<br>Duties.<br>Emergency order                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 403.5<br>.108.1<br>110<br>104<br>109                                                                                                                                                                                                                             |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition<br>Duties.<br>Emergency order<br>Enforcement authority                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 403.5<br>.108.1<br>110<br>104<br>104<br>104.1                                                                                                                                                                                                                    |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition<br>Duties.<br>Emergency order<br>Enforcement authority<br>Failure to comply with demolition order.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3                                                                                                                                                                                                          |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition<br>Duties.<br>Fmergency order<br>Enforcement authority<br>Failure to comply with demolition order.<br>Identification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3<br>104.3                                                                                                                                                                                                 |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition<br>Duties.<br>Fmergency order<br>Enforcement authority<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3<br>104.3<br>104.2                                                                                                                                                                                        |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition<br>Duties.<br>Fmergency order<br>Enforcement authority<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3<br>104.3<br>104.2<br>103.4                                                                                                                                                                               |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition<br>Duties.<br>Emergency order<br>Enforcement authority<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 403.5<br>.108.1<br>110<br>104<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.3<br>104.3<br>104.2<br>103.4<br>111.2                                                                                                                                                  |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Emergency order<br>Enforcement authority<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals .<br>Notice of violation.<br>Notice and orders                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.2<br>103.4<br>111.2<br>5, 107                                                                                                                                                   |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Emergency order<br>Enforcement authority<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals .<br>Notice of violation.<br>Notices and orders.<br>Official records.                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 403.5<br>.108.1<br>.110<br>.104<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.2<br>103.4<br>111.2<br>5, 107<br>.104.6                                                                                                                                              |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Emergency order<br>Enforcement authority<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals .<br>Notice of violation.<br>Notices and orders.<br>Official records.<br>Personal liability                                                                                                                                                                                                                                                                                                                                                                                                                             | 403.5<br>.108.1<br>.109.104.1<br>104.1<br>104.3<br>104.3<br>104.2<br>103.4<br>111.2<br>5, 107<br>104.6<br>103.4                                                                                                                                                  |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Emergency order<br>Enforcement authority.<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals .<br>Notice of violation.<br>Notices and orders.<br>Official records.<br>Personal liability .<br>Placarding.                                                                                                                                                                                                                                                                                                                                                                                                           | 403.5<br>.108.1<br>.109.104.1<br>110.3<br>104.1<br>104.3<br>104.2<br>103.4<br>111.2<br>5, 107<br>104.6<br>103.4                                                                                                                                                  |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Emergency order<br>Enforcement authority.<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals .<br>Notice of violation.<br>Notices and orders.<br>Official records.<br>Personal liability.<br>Placarding.<br>Prosecution.                                                                                                                                                                                                                                                                                                                                                                                            | 403.5<br>.108.1<br>.108.1<br>.104.1<br>109.1<br>104.1<br>104.3<br>104.3<br>104.2<br>103.4<br>104.6<br>103.4<br>108.4<br>108.4<br>106.3                                                                                                                           |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Emeroency order<br>Enforcement authority.<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals.<br>Notice of violation.<br>Notices and orders.<br>Official records.<br>Personal liability.<br>Placarding.<br>Prosecution.<br>Removal of placard.                                                                                                                                                                                                                                                                                                                                                                      | 403.5<br>.108.1<br>.109.104.1<br>104.1<br>104.3<br>104.3<br>104.2<br>103.4<br>111.2<br>5, 107<br>.107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1                                                                                                              |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Emeroency order<br>Enforcement authority.<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals.<br>Notices and orders.<br>Official records.<br>Personal liability.<br>Placarding.<br>Prosecution.<br>Removal of placard.<br>Right of entry                                                                                                                                                                                                                                                                                                                                                                            | 403.5<br>.108.1<br>.109.104.1<br>104.1<br>104.3<br>104.3<br>104.3<br>104.2<br>103.4<br>111.2<br>5, 107<br>.107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1<br>104.3                                                                                            |
| Exhaust.<br>CODE OFFICIAL<br>Condemnation.<br>Demolition .<br>Duties.<br>Fmeroencv order<br>Enforcement authority.<br>Failure to comply with demolition order.<br>Identification.<br>Inspections.<br>Liability, relief of personal.<br>Membership of board of appeals.<br>Notice of violation.<br>Notices and orders.<br>Official records.<br>Personal liability.<br>Placarding.<br>Prosecution.<br>Removal of placard.<br>Right of entry.<br>Transfer of ownership.                                                                                                                                                                                                                                                                                                                         | 403.5<br>.108.1<br>110<br>104<br>104<br>104.1<br>1104.3<br>104.3<br>104.2<br>103.4<br>104.6<br>103.4<br>106.3<br>)8.4.1<br>104.3<br>104.3<br>107.5                                                                                                               |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability.         Placarding.         Prosecution.         Removal of placard.         Transfer of ownership         Vacant structures                                                                                                                                                                                                                         | 403.5<br>.108.1<br>110<br>104<br>109.1<br>104.1<br>104.3<br>104.3<br>104.4<br>110.2<br>5,107<br>107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1<br>104.3<br>107.5<br>108.2                                                                                     |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability.         Placarding.         Prosecution.         Removal of placard.         Transfer of ownership         Vacant structures         Voting of appeals board.                                                                                                                                                                                        | 403.5<br>.108.1<br>110<br>104<br>109.1<br>104.1<br>104.3<br>104.3<br>104.3<br>104.4<br>111.2<br>5,107<br>107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1<br>104.3<br>107.5<br>108.2<br>111.6                                                                   |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability.         Placarding.         Prosecution.         Removal of placard.         Transfer of ownership         Vacant structures         Voting of appeals board.         Voting of appeals board.                                                                                                                                                       | 403.5<br>.108.1<br>.104<br>109<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.3<br>104.4<br>111.2<br>5, 107<br>.107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1<br>104.3<br>107.5<br>108.2<br>111.6                                                               |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability         Placarding.         Prosecution.         Removal of placard.         Transfer of ownership         Vacant structures         Voting of appeals board.         Voting of appeals board.                                                                                                                                                        | 403.5<br>.108.1<br>.104<br>109<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.3<br>104.4<br>111.2<br>5, 107<br>.107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1<br>104.3<br>107.5<br>108.2<br>111.6<br>503.5                                                      |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability.         Placarding.         Prosecution.         Removal of placard.         Transfer of ownership         Vacant structures         Voting of appeals board.         Voting of appeals board.         111.2,         COMBUSTION         Combustion air.                                                                                             | 403.5<br>.108.1<br>.104<br>109<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.3<br>104.4<br>111.2<br>5, 107<br>.107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1<br>104.3<br>107.5<br>108.2<br>111.6<br>503.5                                                      |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability         Placarding.         Prosecution.         Removal of placard.         Transfer of ownership         Vacant structures         Voting of appeals board.         Voting of appeals board.         111.2,         COMBUSTION         Combustion air.         COMPONENT SERVICEABILITY         Unsafe conditions                                   | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.3<br>104.4<br>111.2<br>5, 107<br>107<br>104.6<br>103.4<br>108.4<br>106.3<br>)8.4.1<br>104.3<br>107.5<br>108.2<br>111.6<br>503.5                                                 |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability.         Placarding.         Prosecution.         Removal of placard.         Transfer of ownership         Vacant structures         Voting of appeals board.         Voting of appeals board.         111.2,         COMBUSTION         Combustion air.         COMPONENT SERVICEABILITY         Unsafe conditions.         30         CONDEMNATION | 403.5<br>.108.1<br>.104<br>109<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.3<br>104.3<br>104.3<br>104.4<br>103.4<br>104.3<br>107.5<br>108.4<br>106.3<br>)8.4.1<br>104.3<br>107.5<br>108.2<br>111.6<br>503.5                                                      |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability.         Placarding.         Prosecution.         Removal of placard.         Right of entry.         Transfer of ownership         Vacant structures         Voting of appeals board.         Voting of appeals board.         COMBUSTION         Combustion air.         CONDEMNATION         Closing of vacant structures                          | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3<br>104.3<br>104.3<br>104.3<br>104.3<br>104.4<br>103.4<br>104.3<br>107.5<br>108.4<br>106.3<br>08.4.1<br>104.3<br>107.5<br>108.2<br>111.6<br>503.5<br>6.1.1<br>108.2                                       |
| Exhaust.         CODE OFFICIAL         Condemnation.         Demolition         Duties.         Fmeroency order         Enforcement authority.         Failure to comply with demolition order.         Identification.         Inspections.         Liability, relief of personal.         Membership of board of appeals         Notice of violation.         Notices and orders         Official records.         Personal liability.         Placarding.         Prosecution.         Removal of placard.         Right of entry.         Transfer of ownership         Vacant structures         Voting of appeals board.         Voting of appeals board.         COMBUSTION         Combustion air.         Condemnations         Condemnations         Conductions                   | 403.5<br>.108.1<br>110<br>104<br>109<br>.104.1<br>110.3<br>104.2<br>103.4<br>110.3<br>104.2<br>103.4<br>111.2<br>5, 107<br>107<br>104.6<br>103.4<br>106.3<br>08.4.1<br>106.3<br>08.4.1<br>106.3<br>08.4.1<br>106.3<br>08.4.1<br>108.2<br>111.6<br>503.5<br>6.1.1 |

| General                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 134 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Removal of placard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |
| Conflict of interest 111.2.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2   |
| Violations 106                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2   |
| CONNECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |
| Sewage system                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1   |
| Water heating                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1   |
| Water system                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Ĺ   |
| CONSTRUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |
| Existing structures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | )   |
| Garbage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | )   |
| Rubbish storage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ĺ.  |
| CONTINUOUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |
| Unobstructed egress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | l   |
| CONTRACTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |
| Conflict of interest                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3   |
| CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |
| Insect and rat control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | j   |
| Safety controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ŀ   |
| COOLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |
| Cooling towers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | į.  |
| CORRIDOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |
| Accumulation of rubbish.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |
| Lighting fixtures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |
| Ratings maintained                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1   |
| Toilet rooms, access 503 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Roofs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Window, door frames                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| DANGEROUS, HAZARDOUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Condemnation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Demolition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Electrical hazards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Existing remedies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Fire safety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Imminent danger                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Unsafe equipment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Unsafe structures or premises                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| DECKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Handrails and guardrails                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Maintenance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| DECORATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Exterior structure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| DEMOLITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Existing remedies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Failure to comply 110.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| General 110                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Order 110.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Salvage materials 110.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Violations 110.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Violationes as a state st |
INDEX

| DETECTORS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |
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| Smoke                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 704                      |
| DETERIORATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |
| Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 202                      |
| Exterior walls.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 304.6                    |
| DIRECT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |
| Egress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 702.1                    |
| DISPOSAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |
| Disposal of garbage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 308.3                    |
| Disposal of rubbish                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 308.2                    |
| DOOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |
| Exit doors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
| Fire                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 703.2                    |
| Hardware                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |
| Insect screens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 304.14                   |
| Interior surfaces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |
| LOCKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5, 702.3                 |
| Weather tight                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 304.15                   |
| Window and door framer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 204.13                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |
| DORIMITURY (ROOMING HOUSE, HOTEL, I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MUTEL)                   |
| Drivacy 502                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1 502.0                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1, 003.2                 |
| DRAIN, DRAINAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |
| Basement natchways                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | .304.16                  |
| Storm drainage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |
| BLOT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |
| Exhaust duct                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 204.0                    |
| Duct systems                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 607                      |
| DICT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |
| DUST<br>Breezes ventiletien                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 100.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | .403.4                   |
| DWELLING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |
| Ola and the second seco | 1 000 1                  |
| Cleanliness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1, 308.1                 |
| Cleanliness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1, 308.1                 |
| Cleanliness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1, 308.1<br>202<br>604.1 |
| Cleanliness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1, 308.1<br>             |

### Ε

| EGRESS                                       |
|----------------------------------------------|
| Aisles                                       |
| Emergency escape                             |
| General                                      |
| Lighting                                     |
| Locked doors                                 |
| Obstructions prohibited                      |
| Stairs, porches and railings                 |
| 305.4, 305.5, 307.1                          |
| ELECTRIC, ELECTRICAL EQUIPMENT               |
| Abatement of hazards, fire exposure          |
| Abatement of hazards, water exposure 604.3.1 |
| Condemnation                                 |
| Electrical equipment                         |
| Facilities required                          |
| Hazards                                      |
| Installation                                 |

CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

| Lighting fixtures                       | .605.3           |
|-----------------------------------------|------------------|
| Service.                                | .601.2<br>.604.2 |
| Condemnation                            | 109 1            |
| General                                 | 606 1            |
| Maintenance 606.1                       | 606.2            |
| ENEDGENOV                               | 000.2            |
|                                         | 400              |
| Emergency measures.                     | .109             |
| Emergency orders                        | 109.1            |
| Emergency escape openings               | /02.4            |
| ENFORCEMENT                             | 101              |
| See | 104              |
| Scope                                   | 101.2            |
| EQUIPMENT                               |                  |
| Alternative                             | .105.2           |
| Combustion air.                         | .603.5           |
| Condemnation                            | 108.3            |
|                                         | .605.1           |
| Emergency order                         | .109.1           |
| Energy conservation devices.            | .603.E           |
|                                         | .603.1           |
| Disporting 109.2                        | .305.1           |
| Pracarding                              | 100.4            |
| Promoted use                            | . 100.5          |
| Sofety controls                         | CO2 4            |
| Score                                   | 101 2            |
| Scope, mechanical and electrical        | 601.1            |
| Support definition                      | 202              |
|                                         | 109              |
| lised                                   | 105 4            |
| EVUALIOT                                | 100.4            |
| Clothes days                            | 102 6            |
| Exhaust ducts                           | 403.5            |
| Process ventilation                     | 102.4            |
|                                         | 103.4            |
| EXISTING                                | 400.4            |
| Remeales.                               | 102.4            |
| Stuctural mombara                       | 204.4            |
| Structures                              | .304.4<br>101 2  |
|                                         | 101.5            |
| EXTERIOR                                |                  |
|                                         | 304.8            |
|                                         |                  |
| Deletine 2010                           | 304.6            |
| Palmung                                 | 304.6            |
| Sopiration                              | 304.3            |
| Scope                                   | 204.1            |
| Stair                                   | 03 10            |
| Street numbers                          | 303 3            |
| Unsafe conditions                       | 04 1 1           |
| Weather tight                           | 3.13             |
|                                         |                  |

## 

F

35

## ) FEES, EXPENSES, COST

~ • •

 $\bigcirc$ 

| Closing vacant structures          |
|------------------------------------|
| Demolition                         |
| Extermination                      |
| General                            |
| Relief from personal liability     |
| FENCE                              |
| Accessory                          |
| Maintenance                        |
| FIRE                               |
| Automatic sprinkler systems        |
| Fire-resistance rated assemblies   |
| Fire-protection systems            |
| Responsibility, fire safety        |
| Scope                              |
| Scope, fire safety                 |
| Smoke alarms                       |
| FLAMMABLE LIQUID                   |
| Containers                         |
| ELOOR ELOORING                     |
| Area for sleeping purposes 404.4.1 |
| Fire-resistance ratings 703.1      |
| Interior surfaces 305.1, 305.3     |
| Space requirements 404 4 1 404 6   |
| EOOD REEDA DATION                  |
| Cooking equipment 403.3            |
| Sanitary condition 305 1 404.7     |
| Ventilation 403 A                  |
|                                    |
| POUNDATION 100 4 4                 |
| Condemnation                       |
| Foundation walls                   |
| PRAME                              |
| Window and door frames             |

### G

| GAS                         |
|-----------------------------|
| Energy conservation devices |
| Exhaust vents               |
| GLAZING                     |
| Materials                   |
| GRADE                       |
| Drainage                    |
| GUARD                       |
| Anchorage and maintenance   |
| Basement windows            |
| Definition                  |
|                             |

#### Н

| 70.00                          |
|--------------------------------|
| HABITABLE                      |
| Definition                     |
| Light                          |
| Minimum ceiling height         |
| Minimum room width             |
| Required plumbing facilities   |
| Residential heating facilities |
| Space requirements             |
| Ventilation                    |

2009 INTERNATIONAL PROPERTY MAINTENANCE CODE®

| HANDRAILS AND GUARDRAILS<br>Handrails                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door hardware                                                                                                                                                                                                                                                                                                                                                                 |
| HAZARDOUS (See DANGEROUS, HAZARDOUS)                                                                                                                                                                                                                                                                                                                                          |
| HEAT, HEATING         Energy conservation devices.       .603.6         Fireplaces       .603.1         Heating.       .603.1         Mechanical equipment.       .603.1         Required capabilities.       .602         Residential heating       .602.2, 602.3         Supply       .602.3         Water heating facilities.       .505.4         Water system       .505 |
| Minimum ceiling height                                                                                                                                                                                                                                                                                                                                                        |
| HOT (See HEAT, HEATING)                                                                                                                                                                                                                                                                                                                                                       |
| HOTELS, ROOMING HOUSES AND DORMITORY<br>UNITS, MOTELS                                                                                                                                                                                                                                                                                                                         |
| Definition.202Locked doors.702.3Required facilities.502Toilet rooms.503                                                                                                                                                                                                                                                                                                       |
| HOUSEKEEPING UNIT<br>Definition                                                                                                                                                                                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                               |

J

## Κ

| KITCHEN            |           |      |         |
|--------------------|-----------|------|---------|
| Electrical outlets | required  | <br> | 605.2   |
| Minimum width .    |           | <br> | 404.2   |
| Prohibited use     |           | <br> | 404.4.4 |
| Room lighting      |           | <br> | 605.3   |
| Water heating fa   | acilities |      | 505.4   |

L

| LANDING                                |
|----------------------------------------|
| Handrails and guards                   |
| 305.4, 305.5, 306.1                    |
| Maintenance                            |
| LAUNDRY                                |
| Room lighting                          |
| Water-heating facilities               |
| LAVATORY                               |
| Hotels                                 |
| Required facilities                    |
| Rooming houses                         |
| Sanitary drainage system               |
| Water-neating facilities               |
|                                        |
| LEASE (SELL, KENT)                     |
| Salvage materials                      |
| Transfer of ownership 107 6            |
|                                        |
| Closing of vacant structures 108.2     |
| Demolition 110.3                       |
| Failure to comply 110.3                |
| LIGHT. LIGHTING                        |
| Common halls and stairways 402.2 605.3 |
| General                                |
| Habitable rooms                        |
| Luminaires                             |
| Other spaces                           |
| Responsibility                         |
| Scope                                  |
| Toilet rooms                           |
| LIVING ROOM                            |
| Room area                              |
| LOAD, LOADING                          |
| Elevators, escalators and dumbwaiters  |
| Handrails and guardrails               |
| Live load                              |
| Stairs and porches                     |
| Structural members                     |
|                                        |

### Μ

#### MAINTENANCE Required......102.2

CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

| MA  | TE     | PI | AL. |
|-----|--------|----|-----|
| min | . 8 Au |    | ~~  |

| Alternative                  |
|------------------------------|
| Salvage                      |
| Used                         |
| MEANS OF EGRESS (See EGRESS) |
| MECHANICAL                   |
| Installation                 |
| Responsibility               |
| Scope                        |
| Ventilation, general         |
| Ventilation, toilet rooms    |
| MINIMUM                      |
| Ceiling height               |
| Room width                   |
| Scope                        |
| MODIFICATION                 |
| Approval                     |
| MOTEL (See HOTELS)           |
| MOTOR VEHICLES               |
| Inoperative                  |
| Painting                     |
|                              |

#### Ν

| NATURAL                      |
|------------------------------|
| Lighting                     |
| Ventilation                  |
| NOTICES AND ORDERS           |
| Appeal                       |
| Form                         |
| Method of service            |
| Orders                       |
| Owner, responsible person    |
| Penalties                    |
| Placarding of structure      |
| Transfer of ownership. 107.6 |
| Unauthorized tampering       |
| Vacating structure           |
| NOXIOUS                      |
| Process ventilation          |
| Weeds                        |
| NUISANCE                     |
| Closing of vacant structures |

#### 0

| Application for appeal                          |
|-------------------------------------------------|
| OUTLET                                          |
| Electrical                                      |
| OWNER                                           |
| Closing of vacant structures                    |
| Definition                                      |
| Demolition                                      |
| Pest elimination 309.2                          |
| Failure to comply 110.3                         |
| Insect and rat control 302.5 309.2 309.4        |
| Notice 107.1 108.3                              |
| Placarding of structure 108.4                   |
| Responsibility 201.0                            |
| Responsibility for actaty                       |
| Responsibility, file safety                     |
| Responsibility, light, ventilation              |
| Responsibility, mechanical and electrical 601.2 |
| Responsibility, plumbing facilities             |
| Right of entry                                  |
| Rubbish storage                                 |
| Scope                                           |
| Transfer of ownership                           |
| · · · · · · · · · · · · · · · · · · ·           |

Ρ

| PASSAGEWAY                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Common hall and stairway.       .402.2         Interior surfaces       .305.3         Toilet rooms, direct access.       .503.1                                                                                                                                                                          |
| PENALTY                                                                                                                                                                                                                                                                                                  |
| Notices and orders.107.4Placarding of structure.108.4Prohibited occupancy.108.5Removal of placard108.4.1Scope.101.2Violations106.4                                                                                                                                                                       |
| PEST ELIMINATION                                                                                                                                                                                                                                                                                         |
| Condemnation         .108.1           Definition         .202           Insect and rat control         .302.5, 304.5, 304.14, 309.1           Pest elimination         .309.1           Responsibility of owner         .301.2, 306.2           Responsibility of tenant-occupant.         .306.3, 306.5 |
| PLACARD, POST                                                                                                                                                                                                                                                                                            |
| Closing       108.2         Condemnation       108.1         Demolition       110         Emergency, notice       109.1         Notice to owner.       107.1, 108.3         Placarding of structure.       108.4         Prohibited use       108.5         Removal       108.4,1                        |
| PLUMBING                                                                                                                                                                                                                                                                                                 |
| Clean and sanitary.       .504.1         Clearance.       .504.2         Connections       .505.1         Contamination       .505.2         Employee's facilities       .503.3         Fixtures       .504.1         Required facilities       .502                                                     |

| Responsibility                       |           | .501.2 |
|--------------------------------------|-----------|--------|
| Sanitary drainage system             |           | 506    |
| Scope.                               |           | .501.1 |
| Storm orainage                       |           |        |
| Water besting facilities             |           | .505.3 |
|                                      |           | .505.4 |
| Handraile                            |           | 04 40  |
| Structurally sound                   |           | 104.12 |
| BODTA DI E (TEMBODA DV)              |           | 104.10 |
| Cooking aquinment                    |           | C02 4  |
| DECOURT EQUIPMENT                    |           | .003.1 |
| Mator supply                         |           | 505 1  |
|                                      | • • • • • | .505.3 |
| PRIVATE, PRIVACY                     |           | 500.4  |
| Bathtub or snower                    | * * * * * | .503.1 |
| Decupancy imitations                 | *****     | .404.1 |
| Sowooo system                        | • • • • • | 5UZ    |
| Water closet and lavatory            |           | 503 1  |
| Water system                         |           | 505.1  |
| PROPERTY PREMIERS                    |           | .000.1 |
| Clearlinese                          | 204.4     | 200.4  |
| Condempation                         | .304.1,   | 308.1  |
| Definition                           | * * * * * | 202    |
| Demolition                           |           | 110    |
| Emergency measures                   |           | 109    |
| Exterior areas                       |           | 302    |
| Pest elimination, multiple occupancy | 302.5.    | 309.4  |
| Pest elimination, single occupancy.  | 302.5.    | 309.3  |
| Failure to comply                    |           | .110.3 |
| Grading and drainage                 |           | .302.2 |
| Responsibility.                      |           | .301.2 |
| Scope                                |           | .301.1 |
| Storm drainage                       |           | 507    |
| Vacant structures and land           |           | 301.3  |
| PROTECTION                           |           |        |
| Basement windows                     | 3         | 04.17  |
| Fire-protection systems.             |           | 704    |
| Signs, marquees and awnings.         |           | 304.9  |
| PUBLIC                               |           |        |
| Cleanliness                          | .304.1,   | 305.1  |
| Egress                               |           | .702.1 |
| Hallway                              |           | .502.3 |
| Sewage system                        |           | .506.1 |
| Veget structures and load            | 502.      | 5, 503 |
| Water system                         |           | .301.3 |
|                                      |           |        |
| PUBLIC WAY<br>Definition             |           | 202    |
|                                      |           | . ,202 |
|                                      |           |        |
| R                                    |           |        |

| RAIN (PREVENTION OF ENTRY INTO BUILDIN<br>EXTERIOR ENVELOPE) | IG      |
|--------------------------------------------------------------|---------|
| Basement hatchways.                                          |         |
| Exterior walls                                               |         |
| Grading and drainage                                         | 303.2   |
| Roofs                                                        |         |
| Window and door frames.                                      | .304.13 |

CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

#### INDEX

|                                                                                                                 | RECORD                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\bigcirc$                                                                                                      | Official records104.7 REHABILITATION                                                                                                                                                                                                                                                |
|                                                                                                                 | Intent                                                                                                                                                                                                                                                                              |
|                                                                                                                 | Application of other codes.102.3Chimneys.304.11Demolition.110.1Exterior surfaces.304.1Maintenance.102.2Signs, marquees and awnings.304.9Stairs and porches.304.10Weather tight.304.13Workmanship.102.5                                                                              |
|                                                                                                                 | REPORTS 105.3.2                                                                                                                                                                                                                                                                     |
|                                                                                                                 | RESIDENTIAL                                                                                                                                                                                                                                                                         |
|                                                                                                                 | Pest elimination                                                                                                                                                                                                                                                                    |
| $\bigcirc$                                                                                                      | RESPONSIBILITY                                                                                                                                                                                                                                                                      |
|                                                                                                                 | RIGHT OF ENTRY<br>Duties and powers of code official                                                                                                                                                                                                                                |
|                                                                                                                 | Basement hatchways       304.16         Condemnation.       .108         Exterior surfaces       .304.6         Pest elimination.       .302.5, 309         Guards for basement windows       .304.17         Harborage       .302.5         Insect and rodent control       .309.1 |
|                                                                                                                 | Exterior structure                                                                                                                                                                                                                                                                  |
|                                                                                                                 | ROOMBedroom and living room.404.4Cooking facilities403.3Direct access503.2Habitable402.1                                                                                                                                                                                            |
| ()                                                                                                              | Heating facilities                                                                                                                                                                                                                                                                  |
| and and the second s | Light                                                                                                                                                                                                                                                                               |

CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

| Minimum width             |    |    |     |     | ί. |    | ĩ   |     |   |    |    | ×  |     | <br> |   |       | .4 | 104.2 |
|---------------------------|----|----|-----|-----|----|----|-----|-----|---|----|----|----|-----|------|---|-------|----|-------|
| Overcrowding              |    |    |     | ,   |    |    |     | ,   |   |    |    | ä  |     |      |   |       | .4 | 104.5 |
| Prohibited use            |    |    |     |     | ÷  | -  |     |     |   |    | 2  |    |     |      |   | <br>4 | 0  | 4.4.4 |
| Temperature               |    |    |     |     | ÷  | 20 |     | . 3 |   |    |    |    |     | <br> |   | ,     | .6 | 502.5 |
| Toilet                    |    |    |     | . , |    |    |     |     |   |    |    | •  | . 1 | •    |   |       |    | . 503 |
| Ventilation               |    |    | • • |     |    |    |     | 4   | ÷ | ų. |    | 21 |     | ų,   | ¢ |       |    | . 403 |
| ROOMING HOUSES<br>RUBBISH | (S | ee | D   | 0   | R  | N  | /11 | Т   | C | )F | 5, | Y  | )   |      |   |       |    |       |

| Accumulation       | 08.1  |
|--------------------|-------|
| Definition         | 202   |
| Disposal           | 08.2  |
| Garbage facilities | 3.3.1 |
| Rubbish storage    | 3.2.1 |

#### S

| SAFETY, SAFE                                |
|---------------------------------------------|
| Fire safety requirements 701, 702, 703, 704 |
| Safety controls                             |
| SANITARY                                    |
| Bathroom and kitchen floors                 |
| Cleanliness                                 |
| Disposal of garbage                         |
| Disposal of rubbish 308.2                   |
| Exterior property areas 302 1               |
| Exterior structure 304 1                    |
| Food preparation 404.7                      |
| Furnished by occupant 302.1                 |
| Grease intercentors 506 3                   |
| Interior surfaces 305.3                     |
| Diumbing fixtures 504.1                     |
| Derviced alumbian facilities                |
| Required plumbing facilities                |
| Scope                                       |
| SASH                                        |
| VVIndow                                     |
| SCREENS                                     |
| Insect screens                              |
| SECURITY                                    |
| Basement hatchways 304 18 3                 |
| Ruilding                                    |
| Doors 304.18.1                              |
| Vacant structures and land 301 3            |
| Mindowe 204 19 2                            |
| vandows,                                    |
| SELF-CLOSING SCREEN DOORS                   |
| Insect screens                              |
| SEPARATION                                  |
| Fire-resistance ratings 703                 |
| Privary 404.1                               |
| Separation of unite 404.1                   |
| Water closet and layatory 502.1             |
|                                             |
| SERVICE                                     |
| Electrical                                  |
| Method                                      |
| Notices and orders                          |
| Service on occupant 108.3                   |
| SEWER                                       |
|                                             |
| General 506.1                               |
| Maintenance                                 |
|                                             |

#### SHOWER

| Bathtub or shower                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signs, marquees and awnings                                                                                                                                                                                             |
| SINGLE-FAMILY DWELLING<br>Extermination                                                                                                                                                                                 |
| SINK<br>Kitchen sink                                                                                                                                                                                                    |
| SIZE<br>Habitable room, light                                                                                                                                                                                           |
| SMOKE<br>Alarms                                                                                                                                                                                                         |
| SPACE         General, light.         .402           General, ventilation         .403           Occupancy limitations.         .404           Privacy         .404.1           Scope.         .401.1                   |
| STACK<br>Chimneys                                                                                                                                                                                                       |
| STAIRSCommon halls and stairways, light.402.2Exit facilities.305.4Handrails.304.12, 305.5Lighting.605.3Public areas.302.3Stairs and porches.304.10STANDARD                                                              |
| Referenced.       102.7         STOP WORK ORDER       112.1         Authority.       112.3         Failure to comply       112.4         Issuance.       112.2                                                          |
| STORAGE         Food preparation       .404.7         Garbage storage facilities       .308.3         Rubbish storage facilities       .308.2.1         Sanitation       .308.1                                         |
| STRUCTUREAccessory structures.302.7Closing of vacant structures.108.2Definition.202Emergency measures.109General, exterior.304.1General, condemnation.110General, interior structure.305.1Placarding of structure.108.4 |

| Scope                    |
|--------------------------|
| SUPPLY                   |
| Combustion air           |
| Connections              |
| Water-heating facilities |
| Water supply             |
| Water system             |
| SURFACE                  |
| Exterior surfaces        |
| Interior surfaces        |
| SWIMMING                 |
| Swimming pools           |
| Safety covers            |

#### Т

. .....

#### U

| UNOBSTRUCTED                                                                                                    |        |
|-----------------------------------------------------------------------------------------------------------------|--------|
| Access to public way                                                                                            | )2.1   |
| General, egress                                                                                                 | 2.1    |
| UNSAFE STRUCTURES AND EQUIPME                                                                                   | ENT    |
| Abatement methods                                                                                               | 08.6   |
| Dangerous structure or premises                                                                                 | .1.5   |
| Equipment                                                                                                       | .1.2   |
| Existing remedies                                                                                               | 02.4   |
| General, condemnation,                                                                                          | 110    |
| General, demolition.                                                                                            | 110    |
| Notices and orders                                                                                              | 08.3   |
| Record                                                                                                          | 38.7   |
| Structures                                                                                                      | .1     |
| USE                                                                                                             |        |
| Application of other codes 1(                                                                                   | 12 3   |
| General demolition                                                                                              | 110    |
|                                                                                                                 | 1.0    |
| Authority to disconnect 108                                                                                     | 21     |
| successive about the second | im - 1 |

#### V

CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

INDEX

| Authority to disconnect service utilities |
|-------------------------------------------|
| person responsible                        |
| Placarding of structure                   |
| Record                                    |
| Vacant structures and land                |
| VAPOR 200 0                               |
|                                           |
| Inoperative 302.8                         |
| Pointing 202.9                            |
| Fairing                                   |
| VENT 504.3                                |
| Exhaust vents 302.6                       |
| Flue                                      |
| VENTILATION                               |
| Clothes dryer exhaust                     |
| Combustion air                            |
| Definition                                |
| General, ventilation                      |
| Process ventilation 403.4                 |
| Recirculation 403.2 403.4                 |
| Toilet rooms 403.2                        |
| VERMIN                                    |
| Condemnation                              |
| Insect and rat control                    |
| VIOLATION                                 |
| Condemnation                              |
| General                                   |
| Notice                                    |
| Penalty                                   |
| Prosecution 106.2                         |
| Strict liability offense 106.3, 202       |
| Transfer of ownership 107.6               |

#### W

| WALK                            |
|---------------------------------|
| Sidewalks                       |
| WALL                            |
| Accessory structures            |
| Exterior surfaces               |
| Exterior walls                  |
| Foundation walls                |
| General, fire-resistance rating |
| Interior surfaces               |
| Outlets required                |
| Temperature measurement         |
| WASTE                           |
| Disposal of garbage 308.3       |
| Disposal of rubbish             |
| Dwelling units                  |
| Garbage storage facilities      |

CITY OF VESTAVIA HILLS PROPERTY MAINTENANCE CODE®

| WATER                              |
|------------------------------------|
| Basement hatchways                 |
| Connections                        |
| Contamination                      |
| General, sewage                    |
| General, storm drainage            |
| General, water system              |
| Heating                            |
| Hotels                             |
| Kitchen sink                       |
| Required facilities                |
| Rooming houses                     |
| Supply                             |
| System                             |
| Toilet rooms                       |
| Water-heating facilities           |
| WEATHER, CLIMATE                   |
| Heating facilities                 |
| WEATHERSTRIP                       |
| Window and door frames             |
| WEEDS                              |
| Noxious weeds                      |
| WIDTH                              |
| Minimum room width                 |
| WIND                               |
| Weather tight                      |
| Window and door frames             |
| WINDOW                             |
| Emergency escape 702.4             |
| Glazing 304 13 1                   |
| Guards for basement windows 304 17 |
| Habitable rooms 402.1              |
| Insect screens 304 14              |
| Interior surface 305.3             |
| Light                              |
| Openable windows                   |
| Toilet rooms                       |
| Ventilation                        |
| Weather tight                      |
| Window and door frames             |
| WORKMANSHIP                        |
| General                            |
|                                    |

#### ORDINANCE NUMBER 2378

#### AN ORDINANCE TO ADOPT CERTAIN STANDARD OPERATING PROCEDURES

WHEREAS, the City of Vestavia Hills, Alabama ("City") is a member of the Storm Water Management Authority, Inc. ("SWMA"); and

WHEREAS, SWMA, in conjunction with the Jefferson County Department of Public Health ("JCDH") has drafted certain Standard Operating Procedures ("SOPs"), to be adopted by the City so that the City may maintain compliance with Permit ALS000001 issued by ADEM; and

WHEREAS, the SOPs were discussed at a public hearing on March 23, 2011.

WHEREAS, at its meeting on August 18, 2011, the Board of Directors of SWMA passed a Resolution Supporting Adoption of Standard Operating Procedures by SWMA's Member Governing Bodies with Certain Changes Based upon Public Comment and recommended that the City adopt the SOPs as changed after public comment.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VESTAVIA HILLS, ALABAMA AS FOLLOWS:

- 1. All of the "Whereas" clauses set forth above are hereby incorporated by reference.
- The Standard Operating Procedures as adopted by SWMA are hereby adopted by the City.
- 3. The Mayor of the City is hereby authorized to take all action necessary to implement the SOPs as to the City's operations, as well as the operations of those persons or entities who contract to perform services in the City which bear upon the matters covered by the SOPs.
- 4. The provisions of this Ordinance are hereby declared severable. If any provision or portion of this Ordinance is for any reason held to be invalid, such provision or portion shall be deemed a separate and independent provision and such holding shall not affect the validity of the remainder thereof.
- 5. This Ordinance shall become effective immediately upon adoption and publishing/posting as required by Alabama law.

ADOPTED AND APPROVED on this the 28th day of December, 2011.

Mary Lee Rice Council President

ATTESTED BY: **Rebecca** Leavings

APPROVED BY:

Alberto C. Zaragoza, Jr.

Alberto C. Zaragoza, Jr. V Mayor

#### ATTEST:

City Clerk

I, Rebecca Leavings, City Clerk of the City of Vestavia Hills, Alabama, hereby certify that the above Ordinance was duly adopted by the City Council of the City of Vestavia Hills at a regular meeting held on the 28th day of December 2011 and that same has been published/posted in accordance with Alabama on the day of day of day of 2011 by posting at the Vestavia Hills Municipal Center, Vestavia Hills Civic Center, Vestavia Hills Library in the Forest and the New Merkel House.

0 City Clerk

# 2011

# Guidelines and Standard Operating Procedures



# Chapter 1

### I. INTRODUCTION

The Introduction section describes the regulatory basis, overall organization, and intended audience of the Manual.

#### 2.1 BASIS FOR THE MANUAL

In October 2001, The Alabama Department of Management (ADEM) in accordance with the Environmental Protection Agency (EPA) issued a National Pollutant Discharge Elimination System (NPDES) for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s). The 21 municipalities compromising the Storm Water Management Authority, Inc became subject to stormwater Phase I regulations based on their designation as high-density urbanized areas according to the 2000 US Census. See Figure 1-1 for a map of the regulated municipalities.



#### Figure 1-1: Storm Water Management Authority, Inc Municipalities

The regulation specifies that a new general permit be issued by ADEM on a revolving five year basis. The General permit is valid until the new permit is issued and requires each municipality to develop a five year plan to:

"..(R)educe the discharge of pollutants from the MS4 to the maximum extent practicable; protect water quality, and satisfy the water quality requirements of the Clean Water Act and state water quality standards."

The 21 municipalities decided to best meet the goals of the permit that a uniform organization, Storm Water Management Authority, Inc, Inc. (Storm Water), would need to be formed. In September 2009, the members of Storm Water contracted with the Jefferson County Department of Health to perform certain stormwater duties for each municipality. The municipalities incorporated into Storm Water before this Manual did not have written standardized procedures for carrying out municipal operations that pertain to the management of stormwater. This Manual is the creation of such a standardization that provides a commonly accepted framework, technical standards, and guidance on stormwater management measures that control the quantity and quality of stormwater produced from common municipal activities. This Manual will aid in helping a communities' Illicit Discharge Detection and Elimination (IDDE) program and provide a basis for future employee training

This manual will not only provide assistance to municipalities to meet the Stormwater Phase I regulations, but encourages them to use targeted best management practices (BMPs) within the watershed with the long-term goal of consistent application by all regulated entities within the watershed. The Manual of Guidelines and Standard Operating Procedures will help promote improvement in the water quality of Jefferson County's lakes, ponds, streams, and rivers.

#### **2.2 OBJECTIVES OF THE MANUAL**

The specific objectives of the Manual are to

- Provide a uniform set of technical standards and guidance on stormwater management measures that will control both the quantity and quality of stormwater produced by municipal activities, new development, redevelopment, and postconstruction;
- Assist municipalities in meeting Stormwater Phase I requirements;

- Encourage the use of uniform BMP strategies with the long term goal of consistent application by all regulated entities within the watershed;
- Encourage municipal cost-savings through proper and timely maintenance of stormwater systems; and
- Promote behavior that will improve the water quality throughout Jefferson County

#### 2.3 CONTENT OF THE MANUAL

The content of this Manual is based primarily on the select requirements of the Stormwater Phase I program. The five year plan for each community must address the following control measures:

- 1. Public Education and Outreach on Stormwater Impacts
- 2. Public Involvement and Participation
- 3. Illicit Discharge Detection and Elimination (IDDE)
- 4. Industrial Inspection Program
- 5. Construction Site Stormwater Runoff Control
- 6. Post-Construction Stormwater Management in New Development and Redevelopment
- 7. Pollution Prevention/Good Housekeeping for municipal operations
- 8. Promotion of Green Development
- 9. Roadway Procedures
- 10. Pesticide, Herbicide, and Fertilizer Application
- 11. Flood Control Projects
- 12. Spill Prevention and Response

This Manual addresses components for two of the minimum control measures, Illicit Discharge Detection and Elimination and Pollution Prevention/Good Housekeeping, as follows:

<u>Illicit Discharge Detection and Elimination (IDDE)</u> – This Manual describes the procedures that are used to develop the IDDE program for the MS4s in the 21 municipalities covered under the permit. The program is based on the specific needs of each municipality and the watershed it falls within. This Manual offers the outline of the steps used by JCDH to develop an overall IDDE program that is implemented by each municipality. The basic steps currently underway by JCDH are: 1) Location of priority areas likely to have illicit discharges 2) Mapping of all storm drain systems 3) implementing an illicit discharge detection program through dry screening and outfall monitoring 4) Developing uniform procedure to trace sources of illicit discharging 5) Developing procedures to remove sources, and 6) Evaluating overall IDDE program effectiveness. This Manual provides information on each of the six steps currently being deployed by JCDH, and how they result in an effective IDDE program that fulfills the intent of the General Permit.

<u>Pollution Prevention/Good Housekeeping for Municipal Operations</u> – This Manual provides the Program Manager and municipal staff with the resources and technical references to aid Jefferson County Department of Health and Storm Water Management Authority, Inc in implementing their own Pollution Prevention/Good Housekeeping program. The General Permit requires the following Pollution Prevention/Good Housekeeping components as part of the overall plan:

- a) A program with a goal of preventing and/or reducing pollutant runoff from municipal operations. The program will include employee training through Jefferson County Department of Health in cooperation with the Storm Water Management Authority, Inc.
- b) Maintenance activities for the following: parks and open spaces (area such as public golf courses and athletic fields); fleet maintenance, building maintenance; new construction and land disturbance; roadway drainage system maintenance and storm sewer maintenance.
- c) Schedules and records for municipal maintenance activities in paragraph (b) above.
- d) Inspection procedures and schedules for long term structural controls.

This approach allows for flexibility in communities that are in the Stormwater Management Authority to develop their own unique programs according to community needs and available resources.

#### 2.4 MANUAL AUDIENCE AND ORGANIZATION

The Stormwater Phase I Program requires the development of new programs as well as training for municipal employees to implement the overall stormwater program during daily activities. For this reason the Manual addresses two distinct types of audiences (1) City Engineers; JCDH personnel; City Officials, and (2) municipal employees, such as public works personnel, who implement the programs on a day-to-day basis.

Chapter 1 will provide an introduction and overview of the Manual. Chapter 2, *Illicit Discharge Detection and Elimination*, presents procedures for City Engineers, JCDH personnel, and City Officials to use in identifying high priority areas, tracing illicit discharges, and eliminating illicit discharges in a timely manner. Chapter 3, *Pollution Prevention and Good Housekeeping*, provides the general details on the many ways that municipal activities such as vehicle and facilities maintenance may adversely affect stormwater, and presents ways to modify municipal operations to better prevent and reduce stormwater pollution.

Chapter 3 also gives some details on how to develop procedures related to good housekeeping and pollution prevention.

The Appendices are intended for use by "in-the-field" municipal employees. Appendix A contains some guidelines and standard operating procedures (SOPs) employed by Storm Water Management Authority, Inc and JCDH for use in the detection and elimination of illicit discharges. Appendix B contains guidelines, SOPs, and forms to use in applying pollution prevention and good housekeeping techniques during regular work duties.

The guidelines will be divided into three categories to make them easier for all users. These categories are: Always, whenever possible, and Never. Facility Managers are encouraged to keep up with any changes that occur in specific regulatory compliances with any SOPs in this Manual and should contact Storm Water Management Authority, Inc accordingly. Specific training on the guidelines and SOPs will help to reinforce their importance and encourage implementation.

#### 2.5 COMMON STORMWATER POLLUTANTS, SOURCES, AND IMPACTS

Stormwater runoff contains pollutants that can harm human health, degrade water guality and aquatic habitat, impair water recreational activities, and impair ecosystem functions. On its way into our local streams, rivers, and other receiving waterbodies, stormwater runoff accumulates pollutants such as oil, gas, and other hydrocarbons, heavy metals, deicers, pesticides, fine sediment, fertilizers and bacteria(pathogens), all of which cause impairment to water quality. Runoff from fertilized lawns, golf courses, right-of-ways, and city parks can contribute excess nutrients to waterbodies, which can lead to algal blooms and in extreme cases, fish kills events due to low dissolved oxygen levels. Elevated fecal coliform from sewage or other sources can impair water quality and can lead to restrictions on use and enjoyment of natural resources such as fishing and swimming areas. Other stormwater pollutants of concern are toxic contaminants, such as heavy metals, mercury, pesticides, which can come from vehicles, businesses, or from homeowner activities.

All of these pollutants can be dissolved in water and can wash into receiving bodies during storm events. Understanding the sources of these pollutants and the impacts each pollutant has can help identify the priority goals and objectives of your specific municipality. Table 1-1 summarizes common stormwater pollutants, their sources and potential impacts.

|                                       | TABLE 1-1:                                                                                                                                                                                                                 |                                                                                                                                                                                           |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | WATER POLLUTANTS, SOURCES                                                                                                                                                                                                  | AND IMPACTS                                                                                                                                                                               |
| Pollutant                             | Sources                                                                                                                                                                                                                    | Impact                                                                                                                                                                                    |
| Sediment                              | Construction sites; eroding<br>stream banks and<br>lakeshores; winter sand<br>and salt application;<br>vehicle/boat washing;<br>agricultural sites.                                                                        | Destruction of plant and<br>fish habitat;<br>transportation of<br>attached oils, nutrients<br>and other pollutants;<br>increased maintenance<br>costs, flooding.                          |
| Nutrients<br>(phosphorus, nitrogen)   | Fertilizers; malfunctioning<br>septic systems; livestock,<br>bird & pet waste;<br>vehicle/boat washing; grey<br>water; decaying grass and<br>leaves; sewer overflows;<br>leaking trash containers,<br>leaking sewer lines. | Increased potential for<br>nuisance or toxic algal<br>blooms; increased<br>potential for<br>hypoxia/anoxia (low<br>levels of dissolved<br>oxygen which can kill<br>aquatic<br>organisms). |
| Hydrocarbons (petroleum<br>compounds) | Vehicle and equipment<br>leaks; vehicle and<br>equipment emissions;<br>pesticides; fuel spills;<br>equipment cleaning;<br>improper fuel storage &<br>disposal.                                                             | Toxic to humans and aquatic life at low levels.                                                                                                                                           |
| Heavy Metals                          | Vehicle brake and tire<br>wear; vehicle/equipment<br>exhaust; batteries;<br>galvanized metal; paint<br>and wood preservatives;<br>batteries; fuels; pesticides;<br>cleaners.                                               | Toxic at low<br>levels; drinking<br>water<br>contamination.                                                                                                                               |
| Pathogens<br>(Bacteria)               | Livestock, bird and pet<br>wastes; malfunctioning<br>septic systems; sewer<br>overflows; damaged<br>sanitary lines.                                                                                                        | Risk to human health<br>leading to closure of<br>shellfish areas and<br>swimming areas;<br>drinking water<br>contamination.                                                               |

USEPA defines an illicit discharge as any discharge to an MS4 that is not composed entirely of stormwater or the allowable non-stormwater discharges such as water from fire fighting activities, infiltrating groundwater, etc.. (See list below).

> Allowable Non-Stormwater Discharges

- 1. Water line flushing
- 2. Landscape irrigation
- 3. Diverted stream flows
- 4. Rising ground waters
- Uncontaminated ground water infiltration (as defined in 40 CFR 35.2005 (20))
- 6. Uncontaminated pumped ground water
- 7. Discharge from potable water source
- 8. Foundation drains
- 9. Air conditioning condensation
- 10. Irrigation water, springs
- 11. Water from crawl space pumps
- 12. Footing drains
- 13. Lawn watering
- 14. Individual resident car washing
- 15. Flows from riparian habitats and wetlands
- 16. Dechlorinated swimming pool discharges
- 17. Street wash water
- Residential building wash waters, without detergents



## II. ILLICIT DISCHARGE DETECTION AND ELIMINATION

In our communities, the municipal separate storm drain systems discharge to receiving waterbodies without treatment. Therefore, it is particularly important that only stormwater is discharged and to ensure that illicit discharges are eliminated from the system. The General Permit requires that an effective IDDE program be developed by the regulated municipalities. The use of SOPs by JCDH and Storm Water Management Authority, Inc will allow for a unified approach to formulating an effective IDDE program. The Center for Watershed Protection's (CWP) Illicit Discharge Detection and Elimination- A Guidance Manual for Program Development and Technical Assessments (2004), the New England Interstate Water Pollution Control Commission's (NEIWPCC) Illicit Discharge Detection and Elimination Manual- A Handbook for Municipalities (2003), and Guidelines and Standard Operating Procedures- Illicit Discharge Detection and Elimination and Pollution Prevention/ Good Housekeeping were used to develop this chapter.

This chapter provides some procedures that are being employed or deemed necessary to create an effective IDDE program in accordance with the USEPA General Permit. City officials should have a good understanding of the types of illicit discharges that may be encountered and the proper procedures and roles that are deployed by Storm Water Management Authority, Inc, JCDH, and the local municipality to address the problems. Section 2.1 describes various types of illicit discharges that may be encountered throughout Jefferson County. The next sections address additional steps that can be taken or are currently underway to create an effective IDDE program. The subsequent sections will then address additional steps that are being taken by Storm Water Management Authority, Inc, Inc. and JCDH to create an effective IDDE program such as: locating priority areas within Jefferson County (Section 2.2), storm-drain mapping (Section 2.3), detecting illicit discharges (Section 2.4), tracing illicit discharges back to its source (Section 2.5), removing illicit

discharges (Section 2.6), and tracking illicit discharges (Section 2.7). Lastly, Section 2.8 provides an approach to evaluating the overall IDDE program.

#### 2.1 TYPES AND SOURCES OF ILLICIT DISCHARGES

The USEPA defines an illicit discharge as "any discharge to a regulated small MS4 or to the waters of the State of Alabama that does not consist entirely of stormwater or allowable non-stormwater discharges". Illicit discharges are often categorized according to frequency, which provides information about the source and helps determine which tracing procedures may be useful in locating the discharge. The following three categories provide a good basis for defining illicit discharges:

- <u>Transitory illicit discharges</u> are typically single occurrence events resulting from spills, breaks, dumping or accidents. Transitory illicit discharges are often reported to an authority through the JCDH Stormwater Hotline (205) 930-1999, the local municipality, or through a municipal or JCDH employee observation while performing regular duties. Because they are not recurring, they are the most difficult to identify, trace, and remove. The best methods to reduce transitory discharges is through the use of education to the general public, municipal response personnel, tracking of discharge locations, and enforcement of an illicit discharge ordinance.
- 2. Intermittent illicit discharges occur occasionally over a period of time (several hours per day, or a few days per year). Intermittent discharges can result from legal connections to the storm drain system, such as a legal sump pump connection that is illegally discharging anything other than groundwater. Intermittent discharges can also result from activities such as a drum washing in exterior areas. These types of discharges are more likely to be discovered, and are less difficult to trace and remove, but can still present significant challenges. These discharges can have large or small impacts on waterbodies depending on pollutant content, duration, and the size of the receiving water body.
- <u>Continuous illicit discharges</u> are typically the result of direct connection from a sanitary sewer, overflow from a malfunctioning septic system, inflow from a connection from a commercial or industrial facility. Continuous illicit discharges are usually easiest to trace and can have substantial pollutant loads. (CWP 2004).

Land use should be a major contributing factor when looking for illicit discharges. Table 2-1 provides a list of conditions and activities that may produce transitory and intermittent discharge, along with associated sources and land use. Table 2-2 lists possible sources of continuous discharges and their associated land use.

| LAND USES, LIKEL | TABLE 2-1:           Y SOURCE LOCATIONS AND A           RANSITORY OR INTERMITTENT                                                                                                                                                                                                          | ACTIVITIES THAT CAN PRODUCE                                                                                                                                                                                                                                                                                                                                                    |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Land Use         | Likely Source<br>Locations                                                                                                                                                                                                                                                                 | Condition or Activity that<br>Produces Discharge                                                                                                                                                                                                                                                                                                                               |
| Residential      | <ul> <li>Apartments</li> <li>Multi-family</li> <li>Single family<br/>detached</li> </ul>                                                                                                                                                                                                   | <ul> <li>Driveway cleaning</li> <li>Dumping/spills (e.g., leaf<br/>litter and RV/boat holding<br/>tank effluent)</li> <li>Equipment/vehicle wash-<br/>downs</li> <li>Septic system<br/>maintenance</li> <li>Swimming pool<br/>discharges</li> </ul>                                                                                                                            |
| Commercial       | <ul> <li>Campgrounds/RV<br/>parks</li> <li>Car dealers/rental<br/>car companies</li> <li>Car washes</li> <li>Car washes</li> <li>Commercial<br/>laundry/dry<br/>cleaning</li> <li>Gas stations/auto<br/>repair shops</li> <li>Marinas</li> <li>Nurseries and<br/>garden centers</li> </ul> | <ul> <li>Building maintenance<br/>(power washing)</li> <li>Dumping/spills</li> <li>Landscaping/grounds care</li> <li>Outdoor fluid storage</li> <li>Parking lot maintenance<br/>(power washing)</li> <li>Vehicle fueling</li> <li>Vehicle fueling</li> <li>Vehicle washing</li> <li>Wehicle washing</li> <li>Wash-down of greasy<br/>equipment and grease<br/>traps</li> </ul> |

| Industrial | <ul> <li>Auto recyclers</li> <li>Beverages and<br/>brewing</li> <li>Construction<br/>vehicle washouts</li> <li>Distribution centers</li> <li>Food processing</li> <li>Garbage truck<br/>washouts</li> <li>Marinas, boat<br/>building and repair</li> <li>Metal plating<br/>operations</li> <li>Paper and wood<br/>products</li> <li>Petroleum storage<br/>and refining</li> <li>Printing</li> </ul> | <ul> <li>Industrial process water or rinse water</li> <li>Loading and un-loading area wash-downs</li> <li>Outdoor material storage</li> </ul>                                                                                                                                                                                                                                        |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Municipal  | <ul> <li>Airports</li> <li>Landfills</li> <li>Maintenance<br/>depots</li> <li>Municipal fleet<br/>storage areas</li> <li>Ports</li> <li>Public works yards</li> <li>Streets and<br/>highways</li> <li>Golf courses</li> <li>Schools</li> </ul>                                                                                                                                                      | <ul> <li>Building maintenance<br/>(power washing)</li> <li>Dumping/spills</li> <li>Landscaping/grounds care</li> <li>Outdoor fluid storage</li> <li>Parking lot maintenance<br/>(power washing)</li> <li>Road maintenance</li> <li>Emergency response</li> <li>Vehicle fueling</li> <li>Vehicle<br/>maintenance/repair</li> <li>Vehicle washing</li> <li>Aircraft deicing</li> </ul> |

| LAND USES, LIKELY     | TABLE2-2:2 Source Locations and Activities That Can ProduceContinuousIllicit Discharges                                                                                                          |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Land Use              | Condition or Activity that Produces Discharge                                                                                                                                                    |
| Residential           | <ul> <li>Failed sanitary sewer infiltrating into storm drain</li> <li>Sanitary sewer connection into storm drain</li> <li>Failed septic systems discharging to storm<br/>drain system</li> </ul> |
| Commercial/Industrial | <ul> <li>Failed sanitary sewer infiltrating into storm drain</li> <li>Process water connections into storm drain</li> <li>Sanitary sewer connection into storm drain</li> </ul>                  |
| Municipal             | <ul> <li>Failed sanitary sewer infiltrating into storm drain</li> <li>Sanitary sewer connection into storm drain</li> </ul>                                                                      |

SOURCE (Tables 2-1 and 2-1) : Modified from Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and *Technical Assessments, Center for Watershed Protection, 2004. p.12, Table 2.* 

The illicit discharge detection system provided by Storm Water Management Authority, Inc, Inc, Inc and JCDH uses these criteria to provide an effective detection and elimination program to address all types of illicit discharges.

#### 2.2 LOCATING PRIORITY AREAS

Section 2.2 provides the methodology for locating priority areas that have a high potential for illicit discharges. Storm Water Management Authority, Inc, Inc and JCDH are continually evaluating/improving this process as changes arise and illicit discharges are removed (described in Section 2.6) This allows for a continuous modeling approach on where illicit discharge detection assets should be placed.

To locate priority areas within our municipalities JCDH is:

- Continually monitoring watersheds for any substantial changes such as local water quality classifications (303 d and various others) by using current water quality monitoring for trending data. This helps divide the watershed into discrete areas that can obtain different priority levels.
- 2. Gathering and evaluating available information that provide clues as to where in the community illicit discharges might be found (e.g. older neighborhoods, industrial parks, and gentrified neighborhoods). This is done by taking data from ADEM issued NPDES permits, Sanitary Sewer Overflows, Land usage, and outfall quantity and type and plotting them using Geographical Information System (GIS) mapping technology. The maps are then examined for areas where concentrations of all these components tend to occur.
- 3. Using existing information to assess where illicit discharges may be found and what waterbodies are particularly sensitive (e.g., drinking water sources, areas containing unique biodiversity, and swimming areas).

The following subsections present further discussion on each of these areas. The mapping and watershed prioritization conducted by Storm Water Management Authority, Inc, Inc and JCDH will help to manage each of these areas.

| Natur<br>Conse | ral Resource<br>ervatiion Serv | ice (NCRS)    |
|----------------|--------------------------------|---------------|
|                |                                | HUC           |
| Level          | <u>Name</u>                    | <u>Number</u> |
| 1              | Region                         | 2 digit       |
| 2              | Sub-Region                     | 4 digit       |
| 3              | Basin                          | 6 digit       |
| 4              | Sub-basin                      | 8 digit       |
| 5              | Watershed                      | 10 digit      |
| 6              | Subwatershee                   | l 12 digit    |
| 7              | Drainage                       | 14 digit      |
| 8              | Site                           | 16 digit      |
|                |                                |               |

#### 2.2.1 Indentify Watersheds and Waterbodies

In order to identify priority areas where illicit discharges may occur, a decision must be made as to how to define an "area". The Center for Watershed Protection recommends defining watersheds for individual waterbodies. The National Hydrograph Dataset has a Hydrologic Unit Code (HUC 10) that is used throughout Jefferson County. These 10 digit HUC codes provide an overall framework for delineating the 11 watershed areas within Jefferson County.

Figure 2-1 : Jefferson County HUC 10 Watersheds



This approach is particularly useful when reviewing the 303(d) list of impaired waters. Although wetlands are not taken into the HUC coding program they are taken into account in any water resource planning.

#### 2.2.2 Review Available Information

Priority areas for our overall IDDE program will vary from one municipality to another depending on water quality conditions, land use, etc. The following is a list of resources that is compiled on a continual basis as well as a brief description of the factors used in the prioritization process:

 GIS land use maps - industrial areas with high density development may have a high potential to contain an illicit discharge.

- Approximate density of known outfalls per stream mile areas with a high density of outfalls are considered high priorities.
- Age of infrastructure/development older areas of the community with known high septic tank failure rates or improper stormwater infrastructure is considered a priority.
- Location of public sanitary sewer/age of sewer/date of separation
   Older areas that were put on sewer long ago or have or have areas that are susceptible to pipe erosion are considered a

#### priority.

Water Quality Information

## Water Quality Classification for the State of Alabama applicable to Jefferson County is as follows:

- Outstanding Alabama Water (OAW)
- Public Water Supply (PWS)
- Swimming and Other Whole Body Water-Contact Sports (S)
- Fish and Wildlife (F&W)
- Limited Warmwater Fishery (LWF)
- Agricultural and Industrial Water Supply ( A&I)

For specific information on the classification of specific rivers go to:

http://www.epa.gov/waterscience/standards/wqslibrary/al/al\_4\_ 11wqs.pdf

<u>ADEM 303(d) list</u> – ADEM and EPA evaluate water quality of Alabama surface waterbodies and generate the 303(d) list of impaired water bodies. The list includes a description of the use that is impaired, the cause of the impairment, and the source. In some cases ADEM has identified illicit discharges or wet weather discharges as the cause. If one of the municipalities has a waterbody that is impaired due to wet weather or illicit discharges it becomes a priority to JCDH and Storm Water Management Authority, Inc, Inc. Impaired waters on the 303(d) list will be subjected to Total Maximum Daily Load (TMDL) standard for the pollutant of concern. This TMDL (when available) is factored into the overall IDDE program. This list is provided to the public at

Some Common Impairments in Jefferson County

- Nutrients
- Siltation
- Pathogens
- Pesticides (Dieldrin)
- > Turbidity
- Temperature
- ≽ pH
- Oil and grease

#### http://adem.alabama.gov/programs/water/wquality/2010AL303dLis t.pdf

Areas that drain to public beaches or drinking water sources – These areas are designated as high priority areas for public health and economic reasons.

It should be noted that the above list is not exhaustive. There may be additional data pertinent to locating priority areas that are constantly evolving. The use of any of these will be based on the personal knowledge and experience of JCDH as well as Storm Water Management Authority, Inc, Inc officials.

#### 2.2.3 Evaluate Illicit Discharge Potential

The understanding of the unique waterbodies spread throughout the municipalities of Jefferson County allows the officials of Storm Water Management Authority, Inc, Inc and JCDH to establish a priority ranking. This will assign values of High Priority, Medium Priority, or Low Priority to each watershed. Table 2-4 provides an example of one of the components employed where criterion is evaluated for each waterbody and assigned an illicit discharge potential (IDP) of 1 for low potential, 2 for medium potential, and 3 for high potential. The scores for each waterbody are then averaged to produce a resultant overall score for the waterbody that will range from 1 (low priority) to 3 (high priority). Figure 2-2 shows a GIS mapping detection system that is the major component along with scoring that allows for priority areas to be assigned to each watershed.

The IDDE prioritization process allows Storm Water Management Authority, Inc, Inc and JCDH to focus their efforts on:

- Areas that need further mapping
- Community-specific detection techniques
- Prioritization of storm drain system maintenance work

| - EX                |
|---------------------|
| NHDES (<br>303(     |
| npaired – O<br>(2)  |
| Not Impa            |
| Impaired<br>Dischar |
| Stormwa             |
| Not Impai           |
| No data a           |

Notes:

The number in parentheses is the Illicit Discharge Potential (IDP) "score" (with 3 defined as a high IDP) earned for that area for the category Identified. Basis for assigning scores (based on benchmarks) to assess IDP is defined as follows: •

| Category Definitions | Land Use    | JCDH Category                            | Stormwater Outfall<br>Density | Average Age of<br>Development |
|----------------------|-------------|------------------------------------------|-------------------------------|-------------------------------|
| High (3)             | Industrial  | Impaired-illicit discharge or stormwater | >20                           | >50                           |
| Medium (2)           | Commercial  | Impaired- other source                   | 10-20                         | 25-50                         |
| Low (1)              | Residential | Not impaired                             | <10                           | <25                           |

Normalizing the raw IDP scores (by dividing the raw score by the number of screening factors assessed) will produce scores that fall into the Standard scale of 1 to 3 for low to high IDP, respectively. •

SOURCE: Modified from Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, 2004, p.53, Table 15.



Figure 2-2 Shades Creek Watershed

#### 2.3 MAPPING THE SYSTEM

This section will focus on the development of a comprehensive storm drain map using GIS technology. The strategy used to build the storm drain map by JCDH and Storm Water Management Authority, Inc, Inc is as follows:

- 1. Review/ Office Preparation:
  - a) Existing GIS maps were checked for data in high priority areas first, then medium priority areas, then low priority areas. The maps used came from various sources including Jefferson County, Storm Water Management Authority, Inc, and various state and local agencies. The maps obtained showed land usage, development area patterns, tax maps, as well as old Storm Water Management Authority, Inc priority areas.
  - b) A naming and numbering system was developed for outfalls as well as GIS coordinates and pictures of all outfalls were stored in a data dictionary. This will facilitate future inspections and aid in documentation of maintenance.
  - c) A system of marking outfalls is being employed to help mark outfalls in the field. Spray paint is being examined but a more permanent system would be ideal.
  - d) Equipment was obtained for mapping including all on the list and a few items that are excluded.
  - e) A preliminary schedule was developed to show the various steps need to reach completion. This schedule is subject to change based on factors such as weather, creek level, or other factors.
  - f) Canoes were put into service for areas that could not be walked. Areas that have thick undergrowth were identified as areas to be walked during the fall or winter months.
  - g) Sampling sites and results were taken into account in what areas needed to be first priority.

- 2. Field verification:
  - a) All major waterbodies within a given area of a municipality are being walked and outfall data collected on a weekly basis. The outfalls are identified using a global positioning system (GPS) unit capable of 3-5 m accuracy. Pathfinder<sup>®</sup> is being used to post-process the points to even greater accuracy than the GPS unit alone can provide. The outfalls are also being assigned a number in the GPS data dictionary as well as a picture taken by the Trimble Juno GPS Unit.
  - b) Spray paint is used in the field to identify outfalls.
  - c) Dry weather sampling is being conducted in regular intervals at sites designated by JCDH on the major feeder creeks. There are 29 of these sites along the feeder creeks in our municipalities. Dry weather screening on outfalls is also conducted on complaints and whenever an opportunity presents itself.
  - d) Dry weather screen is also being conducted on each tributary area twice a year to document any pollutant loadings.
- 3. <u>Develop Initial GIS Maps</u>: The storm drain systems are being mapped as a larger part of the GIS database for the Storm Water Management Authority, Inc's municipalities. The new data collected has the option to be displayed with any of the existing data sets. JCDH has the ability to display aerial photography, street maps, municipal boundaries, and various other layers as backdrops for relevant GIS maps. Aerial photographs are one of the most interesting background files to use to display information; however, their large file size (20 MB and larger) can make them impractical for all applications. An alternate way to display our mapped information consisted of downloading either United States Geological Survey (USGS) quadrangles, or a set of roads, political boundaries, waterbodies, and watershed information from various other local and governmental sources.

TIN maps are used by JCDH to formulate 3-dimensional pictures of watersheds and how data can affect the waterbodies therein. The 3-dimensional maps allow water to be traced from source to areas where it will likely be terminate into a major feeder creek.

- a. Aerial photography was first used to identify stormwater detention structures. Field Staff along with local firemen are now in the process of locating various catch basins that are undetectable using aerial photography, a n d taking photographs of pipe locations and sizes. The design details will then be used to get a detailed overview of all structures. A GPS unit with a data logger is being used to take photographs and pinpoint locations.
- b. Quality Assurance/ Quality Control is performed in the office on a daily basis on all data recorded.
- c. All data collected has a unique point type and number assigned.
- 5. Incorporate field data into GIS and revise as necessary: Once the GPS data files have been converted into GIS layers, and revised maps have been produced; these maps are proofed to assess their accuracy and completeness. The JCDH reviewer documents any additional data requirements, and corrects any errors in the information collected. A relational database helps JCDH and local municipalities establish the connections between pipes, outfalls, and other structures.

The mapping database should be completed in a four year period depending on resources and availability starting on August, 1, 2010. Below in Figure 2-3 is a sample GIS map generated by JCDH.





#### 2.4 DETECTION

Illicit discharges can be detected in many ways. Determining which detection methods are appropriate for a municipality can be a relatively simple process. An example of this selection process is provided in Table 2-6. Sheets such as this as well as the following information are used to generate the areas and the frequency of inspections.

#### 2.4.1 Dry Weather Inspections During Mapping (or initial inspections)

The Dry Weather Inspection Form (see Appendix A) can be used during the mapping to detect the continuous and intermittent discharges. The form is completed whenever evidence of an illicit discharge such as significant flow during dry weather, the presence of raw sewage indicators, staining, or residue, is observed. The discharge is then filed into a complaint form like the one seen below in Figure 2-5.

#### Dry Weather Discharge Definition

The CWP defines **dry weather** as a 48 hour period with no runoff producing rain fall. JCDH and Storm Water Management Authority, Inc define dry weather as a 48-72 hour period with less than 1/10inch rainfall.

#### 2.4.2 Long-Term Dry Weather Inspections

Long-term, regular inspections of outfalls are a primary part of JCDH's IDDE program. Regular inspections are not significantly different from inspections conducted during mapping. The major difference is that a crew or inspector will have historical data to work with to make assessments. These inspections are kept in an electronic data base that is analyzed for any higher than expected sample values by using the bench marks in the Figure 2-4 below. The database is then used to direct inspectors on follow-up visits to investigate problem samples. The database also can provide a graph that gives a good baseline above which a sample should not reach. These sites are sampled at least four times a year and can be sampled on an as needed basis.



Figure 2-4: JCDH Sampling Program

Date Range: 7/6/2009 thru 7/6/2010

| Site<br>Name         | Sample<br>Date             | Test Name          | Result<br>Value | Result<br>Text | Unit      | Weather | Sample<br>Type | Lab Id          | Lab Method |
|----------------------|----------------------------|--------------------|-----------------|----------------|-----------|---------|----------------|-----------------|------------|
| VES-<br>CAR-<br>076T | 4/5/2010<br>1:15:00<br>PM  | FECAL<br>COLIFORMS | 1               | <1.00          | COL/100ML | DRY     | GRAB           | 20100<br>695-01 | 9222D      |
| VES-<br>CAR-<br>078T | 4/5/2010<br>2:15:00<br>PM  | FECAL<br>COLIFORMS | 32              | 32.0           | COL/100ML | DRY     | GRAB           | 20100<br>696-01 | 9222D      |
| VES-<br>CAR-<br>079T | 4/6/2010<br>10:20:00<br>AM | FECAL<br>COLIFORMS | 66              | 66             | COL/100ML | DRY     | COMP           | 20100<br>704-01 | 9222D      |
| VES-<br>CAR-<br>077T | 4/7/2010<br>10:40:00<br>AM | FECAL<br>COLIFORMS | 28              | 28             | COL/100ML | DRY     | GRAB           | 20100<br>731-01 | 9222D      |

A schedule of long-term inspections for outfalls was then developed. The CWP recommends inspecting all outfalls once, at a minimum, during the first permit cycle in which JCDH is currently inspecting all outfalls and coming up with a grid system to allow for more efficient management of personnel. Further inspections are conducted to supplement the existing JCDH inspections as personnel and funds allow. Long-term inspections are conducted during dry weather to maximize the potential to observe evidence of illicit discharges and form baseline trends. Winter and summer inspections are conducted at 29 sites to help monitor illicit discharges. The use of interns reduces cost, but to ensure quality of service each intern is trained in safety and identification techniques. If any problems are discovered a procedure is in place to allow for examination by more experienced personnel.

#### 2.5.1 Opportunistic Inspections

Most public works crews conduct their regular duties in and around the storm drain system. A Supervisor may elect to have crews conduct outfall inspections on an informal basis while performing other work, or the supervisor may elect to have crews informally "keep a look out" for illicit discharges. If a city employee observes evidence of an illicit discharge during an informal or non-routine inspection, he/she should collect as much information about the potential illicit discharge as possible then contact his/her supervisor which will relay the information to the JCDH Stormwater hotline at (205)930-1999.A complaint form will then be generated by JCDH containing the information given and will be worked so as to alleviate the problem. A sample complaint form is shown on the next page in Figure 2-4.

| http://jcdhapps/EHComplaint/EHCP02.aspx                                                                             |                                                                                                                             | 🔹 🦘 🗙 Google                                 |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| View Favorites Tools Help                                                                                           |                                                                                                                             | 🖓 🔹 🔝 🔹 🖶 🔹 🔂 Page 🕶 🍈 Tools                 |
| HIC                                                                                                                 | Jefferson County Department Of Health<br>Complaint System<br>Community Environmental Protection Division<br>Entry/Misterace |                                              |
| Complaint Entry Information<br>Complaint Nbr:<br>Old Complaint Nbr:<br>Entered by:<br>Ret Received Date: 07/06/2010 | 3                                                                                                                           |                                              |
| Complainant Information                                                                                             |                                                                                                                             |                                              |
| First:                                                                                                              | Last:                                                                                                                       |                                              |
| Suite: Street N                                                                                                     | br: Street<br>Name:                                                                                                         |                                              |
| Type: • 1                                                                                                           | Direction:                                                                                                                  |                                              |
| City:                                                                                                               | State: Zip:                                                                                                                 |                                              |
| Home<br>Phone:                                                                                                      | Cell Work<br>Phone Phone:                                                                                                   |                                              |
| Complaint Information                                                                                               |                                                                                                                             |                                              |
| Type:                                                                                                               | •                                                                                                                           |                                              |
| Owner First:                                                                                                        | Last:                                                                                                                       |                                              |
| Business<br>Name:                                                                                                   |                                                                                                                             |                                              |
| Suite: Street<br>Nbr:                                                                                               | Street<br>Name:                                                                                                             |                                              |
| Type: • Direc                                                                                                       | tion: •                                                                                                                     |                                              |
| City: • Zip:                                                                                                        | •                                                                                                                           |                                              |
| Home<br>Phone:                                                                                                      | Work Ext.                                                                                                                   |                                              |
| Additional Comments                                                                                                 |                                                                                                                             |                                              |
| Comment up to 500 Chararacters                                                                                      | Max.                                                                                                                        |                                              |
|                                                                                                                     | <b>A</b>                                                                                                                    |                                              |
|                                                                                                                     |                                                                                                                             |                                              |
|                                                                                                                     |                                                                                                                             | 👊 Local intranet   Protected Mode: On 🔍 100% |

Figure 2-4: Sample Complaint Form

#### Examples of Illicit Discharge Indicators

- Color
- Floatables
- Solids
- Turbidity
- Oil sheen
- Grey matOdor

While it may not be possible for all municipal employees to be able to personally call in an illicit discharges. There should be several other ways they can help alleviate this problem such as:

- The person observing the discharge can provide the information verbally to a dispatcher or the supervisor, who can then call in the complaint to the hotline.
- Personnel can log into JCDH's website to report any complaint concerns; however this option may be a bit more time consuming and immediate needs should be called in.
- A "local" JCDH stormwater program employee can be called to come investigate the complaint on an as needed basis.

It is important to collect as much information as possible at the time of the initial observation due to the likelihood that a discharge may be transitory or intermittent. Initial identification of the likely or potential sources of the discharge is also very important.

#### 2.5.2 Citizen Call-In Inspections

A citizen call-in program is an effective way to identify illicit discharges.

JCDH has a stormwater hotline that is accessible and publicized throughout the Storm Water Management Authority, Inc's municipalities. To maximize the effectiveness of citizen call-ins, the complaint system is filtered by an initial inspection so that each complaint is addressed and identified as valid. Upon validation the complaint is worked within 7-10 business days. The form is filled out with the citizen's information along with all relevant complaint information. There are a few ways through letters and faxes that anonymous complaints can be generated but most complaints must have an original complainant so as to be able to notify someone of the results. These are done by environmental health specialists as well as stormwater employees. The hotline is also accessible through JCDH's website at <u>WWW.JCDH.ORG</u>.

#### 2.5.3 Septic System Inspections

Septic System inspections are conducted through JCDH's Community Environmental Protection Division. The older rural and low density areas that are prone to septic tank failures are identified first and any problem is reported internally to that division to handle. Any failure is then handled in a timely manner and the tank is pumped out until the failure is repaired to prevent leaking into the storm sewer system.

#### **2.5 TRACING ILLICIT DISCHARGES**

Once an illicit discharge has been reported or detected through an inspection, the next step is to locate the source. Selection of tracing techniques will depend on the type of illicit discharge detected, information collected during the initial discovery period, observation (whether through an inspection by a municipal employee, JCDH regular inspections, or through a citizen call-in), and the resources/technology available to the municipality. A single technique may be used or several techniques may be used in combination to identify the source of the discharge. Figure 2-5 presents a flow chart for selecting tracing techniques that can be applied to the two categories of potential illicit discharges: (1) transitory or intermittent discharges (where upon returning to the site, no flow is present at the location where the illicit discharge was initially reported), and (2) continuous discharges (where upon returning to the site a continuous flow is present and the flow may be more easily traced to its source). Each of these circumstances is described below:

1. <u>Transitory or intermittent discharges</u>: These conditions may occur as a result of an inspection or a citizen complaint. While initial information may have been collected regarding the potential illicit
discharge, a return trip may show that the discharge was either intermittent or transitory (e.g., no flow is present upon return to the site). The investigative techniques used will depend on whether or not a potential source location was identified during the initial observation:

<u>Potential source identified</u> - If a potential source for the illicit discharge was initially identified, steps are taken to investigate the potential source site, such as inspecting the site and storm drain system in the vicinity of the site. If floor drains, sumps, or other suspect discharge locations are observed during this inspection, dye testing, smoke testing, or continuous flow monitoring may be used. These techniques should definitively show whether the suspect site was the source of the illicit discharge.

Potential source not identified - If no source site is suspected, and only the general area of the illicit discharge is known, it may be possible to trace the evidence of the illicit discharge by visual inspection of the storm drain access points. If this catch basin/manhole inspection technique proves to be unsuccessful, some interim steps are taken attempt to capture water from an intermittent discharge. For example, sand bagging, damming or block testing of selected storm drain access points, combined with installation can help reveal the source of the discharge. If these techniques have no positive result (no water pools behind the weir or sand bag), the discharge was likely transitory (one time only), and it may not be possible to determine its origin. In this case, the location of the originally reported illicit discharge is added to the complaint database and tracked for any future incidents. If the original report of the illicit discharge was severe or gross pollution, then smoke testing or televising of the storm drain system may be warranted.



2. <u>Continuous discharges</u>: Tracing continuous discharges is typically easier than tracing transitory or intermittent discharges. The primary difference between tracing a transitory or intermittent discharge and tracing a continuous discharge is that sandbagging and weirs are not required for a continuous discharge. Visual observation of the system access points should reveal where the flow is coming from. Just as for tracing a transitory or intermittent discharge, if visual inspections fail in identification of the source and the original report was severe or gross pollution, then televising, smoke testing, or sample collection would be warranted. JCDH randomly collects a grab sample for bacterial analysis from any pipe with a significant flow, even if the discharge appears to be clear.

While these conditions may not cover the full extent of discharges that may be discovered, they should provide general guidance on the selection of tracing techniques. The following subsection describes in more detail each of the techniques that can be applied by JCDH, including their advantages and disadvantages.

### 2.5.1 Tracing Techniques

To select an effective tracing technique, one must have a good understanding of the technique and its limitations. The following is a brief summary of each of the tracing techniques that may be employed by JCDH to locate the source of an illicit discharge:

1. <u>Visual Inspection at manholes/catch basins</u>: This tracing technique is typically used when there is no suspected source site or in residential neighborhoods. It is the most cost effective and efficient method of tracing. Structures are inspected systematically starting at the initial detection location, gradually working upstream through the system. If the inspector is tracking a continuous discharge, the inspections may be relatively easy, and the flow can be traced back to its source. If the inspector is attempting to track a transitory or intermittent discharge, the inspector will make the following observations depending on the information provided from the initial identification: color and clarity of any discharge, staining or deposits on bottom of structure; oil sheen, scum, or foam on any standing fluids in sump of structure; odors, staining or deposits on inlet pipes

and outlet pipes. Depending on what the inspector is looking for, and what they find, they will progressively inspect additional structures until either a potential source is found, or no further evidence is found. If no further evidence is found the inspector may elect to further assess some of the structures by installing sandbags or other damming devices to determine if the discharge recurs. Inspectors are always equipped with proper safety equipment such as proper cone placement, safety vests in traffic areas, confined space entry techniques (if entry is necessary), steel-toed boots, etc.

2. Sampling flowing discharges: As shown in Figure 2-5, samples are collected only in the event a discharge is flowing through the outfall, unless a pollutant is clearly evident in stagnant pools of water or sump water. Table 2-8 lists the parameters that a sample can be analyzed for and provides a general discussion of how the results may be interpreted. This table was taken from the CWP manual (2004) which provides a more detailed discussion of sampling procedures and analysis of results. Sampling and analysis for many of the compounds should be completed by JCDH or other personnel trained in collection, handling, and preservation techniques to ensure accurate data. JCDH recommends collecting a sample when the discharge is initially found and after any source is removed. The sample collected after removing an illicit discharge can indicate if other illicit discharges are present. JCDH also holds the right to test any different chemical or pollutant at the inspector's discretion.

| TABLE 2-8:         INDICATOR PARAMETERS USED TO DETECT ILLICIT DISCHARGES |                                                        |             |                                  |                                  |                                                                                                                          |  |
|---------------------------------------------------------------------------|--------------------------------------------------------|-------------|----------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------|--|
| Paramotor                                                                 |                                                        | Discharge T | ypes it can De                   | Laboratory/Analytical Challongos |                                                                                                                          |  |
| Parameter                                                                 | Sewage Washwater Tap Water Commercial<br>Liquid Wastes |             | Laboratory/Analytical Challenges |                                  |                                                                                                                          |  |
| Ammonia                                                                   | •                                                      | ۵           | 0                                | ۵                                | Can change into other nitrogen forms as the flow travels to the outfall.                                                 |  |
| Boron                                                                     | ۵                                                      | ۵           | 0                                | *                                |                                                                                                                          |  |
| Chlorine                                                                  | 0                                                      | 0           | 0                                | ۵                                | High chlorine demand in<br>natural waters limits utility to flow<br>with very                                            |  |
| Color                                                                     | Ø                                                      | Ø           | 0                                | ۵                                |                                                                                                                          |  |
| Conductivity                                                              | Ø                                                      | ۵           | 0                                | ۵                                | Ineffective in saline waters, generally highly variable.                                                                 |  |
| Detergents -<br>Surfactants                                               | •                                                      | •           | 0                                | ۵                                | Reagent is a hazardous waste.                                                                                            |  |
| E. coli<br>Enterococci<br>Total Coliform                                  | ۵                                                      | 0           | 0                                | 0                                | 24-hour wait for results.<br>Need to modify standard monitoring<br>protocols to measure high bacteria<br>concentrations. |  |
| Fluoride**                                                                | 0                                                      | 0           | •                                | ۵                                | Reagent is a hazardous waste.<br>Exception for communities that do not<br>fluoridate their tap water.                    |  |
| Hardness                                                                  | Ø                                                      | ۵           | Ø                                | ۵                                |                                                                                                                          |  |
| рН                                                                        | 0                                                      | ۲           | 0                                | ۲                                |                                                                                                                          |  |
| Potassium                                                                 | ۵                                                      | 0           | 0                                | •                                | May need to use two separate analytical techniques, depending on the concentration.                                      |  |
| Turbidity                                                                 |                                                        | ۲           | 0                                | ۲                                |                                                                                                                          |  |

• Can almost always (>80% of samples) distinguish this discharge from clean flow types (e.g., tap water or natural water). For tap water, can distinguish from natural water.

Can sometimes (>50% of samples) distinguish this discharge from clean flow types depending on regional characteristics, or can be helpful in combination with another parameter.

• Poor indicator. Cannot reliably detect illicit discharges, or cannot detect tap water.

\* Data are not available to assess the utility as a single parameter, but when combined with additional parameters (such as detergents, ammonia and potassium), it can almost always distinguish between sewage and washwater.

\*\* Fluoride is a poor indicator when used alone, but can distinguish between washwater and sewage when combined with analysis for detergents, ammonia and potassium.

SOURCE: Modified from Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, 2004, p. 122, Table 39

3. <u>Sandbagging or damming</u>: Sandbagging and damming is typically only conducted when the discharge flow has ceased since initial detection. Application of this technique is sparsely used and will show whether the discharge is one time only (no water pools behind the sandbag or dam) or intermittent (water pools behind the sandbag). CWP provides the following explanation:

This technique involves placement of sandbags or similar barriers such as caulk dams within strategic manholes in the storm drain network to form a temporary dam that collects any intermittent flows that may occur. Any flow collected behind the sandbag is then assessed using visual observations or by indicator sampling. Sandbags are lowered on a rope through the manhole to form a dam along the bottom of the storm drain, taking care not to fully block the pipe (in case it rains before the sandbag is retrieved). Sandbags are typically installed at junctions in the network to eliminate contributing branches from further consideration. If no flow collects behind the sandbag, the upstream pipe network can be ruled out as a source of the intermittent discharge. Sandbags are typically left in place for no more than 48 hours, and should only be installed when dry weather is forecast. Sandbags should not be left in place during a heavy rainstorm. They may cause a blockage in the storm drain, or, they may be washed downstream and lost. The biggest downside to sandbagging and damming is that it requires at least two trips to each manhole (CWP, 2004, p.157).

4. Optical brightener monitoring traps: (JCDH is very limited in employing this specific technique because the effectiveness is yet to be determined) Optical brightener monitoring (OBM) traps can be used to trace intermittent or transitory discharges that result from washwater with detergent. Detergents usually contain optical brighteners that can be detected at high concentrations using this method. However, the traps only detect highly concentrated discharges. The detergent concentration required to be detected by the light is approximately the same as pure washwater from a washing machine. Consequently, OBM traps may be best suited as a simple indicator of the presence or absence of intermittent flow or to detect the most concentrated flows. The traps can be made using easily acquired materials.

The traps contain an absorbent, unbleached cotton pad or fabric swatch contained inside a wire mesh trap or section of small diameter (e.g., 2-inch) PVC pipe. The traps should be anchored to the inside of an outfall at the invert using wire or monofilament that is secured to the pipe itself. Rocks or bricks can be used a temporary weight to hold the trap in place.

JCDH inspectors can retrieve the OBM traps after 24 to 72 hours of dry weather. OBM traps are retrieved before coming into contact with stormwater, which will contaminate the trap or wash it away. When placed under a long wave fluorescent ultraviolet or "black" light, an OBM trap will indicate if it has been exposed to detergents. CWP reports that OBM traps have been used with some success in Massachusetts (Sergeant et al. 1998) and northern Virginia (Waye 2000).

5. <u>Dye testing</u>: (Green Fluorescent used by JCDH) Dye testing is typically conducted when a potential source site has been identified, and the inspector is trying to determine whether the site has floor drains or other locations that connect and discharge to the storm drain system. Permission to access the site must be obtained before dye testing can be conducted.

Verbal or written requests by JCDH are both acceptable. The inspector should review available sanitary sewer and storm drain maps before conducting the dye testing. The dye testing procedure consists of two steps: (1) discharging the dye into the suspect location, and (2) opening nearby storm drain and sanitary sewer manhole covers to determine where the dye discharges to. This procedure is fairly effective for confirming direct connections into the storm drain system for short reaches. If a longer pipe network is being evaluated, charcoal packets can be left in selected structures and later collected and analyzed for the presence of the dye. If dye testing porcelain structures, tablets or charcoal should be wrapped in tissue before depositing. When dye testing, the inspector takes into account that each structure (sink, toilet, etc.) should be tested separately. Many times a single utility in a basement may be incorrectly connected to a storm drain line instead of a sanitary line.

 <u>Televising</u>: (Not in use by JCDH at this time but Jefferson County Environmental Services employs this technique) Televised video inspections are a useful technique when an illicit connection or infiltration from a nearby sanitary sewer is suspected, but little evidence of the illicit discharge remains behind. Two types of video cameras are available for use: (1) a small camera that can be manually pushed on a stiff cable through storm drains to observe the interior of the piping, or (2) a larger remote operated video camera on treads or wheels that can be guided through storm drains to view the interior of the pipe. Typically the operator of the camera has access to a keyboard or audio voice-over to record significant findings on the videotape that is produced for future review and evaluation.

 <u>Smoke testing</u>: Smoke testing is a useful technique for tracing intermittent discharges or continuous discharges that have no apparent source site. Smoke is introduced into the storm drain system, and emerges at locations that are connected to the system. Smoke testing works best for short reaches of pipe, or in situations where pipe diameters are too small for video testing.

The Center for Watershed Protection provides the following discussion on planning and executing smoke testing:

JCDH must provide notice to the public in the immediate vicinity about the date and purpose of the smoke testing. The smoke used is non-toxic, but can cause respiratory irritation, which can be a problem for some residents. Residents will be notified prior to testing, and should be provided the following information (Hurco Technologies, Inc. 2003):

- Date testing will occur
- Reason for smoke testing
- Precautions they can take to prevent smoke from entering their homes or businesses
- What they need to do if smoke enters their home or business, and any health concerns associated with the smoke
- A number residents can call to relay any particular health concerns (e.g., chronic respiratory problems)

JCDH will also notify local media to get the word out if extensive smoke testing is planned (e.g., television, newspaper, and radio). On the actual day of testing, local fire departments and 911 call centers will be notified to handle any calls from the public. The basic equipment needed for smoke testing includes manhole safety equipment, a smoke source, smoke blower, and sewer plugs. Two smoke sources can be used for smoke testing. The first is a smoke "bomb," or "candle" that burns at a controlled rate and releases very white smoke visible at relatively low concentrations. Smoke bombs are suspended beneath a blower in a manhole. Candles are available in 30 second to three minute sizes. Once opened, smoke bombs should be kept in a dry location and should be used within one year.

The second smoke source is liquid smoke, which is a petroleum-based product that is injected into the hot exhaust of a blower where it is heated and vaporized. The length of smoke production can vary depending on the length of the pipe being tested. In general, liquid smoke is not as consistently visible and does not travel as far as smoke from bombs.

Smoke blowers provide a high volume of air that forces smoke through the storm drain pipe. Two types of blowers are commonly used: "squirrel cage" blowers and direct-drive propeller blowers. Squirrel cage blowers are large and may weigh more than 100 pounds, but allow the operator to generate more controlled smoke output. Direct-drive propeller blowers are considerably lighter and more compact, which allows for easier transport and positioning.

Three basic steps are involved in smoke testing. First, the storm drain is sealed off by plugging storm drain inlets. Next, the smoke is released and forced by the blower through the storm drain system. Lastly, the inspector looks for any escape of smoke above-ground to find potential leaks. Septic vents on rooftops are clear indicators of cross connections to the storm drain system.

One of three methods can be used to seal off the storm drain. (1) Sandbags can be lowered into place with a rope from the street surface. (2) Alternatively, beach balls that have a diameter slightly larger than the drain can be inserted into the pipe. The beach ball is then placed in a mesh bag with a rope attached to it so it can be secured and retrieved. If the beach ball gets stuck in the pipe, it can simply be punctured, deflated and removed. (3) Finally, expandable plugs are available, and may be inserted from the ground surface.

Blowers should be set up next to the open manhole after the smoke is started. Only one manhole is tested at a time. If a smoke candle is used, the inspector simply lights the candle, places it in a bucket, and lowers it into the manhole The inspector then watches to see where smoke escapes from the pipe. The two most common situations that indicate an illicit discharge are when smoke is seen rising from internal plumbing fixtures (typically reported by residents) or from sewer vents. Sewer vents extend upward from the sewer lateral to release gas buildup, and are not supposed to be connected to the storm drain system (CWP, 2004, p. 165-166).

### 2.6 REMOVING ILLICIT CONNECTIONS AND DISCHARGES

Regulated MS4 communities are required to adopt an ordinance or other regulatory mechanism to prohibit illicit discharges to their storm drain system. Storm Water Management Authority, Inc and JCDH operate off the *Erosion and Sedimentation Control Ordinance* that was instated on October 1, 1999. This ordinance allows for enforcement procedures that can be taken in the event of discovery of an illicit discharge. A new ordinance is set to be released within the 2011 calendar year and all illicit discharges should be referred to the most current ordinance. This section describes the procedures that should be taken for illicit discharge removal.

Table 2-9 summarizes the procedures that should be followed to ensure a timely and complete removal depending on the types of illicit discharges that may be discovered, and the various responsible parties. For most cases, the enforcement authority in the Ordinance will coordinate discharge removal.

| NOTIFICATION AND R                                  | T<br>Removal Procedures f<br>Storm                                                                                                    | TABLE 2-9:<br>FOR ILLICIT DISCHARGES INT<br>IN SEWER SYSTEM                                                 | O THE MUNICIPAL SEPARATE                                                                                                                  |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Financially<br>Responsible Party                    | Source Identified                                                                                                                     | Enforcement Authority                                                                                       | Procedure to Follow                                                                                                                       |
| Private Property<br>Owner                           | One-time illicit<br>discharge (e.g., spill,<br>dumping, etc.)                                                                         | Ordinance enforcement<br>authority (e.g., City<br>official, JCDH official,<br>or various other<br>agencies) | <ul> <li>Contact Owner</li> <li>Issue Notice of Violation</li> <li>Issue fine for larger spills</li> </ul>                                |
| Private Property<br>Owner                           | Intermittent or<br>continuous illicit<br>discharge from legal<br>connection                                                           | Ordinance enforcement<br>authority (e.g., Code<br>Enforcement Officer)                                      | <ul> <li>Contact Owner</li> <li>Issue Notice of Violation</li> <li>Determine schedule for<br/>removal</li> <li>Confirm removal</li> </ul> |
| Private Property<br>Owner                           | Intermittent or<br>continuous illicit<br>discharge from illegal<br>connection or indirect<br>(e.g., infiltration or<br>failed septic) | Plumbing Inspector,<br>JCDH Community<br>Environmental<br>Protection Division                               | <ul> <li>Notify plumbing inspector/</li> <li>Notify JCDH by complaint</li> <li>Enforcement Action taken by JCDH</li> </ul>                |
| Municipal                                           | Intermittent or<br>continuous illicit<br>discharge from illegal<br>connection or indirect<br>(e.g., failed sewer line)                | Ordinance enforcement<br>authority (e.g., City<br>official, JCDH official,<br>or various other<br>agencies) | <ul> <li>Issue work order</li> <li>Schedule removal</li> <li>Remove connection</li> <li>Confirm removal</li> </ul>                        |
| Exempt 3 <sup>rd</sup> Party<br>(see Section 2.6.4) | Any                                                                                                                                   | USEPA                                                                                                       | <ul> <li>Notify exempt third party<br/>and USEPA of illicit<br/>discharge</li> </ul>                                                      |

The following subsections address the issues of financial responsibility for removal (Section 2.6.1), forms and procedures that can be used in association with issuing a Notice of Violation (NOV) (Section 2.6.2), circumstances in which a municipality can take emergency action by referring directly to JCDH for discharges that are a threat to human health or the environment (Section 2.6.3), and procedures to follow when an illicit discharge from an exempt party is identified (Section 2.6.4).

### 2.6.1 Financial Responsibility

Once an illicit discharge's source has been identified, the financial responsibility of removing it is determined in the *Erosion and Sedimentation Control Ordinance* adopted by all Storm Water Management Authority, Inc municipalities on October 1, 1999. The following describes three cases that might be encountered:

- 1) The illicit discharge was a private party dumping into the storm drain system (a transient discharge). In this case, the *Erosion and Sedimentation Control Ordinance Article 7, Section 7.05* would allow for first a Notice of Violation, a Compliance Order, and/ or a Cease and Desist Order to be issued and a fine to be imposed of no less than \$100.00 and no more than \$500.00 a day or up to 180 days in jail.
- 2) The illicit discharge originated from a connection to the storm drain system (transient, intermittent, or continuous) that was once allowed. Such as an outdated overflow or anything of the nature. The overflow must be fixed on an as needed basis and appropriate action taken. A Notice of Violation could be issued and a fine could be imposed by JCDH if necessary. All washing machines, septic tanks, gray water generators, etc. are taken off through the Community Environmental Health Division of JCDH.
- 3) The illicit discharge resulted from an illegal connection (i.e., a connection that violates state plumbing codes). For intermittent or continuous discharges that are the result of an illegal direct connection into the storm drain system, the cost for disconnection will fall to either the property owner of the illegal connection or the municipality, depending on the circumstances of the connection. For example, if the connection was incorrectly applied during a separation project conducted by the municipality, the cost to correct the connection should be borne by the municipality. If the connection was the result of a private contractor working for the resident, the resident would be financially responsible for correcting the connection. Similarly, if the illicit discharge is the result of a failed sanitary sewer line, the party responsible for the failed sanitary sewer line must pay for the correction.

### 2.6.2 Notice of Violation

For violations of the *Erosion and Sedimentation Control Ordinance*, the Storm Water Management Authority, Inc municipalities issue a Notice of Violation. A Notice of Violation form will be generated by the municipalities and will look similar to the form shown in Appendix A. It

should be noted that the NOV describes a schedule for the removal to be completed, as well as a summary of any agreements between the parties.

### 2.6.3 Emergency Disconnections

The *Erosion and Sedimentation Control Ordinance* allows for a disconnection to the storm drain system for discharges that present "a threat to the environment or to the health or welfare of persons, or to the storm drain system". Disconnections may include blocking pipes, constructing dams, or taking other measures on public ways or public property to physically block the discharge. The municipal enforcement authority for the ordinance may want to call the Jefferson County Department of Health at (205) 930-1230 or the Jefferson County Emergency Management Authority at (205) 254-2039 when making this determination for disconnection.

### 2.6.4 Discharges from Exempt Parties

Several categories of facilities are regulated by the USEPA for stormwater discharges under other permits. Because these facilities are already responsible to USEPA authority for stormwater discharges, the municipality can exempt them from the *Erosion and Sedimentation Control Ordinance*. If a municipality encounters an illicit discharge that is suspected or determined to be coming from an exempt party that is regulated under USEPA stormwater regulation, the municipality should notify both the suspected discharger and the enforcement authority for that discharger. The notification can be verbal or in writing. Most municipalities have prior experience working with other enforcement authorities for suspected violations of either state or federal law.

The following is a brief list of parties that are regulated under an alternate stormwater program and are present in the *Erosion and Sedimentation Control Ordinance, Article 4 Exclusions:* 

| Т                                                                                        | ABLE 2-10: EXAMPLE<br>EXEMPT FACILITIES                                                                                  |                          |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Exempt Facility                                                                          | Alternate Regulation They Are<br>Subject To                                                                              | Enforcement<br>Authority |
| Alabama Department<br>of Transportation (ALDOT) (in<br>selected urbanized areas)         | NPDES General Permit for<br>Stormwater Discharges from Small<br>Municipal Separate Storm Sewer<br>Systems (MS4s), Part V | USEPA                    |
| Railroad facilities                                                                      | NPDES General Permit for<br>Stormwater Discharges from Small<br>Municipal Separate Storm Sewer<br>Systems (MS4s          | USEPA                    |
| Industrial Facilities with<br>selected SIC codes (See Table<br>2-11 for a complete list) | Multi Sector General Permit for<br>Industrial Activities                                                                 | USEPA                    |

As shown in Table 2-9, if a municipality identifies that an illicit discharge has come from one of these facilities, they should notify both the discharger and the enforcement authority verbally or in writing of the activity. Standard Industrial Classification (SIC) codes for NPDES Stormwater Multi-Sector General Permit (MSGP) Industrial Facilities are listed in Table 2-11.

|            | TAE                                                             | BLE 2-11:                                                   |
|------------|-----------------------------------------------------------------|-------------------------------------------------------------|
|            | SIC CODES FOR MS                                                | GP INDUSTRIAL ACTIVITIES                                    |
| Sector Nam | 10                                                              | SIC Code Listing                                            |
| Sector A:  | Timber Products                                                 | 2411, 2421, 2426, 2429, 2431–2439 (except 2434),            |
|            |                                                                 | 2448, 2449, 2451, 2452, 2491, 2493, 2499                    |
| Sector B:  | Paper and Allied Products                                       | 2611, 2621, 2631, 2652–2657, 2671–2679                      |
| Sector C:  | Chemical and Allied Products                                    | 2812–2819, 2821–2824, 2833–2836, 2841–2844, 2851,           |
|            |                                                                 | 2861–2869, 2873–2879, 2891–2899, 3952 (limited to           |
|            |                                                                 | list)                                                       |
| Sector D:  | Asphalt Paving and Roofing<br>Materials and Lubricants          | 2951, 2952, 2992, 2999                                      |
| Sector E:  | Glass Clay, Cement, Concrete, and                               | 3211, 3221, 3229, 3231, 3241, 3251–3259, 3261–3269,         |
|            | Gypsum Products                                                 | 3271–3275, 3281, 3291, 3292, 3296, 3297, 3299               |
| Sector F:  | Primary Metals                                                  | 3312–3317, 3321–3325, 3331–3339, 3341, 3351–3357,           |
|            |                                                                 | 3363–3369, 3398, 3399                                       |
| Sector G:  | Metal Mining (Ore Mining and<br>Dressing)                       | 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099        |
| Sector H:  | Coal Mines and Coal Mining Related<br>Facilities                | 1221–1241                                                   |
| Sector I:  | Oil and Gas Extraction and Refining                             | 1311, 1321, 1381–1389, 2911                                 |
| Sector J:  | Mineral Mining and Dressing                                     | 1411, 1422–1429, 1442, 1446, 1455, 1459, 1474–1479,         |
|            |                                                                 | 1481, 1499                                                  |
| Sector K:  | Hazardous Waste Treatment,                                      | HZ                                                          |
|            | Storage, or Disposal Facilities                                 |                                                             |
| Sector L:  | Landfills and Land Application Sites                            | LF                                                          |
| Sector M:  | Automobile Salvage Yards                                        | 5015                                                        |
| Sector N:  | Scrap Recycling Facilities                                      | 5093                                                        |
| Sector O:  | Steam Electric Generating Facilities                            | SE                                                          |
| Sector P:  | Land Transportation and<br>Warehousing                          | 4011, 4013, 4111–4173, 4212–4231, 4311, 5171                |
| Sector Q:  | Water Transportation                                            | 4412–4499                                                   |
| Sector R:  | Ship and Boat Building or Repairing<br>Yards                    | 3731,3732                                                   |
| Sector S:  | Air Transportation                                              | 4512–4581                                                   |
| Sector T:  | Treatment Works                                                 | TW                                                          |
| Sector U:  | Food and Kindred Products                                       | 2011–2015, 2021–2026, 2032, 2041–2048, 2051–2053,           |
|            |                                                                 | 2061–2068, 2074–2079, 2082–2087, 2091–2099, 2111–<br>2141   |
| Sector V:  | Textile Mills, Apparel, and Other                               | 2211–2299, 2311–2399, 3131–3199 (except 3111)               |
|            | Fabric Product Manufacturing,<br>Leather and Leather Products   |                                                             |
| Sector W:  | Furniture and Fixtures                                          | 2434, 2511–2599                                             |
| Sector X:  | Printing and Publishing                                         | 2711–2796                                                   |
| Sector Y:  | Rubber, Miscellaneous Plastic                                   | 3011, 3021, 3052, 3053, 3061, 3069, 3081–3089, 3931,        |
|            | Products, and Miscellaneous                                     | 3942–3949, 3951–3955 (except 3952 facilities as             |
|            | Manufacturing Industries.                                       | specified in Sector C), 3961, 3965, 3991–3999               |
| Sector Z:  | Leather Tanning and Finishing                                   | 3111                                                        |
| Sector AA: | Fabricated Metal Products                                       | 3479, 3411–3499 , 3911–3915                                 |
| Sector AB: | Transportation Equipment,<br>Industrial or Commercial Machinery | 3511–3599 (except 3571–3579), 3711–3799 (except 3731, 3732) |
| Sector AC: | Electronic, Electrical, Photographic, and Optical Goods         | 3571–3579, 3612–3699, 3812-3873                             |
| Sector AD: | Non-Classified Facilities                                       | N/A                                                         |

### 2.7 TRACKING ILLICIT DISCHARGES

JCDH has developed a long-term stormwater complaint tracking program that can help municipalities better understand the origins of illicit discharges and identify maintenance issues for the storm drain system structures. The complaint tracking program will also facilitate evaluation of the overall IDDE program and will expedite annual reporting. The tracking program is based to address illicit discharge and maintenance issues resulting from the following:

- Citizen's Complaints
- Opportunistic Inspections (such as if an illicit discharge is found while doing outfall monitoring in which JCDH has a self complaint system in place)
- Regular Long Term Inspections (if a sample comes back with high readings any follow-up tests are logged in the complaint system)
- Removal Actions Taken

### 2.7.1 Electronic Database

A GPS data dictionary has been created that includes all the fields on the Dry Weather Outfall Inspection Form The advantage to this type of tracking program is that the database can be easily linked into GIS. Linking to GIS has allowed mapping of illicit discharge locations, citizen complaint locations, and many other IDDE issues which have assisted greatly in the overall program. Figure 2-12 contains some of the simple attributes that are used in the database. JCDH uses a sequel server database as well for sample technique, results inventory, and an excel spreadsheet for location data.

| Actio        | n Buttons    |                           |                                                |                    |                |                        |               |
|--------------|--------------|---------------------------|------------------------------------------------|--------------------|----------------|------------------------|---------------|
| 5            |              |                           |                                                |                    |                |                        |               |
| Que          | ry Clear     |                           |                                                |                    |                |                        |               |
| Pana         | ut Datail In | formution                 |                                                |                    |                |                        |               |
| перо         | n Detait In  | jormation                 |                                                |                    |                |                        |               |
|              |              |                           |                                                | Claiment           | 4              |                        |               |
| Nbr          | Date         | Site Name                 | Address                                        | Name               | Assignea<br>To | Status                 | Type          |
| <u>22000</u> | 12/16/2009   | City of Pleasant<br>Grove | PLEASANT GROVE, AL<br>35127                    | Doug Hyche         | Tew,<br>Ronnie | Closed/Resolved        | Soil Erosion  |
| <u>22543</u> | 2/5/2010     | unknown                   | 2045 montevallo Road<br>LEEDS, AL 35094        | Steve<br>Callaway  | Tew,<br>Ronnie | Closed/Resolved        | Soil Erosion  |
| <u>22592</u> | 2/10/2010    | Dennis Mason              | 2311 21st Avenue South<br>BIRMINGHAM, AL 35223 | Jim Nolan          | Tew,<br>Ronnie | Closed/Resolved        | Drainage      |
| <u>22614</u> | 2/11/2010    | Unknown Unknown           | 7th Avenue<br>MIDFIELD, AL 35228               | Mark<br>Hancock    | Tew,<br>Ronnie | Closed/Resolved        | Drainage      |
| <u>22670</u> | 2/17/2010    | Unknown Unknown           | , AL 0                                         | Anonymous          | Tew,<br>Ronnie | Closed/Resolved        | Soil Erosion  |
| <u>22689</u> | 2/18/2010    | Unknown Unknown           | LEEDS, AL 35094                                | Barbara<br>Reed    | Tew,<br>Ronnie | Closed/Resolved        | Drainage      |
| <u>22936</u> | 3/9/2010     | Unknown Unknown           | Shady Grove Road<br>, AL 0                     | Scott Hofer        | Tew,<br>Ronnie | Closed/Resolved        | Water Quality |
| <u>23178</u> | 3/25/2010    |                           | Brookside-Cardiff Road<br>BROOKSIDE, AL 35036  | Robert<br>Manual   | Tew,<br>Ronnie | Under<br>Investigation | Drainage      |
| <u>23315</u> | 4/6/2010     |                           | 15th Street<br>HUEYTOWN, AL 35023              | Kent Bram          | Tew,<br>Ronnie | Under<br>Investigation | Water Quality |
| <u>23327</u> | 4/6/2010     | Sharon Ford               | 2524 Carlos Avenue<br>BIRMINGHAM, AL 35211     | Sharon Ford        | Tew,<br>Ronnie | Closed/Resolved        | Water Quality |
| <u>23624</u> | 4/22/2010    | Unknown Unknown           | Joy Street & Ruffner<br>Road<br>IRONDALE, AL 0 | Hugh<br>Morgan, PE | Tew,<br>Ronnie | Closed/Resolved        | Drainage      |
| <u>24001</u> | 5/17/2010    | Buddy Darby               | 6520 Hemlock Street<br>TRUSSVILLE, AL 35173    | Buddy<br>Darby     | Tew,<br>Ronnie | Closed/Resolved        | Soil Erosion  |
| <u>24611</u> | 6/25/2010    | Buddy Darby               | 6520 Hemlock Street<br>TRUSSVILLE, AL 0        | Buddy<br>Darby     | Tew,<br>Ronnie | Under<br>Investigation | Drainage      |
|              |              |                           |                                                |                    | T              |                        |               |

FIGURE 2-12: STORMWATER PHASE II TRACKING COMPLAINT FORM

| City: Pleasant Grove V Zip: 35127 V                                                                                                                                     |                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Home         Work         Ext.           Phone:         Phone:         Ext.                                                                                             |                                    |
| Additional Comments                                                                                                                                                     |                                    |
| Comment up to 500 Chararacters Max.                                                                                                                                     |                                    |
| Road construction at 4th Street Pleasant Grove.<br>Road is being put into new Pleasant Grove School<br>off of 4th Street. No BMP. Complaint submitted<br>by Ronnie Tew. | <ul> <li>Check Spelling</li> </ul> |
| Other Information                                                                                                                                                       |                                    |
| Assign<br>To: Ronnie Tew - Status: Closed/Resolved -                                                                                                                    |                                    |
| N.O.V. Issued: No                                                                                                                                                       |                                    |

### **2.8 EVALUATING THE PROGRAM**

JCDH evaluates their IDDE program at the end of each year to assess its' effectiveness, efficiency, and to identify where improvements are needed. Table 2-13 is a worksheet that is used at the end of the fiscal cycle to evaluate the following components:

- <u>Priority Areas</u>: Are the priority areas initially identified still appropriate? Considerations include reviewing the priority worksheet to assess if any changes have occurred since the initial evaluation was completed (such as: Have additional illicit discharges been discovered in any of the areas or is there significant development? Has a new 303(d) list come out naming new waterbodies as impaired?). JCDH also takes into account any negative sample trends in if priority area scopes need to be limited or expanded.
- 2) <u>Detection Program</u>: Is the detection program effective? Documenting the number of illicit discharges detected by the various detection mechanisms (inspections, citizen call-ins, opportunistic inspections) helps to decide where to allocate resources. This is becoming more extensive as the database at JCDH grows.
- 3) <u>Tracing Techniques</u>: What tracing techniques were generally used (site inspections, damming, etc)? What tracing techniques were generally effective? In how many instances were visual inspections of the area sufficient to identify the source of the illicit discharge (% effective)? Were there any times the equipment necessary to effectively trace an illicit discharge was not used because it was not available, was too costly to obtain, or not deemed a priority? Documenting the effectiveness of tracing techniques helps to evaluate how efficient the inspector is at the technique and if training is needed on where best to employ the technique.

Although completing an evaluation of the overall IDDE program may be time consuming and labor intensive, its benefits helps to reduce the costs for future inspection and IDDE efforts, which allows us to employ more efforts in other areas of the program. Keeping track of where illicit discharges are likely to occur and what techniques are useful can help lead to an effective identification program between JCDH and Storm Water Management Authority, Inc's municipalities

|                                                                                                                                                                 |                                                                | IDDEF                                       | TABLE<br>ROGRAM EVA                     | E 2-13:<br>LUATION WORK                       | SHEET                                           |                                          |                      |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------|-----------------------------------------|-----------------------------------------------|-------------------------------------------------|------------------------------------------|----------------------|-------------------------------------|
| Priority Areas <sup>(1)</sup>                                                                                                                                   | List any                                                       | factors that ha                             | ave changed s<br>was set <sup>(2)</sup> | since initial                                 | E                                               | Recommended Ch                           | nange (Circle)       | (3)                                 |
| ٨                                                                                                                                                               |                                                                |                                             |                                         |                                               | Leave Pr                                        | iority Same                              | Re-e                 | valuate                             |
| В                                                                                                                                                               |                                                                |                                             |                                         |                                               | Leave Pr                                        | iority Same                              | Re-e                 | valuate                             |
| U                                                                                                                                                               |                                                                |                                             |                                         |                                               | Leave Pr                                        | iority Same                              | Re-e                 | valuate                             |
|                                                                                                                                                                 |                                                                |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| Detection Program <sup>(1)</sup>                                                                                                                                | # Mapping                                                      | Inspections<br>(4)                          | # Long                                  | Jer Term<br>tions <sup>(4)</sup>              | # Citizen C                                     | omplaints <sup>(4)</sup>                 | # Opp<br>Inspe       | ortunistic<br>ctions <sup>(4)</sup> |
| Priority Areas                                                                                                                                                  | Identified                                                     | Resolved                                    | Identified                              | Resolved                                      | ldentified                                      | Resolved                                 | Identified           | Resolved                            |
| Α                                                                                                                                                               |                                                                |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| В                                                                                                                                                               |                                                                |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| C                                                                                                                                                               |                                                                |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| Tracing Techniques Used <sup>(5)</sup>                                                                                                                          | Effective                                                      | Ineffective<br>(Comment<br>below)           | Effective                               | Ineffective<br>(Comment<br>below)             | Effective                                       | Ineffective<br>(Comment<br>below)        | Effective            | Ineffective<br>(Comment<br>below)   |
| Method:                                                                                                                                                         |                                                                |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| Method:                                                                                                                                                         |                                                                |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| Method:                                                                                                                                                         |                                                                |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| Comments/Recommended Changes                                                                                                                                    | (8)                                                            |                                             |                                         |                                               |                                                 |                                          |                      |                                     |
| Instructions: This worksheet is for Prograr<br>1. Fill in the names of the priority areas in y<br>2. List any factors that have changed since t                 | n Managers to ev<br>your municipality<br>the initial prioritiz | aluate their IDDE P<br>ation (i.e. have add | rogram.<br>litional illicit disch       | arges been discover                           | ed in these areas, has a                        | t new 303(d) list come                   | out naming new       |                                     |
| waterbodies as impaired, etc.).<br>3. Circle the applicable recommended chan<br>4. Fill in the number of illicit discharges idd                                 | ige.<br>entified and subse                                     | quently resolved fo                         | r each detection m                      | echanism used.                                |                                                 |                                          | ہ<br>ج<br>ہ          |                                     |
| <ol> <li>Fill in the different tracing techniques the<br/>applicable detection mechanism that they<br/>6. Note any additional comments or recomments</li> </ol> | at were used (visu<br>y were used for. If<br>mended changes.   | al, sampling, sandt<br>f the method was in  | agging, OBM, dye<br>effective, commen   | s/smoke testing, tele<br>t on why it was inef | vising), and check wh<br>fective and how it cou | ether they were effectivily be improved. | ve or ineffective fo | r each                              |

Chapter 3

# III. POLLUTION PREVENTION AND GOOD HOUSEKEEPING

Many municipal activities can result in stormwater pollution if not conducted properly. Activities such as vehicle maintenance, fueling, and landscaping involve handling, storage, and use of chemicals and petroleum products that must be used properly to prevent stormwater from becoming polluted. In addition, construction activities conducted during general maintenance of infrastructure can result in sedimentation and erosion of soil that can be swept by stormwater into the storm drain system or directly into waterbodies.

- a) Develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations. The program must include an employee training component.
- b) Include, at a minimum, maintenance activities for the following: parks and open space (areas such as public golf courses and athletic fields); fleet maintenance, building maintenance; new construction and land disturbance; roadway drainage system maintenance, post-construction plans; and stormwater system maintenance.
- c) Develop schedules for municipal maintenance activities described in paragraph (b) above.
- d) Develop inspection procedures and schedules for long term structural controls.

|      | GOOD HOUSEKEEPING/POLL                           | TABLE 3-1:<br>UTION PREVENT          | ION SOPS/ACTIVITY                                                | Ματκιχ                               |                                                        |
|------|--------------------------------------------------|--------------------------------------|------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------|
|      | SOP                                              | Vehicle/<br>Equipment<br>Maintenance | Facilities<br>Maintenance<br>(including Parks<br>and Open Space) | Storm Drain<br>System<br>Maintenance | Construction Activities and<br>Other Land Disturbances |
| В.1  | Catch Basin Cleaning                             |                                      |                                                                  |                                      |                                                        |
| B.2  | Storm Drain System Repair and Maintenance        |                                      |                                                                  |                                      |                                                        |
| B.3  | Erosion and Sediment Control                     |                                      |                                                                  |                                      |                                                        |
| B.4  | Landscape Design and Management                  |                                      |                                                                  |                                      |                                                        |
| B.5  | Storage and Disposal of Fertilizer and Pesticide |                                      |                                                                  |                                      |                                                        |
| B.6  | Fertilizing and Turf Health Application          |                                      |                                                                  |                                      |                                                        |
| B.7  | Weed and Pest Control Application                |                                      |                                                                  |                                      |                                                        |
| B.8  | Mowing and Irrigation                            |                                      |                                                                  |                                      |                                                        |
| B.9  | Vehicle and Equipment Storage                    |                                      |                                                                  |                                      |                                                        |
| B.1( | ) Vehicle and Equipment Washing                  |                                      |                                                                  |                                      |                                                        |
| Т,   | 1 Vehicle and Equipment Fueling                  |                                      |                                                                  |                                      |                                                        |
| B.1  | 2 Spill Clean-up                                 |                                      |                                                                  |                                      |                                                        |
| B.1  | 3 Parts Cleaning                                 |                                      |                                                                  |                                      |                                                        |
| B.1₂ | 4 Spare Parts Storage                            |                                      |                                                                  |                                      |                                                        |
| B.15 | 5 Alternative Products Use/Storage/Disposal      |                                      |                                                                  |                                      |                                                        |
| B.1( | 3 Petroleum and Chemical Disposal                |                                      |                                                                  |                                      |                                                        |
| B.17 | 7 Petroleum and Chemical Handling                |                                      |                                                                  |                                      |                                                        |
| B.18 | 3 Petroleum and Chemical Storage – Bulk          |                                      |                                                                  |                                      |                                                        |
| B.19 | Petroleum and Chemical Storage – Small Quantity  |                                      |                                                                  |                                      |                                                        |
| B.2( | ) Garbage Storage                                |                                      |                                                                  |                                      |                                                        |
| B.2  | 1 General Facility Housekeeping                  |                                      |                                                                  |                                      |                                                        |
| B.22 | 2 Floor Drains                                   |                                      |                                                                  |                                      |                                                        |
| B.23 | 3 Painting                                       |                                      |                                                                  |                                      |                                                        |
| B.24 | 1 Street Sweeping                                |                                      |                                                                  |                                      |                                                        |
| B.2( | 5 Snow Disposal                                  |                                      |                                                                  |                                      |                                                        |
| B.2( | 3 Deicing Material Storage                       |                                      |                                                                  |                                      |                                                        |
| B.27 | 7 Deicing Material Application                   |                                      |                                                                  |                                      |                                                        |

To address these components, this Chapter is divided into four subsections that describe four major categories of operations completed by each municipality:

- Vehicle/Equipment Maintenance (Section 3.1)
- Facilities Maintenance including parks and open space (Section 3.2)
- Storm Drain System Maintenance (Section 3.3), and
- Construction Activities (Section 3.4)

Each of these four operational areas contains a diverse set of activities, for which SOPs are appropriate. SOPs associated with each of these operational areas are contained in Appendix B. The SOPs outline the management and maintenance procedures that are used to minimize impacts on stormwater. Some of the SOPs apply to more than one operational area. For example, both vehicle maintenance and facilities maintenance require handling, storage, and disposal of petroleum products. Therefore, the SOPs for petroleum handling, storage and disposal in Appendix B address both of these operational areas. Table 3-1 shows the relationship between the SOPs that are contained in Appendix B and the operational areas that are described in this Chapter.

### 3.1 VEHICLE AND EQUIPMENT MAINTENANCE

The SOPs related to vehicle maintenance have three basic structural components:

- 1) Store chemicals, wastes, and vehicles inside whenever possible to minimize their potential to pollute stormwater.
- Handle with care to avoid spills. Preventing spills is the best way to minimize stormwater contact with chemicals and petroleum products.
- Recycle whenever possible. When it is not possible to recycle, Use proper disposal procedures to ensure contact with stormwater is minimized.

Seven common vehicle maintenance activities are described below. To assist each Storm Water Management Authority, Inc municipality in understanding what are the best methods to protect stormwater from becoming polluted by these activities, a worksheet-style aid is being given by JCDH to each facility that provides for stormwater pollution prevention methods for each activity immediately following the description of that activity. It is recommended that each municipal

What is a "regulated contaminant"?

JCDH defines any regulated contaminant as "any physical, chemical, biological, radiological substance or other matter other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment." The Material Safety Data Sheets (MSDS) should be consulted for the products you use; See disposal information in the "Spills or Leaks" Section of the MSDS.

JCDH rules prohibit any discharge to the ground of non-domestic wastewater containing any regulated chemicals. employee become familiar with the worksheets applicable for your facility and practice filling them out as you review this section.

1. *Floor Drains*: Facility managers should be able to positively identify the discharge location of their floor drains. If the discharge location is unknown, it should be determined by visual inspections. Available methods to determine the discharge location include: televising or dye testing in which a bottle can be obtained from JCDH (see Section 2.5 for discussion of advantages and disadvantages of each method). Floor drains should either be connected to a regularly maintained septic tank or to a regularly maintained oil/water separator that discharges to the sanitary sewer. The facility should connect the floor drains to the appropriate device or close and seal the floor drains, and run a "dry shop". Public works facilities typically store or use "regulated contaminants" in the area served by the floor drain. Therefore, these floor drains must be closed, rerouted to the sanitary sewer via an oil/water separator, or rerouted to a septic tank registered with the JCDH (205)930-1230.



2. <u>Parts Cleaning</u>: Most vehicle maintenance facilities use one of three methods to clean parts: chlorinated solvents, citrus-based cleaners, or aqueous base cleaners. If chlorinated solvents are used, they should be disposed of as hazardous waste by a licensed hazardous waste contractor. Citrus based cleaners can be recycled by an off-site contractor reducing overall cost of its use. Steam cleaning or use of a commercial aqueous washer allows discharge to the sanitary sewer. Using non-hazardous chemicals reduces the risk of stormwater pollution.



3. <u>Petroleum Storage</u>: ADEM regulates above-ground storage tanks (ASTs) when a facility is storing more than 660 gallons of used oil or fuel, or when a facility is storing more than 10,000 gallons of heating oil used for on-site heating. ADEM requires registration of ASTs and requires interstitial monitoring and double walls on all tanks. Federal regulations (40 CFR Part 112) require development of a Spill Prevention Control and Countermeasure Plan (SPCC) for facilities that store more than 1,320 gallons of any petroleum product. These regulations help protect stormwater by requiring regular inspections and development of spill prevention and clean-up procedures. Facility managers should understand and follow the regulations that apply to their facility.

#### To Register an AST

Call ADEM AST Program at (334)394-4399





- 4. <u>Petroleum Disposal</u>: Proper disposal of petroleum products can minimize their impact on stormwater. Used oil can be recycled with a marketer who has registered with the ADEM. Used oil can also be burned on-site by a municipality for energy recovery as long as the oil has not been mixed with any other fuels or chemicals. Municipalities must notify ADEM of their used oil management activities if they are burning used oil on-site. Other wastes generated should be managed as follows:
  - Diesel fuel and gasoline, or any mixture of oil and water, must be managed as hazardous waste and should not be mixed with used oil.
  - Sludge from floor drains should be analyzed for Toxicity Characteristics Leaching Procedure (TCLP) prior to disposal to determine if it is hazardous waste.
  - Residual solids from oil spills may be managed as solid waste, unless the residuals are from a volatile fuel such as gasoline. Volatile fuel residuals must be managed as a hazardous waste.



Municipalities burning used oil onsite must register with ADEM

(334)271-7730

5. <u>Vehicle Storage</u>: Vehicles should be stored indoors in an area where there are no floor drains or where any floor drains have been properly connected and registered(see above). If vehicles cannot be stored indoors, they can be stored on impervious areas that are inspected on a regular basis and which can be cleaned with a street sweeper as necessary. Vehicles can be stored on pervious (unpaved) areas that are inspected on a regular basis to assess if drip pans are necessary. Drip pans should always be used to collect leaking fluids. A dedicated, convenient storage area should be provided and clearly labeled for the drip pans and for the fluids they will contain. Leaking vehicles should be repaired as soon as practical to minimize stormwater pollution.



## To Register a Car Wash Facility:

Call ADEM at (334) 271-4367 or for any other questions call JCDH at (205)930-1230

- 6. <u>Vehicle Washing:</u> If vehicles are washed regularly onsite, they should be washed in a dedicated area. The area can be:
  - Indoors, if the washwater is discharged to floor drains that are properly connected to the septic tank or the sanitary sewer (See Figure 3-1),
  - 2) Outdoors; however if you wash more than 30 vehicles per week you must obtain a NPDES Groundwater Permit from ADEM, or
  - 3) Outdoors if you wash fewer than 30 vehicles per week and discharge to the ground surface, if:

## To register a vehicle washing activity (when less than 30 vehicles per week):

Contact JCDH Stormwater Division at (205)930-1230

- The Best Management Practice Rules are followed,
- > The activity is registered with JCDH or ADEM, and
- The wastewater is not from power washing, steam cleaning, engine cleaning, or undercarriage cleaning or does not contain soaps or other products which contain regulated contaminants.
- > Does not discharge to a surface water or storm inlet



7. <u>Vehicle Fueling</u>: Vehicle fueling areas are a significant generation point for petroleum contamination of stormwater. Vehicle fueling areas should be impervious surfaces, and should be inspected and swept with a street sweeper on a regular basis. A spill kit and covered garbage container should be located near the fueling area and should be well labeled for individuals to use when needed.



An important component of stormwater protection at vehicle and equipment maintenance facilities is general good housekeeping. Conducting regular inspections of a facility can be an effective pollution prevention technique. The following is a list of areas facility Managers should consider when developing their own inspection checklist:

- 1) Check refuse areas for trash on the ground that could contaminate stormwater.
- 2) Check exterior vehicle and equipment areas for leaks, spills, drips, or excess dirt. Consider if street sweeping is necessary and if drip pan use is acceptable.
- 3) Check fueling areas for leaks, spills, or drips.
- 4) Check exterior petroleum storage areas for leaks, spills, or drips.
- 5) Check or clean-up of tracked sand and/or salt.
- 6) Check calcium chloride tank for leaks, spills, or cracks.
- 7) Check vehicle washing area for excess sediment and wastes..
- 8) Check oil/water separator in floor drain system to ensure it is functioning, and clean if necessary.
- 9) Clean catch basin grates around facility for entering stormwater.

Table 3-2 is an example inspection checklist that should be used on a regular (monthly or quarterly) basis to identify areas of potential stormwater pollution. Table 3-3 contains a blank form that the Facility Manager should fill in for their facility and return to the governing municipal official as soon as practical. These forms will be used to track the stormwater duties performed by each facility for the Storm Water Management Authority, Inc's annual report.

| EXAMP                                                                                                                                                        | TABLE 3-2:<br>Le Inspection Checklist                                          |                                                                             |                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------|
| Municipality: Facility Manager:                                                                                                                              |                                                                                |                                                                             |                                                      |
| Date: Inspector:                                                                                                                                             |                                                                                |                                                                             |                                                      |
| Inspection Area                                                                                                                                              | Practice Followed                                                              | Comments                                                                    | Date Resolved<br>(if applicable)                     |
| Check refuse areas for trash on the ground that could contaminate stormwater or be washed away in stormwater                                                 | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Check all exterior vehicle and equipment areas for leaks, spills, drips, or excess dirt – Street sweeping necessary?                                         | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Check all exterior vehicle and equipment areas for leaks, spills, drips, or excess dirt – Drip pan use acceptable?                                           | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Check fueling areas for leaks, spills or drips                                                                                                               | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Check exterior petroleum storage areas for leaks, spills, or drips                                                                                           | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Clean-up of tracked sand that might allow stormwater transport of sand                                                                                       | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Clean-up tracked salt that might result in stormwater transport                                                                                              | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Check calcium chloride tank for leaks, spills or cracks                                                                                                      | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Check vehicle washing area for excess sediment or wastes                                                                                                     | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Other:                                                                                                                                                       | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| Other:                                                                                                                                                       | Acceptable/Needs Attention                                                     |                                                                             |                                                      |
| <b>Instructions:</b> This form needs to be used for regular (quarterly) inspec<br>be inspected for their facilities (refer to Section 3.1 and Table 3.2 Exam | tions at vehicle/equipment maintenanc<br>ple Inspection Checklist). When the c | ce facilities. Program Managers sho<br>hecklist is used during an inspectic | ould fill in the areas to<br>on, the inspector needs |

to fill in the date as well as his/her name, circle either "Acceptable" or "Needs Attention", and note comments for each inspection area.

### **3.1 FACILITIES MAINTENANCE**

Most Storm Water Management Authority, Inc municipalities own and maintain their own buildings, parks, and other green spaces while others rely on Jefferson County to provide this service. Those that have their own maintenance staff perform general maintenance activities that include mowing and trimming, painting, pest control, weed control, and all of the chemical and petroleum handling that is associated with these activities. The SOPs contained in Appendix B provide best management practices to protect stormwater from the potential hazards associated with each of these maintenance activities. Facilities maintenance personnel should be trained in each of the SOPs associated with their job by their respective cities or JCDH.

In addition to training municipal employees on the SOPs in Appendix B that affect their jobs, a formal street sweeping program can reduce pollutant loads from road salt and can reduce sand export to receiving waters. Street sweeping also reduces the amount of sediment, debris, and organic matter being washed away by stormwater. A street sweeping schedule will need to be kept similar to the one shown in Appendix B and presented to Storm Water Management Authority, Inc.

USEPA does not recommend how frequently a community should sweep, but most sweeping of municipal lots and roadways should be performed at least once per year. An appropriate schedule for street sweeping should be determined based on each municipality's specific needs. Heavy traffic areas can be swept weekly or monthly, depending on a community's available resources. Other locations, such as construction entrances, sand/salt loading areas, vehicle fueling areas, and vehicle and equipment storage areas should be swept on an as needed basis.

The State of Alabama has no formal standards that would not allow municipalities to reuse street sweepings in accordance with the Environmental Fact Sheet shown below. Street sweepings may be reused as long as they do not contain visual evidence of wastewater, animal wastes, oil or other petroleum products. Catch basin residuals must be tested to determine if they may be reused. Table 3-4 lists the compounds, the S-1 limits which allow unrestricted reuse, and the S-3 limits which allow reuse as a road base or subbase. Visually contaminated street and catch basin residuals must also be tested to determine if they contain hazardous wastes.

| Table 3-4 Soil Standards                                                                                                                                                             |                 |                      |              |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------|--------------|--|--|--|
| Catch Basin Cleanings Reuse Guidance                                                                                                                                                 |                 |                      |              |  |  |  |
|                                                                                                                                                                                      | Maximum Contami | inant Concentrations |              |  |  |  |
|                                                                                                                                                                                      | S-1 Standards   | S-3 Standards        | USEPA SW-846 |  |  |  |
| Regulated Contaminant                                                                                                                                                                | (mg/kg)         | (mg/kg)              | Test Method  |  |  |  |
| Metals                                                                                                                                                                               |                 |                      |              |  |  |  |
| Arsenic                                                                                                                                                                              | 11              | 11                   | 6010B        |  |  |  |
| Barium                                                                                                                                                                               | 750             | 3,400                | 6010B        |  |  |  |
| Cadmium                                                                                                                                                                              | 32              | 230                  | 6010B        |  |  |  |
| Chromium                                                                                                                                                                             | 1000            | 5,000                | 6010B        |  |  |  |
| Lead                                                                                                                                                                                 | 400             | 400                  | 6010B        |  |  |  |
| Mercury                                                                                                                                                                              | 13              | 13                   | 7471A        |  |  |  |
| Selenium                                                                                                                                                                             | 260             | 260                  | 6010B        |  |  |  |
| Silver                                                                                                                                                                               | 45              | 200                  | 6010B        |  |  |  |
| VOCs                                                                                                                                                                                 |                 |                      |              |  |  |  |
| Benzene                                                                                                                                                                              | 0.3             | 0.3                  | 8260B        |  |  |  |
| Dichloroethane, 1,2-                                                                                                                                                                 | 0.08            | 0.08                 | 8260B        |  |  |  |
| Isopropyl benzene                                                                                                                                                                    | 123             | 123                  | 8260B        |  |  |  |
| Methyl-t-butyl ether                                                                                                                                                                 | 0.13            | 0.13                 | 8260B        |  |  |  |
| Toluene                                                                                                                                                                              | 100             | 100                  | 8260B        |  |  |  |
| Xvlene                                                                                                                                                                               | 500             | 1.100                | 8260B        |  |  |  |
| Aklylbenzenes<br>Butylbenzene, n-<br>Butylbenzene, sec-<br>Butylbenzene, tert-<br>Isopropyl toluene, 4-<br>Propylbenzene, n-<br>Trimethylbenzene, 1,2,4-<br>Trimethylbenzene, 1,3,5- | 59 (total)      | 59 (total)           | 8260B        |  |  |  |
| PAHs - Carcinogenic                                                                                                                                                                  |                 |                      |              |  |  |  |
| Benzo(a)anthracene                                                                                                                                                                   | 0.7             | 40                   | 8270C        |  |  |  |
| Benzo(a)pyrene                                                                                                                                                                       | 0.7             | 4                    | 8270C        |  |  |  |
| Benzo(b)fluoranthene                                                                                                                                                                 | 7               | 400                  | 8270C        |  |  |  |
| Benzo(k)fluoranthene                                                                                                                                                                 | 7               | 400                  | 8270C        |  |  |  |
| Chrysene                                                                                                                                                                             | 70              | 4,000                | 8270C        |  |  |  |
| Dibenzo(a,h)anthracene                                                                                                                                                               | 0.7             | 4                    | 8270C        |  |  |  |
| Indeno(1,2,3-cd)pyrene                                                                                                                                                               | 0.7             | 40                   | 8270C        |  |  |  |
| PAHs – Noncarcinogenic                                                                                                                                                               |                 |                      |              |  |  |  |
| Acenaphthene                                                                                                                                                                         | 270             | 270                  | 8270C        |  |  |  |
| Acenaphthylene                                                                                                                                                                       | 300             | 300                  | 8270C        |  |  |  |
| Anthracene                                                                                                                                                                           | 1,000           | 1,700                | 8270C        |  |  |  |
| Fluoranthene                                                                                                                                                                         | 810             | 5,000                | 8270C        |  |  |  |
| Fluorene                                                                                                                                                                             | 510             | 510                  | 8270C        |  |  |  |
| Methylnaphthalene,2-                                                                                                                                                                 | 150             | 150                  | 8270C        |  |  |  |
| Napthalene                                                                                                                                                                           | 5               | 5                    | 8270C        |  |  |  |
| Benzo(g,h,i)perylene<br>Phenanthrene<br>Pyrene                                                                                                                                       | 480 (total)     | 5,000 (total)        | 8270C        |  |  |  |

### **3.2 STORM DRAIN SYSTEM MAINTENANCE**

Storm drain system maintenance consists of three components: cleaning, repairing (or retrofitting), and upgrading. Historically, storm drain systems have been repaired or upgraded only when catastrophic failures have occurred, such as those causing

flooding, road failures, or severe erosion. The General Permit requires that each Storm Water Management Authority, Inc regulated municipality develop a maintenance schedule for the storm drain system, as well as inspection procedures and schedule for long term control structures. The storm drain mapping currently being performed by JCDH will be presented to each city upon completion The estimated time frame with current resources should be able to meet the five years required from October 1, 2010. The completion date will hopefully be sooner through cooperative programs with the municipality fire departments and other agencies. This will allow for cities to make better estimates on where to expend fiscal resources to get the biggest impact on Storm Water infrastructure instead of the as-needed maintenance system in place now.

### Conveyance System Maintenance

Section 2.2 of this Manual reviews how JCDH divides a municipality into distinct areas and prioritizes the areas based on their illicit discharge potential. A future component of that evaluation will be to consider the age and material of the infrastructure, which is an indicator of failure potential. This prioritization can be used in the future to aid in developing a maintenance program for the system.

Additional useful resources include the municipal capital budget and the GASB 34 accounting information. All of these items should be reviewed and evaluated to identify where and when repairs, retrofits, and upgrades should be conducted. The storm drain system maintenance program can be developed using a process that is similar to the local pavement management program. The following paragraphs provide guidance to city managers in developing an operation and maintenance program.

- Vitrified clay (terracotta) storm drain pipe, asbestos cement pipe, or corrugated metal pipes in older areas should be replaced or retrofitted as part of other infrastructure work (street reconstruction, or combined sewer overflow (CSO) work). Televising and/or manual inspections should be performed to confirm the degree of repair or replacement necessary.
- 2) An inspection and replacement program should be developed for newer pipes and structures in order to conduct preventative maintenance that can affect long-term cost savings and avert catastrophic failures. The inspection and replacement program should consist of the following items:
  - Storm Drain Pipe/Outfall Cleaning and Inspections

- A cleaning and inspection prioritization should be established by all municipalities for storm drain The City Manager should pipes and outfalls. consider conducting annual inspections on storm drains and outfalls in high priority areas. Less frequent inspections (every 2 to 3 years) should be completed for medium and low priority areas. Inspections for structural conditions should be combined with the inspections for illicit discharges as described in Section 2.4.2. JCDH is helping to aid municipalities in this endeavor through the mapping of the storm drain and outfalls by providing information on the condition and sedimentation loading of each pipe.

Catch basin Cleaning and Inspection А prioritization plan should also be established for catch basin cleaning. The prioritization can be completed by the City Manager using the following two considerations: (1) amount of winter sand spread in different areas (this will be zero for most cities but should still be included in the plan), and (2) areas that have historically accumulated a large quantity of sediment or debris. This prioritization should be reviewed and updated frequently. The re-evaluation should use the same two criteria listed above (sand application and historical sediment accumulation). City Managers should identify a reasonable frequency of cleaning based on need, municipal budgets, and personnel availability. JCDH and Jefferson County can provide some assistance to cities without their own capabilities

The Catch Basin Cleaning Form contained in Appendix A, should be used during cleaning as a method to inspect the catch basins to evaluate the integrity of the structure and identify necessary repairs. Any repairs identified on the forms should be incorporated into the municipality's work order system. Communities that outsource catch basin cleaning should either require that the contractor use the inspection form or should consider sending a public works employee, intern, or other municipal representative along with the contractor to evaluate structures. This form will be used by Storm Water Management Authority, Inc and JCDH to estimate the effectiveness of the program so all forms should be completed and given to the relevant agency.

> Ditches and Swales Maintenance - Many Storm Water Management Authority, Inc municipalities have rural areas, where the storm drain system consists of roadside ditches. Sediment, grass clippings, winter sand, leaves, excess vegetation and other debris periodically impedes the proper function of these ditches and should be removed approximately annually. Ditch cleaning can be conducted manually or using heavy equipment. Ditch cleaning should be conducted during low water periods, minimizing the disturbance to existing vegetation. If existing vegetation is removed during ditch cleaning, the ditch side slopes should be seeded and mulched as soon as possible after dredging. Ditch cleaning with heavy equipment should not be conducted in areas where the ditch carries a perennial stream unless specifically approved by the Army Corp of Engineers. Pesticide use should also be kept to a minimum in these sensitive areas due to their direct impact on waterways.

### 3.3.1 Long Term Control Structure Inspection and Maintenance

In addition to the storm drain pipes, catch basins and outfalls, long term control structures such as detention ponds, vegetated filter strips, grass swales, and constructed wetlands must be inspected and maintained.

ADEM produces a BMP Manual that tells the design features for these BMPS that must be maintained. JCDH is working on a Manual that will tell the frequency of maintenance needed for these devices and is targeted for release in August 2012. The following table 3-5 provides recommended maintenance requirements from *NHDES BMPs for Urban Stormwater Runoff* to provide some general guidance until the manual can be released.

| Recor                                     | TABLE 3-5:         MMENDED MAINTENANCE ON COMMON LONG-TERM STORMWATER BMPs                                                                                                                                                                                                                                                                |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Structure Type                            | Maintenance Requirements                                                                                                                                                                                                                                                                                                                  |
|                                           | The embankment should be inspected annually to determine if rodent burrows, wet areas, or erosion of the fill are present. Trees and shrubs should be kept off the embankment and emergency spillway areas.                                                                                                                               |
| Extended Detention<br>Pond<br>(Dry)       | The vegetation should be mowed once per year to discourage woody growth. Vegetation should be managed without the aid of fertilizers.                                                                                                                                                                                                     |
|                                           | If vegetation is sparse or non-existent, test soils for proper nutrients/growing conditions and re-<br>vegetate with drought-tolerant.                                                                                                                                                                                                    |
|                                           | Pipe inlets and outlets should be inspected annually and after major storm events.                                                                                                                                                                                                                                                        |
|                                           | Sediment should be continually checked in the basin and removed as necessary.                                                                                                                                                                                                                                                             |
|                                           | The structure should be inspected by a qualified professional on a periodic basis.                                                                                                                                                                                                                                                        |
| Vegetated Filter<br>Strips                | A properly designed and constructed filter strip should require little maintenance. It should be inspected frequently during the first year of operation and then annually thereafter. Large accumulations of sediments should be removed, and all gullies filled in and stabilized. Areas of bare soil should be immediately stabilized. |
| Grassed Swales                            | Swales should be mowed at least once per year to prevent the establishment of woody vegetation.                                                                                                                                                                                                                                           |
|                                           | Sediments should be removed as required and swale reseeded if necessary.                                                                                                                                                                                                                                                                  |
|                                           | Grass should not be mowed to less than three inches in height.                                                                                                                                                                                                                                                                            |
| Wet Ponds and<br>Constructed<br>Wetlands* | The embankment should be inspected annually to determine if rodent burrows, wet areas, or erosion of the fill are present. Trees and shrubs should be kept off the embankment and emergency spillway areas.                                                                                                                               |
|                                           | The vegetation should be mowed once per year to discourage woody growth. Vegetation should be managed without the aid of fertilizers.                                                                                                                                                                                                     |
|                                           | Inspect vegetation for invasive species annually and remove if present. Supplement wetland plants if <50% surface is bare. Harvest wetland plants that have been "choked out" by sediment buildup.                                                                                                                                        |
|                                           | Pipe inlets and outlets should be inspected annually and after major storm events.                                                                                                                                                                                                                                                        |
|                                           | Sediment should be continually checked in the basin and removed as necessary.                                                                                                                                                                                                                                                             |
|                                           | The structure should be inspected by a qualified professional on a periodic basis.                                                                                                                                                                                                                                                        |

\*NOTE: Source of information for Constructed Wetlands is USEPA manual of BMPs.
| Table 3-6<br>Storm Water Management Authority, Inc<br>LONG TERM STRUCTURAL CONTROL INSPECTION FORM |                    |                          |  |  |  |  |
|----------------------------------------------------------------------------------------------------|--------------------|--------------------------|--|--|--|--|
| PROJECT NAME:                                                                                      |                    | CITY:                    |  |  |  |  |
| LOCATION:                                                                                          |                    | INSPECTOR NAME:          |  |  |  |  |
| ADDRESS:                                                                                           |                    | DATE OF LAST INSPECTION: |  |  |  |  |
| PHONE #:                                                                                           |                    |                          |  |  |  |  |
| CONTACT:                                                                                           |                    |                          |  |  |  |  |
| BMP ID:                                                                                            |                    |                          |  |  |  |  |
| BMP TYPE:                                                                                          | WET RETENTION POND | -                        |  |  |  |  |
| ENGINEER OR DESIGNER:                                                                              |                    | -                        |  |  |  |  |
| ADDRESS.                                                                                           |                    | -                        |  |  |  |  |
| CONTACT:                                                                                           |                    | -                        |  |  |  |  |
| PHONE #:                                                                                           |                    | -                        |  |  |  |  |
| MAI                                                                                                | NTENANCE INFOR     | MATION                   |  |  |  |  |
| MAINTENANCE:                                                                                       |                    |                          |  |  |  |  |
| COMMENTS:                                                                                          |                    |                          |  |  |  |  |
|                                                                                                    |                    |                          |  |  |  |  |
|                                                                                                    |                    |                          |  |  |  |  |
|                                                                                                    |                    |                          |  |  |  |  |
|                                                                                                    |                    |                          |  |  |  |  |
|                                                                                                    |                    |                          |  |  |  |  |
|                                                                                                    |                    |                          |  |  |  |  |
|                                                                                                    |                    |                          |  |  |  |  |

| Storm Water Manage                                                                                                                                                             | ment Authority, Inc                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1400 SIXTH AVENUE SOUTH. P.O. BOX 2648. BIF<br>1230                                                                                                                            | RMINGHAM, ALABAMA 35202. (205)930-                                                                                                                                                                                                                           |
| Storm Water Structural Control F                                                                                                                                               | orm (Municipal Use)                                                                                                                                                                                                                                          |
| FORM                                                                                                                                                                           |                                                                                                                                                                                                                                                              |
| Part 1: General Information<br>Stormwater Municipality:<br>Mayor:<br>Contact Person:                                                                                           | Date:                                                                                                                                                                                                                                                        |
| Part 2: Existing Storm Water Structural Controls<br>Estimated Miles of Storm Sewer Inspected:<br>Estimated personnel time spent inspecting:<br>Structural Controls Fixed:      | <ul> <li>miles</li> <li>hrs</li> <li>estimated # of detention ponds</li> <li>estimated # of retaining walls</li> <li>estimated # of ditches repaired</li> <li>estimated # of head walls</li> <li>repaired</li> <li>estimated # of retention ponds</li> </ul> |
| Part 3:New Storm Water Structural Controls<br>Estimated Miles of New Storm Sewer Installed:<br>Estimated Personnel time during installation:<br>Structural Controls Installed: | <ul> <li>estimated # of detention ponds</li> <li>estimated # of retaining walls</li> <li>estimated # of ditches repaired</li> <li>estimated # of head walls</li> <li>repaired</li> <li>estimated # of retention ponds</li> </ul>                             |
| If structural controls are cleaned or maintained by an ou<br>Alabama, etc) then contract with outside entity should                                                            | utside entity (Jefferson County, State of<br>be stabled to this form when returned.                                                                                                                                                                          |

I

| Storm Wa                                                                                                                                                                          | ater Mana                            | gement Aut                                                                                         | thority, Inc                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 1400 SIXTH AVENUE SOUTH.                                                                                                                                                          | P.O. BOX 2648. BIR                   | MINGHAM, ALABAN                                                                                    | MA 35202. (205)930-1230                                                                                    |
| Development F                                                                                                                                                                     | orm for Storm Wa                     | ter Structural Contr                                                                               | ols                                                                                                        |
|                                                                                                                                                                                   | Submit in Triplic<br>Application     | cate                                                                                               |                                                                                                            |
| Part 1: General Information<br>Stormwater Municipality:<br>Applicant's Name<br>Applicant's email address/ Phone number:<br>Applicator Company Name:<br>Mailing Address:<br>State: |                                      |                                                                                                    | Date:                                                                                                      |
| Type of Development                                                                                                                                                               |                                      |                                                                                                    |                                                                                                            |
| I,, a<br>in this report and/or attached sheets are tro<br>Signature:<br>Address:                                                                                                  | ue and accurate as<br>Date:<br>City: | do herel<br>presented.<br>State:                                                                   | by certify that the data stated<br>Reg. #<br>zip: Phone:                                                   |
| Part 2: Storm Water Structural Controls Ins<br>Estimated Distance of New Storm Pipe                                                                                               | stalled                              |                                                                                                    |                                                                                                            |
| Structural Controls Installed:                                                                                                                                                    |                                      | estimated # o<br>estimated # o<br>estimated # o<br>estimated # o<br>estimated # o<br>estimated # o | f detention ponds<br>f retaining walls<br>f ditches repaired<br>f head walls repaired<br>f retention ponds |
| Estimated Area of Detention Ponds:                                                                                                                                                | 1<br>2<br>3<br>4                     | 6<br>7<br>8<br>9                                                                                   |                                                                                                            |
| Estimated Area of Retention Ponds:                                                                                                                                                | 1       2       3       4       5    | 6<br>7<br>8<br>9<br>10                                                                             |                                                                                                            |
| Are there any other structures used for stor                                                                                                                                      | rmwater managem                      | ent if so explain:                                                                                 |                                                                                                            |

\_\_\_\_\_

#### **3.4 CONSTRUCTION ACTIVITIES AND OTHER LAND DISTURBANCES**

As Storm Water Management Authority, Inc's municipalities perform construction activities and other activities which disturb soil, they take precautions to prevent erosion and runoff of sediment. Road crews and landscaping crews are being trained in erosion and sediment control methods. JCDH is creating publications and training sessions that describe a variety of methods that can be used to reduce the long term impact of sedimentation and erosion on water quality. The material for each municipality should be available by June 2011 and in video form sometime thereafter. Each municipality will then be responsible for making sure any new hires are trained using the video material as well as a refresher course is offered for each existing employee on an annual basis. Erosion and Sedimentation Control SOPs are listed in Appendix C. Storm Water Management Authority, Inc Standard Operating Procedure Page 67

### 4. GLOSSARY OF ACRONYMS

| ADEM | Alabama Department of Environmental Management |
|------|------------------------------------------------|
| AST  | Aboveground Storage Tank                       |
| AU   | Assessment Unit                                |
| BMP  | Best Management Practice                       |
| CWP  | Center for Watershed Protection                |
| GASB | General Accounting Standards Board             |
| GIS  | Geographic Information System                  |
| GPS  | Geographic Positioning System                  |
| HUC  | Hydrologic Unit Code                           |
| JCDH | Jefferson County Department of Health          |
| IDDE | Illicit Discharge Detection and Elimination    |
| IDP  | Illicit Discharge Potential                    |
| MEP  | Maximum Extent Practical                       |
| MCM  | Minimum Control Measure                        |
| MSDS | Material Safety Data Sheet                     |
| MSGP | Multi Sector General Permit                    |

MS4 Municipal Separate Storm Sewer System

NEIWPCC New England Interstate Water Pollution

**Control Commission** 

- NOV Notice of Violation
- NPDES National Pollutant Discharge Elimination System
- NRCS National Resource Conservation Service
- OBM Optical Brightener Monitoring
- PAHs Polycyclic Aromatic Hydrocarbons
- PCBs Polychlorinated Biphenyls
- SIC Standard Industrial Classification
- SOP Standard Operating Procedure
- SPCC Spill Prevention Control and Countermeasure
- TCLP Toxicity Characteristics Leaching Procedure
- TMDL Total Maximum Daily Load
- UNH University of New Hampshire
- USEPA United States Environmental Protection Agency
- USGS United States Geological Survey

Storm Water Management Authority, Inc Standard Operating Procedure Page 70

**APPENDIX A** 

# ILLICIT DISCHARGE DETECTION AND ELIMINATION SOPS AND FORMS

## **TYPICAL GPS SCREEN EXPLANATION**



| Standard Operating F        | Procedure for:                                                                                                |        |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|--------|
| A.1 IDDE: Ins<br>Employees) | pections During Mapping (JCDH                                                                                 |        |
| Purpose of SOP:             | This SOP provides a basic checklist for JCDH employees conducting illicit disc<br>inspections during mapping. | charge |

- 1) Characterize the outfall by recording information on the Tremble Nomad Unit data dictionary such as:
  - Side of creek
  - GPS location (at least 30 points to post process)
  - Flow present
  - Flow description
  - Material of pipe
  - Shape
  - Diameter, horizontal distance, vertical distance
  - Number of pipes
  - Submerged pipe
  - Sediment filled
  - ≻ pH
  - > temperature
  - picture of all pipes
- Conduct inspections during dry weather periods using the Dry Weather Outfall Inspection Form or data dictionary shown on the next page if a problem outfall is believed to be discovered
- 3) Follow procedure below if an illicit discharge is encountered (such as raw sewage, paint, etc.).
- 4) Conduct inspections with at least two JCDH employees per crew.
- 5) Carry a list of emergency phone numbers.(All JCDH inspectors are equipped with cell phones)
- 6) Have on JCDH badge at all times

#### Whenever Possible:

- 1) Conduct inspections during low groundwater and leaf off conditions.
- 2) Identify and label the outfall with a unique identifier if outfall is believed to be a problem.
- If dry weather flow is present at the outfall, and the flow does not appear to be an illicit discharge attempt to identify the source of the flow (intermittent stream etc.), then document the discharge for future comparison.
- 4) Collect samples of flowing discharges before and after source removal.

#### Never:

- 1) Never put yourself in danger.
- 2) Never enter private property without permission



Figure 1: Tremble Nomad Unit

#### **Dry Weather Discharge**

The CWP defines **dry weather** as a 48 hour period with no runoff-producing rainfall. JCDH prefers the period to be 72 hours but if continual rain occurs that will be switched to 48 hours as needed.

#### Equipment list for mapping:

- 1. Entrance and Exit Point Map
- 2. GPS unit with built in camera
- 3. Field sheets for any illicit discharge found (can be left in truck)
- 4. Cell phones
- 5. pH meter
- 6. First aid kit
- 7. Flash light or head lamp
- 8. Surgical gloves
- Tape measure
   Temperature probe
- 11. Waders
- 12. Watch with a second hand
- 13. Hand sanitizer
- 14. Sampling pole
- 15. Safety vests

#### JCDH Procedure for illicit discharge detection

- Call supervisor and notify of location
- Take photos and record under Site of Interest in data dictionary on GPS unit as shown below
- Supervisor carries out sample bottles to be taken to lab for a rush sample
- > Area is then visually inspected for the possible sources.
- If no source can be identified then wait for sample results to come back to see what possible contaminants are. At this point a further investigation will be launched. This can include but is not limited to 24 hour ISCO sampling, damming, etc.

**Location Information** 

## **Dry Weather Outfall Inspection Form**

| Date:<br>Time:                                                                                   |                                       | Inspe                                   | ector:                                  |                  |                    |        |
|--------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------|-----------------------------------------|------------------|--------------------|--------|
| Outfall ID:                                                                                      |                                       |                                         |                                         |                  |                    |        |
| Outfall Location:                                                                                |                                       |                                         |                                         |                  |                    |        |
| Receiving Waterbody:                                                                             |                                       |                                         |                                         |                  |                    |        |
| Photo Taken: Yes No                                                                              | Ph                                    | oto ID: _                               |                                         |                  |                    |        |
| Weather:ClearPrecipitation in the past 3 days:                                                   | Cloudy<br>No Yes                      | Appr<br>inches                          | oximate Tem                             | p:               | Wind Present:      | Yes No |
| Pipe Flow:<br>Seepage Flow:<br>Color (if flow is present):                                       | None Trickle<br>None Trickle          | Steady 1/<br>Steady 1/                  | 4 pipe flow or<br>4 pipe flow or        | more<br>more     |                    |        |
| Inspection Information Sea                                                                       | lect all that are app                 | licable                                 |                                         | -                |                    |        |
| Obvious Debris/Pollution:                                                                        |                                       | Odor:                                   |                                         |                  | Water Clarity:     |        |
| None                                                                                             | 0                                     | None/Nat                                | ural                                    | 0                | Clear              | 0      |
| Foam                                                                                             | 3                                     | Musty                                   |                                         | 5                | Cloudy             | 5      |
| Staining                                                                                         | 5                                     | Sewage/s                                | eptic                                   | 10               |                    |        |
| Floating Green Scum                                                                              | 8                                     | Petroleum                               | ı                                       | 10               | Opaque             | 10     |
| Oil / Film<br>Vegetative Mat/or Gray Mat<br>Sewage Solids<br><b>TOTAL</b>                        | 9<br>9<br>10                          | TOTAL                                   |                                         |                  | TOTAL              |        |
| GRAND TOTAL SCORE =                                                                              |                                       |                                         |                                         |                  |                    |        |
| Additional Information                                                                           | · · · · · · · · · · · · · · · · · · · |                                         |                                         |                  |                    |        |
| Sediment Condition:<br>Structure Condition:<br>Trash/litter present: Yes No<br>General Comments: | Open 1/4 Ful<br>Excellent Good        | l 1/2 Full<br>d Fair<br><b>Yard was</b> | 3/4 Full<br>Poor<br><b>te observed:</b> | Plugged<br>Yes N | 0                  |        |
| Potential Sources / Actions Take                                                                 | en:                                   |                                         |                                         |                  |                    |        |
| Sample collected? Yes                                                                            | No                                    | _                                       | Paramete                                | ers:             | Results:           |        |
| By whom?                                                                                         |                                       |                                         | Be sure to sta                          | aple all rel     | evant lab tests an | d      |
| Follow up required: Yes No                                                                       |                                       |                                         | assigned GPS<br>investigation           | points an        | d photos to sheet  | during |
|                                                                                                  |                                       | L                                       |                                         |                  |                    |        |

#### NOTE: This information is to accompany the Dry Weather Outfall Inspection Form.

Odor - Most strong odors, especially gasoline, oils, and solvents are likely associated with high responses on the toxicity screening test.

Stale sanitary wastewater: sewage Detergent, perfume: Laundromat or household laundry Sulfur ("rotten eggs"): industries that discharge sulfide compounds or organics (meat packers, canneries, dairies) Oil and gas: facilities associated with vehicle maintenance or petroleum product storage (gas stations) or petroleum refineries Rancid-sour: food preparation facilities (restaurants, hotels)

**Color –** Important indicator of inappropriate industrial sources. Dark colors, such as brown, gray, or black are the most common. *Yellow:* chemical plants, textile, and tanning plants

*Brown:* meat packers, printing plants, metal works, stone and concrete, fertilizers, and petroleum refining facilities [note: can be from natural organic acids if a wetland is upstream]

Green: chemical plants, textile facilities

*Red:* meat packers [note: can be from organic acids if a wetland is upstream] *Gray:* dairies

**Turbidity** – The cloudy appearance of water caused by the presence of suspended or colloidal matter. In dry weather, high turbidity is often a characteristic of undiluted industrial discharges.

Cloudy: sanitary wastewater, concrete or stone operations, fertilizer facilities, automotive dealers

Opaque: food processors, lumber mills, metal operations, pigment plants

**Floatable matter** – a contaminated flow may contain floating solids or liquids directly related to industrial or sanitary wastewater pollution. Floatables of industrial origin may include animal fats, spoiled food, oils, solvents, sawdust, foams, packing materials, or fuel.

*Oil sheen:* petroleum refiners or storage facilities and vehicle service facilities. [note: there is a type of bacteria that looks like an oil sheen. If you take a stick and swirl around the sheen, it will break up into blocky pieces if it is the bacteria. A true oil sheen will quickly re-form and not look blocky.]

Toilet paper bits, fecal bits, food particles: sanitary wastewater

*Soap suds*: if white or a clear sheen, laundry discharge (check odor) [note: can also occur from natural surfactants; usually off-white or tan with an earthy-fishy odor.]

**Deposits and Stains –** Any type of coating near the outfall, usually a dark color. Deposits and stains will often contain fragments of floatable substances.

Lots of sediment: construction site erosion, sand and gravel pits, winter road applications

Oil stain: petroleum storage, vehicle service facilities, petroleum refineries

Rusty: precipitates from iron-rich water (natural or industrial) [note: if slimey and clumpy, it could be iron bacteria]

Grayish-black deposits and hair: leather tanneries

White crystalline powder: nitrogenous fertilizer waste

**Vegetation** – Vegetation surrounding an outfall may show the effects of industrial pollutants. Decaying organic materials coming from various food product wastes would cause an increase in plant life, while the discharge of chemical dyes and inorganic pigments from textile mills could noticeably decrease vegetation. It is important not to confuse the adverse effects on high Storm Water flows on vegetation with highly toxic dry-weather intermittent flows.

Excessive growth: food product facilities, fertilizer runoff (lawns, golf courses, and farms)

Inhibited growth: high Storm Water flows, beverage facilities, printing plants, metal product facilities, drug manufacturing, petroleum facilities, vehicle service facilities, and automobile dealers

**Damage to Outfall Structures –** Outfall damage can be caused by severely contaminated discharges that are very acidic or basic in nature. Primary metal industries have a strong potential to cause outfall structure damage because their batch dumps are highly acidic. Poor construction, hydraulic scour, and old age can also negatively affect the condition of al outfall structure.

Concrete or spalling (breaking off into chips or layers): industrial flows Peeling paint: industrial flows Metal corrosion: industrial flows

This sheet was courtesy of the NHDES (modified from Pitt et al., 1993 Investigation of Inappropriate Pollutant Entries into Storm Drainage Systems: a User's Guide. EPA Office of research and Development, EPA/600/R-92/238).

### **Data Dictionary Screen Shots Typical Example**

The data dictionary is used on the GPS units to allow for easy waterproof form carrying. The options can be changed and the screen shots presented are just a sample of what JCDH is using currently. This helps to keep the paper forms like the ones above strictly for documentation purposes.







| <b>Standard Operating</b>   | Procedure for:                                                               |           |
|-----------------------------|------------------------------------------------------------------------------|-----------|
| A.2 IDDE: Lo<br>(JCDH Emplo | ng-Term Inspections –Dry Weather<br>oyees)                                   |           |
| Purpose of SOP:             | To provide supervisor and field crew with a punch list of things to remember | er during |

1) Conduct inspections during dry weather periods (48-72 hours after rain event).

regularly scheduled inspections.

- 2) Check the outfall's dimensions, shape, and component material using the GPS data dictionary with the existing site name in the data dictionary
- Characterize and record observations on basic sensory and physical indicators (e.g., odor, color, oil sheen).
- 4) If an illicit discharge is encountered (such as raw sewage, paint, etc.), follow the procedure below.
- 5) Perform inspections so as to meet JCDH's goal of inspecting each outfall within the 5 year permit cycle (long term).
- 6) Take pictures in the data dictionary for later inspections and GIS maps.
- 7) Always have on JCDH badge when doing inspections

#### Whenever Possible:

- 1) Identify and label the outfall with a unique identifier. For example "SWO-013".
- 2) If dry weather flow is present at the outfall, and the flow does not appear to be an obvious illicit discharge (e.g., flow is clear, odorless, etc.), attempt to identify the source of the flow (intermittent stream, etc.) then document the discharge for future comparison.
- 3) Collect samples before and after source removal.

#### Never:

- 1) Never put yourself in danger.
- 2) Never enter private property without permission.

#### JCDH Procedure for illicit discharge detection

- Call supervisor and notify of location
- Take photos and record under Site of Interest in data dictionary on GPS unit as shown below
- Supervisor carry out sample bottles to be taken to lab for a rush sample
- > Area is then visually inspected for the possible sources.
- If no source can be identified, wait for sample results to provide information on possible contaminants. At this point a further investigation will be launched. This can include but is not limited to 24 hour ISCO sampling, damming, etc.

| Standard Operating Procedure for:            |  |
|----------------------------------------------|--|
| A.2 IDDE: Long-Term Inspections –Wet Weather |  |
| (JCDH Employees)                             |  |
|                                              |  |

**Purpose of SOP:** To provide supervisor and field crew with a punch list of things to remember during regularly scheduled inspections.

#### Always:

- 8) Conduct inspections during flow events, or as close to a rain event as possible. (no longer than 6 hours)
- 9) Check the outfall's dimensions, shape, and component material using the GPS data dictionary with the existing site name in the data dictionary
- 10) Characterize and record observations on basic sensory and physical indicators (e.g., odor, color, oil sheen).
- 11) If an illicit discharge is encountered (such as raw sewage, paint, etc.), follow the procedure below.
- 12) Perform inspections so as to meet JCDH's goal of inspecting each outfall within the 5 year permit cycle (long term).
- 13) Take pictures in the data dictionary for later inspections and GIS maps.
- 14) Always have on JCDH badge when doing inspections

#### Whenever Possible:

- 4) Identify and label the outfall with a unique identifier. For example "SWO-013".
- 5) Collect samples before and after source removal.

#### Never:

- 3) Never put yourself in danger.
- 4) Never enter private property without permission.

#### JCDH Procedure for illicit discharge detection

- Call supervisor and notify of location
- Take photos and record under Site of Interest in data dictionary on GPS unit as shown below
- Supervisor carry out sample bottles to be taken to lab for a rush sample
- > Area is then visually inspected for the possible sources.
- If no source can be identified, wait for sample results to provide information on possible contaminants. At this point a further investigation will be launched. This can include but is not limited to 24 hour ISCO sampling, damming, etc.

| Standard Operating        | Procedure for:                                                                                                                                                     |      |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| A.3 IDDE: O<br>Employees) | pportunistic Inspections (Non JCDH                                                                                                                                 |      |
| Purpose of SOP:           | This SOP provides city field personnel with a quick checklist of proper procedures to follow if they observe illicit discharges while conducting t regular duties. | heir |

- 1) Call dispatcher, supervisor, or JCDH official if you see evidence of an illicit discharge. (If not a JCDH employee). If JCDH employee notify supervisor or follow illicit discharge procedure.
- 2) Assess the general area of the illicit discharge to see if you can identify its' source.

#### Whenever Possible:

- 1) Use the Incident Tracking Sheet to document observations.
- 2) Take photographs of the illicit discharge.
- 3) Get Supervisor to fill out Illicit Discharge Form.
- 4) Use the Catch Basin Cleaning Form to document observations during cleaning.

#### Never:

- 1) Never enter private property without permission.
- 2) Never put yourself in danger.

| Standard Operating          | Procedure for:                                                                                                                               |              |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| A.4 IDDE: Ci<br>Employees a | tizen Call-in Inspections (JCDH<br>and Municipal Officials)                                                                                  |              |
| Purpose of SOP:             | To collect appropriate information from a citizen reporting a potential illicit increase the chances of identifying and removing its source. | discharge to |

- Use the JCDH complaint system and call in line at (205)930-1230. The Incident Tracking Sheet below can provide an additional document to collect the appropriate information that then should be entered into JCDH complaint system
- 2) Investigations should be worked with in 5-7 business days and the status should be reported on the complaint system.
- 3) All action taken should be recorded.
- 4) Follow JCDH procedures on complaints for any additional information
- 5) All municipal employees should call in the complaint to JCDH at (205)930-1230 for tracking purposes

#### Whenever Possible:

- 1) Provide additional training on tracking stormwater complaints
- 2) Generate GIS databases from information taken from complaints to scan for any patterns of illicit discharges

#### Never:

- 1) Never enter private property without permission.
- 2) Never put yourself in danger.

| Inclaent ID:                                                 |                                                            |                               |                                                  |                                         |                          |                       |
|--------------------------------------------------------------|------------------------------------------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------|--------------------------|-----------------------|
| Responder Information                                        |                                                            |                               |                                                  |                                         |                          |                       |
| Call taken by:                                               |                                                            |                               |                                                  |                                         | Call date:               |                       |
| Call time:                                                   |                                                            |                               |                                                  |                                         | Precipitation<br>hrs:    | (inches) in past 24-4 |
| Reporter Information                                         |                                                            |                               |                                                  |                                         |                          |                       |
| Incident time:                                               |                                                            |                               |                                                  |                                         | Incident date            | :                     |
| Caller contact information (optic                            | onal):                                                     |                               |                                                  |                                         |                          |                       |
| Incident Location (complete of                               | ne or more belo                                            | w)                            |                                                  |                                         |                          |                       |
| Latitude and longitude:                                      |                                                            |                               |                                                  |                                         |                          |                       |
| Or other coordinate system Stream address or outfall #:      |                                                            |                               |                                                  |                                         |                          |                       |
| Closest street address                                       |                                                            |                               |                                                  |                                         |                          |                       |
| Nearby landmark:                                             |                                                            |                               |                                                  |                                         |                          |                       |
| Primary Location Description                                 |                                                            | Seco                          | ondary Loca                                      | tion Desc                               | cription:                |                       |
| Stream corridor                                              |                                                            | С                             | Jutfall                                          | In-str                                  | In-stream flow Along ban |                       |
| (In or adjacent to stream)                                   |                                                            |                               | Near storm Near                                  |                                         | r other water            | r source (storm wa    |
| (Land not adjacent to stream)                                |                                                            |                               | drain pond, wetland, etc.):                      |                                         |                          |                       |
| Narrative description of location                            | :                                                          |                               |                                                  |                                         |                          |                       |
|                                                              |                                                            |                               |                                                  |                                         |                          |                       |
| Inland Problem Indicate                                      | r Descrintio                                               | n                             |                                                  |                                         |                          |                       |
| Dumping                                                      |                                                            |                               |                                                  |                                         | Sewage                   |                       |
| Wash water suds etc                                          |                                                            | Oil/solvents/chemicals        |                                                  |                                         |                          |                       |
| Stream Corridor Problen                                      | n Indicator D                                              | esci                          | ription                                          |                                         |                          |                       |
|                                                              | Nere                                                       |                               | Cowara                                           |                                         |                          | Petrole               |
| Odor                                                         | Sulfide                                                    |                               | Sewage                                           |                                         | Rancid/Sour              | r (gas)               |
|                                                              | (rotten eg<br>natural o                                    | eggs); Other:<br>las          |                                                  | escribe in "Narrative" section          |                          | ection                |
|                                                              | Appearance "Norm                                           |                               | l" Oil sheen                                     |                                         | Cloudy                   | Suds                  |
| Appearance                                                   | Norma                                                      |                               | Other: Describe in "Narrative" secti             |                                         |                          |                       |
| Appearance                                                   | Other: [                                                   | Descri                        | be in "Narrat                                    | ive" sectio                             | n                        |                       |
| Appearance                                                   | Other: [<br>None:                                          | Descri                        | be in "Narrat<br>Sewage (toile                   | ive" sectio<br>et paper,                | Algae                    | Dead fish             |
| Appearance<br>Floatables                                     | Other: [<br>None:<br>Other: [                              | Descri<br>(<br>etc)<br>Descri | be in "Narrat<br>Sewage (toile<br>be in "Narrat  | ive" sectio<br>et paper,<br>ive" sectio | Algae                    | Dead fish             |
| Appearance<br>Floatables<br>Narrative description of problem | Other: [<br>None:<br>Other: [<br>Other: [<br>n indicators: | Descri<br>etc)<br>Descri      | ibe in "Narrat<br>Sewage (toile<br>be in "Narrat | ive" sectio<br>et paper,<br>ive" sectio | Algae                    | Dead fish             |

#### **Standard Operating Procedure for:**

# A.5 IDDE: Septic System Inspections (JCDH Employees and Municipal Employees)

| Purpose of SOP: | Failed septic systems can adversely impact water quality.                                   |   |
|-----------------|---------------------------------------------------------------------------------------------|---|
|                 | This SOP provides a quick reference list to supervisors and field crews that are conducting | ļ |
|                 | an initial screening for failures in areas that are identified in the full IDDE program.    |   |

#### Always:

- 1) Refer potential septic tank issues to JCDH (205)903-1230 if a municipal employee.
- JCDH refer all septic tank issues to Community Environmental Protection Division. They will follow internal procedures to have all issues resolved. Monitor to make sure work is being completed.
- 3) Inform homeowner that they have a leak and that action needs to be taken to remediate the problem such as tank pumping until problem can be resolved

#### Whenever Possible:

- 1) Screen high risk areas (older areas or areas near lakes or impaired waterbodies). JCDH keeps a record of all septic tank malfunctions and what areas are more likely for malfunctions
- 2) Look for indicators of failures, such as wet areas or disagreeable odors near the leach field.
- 3) JCDH documents all septic tank systems as they are installed and what repairs are issued.

#### Never:

- 1) Never enter private property without permission.
- 2) Never put yourself in danger.

#### **Related References**

Jefferson County Department of Health Community Environmental Protection Division Environmental Health Services 1400 Sixth Avenue South Birmingham, AL 35233 (205)930-1230

| Standard Operating                                       | Procedure for:                                                                                                                                           |             |  |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--|
| A.6 IDDE: Tracing Illicit Discharges (JCDH<br>Employees) |                                                                                                                                                          |             |  |
| Purpose of SOP:                                          | To provide a quick reference list of items to keep in mind during tracing ac efficiently and systematically identify the source of an illicit discharge. | tivities to |  |

- Review / consider information collected when illicit discharge was initially identified (Incident Tracking Sheet from municipality, Data Dictionary from JCDH, or Dry Weather Outfall Inspection Form can all be used for this purpose).
- 2) Survey the general area / surrounding properties to identify potential sources of the illicit discharge as a first step. If discharge is fecal or similar JCDH takes enforcement action immediately and then educates homeowner using pamphlets, flyers, or talks to communities about ways to eliminate these issues.
- 3) JCDH traces illicit discharges using visual inspections of upstream points as a secondary step.
- 4) JCDH documents tracing results for future reference.
- 5) JCDH uses analysis software to tell if there are illicit discharges between set sample points and then uses personnel to track these discharges

#### Whenever Possible:

- 1) JCDH can employ the use of weirs, sandbags, dams, or optical brightener monitoring traps to collect or pool intermittent discharges during dry weather for further inspection.
- 2) Although rarely used by JCDH, televising of the storm drain system can be used trace high priority, difficult to detect illicit discharges.
- 3) JCDH dye tests, with a fluorescent green dye, the individual discharge points within suspected buildings.
- 4) If the source cannot be found, it is added to the area GIS database for future inspection programs.
- 5) Samples are always taken by JCDH usually in pairs to confirm/refute illicit discharge.

#### Never:

- 1) Never enter private property without permission.
- 2) Never put yourself in danger.

| Standard Operating                                                   | Procedure for:                                                                                                                                                                                  |                 |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| A.7 IDDE: Removing Illicit Discharges (JCDH and Municipal Employees) |                                                                                                                                                                                                 |                 |
| Purpose of SOP:                                                      | Proper removal of an illicit discharge will ensure it does not recur. Using least the removal will minimize the municipality's liability. This SOP provides an or discharge removal procedures. | gal methods for |

- 1) Determine who is financially responsible; and follow associated procedures on Table 2-9.
- 2) Suspend access to storm drain if threats of death or serious physical harm to humans or the environment are possible.
- 3) If the discharge is from an exempt facility (see Table 2-9) notify the facility operator and the appropriate enforcement authority.
- 4) Repair/correct cause of discharge if municipality is responsible.
- 5) Collect a confirmatory sample after the removal. Seek technical assistance from JCDH, if needed.
- 6) Seek fining methods through the *Erosion and Sedimentation Control Ordinance* or through municipal codes. Each day of discharge will constitute a separate offense.
- 7) Work with guilty party to solve issue as much as possible.

#### Whenever Possible:

1) Issue a Notice of Violation for violations of the *Erosion and Sedimentation Control Ordinance* adopted by all Storm Water Management Authority, Inc municipalities.

#### Never:

1) Never repair/correct cause of discharge on private property until all organizations have met and decided what is the best course of action (JCDH Storm Water program, Mayor, City Official, etc.)

| TABLE 2-9:         NOTIFICATION AND REMOVAL PROCEDURES FOR ILLICIT DISCHARGES INTO THE MUNICIPAL SEPARATE         Storm Sewer System                                                                         |                                                                                                                                       |                                                                                                                    |                                                                                                                                           |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Financially Responsible<br>Party                                                                                                                                                                             | Source Identified                                                                                                                     | Enforcement<br>Authority                                                                                           | Procedure to Follow                                                                                                                       |  |  |
| Private Property Owner                                                                                                                                                                                       | One-time illicit<br>discharge (e.g., spill,<br>dumping, etc.)                                                                         | Ordinance<br>enforcement authority<br>(Municipal Official,<br>JCDH)                                                | <ul><li>Contact Owner</li><li>Issue Notice of Violation</li><li>Issue fine</li></ul>                                                      |  |  |
| Private Property Owner                                                                                                                                                                                       | Intermittent or<br>continuous illicit<br>discharge from legal<br>connection                                                           | Ordinance<br>enforcement authority<br>(Municipal Official,<br>JCDH)                                                | <ul> <li>Contact Owner</li> <li>Issue Notice of Violation</li> <li>Determine schedule for<br/>removal</li> <li>Confirm removal</li> </ul> |  |  |
| Private Property Owner                                                                                                                                                                                       | Intermittent or<br>continuous illicit<br>discharge from illegal<br>connection or indirect<br>(e.g., infiltration or<br>failed septic) | Plumbing Inspector,<br>Municipal Official,<br>JCDH                                                                 | Notify plumbing inspector                                                                                                                 |  |  |
| Municipal                                                                                                                                                                                                    | Intermittent or<br>continuous illicit<br>discharge from illegal<br>connection or indirect<br>(e.g., failed sewer<br>line)             | Ordinance<br>enforcement authority<br>(JCDH, Municipal<br>Official, Jefferson<br>County Environmental<br>Services) | <ul> <li>Issue work order</li> <li>Schedule removal</li> <li>Remove connection</li> <li>Confirm removal</li> </ul>                        |  |  |
| <ul> <li>Exempt 3<sup>ra</sup> Party</li> <li>Alabama Department<br/>of Transportation<br/>ALDOT (in selected<br/>urbanized areas)</li> <li>Industrial Facilities<br/>with selected SIC<br/>codes</li> </ul> | Any                                                                                                                                   | USEPA                                                                                                              | <ul> <li>Notify exempt third party and<br/>USEPA of illicit discharge</li> </ul>                                                          |  |  |

# A.8 IDDE: Removing Industrial Illicit Discharges (JCDH and Municipal Employees)

| Purpose of SOP: | Proper removal of an industrial illicit discharge will ensure it does not recur. Using legal |
|-----------------|----------------------------------------------------------------------------------------------|
|                 | methods for the removal will minimize the municipality's liability. This SOP provides an     |
|                 | overview of industrial illicit discharge removal procedures.                                 |

#### Always:

- 1) Determine who is financially responsible; and follow associated procedures on Table 2-9.
- 2) Suspend access to storm drain if threats of death or serious physical harm to humans or the environment are possible.
- 3) If the discharge is from an exempt facility (see Table 2-9) notify the facility operator and the appropriate enforcement authority.
- 4) Repair/correct cause of discharge if industrial discharge is from a municipal source
- 5) Collect a confirmatory sample after the removal. Seek technical assistance from JCDH, if needed.
- 6) Seek fining methods through the *Erosion and Sedimentation Control Ordinance* or through municipal codes. Each day of discharge will constitute a separate offense. These offenses may be subject to escalated fees according to municipal or other ordinances.
- 7) Work with guilty party to solve issue as much as possible. Use environmental engineer for facility when possible, these have been identified from the existing Air Toxins program at JCDH

#### Whenever Possible:

- 1) Issue a Notice of Violation for violations of the *Erosion and Sedimentation Control Ordinance* adopted by all Storm Water Management Authority, Inc municipalities.
- 2) GIS locate all NPDES discharge sites for all industrial sources within the Storm Water Management Authority, Inc municipalities.
- Work with ADEM to check all NPDES permit limits to make sure industrial sources are within allowed limits

#### Never:

1) Never repair/correct cause of discharge on private property until all organizations have met and decided what is the best course of action (JCDH Storm Water program, Mayor, City Official, etc.)



## POLLUTION PREVENTION AND GOOD HOUSEKEEPING SOPS

| Standard Operating P                                                               | Procedure for:                                                                  |                |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------|
| B.1 Catch Basin Cleaning (Municipal or Jefferson<br>County Public Works Employees) |                                                                                 |                |
| Purpose of SOP:                                                                    | To protect Storm Water by maintaining the ability of catch basins to trap sedim | ients, organic |

matter, and litter. This reduces clogging in the storm drain system as well as the transport of sediments and pollutants into receiving waterbodies.

#### Always:

- 1) Inspect catch basins for structural integrity and evidence of illicit discharges during cleaning. Use the Catch Basin Cleaning Form.
- 2) If gross contamination (sewage or oil), stop cleaning and report to supervisor for follow up. The supervisor should then report this to JCDH at (205)930-1230.
- 3) Stockpile and cover catch basin residuals on an impervious surface that discharges to a sanitary sewer or buffered area until test results are known (if reuse is planned).
- 4) Test catch basin stockpile as follows:
  - If obviously (by visual and/or olfactory examination) contaminated with sanitary wastewater, animal wastes, oil, gasoline or other petroleum products, test the solids pursuant to the hazardous waste determination dispose of as follows:
    - a) If non-hazardous dispose at any permitted, lined solid waste landfill or other solid waste treatment facility permitted to accept this material.
    - b) If hazardous dispose of in accordance with Alabama Hazardous Waste Rules.
  - If not obviously contaminated,
    - a) Test for metals, VOCs and PAHs.
    - b) Compare with the following charts used by New Hampshire or relevant Alabama used charts.

#### Whenever Possible:

- Inspect each catch basin at least annually, during catch basin cleaning. These forms will need to be reported to JCDH for record keeping unless the municipality has a record keeping process in place.
- 2) Create an internal checklist for catch basins to help classify which catch basins require maintenance and how often.
- 3) Perform street sweeping on an appropriate schedule to reduce the amount of sediment, debris and organic matter entering the catch basins, which in turn reduces the frequency with which they will need to be cleaned. The street sweeping schedules should be provided to JCDH or Storm Water Management Authority, Inc and tracked on a monthly basis by each municipality
- 4) Discharge fluids collected during catch basin cleaning to a sanitary WWTP, or buffered detention area.
- 5) The forms listed below should be completed and turned into JCDH on a monthly basis. This allows for miles of street swept and number of catch basins cleaned each year.

#### STORM WATER MANAGEMENT AUTHORITY, INC CATCH BASIN CLEANING FORM

| Date: Precipitation in the last three days |          |         |               | s? No Yes    |            |          |
|--------------------------------------------|----------|---------|---------------|--------------|------------|----------|
| Supervisor/Crew Leader:                    |          |         |               |              |            |          |
| Municipality:                              |          |         |               |              |            |          |
|                                            |          | Probler | n Identified? | (Check all t | hat apply) |          |
| Catch Basin                                | Basin    |         | Poor          | Oil          | Excess     |          |
| ID                                         | Location | Flow    | Condition     | Sheen        | Sediment   | Comments |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |
|                                            |          |         |               |              |            |          |

| Catch Basin Cleanings<br>Reuse Guidance                                                                                                                                              |                          |                          |                             |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-----------------------------|--|--|--|
| Maximum Contaminant Concentrations                                                                                                                                                   |                          |                          |                             |  |  |  |
| Regulated Contaminant                                                                                                                                                                | S-1 Standards<br>(mg/kg) | S-3 Standards<br>(mg/kg) | USEPA SW-846<br>Test Method |  |  |  |
| Metals                                                                                                                                                                               |                          |                          |                             |  |  |  |
| Arsenic                                                                                                                                                                              | 11                       | 11                       | 6010B                       |  |  |  |
| Barium                                                                                                                                                                               | 750                      | 3,400                    | 6010B                       |  |  |  |
| Cadmium                                                                                                                                                                              | 32                       | 230                      | 6010B                       |  |  |  |
| Chromium                                                                                                                                                                             | 1000                     | 5,000                    | 6010B                       |  |  |  |
| Lead                                                                                                                                                                                 | 400                      | 400                      | 6010B                       |  |  |  |
| Mercury                                                                                                                                                                              | 13                       | 13                       | 7471A                       |  |  |  |
| Selenium                                                                                                                                                                             | 260                      | 260                      | 6010B                       |  |  |  |
| Silver                                                                                                                                                                               | 45                       | 200                      | 6010B                       |  |  |  |
| VOCs                                                                                                                                                                                 |                          |                          |                             |  |  |  |
| Benzene                                                                                                                                                                              | 0.3                      | 0.3                      | 8260B                       |  |  |  |
| Dichloroethane, 1,2-                                                                                                                                                                 | 0.08                     | 0.08                     | 8260B                       |  |  |  |
| Isopropyl benzene                                                                                                                                                                    | 123                      | 123                      | 8260B                       |  |  |  |
| Methyl-t-butyl ether                                                                                                                                                                 | 0.13                     | 0.13                     | 8260B                       |  |  |  |
| Toluene                                                                                                                                                                              | 100                      | 100                      | 8260B                       |  |  |  |
| Xylene                                                                                                                                                                               | 500                      | 1,100                    | 8260B                       |  |  |  |
| Aklylbenzenes<br>Butylbenzene, n-<br>Butylbenzene, sec-<br>Butylbenzene, tert-<br>Isopropyl toluene, 4-<br>Propylbenzene, n-<br>Trimethylbenzene, 1,2,4-<br>Trimethylbenzene, 1,3,5- | 59 (total)               | 59 (total)               | 8260B                       |  |  |  |
| PAHs - Carcinogenic                                                                                                                                                                  |                          |                          |                             |  |  |  |
| Benzo(a)anthracene                                                                                                                                                                   | 0.7                      | 40                       | 8270C                       |  |  |  |
| Benzo(a)pyrene                                                                                                                                                                       | 0.7                      | 4                        | 8270C                       |  |  |  |
| Benzo(b)fluoranthene                                                                                                                                                                 | 7                        | 400                      | 8270C                       |  |  |  |
| Benzo(k)fluoranthene                                                                                                                                                                 | 7                        | 400                      | 8270C                       |  |  |  |
| Chrysene                                                                                                                                                                             | 70                       | 4,000                    | 8270C                       |  |  |  |
| Dibenzo(a,h)anthracene                                                                                                                                                               | 0.7                      | 4                        | 8270C                       |  |  |  |
| Indeno(1,2,3-cd)pyrene                                                                                                                                                               | 0.7                      | 40                       | 8270C                       |  |  |  |
| PAHs – Noncarcinogenic                                                                                                                                                               |                          |                          |                             |  |  |  |
| Acenaphthene                                                                                                                                                                         | 270                      | 270                      | 8270C                       |  |  |  |
| Acenaphthylene                                                                                                                                                                       | 300                      | 300                      | 8270C                       |  |  |  |
| Anthracene                                                                                                                                                                           | 1,000                    | 1,700                    | 8270C                       |  |  |  |
| Fluoranthene                                                                                                                                                                         | 810                      | 5,000                    | 8270C                       |  |  |  |
| Fluorene                                                                                                                                                                             | 510                      | 510                      | 8270C                       |  |  |  |
| Methylnaphthalene,2-                                                                                                                                                                 | 150                      | 150                      | 8270C                       |  |  |  |
| Napthalene                                                                                                                                                                           | 5                        | 5                        | 8270C                       |  |  |  |
| Benzo(g,h,i)perylene<br>Phenanthrene<br>Pyrene                                                                                                                                       | 480 (Total)              | 5,000 (Total)            | 8270C                       |  |  |  |

| Standard Operating<br>B.2 Storm Dr<br>(Municipal or<br>Employees) | Procedure for:<br>ain System Repair and Maintenance<br>Jefferson County Public Works |         |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------|
| Purpose of SOP:                                                   | To protect Storm Water by replacing or repairing components of the store             | m drain |
|                                                                   | system on a regular basis to prevent a failure of the storm drain system.            |         |

- 1) Practice preventive maintenance for cracks, leaks, and other conditions that could cause breakdowns in the system by identifying maintenance issues such as:
  - > For catch basins during catch basin cleaning (see SOP B.1)
  - > For outfalls during IDDE inspection (see SOP A.1, A.2 and A.3)
- 2) Repair defective structures or equipment identified during an inspection as soon as possible.
- 3) Test and dispose of stockpiled materials as described in SOP B.1.
- 4) Document inspections, cleanings and repairs and report them to Storm Water Management Authority, Inc or JCDH (SOP B.1 for catch basins, SOPs A.1 through A.3 for outfalls, and attached example form for pipes).
- 5) Use appropriate erosion and sediment control practices when performing repairs.

#### Whenever Possible:

- 1) Practice preventive maintenance for pipes by televising:
  - Prior to reconstruction of roadways, or
  - > On a regular schedule beginning with high priority areas.
  - > Or track all televising of sewer lines by Jefferson County Environmental Services.
- 2) Research and implement new technology that will improve the overall performance of the storm drain system.
- 3) Perform street sweeping on a regular basis to reduce the amount of sediment, debris and organic matter entering the storm drain system, which in turn reduces the frequency with which the system will need to be cleaned. This activity will need to be tracked and presented to Stormwater Management Authority or JCDH on a monthly basis.
- 4) Use documentation of repairs and maintenance to develop a capital improvement and O&M plan for future system maintenance. This should be written in an overall city document plan.

#### Never:

1) Never allow defective equipment or structures to go unrepaired.

#### Related References

-USEPA National Menu of BMPS -Alabama Soil and Conservation Committee's Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management of Construction Sites and Urban Areas

# B.3 Erosion and Sediment Control (All Organizations)

**Purpose of SOP:** To protect Storm Water from pollution by reducing or eliminating pollutant loading from land disturbing activities.

#### Always:

- 1) Use erosion control techniques or devices to stabilize disturbed areas.
- 2) Use effective site planning to avoid sensitive areas.
- 3) Keep land disturbance to a minimum.
- 4) Inspect and maintain erosion control devices after each 0.75 inches of rain
- 5) Install erosion control devices properly.
- 6) Remove sediment accumulated during construction from permanent BMPs once construction is completed.
- 7) Minimize the amount of bare soil by scheduling phases of construction and stabilization.
- 8) Minimize slope lengths.
- 9) Monitor practices and adjust, maintain, and repair them periodically and after every storm.
- 10) Reduce the velocity of Storm Water runoff.
- 11) Prevent erosion by covering bare soil with mulch or other cover.
- 12) Protect existing Storm Water structures from sediment by using temporary sediment traps, silt fence, or perforated risers.
- 13) Divert clean water around construction site.
- 14) Make sure all permitting has been done and approved through JCDH and the local Stormwater Management Authority municipality. See form on next page for electronic permit.
- 15) Allow 3-14 business days for initial review time on large commercial developments.

#### Whenever Possible:

- 1) Limit construction activities during months with higher runoff rates.
- 2) Install erosion control blankets when seeding drainage ways.
- 3) Protect natural vegetation, especially near waterbodies, wetlands, and steep slopes.
- 4) Establish vegetative cover with good root systems prior to freeze/thaw cycles.

#### Never:

- 1) Never divert runoff into a sensitive area.
- 2) Never remove temporary measures before construction is complete.
- 3) Never allow silt fences to over-run or put in flow paths.

| Related References                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------|
| -USEPA National Menu of BMPS<br>-Alabama Soil and Conservation Committee's<br>Alabama Handbook for Erosion Control, Sediment |
| Control, and Stormwater Management of<br>Construction Sites and Urban Areas                                                  |

#### JCDH EROSION AND SEDIMENTATION CONTROL PERMITTING FORM



| Standard Operating Pro          | ocedure for:                                                                                   |      |
|---------------------------------|------------------------------------------------------------------------------------------------|------|
| B.4 Landscape<br>Organizations) | Design and Management (All                                                                     |      |
| Purpose of SOP:                 | To protect Storm Water by designing and managing landscaping in that minimize polluted runoff. | ways |

- Design landscaping by taking into account soil types, light, drainage, desired maintenance level and budget. A soil map is attached on the following page of Jefferson County but for further soil information go to <u>http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</u>.
- 2) Design for ease of maintenance.

#### Whenever Possible:

- 1) Minimize erosion prone steep slopes by using techniques such as terracing.
- 2) Use native plants that are pest resistant. Plant the right plant in the right area.
- 3) Manage water runoff by rerouting gutters away from storm drains and maintaining groundcovers between developed areas and waterways (ditches, swales, shorelines).
- 4) Reduce or eliminate mown lawn in unused areas.
- 5) Convert excess lawn to meadow or forest.
- 6) Establish set back distances from pavement, storm drains, and waterbodies. Allow these areas to serve as buffers with disease-resistant plants and minimal mowing.
- 7) JCDH and the Stormwater Municipalities promote Low Impact Development Design on new structures and retrofits.

#### Never:

- 1) Never develop a landscape design without assessing its impact on water quality.
- 2) Never cause unintended consequences such as
  - > Planting large variety trees beneath overhead wires.
  - Blocking site distance at intersections
  - Planting trees with a high water demand (weeping willow) near sanitary sewer pipes and storm sewer pipes.

#### **Related References**

-United States Department of Natural Resources Conservation Services Soil Map -Alabama Department of Agriculture -USEPA National Menu of BMPs -CWP Urban Forestry Manual

### JEFFERSON COUNTY SOIL MAP



*SOURCE:* United States Department of Natural Resources Conservation Services Soil Map website <u>http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</u>.

| Standard Operating<br>B.5 Storage a<br>Pesticides (N<br>County Empl | Procedure for:<br>and Disposal of Fertilizer and<br>Iunicipal Employees, Jefferson<br>oyees, and Homeowners)                                                                                                                                           |                                                             |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Purpose of SOP:                                                     | To protect Storm Water by properly storing and disposing of fertilizers a<br>(herbicides and fungicides). Because storm drain water is not part of a<br>system, discharge of these chemicals flows untreated into ponds, lakes<br>estuaries, and bays. | nd pesticides<br>wastewater treatment<br>, rivers, streams, |

- 1) Store fertilizers and pesticides in high, dry locations, according to manufacturer's specifications and applicable regulations.
- 2) Fill out PHF storage form below.
- 3) Clearly label secondary containers.
- 4) Properly dispose of fertilizers and pesticides according to manufacturer's specifications and applicable regulations.
- 5) Regularly inspect fertilizer and pesticide storage areas for leaks or spills.
- 6) Clean up spills and leaks of pesticides and fertilizers to prevent the chemicals from reaching the storm drain system. (SOPs B.12 and B.16)

#### Whenever Possible:

- 1) Store pesticides in enclosed areas or in covered impervious containment, preferably in a locked cabinet.
- Order fertilizers and pesticides for delivery as close to time of use as possible to reduce amount stored at facility.
- Order only the amount needed to minimize excess or obsolete materials requiring storage and disposal.
- 4) Use ALL herbicides or pesticides appropriately to minimize the amount of chemicals requiring disposal.
- Do an annual review of storage area and dispose of old, unusable or "obsolete" fertilizer or pesticides in accordance with applicable regulations (just before your local Household Hazardous Waste Day).
- 6) Keep a eye out for local recycling centers that will be marked by a JCDH program that is targeted for October 2011.

EPA defines a <u>pesticide</u> as any substance intended for preventing, destroying, repelling, or mitigating any pest. Pest can include insects, animals, unwanted plants, fungi, bacteria, etc. The term applies to insecticides, herbicides, fungicides, etc.

#### Never:

- 1) Never dispose of fertilizers or pesticides in storm drains.
- 2) Never leave unlabeled or unstable chemicals in uncontrolled locations.

#### **Related References**

-USEPA National Menu of BMPs

| Storm Water Management Authority, Inc<br>1400 SIXTH AVENUE SOUTH. P.O. BOX 2648. BIRMINGHAM, ALABAMA 35202. (205)930-1230<br>Pesticide, Herbicide, and Fertilizer Storage Facility |                        |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|
|                                                                                                                                                                                    |                        |               |
| Part 2: Storage Information<br>Storage Location Address:<br>State:<br>Amount Stored<br>Brand, Purpose, and Amounts of Chem                                                         | gallons                | City:<br>Zip: |
|                                                                                                                                                                                    |                        |               |
| Are Storage SOPs followed:                                                                                                                                                         | Yes No (if no why not) |               |
r.

| Stormwater Municipality:<br>Mayor:            |                                                 | -                           |          |             |  |  |  |
|-----------------------------------------------|-------------------------------------------------|-----------------------------|----------|-------------|--|--|--|
| *If more than 19 chemical stored then start a | at 1 on another form and conti                  | nue forward until completed |          |             |  |  |  |
| Pesticio                                      | Pesticides, Herbicides and Fertilizer Inventory |                             |          |             |  |  |  |
| Description                                   | Purpose                                         | Amount (gallons)            | Category | Amount Used |  |  |  |
| 1)                                            |                                                 |                             |          |             |  |  |  |
| 2)                                            |                                                 |                             |          |             |  |  |  |
| 3)                                            |                                                 |                             |          |             |  |  |  |
| 4)                                            |                                                 |                             |          |             |  |  |  |
| 5)                                            |                                                 |                             |          |             |  |  |  |
| 6)                                            |                                                 |                             |          |             |  |  |  |
| 7)                                            |                                                 |                             |          |             |  |  |  |
| 8)                                            |                                                 |                             |          |             |  |  |  |
| 9)                                            |                                                 |                             |          |             |  |  |  |
| 10)                                           |                                                 |                             |          |             |  |  |  |
| 11)                                           |                                                 |                             |          |             |  |  |  |
| 12)                                           |                                                 |                             |          |             |  |  |  |
| 13)                                           |                                                 |                             |          |             |  |  |  |
| 14)                                           |                                                 |                             |          |             |  |  |  |
| 15)                                           |                                                 |                             |          |             |  |  |  |
| 16)                                           |                                                 |                             |          |             |  |  |  |
| 1/)                                           |                                                 |                             |          |             |  |  |  |
| 18)                                           |                                                 |                             |          |             |  |  |  |
| 19)                                           |                                                 |                             |          |             |  |  |  |

| Standard Operating<br>B.6 Fertilizing<br>(Municipal Er<br>Employees, a | Procedure for:<br>g and Turf Health Application<br>mployees, Jefferson County<br>and Homeowners)                          |              |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------|
| Purpose of SOP:                                                        | To protect Storm Water by properly storing, applying, and disposing of fer by maintaining turf health to reduce diseases. | tilizers and |

- 1) Store, use, and dispose of all fertilizers and contaminated wastes according to manufacturer's specifications and applicable regulations.
- 2) Choose seed based on soil types, intended use of area, latest variety research, and/or assessment of past site performance.
- 3) Check 5-day weather forecast to avoid fertilizing before heavy rain or during a drought.
- 4) Fill out appropriate form below.

#### Whenever Possible:

- Apply fertilizers based on a soil testing program, soil type, turf function, and assessment by qualified personnel (conservation commission or municipal arborist, etc.). See Jefferson County Soil Map above.
- 2) Avoid fertilizing during a drought or when the soil is dry.
- 3) Apply fertilizers during periods of maximum plant uptake (usually fall and spring).
- 4) Avoid combined products such as weed and feed, which do not necessarily target specific problems at the appropriate time.
- 5) Calibrate application equipment to ensure proper application.
- 6) If phosphorus fertilizer is used when re-seeding, mix phosphorus into root- zone.
- 7) Use alternative or environmentally friendly products (See SOP B.15.).
- 8) Use natural compost and organic fertilizers instead of synthetic fertilizers.
- 9) Aerate grassed areas to improve drainage and bring more oxygen to the soil.

- 1) Never fertilize before a forecasted heavy rainfall.
- 2) Never apply phosphorus fertilizer on bare soil.
- 3) Never deposit fertilizer in the water, into storm drains, or onto impervious surfaces (streets and sidewalks).
- 4) Never apply fertilizer to frozen ground.
- 5) Never clean up spilled fertilizer by rinsing it with water.

| Related References           |
|------------------------------|
| -USEPA National Menu of BMPs |

Standard Operating Procedure for:

# B.7 Weed and Pest Control Application (Municipal Employees, Jefferson County Employees, and Homeowners)

**Purpose of SOP:** To protect Storm Water by properly applying pesticides (herbicides and insecticides).

#### Always:

- 1) Ensure that pesticides are only applied by personnel certified by AL Department of Agriculture to do so.
- 2) Apply pesticides according to manufacturer's specifications, the Alabama Department of Agriculture & Industrial Food & Safety Division, Pesticide Management Section, and any local requirements.
- 3) Clean up any spilled chemicals (See SOPs B.12 and B.16.).
- 4) Use pesticides only when necessary.
- 5) Rinse equipment only when necessary and use rinse water to dilute next mix as long as application rates are not exceeded.

#### Whenever Possible:

- 1) Use alternative methods to control weeds and pests such as Integrated Pest Management strategies, biorational insecticides (natural soaps and oils) or biological controls. (See SOP B.15.)
- 2) Mix/load pesticides in an area where spills can be contained.
- 3) Pull weeds by hand or mechanically.
- 4) Spot treat affected areas only instead of entire location.
- 5) Apply pest control at the life stage when the pest is most vulnerable.
- 6) Choose the least toxic pesticides that still achieve results.
- 7) Tolerate low levels of weeds.
- 8) Allow grass to grow 2.5 to 3 inches high, reduce thatch build up and aerate soils.
- 9) Reduce seed release of weeds by timing cutting at seed set.

- 1) Never mix or prepare pesticides near storm drains.
- 2) Never apply controlled pesticides unless certified to do so.
- 3) Never apply pesticides before a heavy rainfall.
- 4) Never discharge rinse water or excess chemicals to storm drain, sewer, or ground surface.

| Related References           |
|------------------------------|
| -USEPA National Menu of BMPs |

| Jefferson C                                                                                                                                                           | Count                                                                            | ty Dep       | artment of He             | alth and Storm Water |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------|---------------------------|----------------------|--|
|                                                                                                                                                                       | M                                                                                | , .<br>anage | ment Authorit             | Y                    |  |
| 1400 SIXTH AVENU                                                                                                                                                      | 1400 SIXTH AVENUE SOUTH, P.O. BOX 2648, BIRMINGHAM, ALABAMA 35202, (205)930-1230 |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
| Pesticide, Her                                                                                                                                                        | bicide                                                                           | e, and Fe    | ertilizer Applicatio      | n (Municipal Use)    |  |
|                                                                                                                                                                       |                                                                                  |              | FORM                      |                      |  |
| Part 1: General Information                                                                                                                                           |                                                                                  |              |                           |                      |  |
| Stormwater Municipality:                                                                                                                                              |                                                                                  |              |                           | Date:                |  |
| Mayor:                                                                                                                                                                |                                                                                  |              |                           |                      |  |
| Applicator's Department                                                                                                                                               |                                                                                  |              |                           |                      |  |
| Relevant Licenses Secured                                                                                                                                             | Yes                                                                              | No           |                           | License #:           |  |
| Part 2: Precipitation Amount                                                                                                                                          |                                                                                  |              |                           |                      |  |
| Time Since last rain (must be at least 24                                                                                                                             |                                                                                  |              |                           |                      |  |
| hours)                                                                                                                                                                |                                                                                  |              | hrs                       |                      |  |
| Precipitation Chance in 3-day period                                                                                                                                  |                                                                                  |              |                           |                      |  |
| (estimated 3-day forecast information)                                                                                                                                |                                                                                  |              | % day 1                   |                      |  |
|                                                                                                                                                                       |                                                                                  |              | % day 2                   |                      |  |
|                                                                                                                                                                       |                                                                                  |              | % day 3                   |                      |  |
| Part 3: PHF Information                                                                                                                                               |                                                                                  |              |                           |                      |  |
| Estimated Amount Applied Total:                                                                                                                                       |                                                                                  |              | gallons                   |                      |  |
| Employee Hours Used in Application                                                                                                                                    |                                                                                  |              | hrs                       |                      |  |
| Types Commonly Applied:                                                                                                                                               |                                                                                  |              |                           |                      |  |
| * Manufacture, Reciepts of Purchuse, and Pu                                                                                                                           | rpose sh                                                                         | ould be sta  | ated or stapled to docume | ent                  |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
| Were SOPs followed during application:                                                                                                                                | Yes                                                                              | No (if no w  | hy state below)           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
| Application Areas:                                                                                                                                                    |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
|                                                                                                                                                                       |                                                                                  |              |                           |                      |  |
| If PHFs are applied by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity should be stabled to<br>this form when returned. |                                                                                  |              |                           |                      |  |

| Jefferson Co<br>1400 SIXTH AVENUE S              | unty Department o<br>Management Auth<br>GOUTH. P.O. BOX 2648. BIRMING | f Health and Storm Water<br>ority<br>SHAM, ALABAMA 35202. (205)930-1230 |
|--------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------|
| Pesticide, Herbicid                              | de, and Fertilizer Applica                                            | tion (Private Applicator)                                               |
|                                                  | Application                                                           |                                                                         |
| Part 1: General Information                      |                                                                       |                                                                         |
| Stormwater Municipality:                         |                                                                       | Date:                                                                   |
| Mayor:                                           |                                                                       |                                                                         |
| Applicant's Name                                 |                                                                       |                                                                         |
| Applicant's email address/ Phone number:         |                                                                       |                                                                         |
| Applicator Company Name:                         |                                                                       |                                                                         |
| Mailing Address:                                 |                                                                       | City                                                                    |
| State:                                           |                                                                       | Zip:                                                                    |
| Relevant Licenses Secured                        | Yes No                                                                | License #:                                                              |
| Part 2: Precipitation Amount                     |                                                                       |                                                                         |
| Time Since last rain (must be at least 24 hours) |                                                                       | hrs                                                                     |
| 3-day forecast information)                      |                                                                       | % day 1                                                                 |
|                                                  |                                                                       | % day 2                                                                 |
|                                                  |                                                                       | % day 3                                                                 |
| Part 3: PHF Information                          |                                                                       |                                                                         |
| Estimated Amount Applied Total:                  |                                                                       | gallons                                                                 |
| Employee Hours Used in Application:              |                                                                       | hrs                                                                     |
| Type Applied.                                    |                                                                       |                                                                         |
| Were SOPs followed during application:           | Yes No (if no why state below)                                        |                                                                         |
|                                                  |                                                                       |                                                                         |
| Application Area:                                |                                                                       |                                                                         |
|                                                  |                                                                       |                                                                         |

# B.8 Mowing and Irrigation (Municipal Employees, Jefferson County Employees, and Homeowners)

| Purpose of SOP: | To protect Storm Water by using proper mowing and watering techniques.       |
|-----------------|------------------------------------------------------------------------------|
|                 | Proper mowing and irrigation techniques will reduce organic matter and other |
|                 | pollutants from entering the storm drain system and waterbodies.             |

#### Always:

- 1) Mow only as low as needed for the area's intended use.
- 2) Vary mowing pattern to minimize ruts and promote even growth.
- 3) Base irrigation amounts on monitoring for moisture content.
- 4) Water at appropriate times (when no rain is forecasted and in cooler times of day).
- 5) Manage leaves, clippings, and compost so that runoff does not enter storm drain system or waterbodies.

#### Whenever Possible:

- 1) Allow areas to go to meadow or field and mow once or twice per year rather than every week.
- 2) Keep mower blades sharpened to avoid damaging grass leaf tissue.
- 3) Mow when the grass is dry to prevent spread of turf diseases.
- 4) Sweep lawn clippings and debris instead of using water.
- 5) Mulch grass clippings using a mulching mower.
- 6) Fill gas tanks in a controlled location.

#### Never:

- 1) Never irrigate based on timers/schedules instead of monitoring for moisture content.
- 2) Never dump gas, wastes or contaminated water down storm drains.
- 3) Never refuel or change the mower oil near storm drains.
- 4) Never leave mower running in one location (to prevent burning and over- cutting of vegetation).

# Related References -USEPA National Menu of BMPs

| Standard Operating                                                           |                                                                                                                                                      |                           |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| B.9 Vehicle and Equipment Storage (Municipal and Jefferson County Employees) |                                                                                                                                                      |                           |
| Purpose of SOP:                                                              | To protect Storm Water from petroleum products that may drip or leak from<br>and equipment being stored or from dirt and sediment that accumulate in | n vehicles<br>the storage |

- 1) Inspect parking areas for stains/leaks on a regular basis.
- 2) Use drip pans or adsorbents for leaking vehicles (provide a labeled location to empty and store drip pans).
- 3) Address any known leaks or drips as soon as possible.
- 4) Clean up spills.

#### Whenever Possible:

- 1) Store vehicles inside where floor drains have been properly connected and registered.
- 2) Store vehicles on paved areas, and street sweep on a regular basis to remove drips/leaks/dirt, and dispose of street sweepings properly.
- 3) Maintain vehicles to prevent leaks.

#### Never:

1) Never store leaking vehicles over a storm drain.

| Related References           |
|------------------------------|
| -USEPA National Menu of BMPs |

| Standard Operating Procedure for:                                                    |                                                                                                                                               |                                  |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| B.10 Vehicle and Equipment Washing (Municipal, JCDH, and Jefferson County Employees) |                                                                                                                                               |                                  |
| Purpose of SOP:                                                                      | To protect Storm Water using proper washing techniques, proper wash<br>and proper disposal of wash water for heavy and light-duty vehicles ar | ning locations,<br>nd equipment. |

- 1) Operate a closed system with wastewater recycling (like a floor drain discharge to a holding tank), or
- 2) Discharge to a municipal sanitary sewer, or
- 3) Obtain a Septic Tank permit from JCDH, or
- 4) Wash fewer than 30 vehicles per week and discharge to the ground surface, if
  - Good Best Management Practices Rules are used,
  - > The discharge is registered through NPDES permitting, and
  - > The washwater:
    - a) is not from power washing, steam cleaning, engine cleaning, or undercarriage cleaning,
    - b) does not contain soaps or other products which contain regulated contaminants, and
    - c) does not discharge to a surface water.

#### Whenever Possible:

- 1) Use a commercial car wash for light duty vehicles.
- 2) Obtain and use drain guards (filter inserts) to catch sediments, petroleum products, etc. that might enter the storm drains as a result of vehicle washing.
- 3) Minimize water and soap use when washing or rinsing vehicles.

#### Never:

- 1) Never perform engine or undercarriage washing outside.
- 2) Never wash vehicles over a storm drain or near drinking water wells.
- 3) Discharge washwater to a surface water.

#### **Related References**

-Alabama Department of Environmental Management Standard Operating Procedure for:

## B.11 Vehicle and Equipment Fueling (Municipal, JCDH, and Jefferson County Employees)

**Purpose of SOP:** To prevent Storm Water contamination originating from vehicle and equipment fueling.

#### Always:

- 1) Fuel carefully to minimize drips to the ground surface.
- 2) Maintain clean fuel dispensing areas using dry cleanup methods.
- 3) Clearly label and tag all valves to reduce human error.
- 4) Train employees and subcontractors on proper fueling methods and spill cleanup techniques.
- 5) Maintain fuel storage tanks in accordance with local, state and federal laws.
- 6) Have absorbent spill cleanup kits and materials available at fueling areas.
- 7) Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.
- 8) When fueling small equipment from portable containers, fuel in a designated area away from storm drains and waterbodies.

#### Whenever Possible:

- 1) Install a canopy or roof over aboveground storage tanks and fuel transfer areas.
- 2) Regularly inspect fueling equipment for corrosion and structural failure, cracks in foundations, and physical damage to container systems.
- 3) Use designated fueling areas built upon a level impervious surface (hard cement is best). If paved with asphalt, add a protective coating to create an impervious surface, inspect regularly, and street sweep quarterly at a minimum.
- 4) Protect storm drains from fueling areas using berms and dikes.
- 5) Use absorbent material or absorbent pads during fueling to collect leaks.

#### Never:

- 1) "Top off" fuel tanks (post signs to remind employees).
- 2) Hose down or bury a fuel spill.

**Related References** 

-USEPA National Menu of BMPs

| Standard Operating Procedure for: |                                                                         |             |
|-----------------------------------|-------------------------------------------------------------------------|-------------|
| B.12 Spill Cle<br>County Empl     | anup (Municipal, JCDH, and Jefferson oyees)                             |             |
| Purpose of SOP:                   | To protect Storm Water by educating employees on proper spill cleanup p | procedures, |

state reporting requirements and preventative actions.

#### Always:

- 1) Stop the source of the spill, if possible to safely do so.
- 2) Contain any liquids, if possible to safely do so.
- Contact the appropriate emergency response number (see below) during normal working hours (8:00 a.m. – 4:00 p.m., Monday - Friday) to report spills.
  - > Jefferson County Emergency Management Agency– Oil and Response (205)254-2039
  - National Response Center Chemical or Oil Spills that Impact Surface Water (800) 424-8802
  - > USEPA Region 4 –(800)241-1754 or (404)562-9900
- 4) Cover the spill with absorbent material such as kitty litter, sawdust, or oil absorbent pads. Do not use straw or water. (See SOP B.16 for adsorbent disposal.)
- 5) Petroleum spills involve, but are not limited to: crude oil, gasoline, heating oil, various fuel oils, lubricating oil, hydraulic oil, asphaltic residuals.
- 6) Report a petroleum spill if:
  - > The spill is greater than 25 gallons, or
  - > The spill cannot be immediately contained, or
  - > The spill and/or contamination cannot be completely removed within 24 hours, or
  - > There is an impact or potential impact to ground/surface water.
  - ➢ IF IN DOUBT, REPORT THE SPILL
- 7) Hazardous materials spills involve non-oil spills that pose a threat to human health or the environment, such as chemical releases.
- 8) Report any discharge of hazardous waste immediately, (within one hour) to local emergency officials [fire department], then contact the Jefferson County Emergency Management Agency as listed above
- 9) Contact local fire department \_\_\_\_\_(phone #).
- 10) Develop and maintain a Spill Prevention, Control, and Countermeasure (SPCC) Plan if the facility stores more than 1,320 gallons of petroleum.
- 11) Fit petroleum and chemical storage containers with secondary containment structures.
- 12) Keep a spill kit in areas where petroleum or hazardous materials are stored.
- 13) Train employees in spill response procedures and equipment annually.
- 14) Deploy containment booms if spill could potentially reach a storm drain or waterbody. JCDH is working with local fire departments to develop these maps which should be done by 2015
- 15) Position mats to contain drips from equipment or vehicles until they can be repaired.

#### Whenever Possible:

- 1) Seal the floor with paint to prevent absorption of fluids into concrete.
- 2) Install low-level or low-pressure alarms and/or cut-off systems on hydraulic equipment.

- 1) Never wash a spill into the storm drain or a water body.
- 2) Never leave a spill without cleaning it up.

| Standard Operating Procedure for:                              |                                                                      |   |
|----------------------------------------------------------------|----------------------------------------------------------------------|---|
| B.13 Parts Cleaning (Municipal and Jefferson County Employees) |                                                                      |   |
| Purpose of SOP:                                                | To protect Storm Water by practicing proper parts cleaning technique | S |

and disposing of waste cleaners properly.

#### Always:

- 1) Perform all cleaning in a designated area to minimize the potential for spills.
- 2) Store waste cleaners in properly labeled containers in accordance with regulations.
- 3) Dispose of all waste cleaners properly with a licensed contractor, on a regular basis.
- 4) Close parts-cleaner lid when it is not in use.

#### Whenever Possible:

- 1) The variety of cleaners should be minimized to make recycling and disposal simpler.
- 2) Use citrus-based cleaners and dispose of properly.
- Use steam cleaning, pressure washing, or aqueous washers instead of solvents; however wastewater must be discharged to an oil/water separator and the wastewater treatment plant notified, or to a JCDH registered septic tank.

- 1) Never dispose of spent cleaners down the floor drains, sinks, storm drain, on the ground or into the air. Disposal by evaporation violates the Alabama Hazardous Waste Rules.
- 2) Never mix or add spent or fresh solvents to used oil.
- 3) Never use gasoline as a cleaner or solvent.
- 4) Never burn spent parts cleaning fluids in a used oil burner.
- 5) Never use a hand-held cleaner in/near the parts cleaner; never mix cleaners.

| Standard Operating Procedure for:                                                                                                                                                              |  |                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------|
| B.14 Spare Parts Storage                                                                                                                                                                       |  |                              |
| Purpose of SOP: To protect Storm Water by properly storing spare parts. Improper storage of materials can result in pollutants and toxic materials entering ground and surface water supplies. |  | of materials<br>er supplies. |

- 1) Store spare parts in a designated area.
- 2) Use drip pans for any parts that are dripping.

#### Whenever Possible:

- 1) Store spare parts inside or under cover.
- 2) Monitor storage areas for staining/leaks on a schedule decided on by the appropriate personnel.
- 3) Clean the majority of petroleum products from the parts that are to be stored.

| Related References           |
|------------------------------|
| -USEPA National Menu of BMPs |

| Standard Operating Procedure for:                                  |                                                                                              |  |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--|
| B.15 Alternative Products Use/Storage/Disposal (All Organizations) |                                                                                              |  |
| Purpose of SOP:                                                    | To protect Storm Water by using alternative products that are more environmentally friendly. |  |

1) Ask product suppliers, peers, or regulatory agents if there is a more environmentally friendly alternative, when ordering any product.

#### Whenever Possible:

- 2) Use alternative products when deemed appropriate:
  - Instead of solvent-based parts cleaners use citrus-based cleaners or steam/pressure wash to an oil/water separator/holding tank.
  - Instead of herbicides use bark mulch.
  - Instead of fertilizer use compost or manure.
  - Instead of pesticides plant marigolds, onion, or garlic as deterrents; release or attract beneficial insects.
  - Instead of synthetic adsorbents, use corncob or cellulose products for petroleum spills that can be burned for energy recovery.
- 3) Train employees annually on the benefits of using alternative products.
- 4) Minimize waste by purchasing recyclable products that have minimal packaging.
- 5) Use less harmful deicers such as calcium magnesium acetate, potassium acetate, or organic deicers such as Magic Salt™.
- 6) Use a "pre-mix" of 4 to 1 sodium chloride and calcium chloride, which is the most cost- effective alternative to straight salt.
- 7) Substitute synthetic fertilizers with natural compost and organic fertilizers to improve soil pH, texture and fertility, and cause less leaching to groundwater.
  - Use no-phosphorus lawn fertilizer.
  - Use natural or certified organic fertilizers with low phosphorus levels (8-2-4, 6-2-4, 9-1-1, 6-1-1).
- 8) Use slow-release nitrogen fertilizers.
- 9) Reduce or eliminate mown lawn in areas that are not actively used.
- 10) Consider converting unused turf to meadow or forest.

| Related References           |
|------------------------------|
| -USEPA National Menu of BMPs |

# B.16 Petroleum and Chemical Disposal (Municipal and Jefferson County Employees, Homeowners)

**Purpose of SOP:** To protect Storm Water from petroleum and chemical products due to improper disposal practices.

#### Always:

- 1) Maintain tracking and manifest to report to JCDH or Storm Water Management Authority, Inc, where necessary, of chemicals and petroleum products being disposed or recycled off-site.
- 2) Transports used petroleum and chemical products with a licensed transporter and maintain records for three years.
- 3) Train employees annually on proper disposal practices.
- 4) Drain used oil filters for 24-hours before crushing and disposal (disposal in regular trash allowed).
- 5) Analyze floor drain solids (from sediment trap) for TCLP to determine if hazardous waste or not.
- 6) Contaminated cloth wipe may be laundered onsite or offsite, liquid free, and stored in a closed, labeled container.

#### Whenever Possible:

- 1) Minimize the number of solvents used to reduce the variety of waste generated and to make recycling easier.
- 2) Use safer alternatives. (see Alternative Products SOP)
- 3) If burning used oil for on-site heat, analyze for these used oil standards (Arsenic, Lead, Cadmium, Chromium, F- listed Halogens, Flashpoint, PCBs) approximately once every 1,000 gallons.

- 1) Never place hazardous waste in solid waste dumpsters.
- 2) Never pour liquid waste down floor drains, sinks or outdoor storm drain inlets.
- 3) Never mix petroleum waste and chemical waste.
- 4) Never dispose of any gasoline-contaminated waste in the regular trash. Dispose of it only as a hazardous waste.

| Standard Operating Procedure for:               |  |
|-------------------------------------------------|--|
| B.17 Petroleum and Chemical Handling (Municipal |  |
| and Jefferson County Employees)                 |  |
|                                                 |  |

**Purpose of SOP:** To protect Storm Water by properly managing petroleum products and chemicals used by municipalities.

#### Always:

- 1) Train employees in hazardous material handling, safety, spill cleanup and reporting on an annual basis.
- 2) Handle petroleum products and chemicals according to manufacturer's specifications.
- 3) Conduct oil changes indoors for equipment that fits indoors.
- 4) Use proper protective equipment.
- 5) Maintain Material Safety Data Sheets (MSDS) for all chemicals used.
- 6) Make MSDS sheets available on materials that require special handling, storage and/or disposal.
- 7) Create a sign-off sheet for employees stating that they know the location of the MSDS(s) and provide to JCDH or Storm Water Management Authority, Inc.
- 8) Train new employees within six months of hire. A record of this should be kept and given annually to JCDH or Storm Water Management Authority, Inc

#### Whenever Possible:

- 1) Assess hazardous material needs to minimize the amount and variety of hazardous material in storage.
- 2) Keep an inventory of hazardous materials on hand.
- 3) Transfer materials from one container to another indoors in a well ventilated area.
- 4) Properly label containers.

#### Never:

- 1) Never treat or dispose of hazardous materials unless licensed to do so.
- 2) Never mix petroleum or chemicals unless directed by manufacturer's instructions.

**Related References** 

-USEPA National Menu of BMPs

### B.18 Petroleum and Chemical Storage – Bulk (Municipal and Jefferson County Employees)

**Purpose of SOP:** To protect Storm Water by properly storing bulk petroleum products and chemicals (containers larger than 55 gallons).

#### Always:

- 1) Store materials away from high traffic areas, posted with appropriate signage.
- 2) Store materials according to manufacturer's specifications in approved containers and conditions.
- 3) Be prepared for possible spills by having a spill kit nearby.
- 4) Register ASTs if your facility stores more than 660 gallons of petroleum products (10,000 gallons if used for on-site heating).
- 5) Develop and use a Spill Prevention Control and Countermeasure (SPCC) plan if storing more than 1,320 gallons of petroleum (required).
- 6) Store incompatible hazardous materials in separate areas.
- 7) Inspect storage areas for leaks or drips frequently.
- 8) Store bulk items within secondary containment areas if bulk items are stored outside.
- Conduct annual employee training to reinforce proper storage techniques for petroleum and chemical products. Keep record and present to JCDH or Storm Water Management Authority, Inc annually.

#### Whenever Possible:

- 1) Store bulk chemicals and petroleum products inside or under cover.
- 2) Provide secondary containment for interior storage.
- 3) Cover transfer areas.

#### Never:

1) Never store bulk chemicals or petroleum products near a storm drain.

| Standard Operating                                                                      | Procedure for:                                                                     |          |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------|
| B.19 Petroleum and Chemical Storage – Small Quantity (All organizations and Homeowners) |                                                                                    |          |
|                                                                                         |                                                                                    |          |
| Purpose of SOP:                                                                         | To protect Storm Water from pollution by properly storing petroleum products or cl | hemicals |

- 1) Store materials away from high traffic areas.
- 2) Store materials according to manufacturer's specifications (e.g. in a flammable materials storage cabinet).
- 3) Dispose of unused or waste materials properly.
- 4) Train employees on proper storage procedures for petroleum and chemical products.
- 5) Store materials in their original containers to maintain appropriate labeling.
- 6) Be prepared for spills by having a spill kit nearby.
- 7) Frequently inspect the storage areas for leaks or spills.

(containers 55 gallons and smaller).

8) Conduct annual employee training to reinforce proper storage techniques for petroleum and chemical products. A list should be provided to JCDH or Storm Water Management Authority, Inc at the end of the permit cycle.

#### Never:

1) Never store petroleum or chemical products near a floor drain or Storm Water inlet.

| Standard Operating Procedure for:<br>B.20 Garbage Storage (All Organizations and<br>Homeowners) |                                                                                                                                                                                |                       |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Purpose of SOP:                                                                                 | To protect Storm Water from contamination by properly storing garbage.<br>and leachate can be transported by Storm Water and enter the storm dra<br>and receiving waterbodies. | Garbage<br>ain system |

1) Cover rubbish bins to keep rubbish and leachate in and wind and rain out.

#### Whenever Possible:

- 1) Store garbage containers beneath a covered structure or inside to prevent contact with Storm Water. This is done on all food establishments as well by JCDH.
- 2) Install berms, curbing or vegetation strips around storage areas to control water entering/leaving storage areas.
- Locate dumpsters on a flat, concrete surface that does not slope or drain directly into the storm drain system.
- 4) Locate dumpsters and trash cans in convenient, easily observable areas.
- 5) Provide properly-labeled recycling bins to reduce the amount of garbage disposed.
- 6) Inspect garbage bins for leaks regularly, and have repairs made immediately by responsible party.
- 7) Keep bins free of improperly discarded trash.
- 8) Provide training to employees to prevent improper disposal of general trash.
- 9) Minimize waste by purchasing recyclable products that have minimal packaging.
- 10) Request/use dumpsters without drain holes.

- 1) Never place hazardous wastes in a dumpster or trash bin.
- 2) Never place gasoline-contaminated wastes in a rubbish bin (but small quantities of adsorbents from virgin oil spills are acceptable).
- 3) Never place oil-contaminated materials that release free draining oil into a rubbish bin.

| Related References |                              |
|--------------------|------------------------------|
|                    | -USEPA National Menu of BMPs |

| Standard Operating Procedure for:                         |                                                                    |  |
|-----------------------------------------------------------|--------------------------------------------------------------------|--|
| B.21 General Facility Housekeeping (All<br>Organizations) |                                                                    |  |
| Purpose of SOP:                                           | To protect Storm Water by maintaining a clean, organized facility. |  |

- 1) Keep open areas clean and orderly.
- 2) Pick up litter.
- 3) Conduct regular employee training and public education to reinforce proper housekeeping. Keep internal records to provide to Storm Water Management Authority, Inc or JCDH.
- 4) Remove unused scrap/junk materials.
- 5) Store hazardous materials as specified by the manufacturer.

#### Whenever Possible:

- 1) Store materials and wastes inside or under cover if outside.
- 2) Substitute less or non-toxic materials for toxic ones.
- 3) Perform a routine cleaning of the facility.
- 4) Inspect facility (interiors, exterior, parking areas, etc.) for stains.

#### **Related References**

-USEPA National Menu of BMPs

| Standard Operating Procedure for:                            |                                                                                                                                                  |                       |  |  |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--|--|
| B.22 Floor Drains (Municipal and Jefferson County Employees) |                                                                                                                                                  |                       |  |  |
| Purpose of SOP:                                              | To protect Storm Water from pollution caused by discharges of hazardous the subsurface, ground surface, waterway, or storm sewer through floor d | s materials to rains. |  |  |

- 1) Keep a spill kit in the vicinity of the floor drains.
- 2) Obtain and use drain mats, adsorbent booms or covers to keep larger spills out of drains.
- 3) Use floor drains that are (1) connected to a holding tank or (2) connected to the sanitary sewer via an oil/water separator.
- 4) Keep internal map of floor drains that have regulated contaminants stored or used near them.
- 5) Register septic tanks with JCDH.

#### Whenever Possible:

1) Minimize water use or run a dry shop.

- 1) Never dump hazardous materials down the floor drains.
- 2) Never use floor drains if you are unsure of their discharge location.
- 3) Never store regulated contaminants near a floor drain that discharges directly to the environment.

| Standard Operating Procedure for:                |                                                                                                    |       |  |  |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------|-------|--|--|
| B.23 Painting (All Organizations and Homeowners) |                                                                                                    |       |  |  |
| Purpose of SOP:                                  | To protect Storm Water by properly storing, using and disposing of p<br>and preparation materials. | paint |  |  |

- 1) Store waste paints, solvent, and rags in sealed containers.
- 2) Perform abrasive blasting and spray painting in accordance with regulations.
- 3) Properly clean, store, and dispose of paint and associated waste materials.
- 4) Train employees on Best management Practices concerning painting activities, cleanup, and disposal.

#### Whenever Possible:

- 1) Replace solvent-based paint with less toxic paints such as latex or water-based paints.
- 2) Practice "source reduction" buy only the paint that is needed.
- 3) Use up, donate or recycle unused paint.
- 4) Use drop cloths under any painting or preparation activity such as scraping or sandblasting.
- 5) Use techniques such as brushing and rolling to avoid overspray.
- 6) Use vacuum sanders to collect paint dust.
- 7) Perform abrasive blasting and spray painting in an enclosed or covered area that is safe for personnel.

#### Never:

1) Never dispose of paint or waste paint products into the storm drain system, a waterbody, or onto the ground.

| Standard Operating   |                                                                                                                                                                           |  |  |  |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| B.24 Street Sweeping |                                                                                                                                                                           |  |  |  |
| Purpose of SOP:      | rpose of SOP:         To remove sediment, debris and other pollutants from streets, parking areas, and paved surfaces through regular, properly timed sweeping schedules. |  |  |  |

- 1) Sweep all publicly accepted paved streets and parking lots at least once per year as soon as possible after snowmelt.
- 2) Dispose of street sweepings properly (reuse is unrestricted if visual evidence of litter, animal waste, and petroleum contamination is absent).
- 3) Keep data logs on the mileage of street sweeping conducted in each city to provide to Storm Water Management Authority, Inc or JCDH such as the form below.

#### Whenever Possible:

- 1) Start at the "top" of town and work down.
- 2) Sweep downtown areas more frequently (daily).
- 3) Perform additional sweeping on a seasonal schedule and document areas swept.
- 4) Sweep in locations that generate debris, such as construction entrances, sand/salt loading areas, vehicle fueling areas, and vehicle and equipment storage areas on an as needed basis.
- 5) Street sweep before a major rain event.
- 6) Use dry vacuum assisted street sweepers (the most effective).
- 7) Maintain street sweeping equipment for maximum effectiveness.
- 8) Cover storage areas or locate storage areas where runoff discharges to a buffer.
- 9) Clean catch basins after streets are swept.

- 1) Never store street sweepings in areas where Storm Water could transport fines to the storm drain system or a waterbody.
- 2) Never purposely sweep into the storm drain system.

| Standard Operating Procedure for:<br>B.25 Snow Disposal (Municipal and Jefferson<br>County Employees)                                                                                                            |  |                                   |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--|--|
| Purpose of SOP: To protect Storm Water by minimizing the impact of snow piles which contain sand, salt,<br>and trash and which generate concentrated releases of pollutants during spring snowmel<br>conditions. |  | iin sand, salt,<br>pring snowmelt |  |  |

- 1) Identify sensitive ecosystems prior to disposal and avoid snow disposal in these areas.
- 2) Store snow at least 25 feet from the high water mark of a surface water.
- 3) Store snow at least 75 feet from any private water supply, at least 200 feet from any community water supply, and at least 400 feet from any municipal wells.
- 4) Install a double row of silt fence or equivalent barrier securely between the snow storage area and the high water mark, and inspect periodically throughout the winter season.
- 5) Clear debris in storage area each year prior to snow storage use.
- 6) Clear all debris in snow storage area and properly dispose of no later than April 15 or immediately after snowmelt occurs of each year the storage area is in use.

#### Whenever Possible:

- 1) Select storage locations that do not drain into surface waters and where environmental impacts of spring melt are minimal.
- 2) Store snow on areas that are well above the groundwater table on a flat, vegetated slope.
- 3) Avoid disposal on pavement, concrete, and other impervious surfaces.
- 4) Do not pile snow in wooded areas, around trees or in vegetative buffers.
- 5) Divert run-on of water from areas outside the snow piles.
- 6) Use less harmful deicers such as calcium magnesium acetate, potassium acetate, or organic deicers such as Magic Salt™.

- 1) Never dispose of snow in wetlands, lakes, streams, rivers, or near drinking water sources.
- 2) Never store snow in well-head protection areas (class GAA groundwater).

| Standard Operating Procedure for:            |                                                                                                                                                                                                           |                                |  |  |  |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--|--|--|
| B.26 Deicing Material Storage (Municipal and |                                                                                                                                                                                                           |                                |  |  |  |
| Jefferson Cou                                | Jefferson County Employees)                                                                                                                                                                               |                                |  |  |  |
| Purpose of SOP:                              | To protect Storm Water by properly storing deicing materials. Sand, deicing materials used during winter can be transported by runoff into system and eventually into waterbodies if not stored properly. | salt and other the storm drain |  |  |  |

- 1) Locate sand/salt piles and deicing fluid tanks on flat, impervious sites that are easily protected from overland runoff and away from surface waters.
- 2) Cover sand/salt and salt piles with a tarp (polyethylene) during non-freezing spring and summer months when indoor storage facilities are not available.
- 3) Fill out form below on amounts and facility location

#### Whenever Possible:

- 1) Contain wash water from trucks used for salting and sanding in a holding tank for disposal or discharge into sanitary sewers.
- 2) Allow rinse water/melt water to drain into vegetated buffers (away from storm drains).
- 3) Locate deicing material stockpiles and tanks at least 100 feet from streams and flood plains.
- 4) Contain Storm Water runoff from areas where salt is stored by using buffers to diffuse runoff before entering waterbodies.
- 5) Use diversion berms to minimize run-on to storage areas.
- 6) Cleanup "truck tracks" after storm events.

#### Never:

1) Never dispose of wash water from sanding and salting trucks into the storm drain system, a waterbody, or septic system drain fields.

| Stormwater Municipality:<br>Mayor:         |                                     |                       |
|--------------------------------------------|-------------------------------------|-----------------------|
|                                            | Sand or Deicing Storage Loca        | ntion (Municipal use) |
| Storage Location Address:<br>Amount Stored |                                     | City:State:           |
| Are SOPs followed                          | Yes No (if no please explain below) | )                     |
|                                            |                                     |                       |
|                                            |                                     |                       |
|                                            |                                     |                       |
|                                            |                                     |                       |
|                                            |                                     |                       |
|                                            |                                     |                       |
|                                            |                                     |                       |

Mayor:

\*If more than 197 roadway projects then start at 1 on another form and continue forward until completed

| Roadway Projects Inventory |                     |                                                                  |               |  |  |
|----------------------------|---------------------|------------------------------------------------------------------|---------------|--|--|
| Location                   | Project Description | Was planned reviewed<br>by JCDH, STORM<br>WATER, or municipality | Permit Number |  |  |
| 1                          |                     |                                                                  |               |  |  |
| 2                          |                     |                                                                  |               |  |  |
| 3                          |                     |                                                                  |               |  |  |
| 4                          |                     |                                                                  |               |  |  |
| 5                          |                     |                                                                  |               |  |  |
| 6                          |                     |                                                                  |               |  |  |
| 7                          |                     |                                                                  |               |  |  |
| 8                          |                     |                                                                  |               |  |  |
| 9                          |                     |                                                                  |               |  |  |
| 10                         |                     |                                                                  |               |  |  |
| 11                         |                     |                                                                  |               |  |  |
| 12                         |                     |                                                                  |               |  |  |
| 12                         |                     |                                                                  |               |  |  |
| 15                         |                     |                                                                  |               |  |  |
| 14                         |                     |                                                                  |               |  |  |
| 15                         |                     |                                                                  |               |  |  |
| 16                         |                     |                                                                  |               |  |  |
| 17                         |                     |                                                                  |               |  |  |

\* Please staple all permits, inspections, and plan review dates to form for annual report

| Standard Operating Procedure for: |                                                                                                                                |  |  |  |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| B.27 Deicing Material Application |                                                                                                                                |  |  |  |
| Purpose of SOP:                   | Purpose of SOP:         To protect Storm Water by improving application techniques of salt, sand, and other deicing materials. |  |  |  |

1) Apply as little sand and salt as needed, and no more than the NHDOT recommended application rates (based on level of service):

| Condition           | Highways<br>carrying<br>greater than<br>5,000 | Highway/roads carrying<br>less than<br>5,000 vehicles daily |
|---------------------|-----------------------------------------------|-------------------------------------------------------------|
| Snow - 20°F and     | 250 lbs salt                                  | 250 lbs salt per lane mile                                  |
| Snow – below 20° F  | 250 lbs salt                                  | Abrasive chemical mix                                       |
| Sleet/freezing rain | 300 lbs salt                                  | 300 lbs salt per lane mile                                  |

#### Whenever Possible:

- 1) Inform salt applicators of sensitive areas, such as public water supplies, lakes, ponds, etc b installing permanent signs.
- 2) Use de-icing alternatives such as calcium magnesium acetate, sand, etc. in sensitive areas.
- 3) Use the minimum amount of salt and sand needed to get the job done.
- 4) Use coarse, clean "washed" sand, which is free of fine particles and dust and easier to clean in the spring.
- 5) Equip all spreaders with ground-speed controllers.
- 6) Train drivers to improve application techniques and reduce losses.
- 7) Consider applying salt in a 4-8 foot strip along centerline of a two-lane road (for less traveled roads).
- 8) Know when to plow and reapply salt. Allow maximum melting by salt before plowing.
- 9) Remove snow manually from driveways and sidewalks.
- 10) Street sweep accumulated salt and sand at the end of the season.

| Jefferson County Department of Health and Storm Water<br>Management Authority<br>1400 SIXTH AVENUE SOUTH. P.O. BOX 2648. BIRMINGHAM, ALABAMA 35202. (205)930-1230 |                                  |       |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------|--|--|--|
|                                                                                                                                                                   | Roadway Form (Municipal Use)     |       |  |  |  |
|                                                                                                                                                                   | FORM                             |       |  |  |  |
| Part 1: General Information                                                                                                                                       |                                  | Datas |  |  |  |
| Mawor:                                                                                                                                                            |                                  | Date: |  |  |  |
| Contact Person:                                                                                                                                                   |                                  |       |  |  |  |
| Part 2: Trash Collection                                                                                                                                          |                                  |       |  |  |  |
| Estimated Trash Collected in Permit                                                                                                                               |                                  |       |  |  |  |
| Year:                                                                                                                                                             | lbs                              |       |  |  |  |
| trash:                                                                                                                                                            | hrs                              |       |  |  |  |
| Disposal Method for Trash:                                                                                                                                        |                                  |       |  |  |  |
| (*What landfill was used for disposal, dump ticket                                                                                                                | s should be included if present) |       |  |  |  |
|                                                                                                                                                                   |                                  |       |  |  |  |
| Part 3: Street Sweeping                                                                                                                                           |                                  |       |  |  |  |
| Street Sweeping for Permit Year:                                                                                                                                  | miles                            |       |  |  |  |
| Street Refuse Reused:                                                                                                                                             | lbs                              |       |  |  |  |
| Street Refuse Disposal:                                                                                                                                           | lbs                              |       |  |  |  |
| refuse:                                                                                                                                                           | bre                              |       |  |  |  |
| Disposal Method:                                                                                                                                                  | 111.5                            |       |  |  |  |
| (*What landfill was used for disposal, dump ticket                                                                                                                | s should be included if present) |       |  |  |  |
|                                                                                                                                                                   |                                  |       |  |  |  |
|                                                                                                                                                                   |                                  |       |  |  |  |
| Part 4: Sand or Deicing Material                                                                                                                                  |                                  |       |  |  |  |
| Sand or Salt used for Permit Year:                                                                                                                                | yd <sup>3</sup>                  |       |  |  |  |
| Sand or Salt disposal for Permit Year                                                                                                                             | yd <sup>3</sup>                  |       |  |  |  |
| Estimated Employee Hours disposing<br>of material:                                                                                                                | hrs                              |       |  |  |  |
|                                                                                                                                                                   |                                  |       |  |  |  |

| and Storage Form should be filled out with location of sand storage<br>roadway functions are performed by an outside entity (lefferson County, State of Alabama, etc) then contract with outside entity sho<br>be stabled to this form when returned. | filled out with location of sand storage<br>erformed by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity should<br>be stabled to this form when returned. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| and Storage Form should be filled out with location of sand storage<br>roadway functions are performed by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity sh<br>be stabled to this form when returned.  | filled out with location of sand storage<br>erformed by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity shoul<br>be stabled to this form when returned.  |
| and Storage Form should be filled out with location of sand storage<br>roadway functions are performed by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity sho<br>be stabled to this form when returned. | filled out with location of sand storage<br>erformed by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity shou<br>be stabled to this form when returned.   |
| and Storage Form should be filled out with location of sand storage<br>roadway functions are performed by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity sho<br>be stabled to this form when returned. | erformed by an outside entity (Jefferson County, State of Alabama, etc) then contract with outside entity shou<br>be stabled to this form when returned.                                               |
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### **APPENDIX B**

Storm Water Collection Systems Operations

#### **Municipal-Owned Structural Controls**

- 1 Town Village Detention Pond, 2369 Dolly Ridge Road
- 2 Library in the Forest underground detention chamber, 1221 Montgomery Highway
- 3 SHAC Detention Ponds, 4851 Sicard Hollow Road
- 4 Liberty Park Sports Complex, 4750 Sicard Hollow Road

#### **Current Construction**

- 5 Wald Park, 1973 Merryvale Road (under construction)
- 6 Cahaba Heights Baseball Fields, 4403 Dolly Ridge Road (under construction)
- 7 New Civic Center, 1290 Montgomery Highway (under construction)

#### <u>GI/LID</u>

- 8 Meadowlawn Park, 4041 Dolly Ridge Road
- 9 McCallum Park, 3332 Rosemary Lane
- 10 Altadena Valley Pond, 2695 Acton Road (under construction)



## **Structural Controls Inspection**

| 1                                                 | General Information                                             |            |                                     |       |       |       |                             |
|---------------------------------------------------|-----------------------------------------------------------------|------------|-------------------------------------|-------|-------|-------|-----------------------------|
| Faci                                              | Facility Name: Facility's ID:                                   |            |                                     |       |       |       |                             |
| Faci                                              | lity                                                            | Addre      | ess:                                |       |       |       | Inspection Date:            |
|                                                   |                                                                 |            | Inspector's                         | nfor  | mati  | on    |                             |
| Nam                                               | ne:                                                             |            |                                     |       |       | 0     | Organization:               |
| Pho                                               | ne ‡                                                            | <b>#</b> : | Fax #:                              |       |       | E     | mail:                       |
| 1                                                 |                                                                 |            | Inspection Typ                      | be (C | ircle | one)  | l                           |
| Sem                                               | ni-Ar                                                           | nnual      | Storm Event Fo                      | llow- | up    |       | Assessment                  |
| 1                                                 |                                                                 |            | Structure Typ                       | e (Ci | rcle  | one)  |                             |
| Rete                                              | enti                                                            | on Por     | nd (wet) Detention Pond (dry) Under | grou  | nd D  | etent | tion Other:                 |
| <b>1</b> - 1                                      |                                                                 | r          | Observ                              | atio  | ns    | r     |                             |
| Y                                                 | Ν                                                               | N/A        | Floatables present?                 | Υ     | Ν     | N/A   | A Illegal dumping?          |
| Υ                                                 | Ν                                                               | N/A        | Litter present?                     | Y     | Ν     | N/A   | A Public hazards?           |
| Υ                                                 | Ν                                                               | N/A        | Sediment accumulation?              | Y     | Ν     | N/A   | A Outlet structure clogged? |
| Υ                                                 | Ν                                                               | N/A        | Debris accumulation?                | Y     | Ν     | N/A   | A Outlet structure damaged? |
| Υ                                                 | Ν                                                               | N/A        | Illegal discharges?                 | Y     | Ν     | N/A   | A Poor ground cover?        |
| Com                                               | nme                                                             | ents:      |                                     |       |       |       |                             |
|                                                   |                                                                 |            |                                     |       |       |       |                             |
| Υ                                                 | Ν                                                               | N/A        | Maintenance required?               |       |       |       |                             |
| <b>1</b> - 1                                      |                                                                 |            | Maintenance Required (Put a         | h che | ck b  | eside | work needed)                |
|                                                   | Remove floatables     Remove illegal dumping                    |            |                                     |       |       |       |                             |
|                                                   | Rer                                                             | nove l     | litter                              |       |       |       | Remove public hazards       |
|                                                   | Rer                                                             | nove s     | sediment                            |       |       |       | Unclog outlet structure     |
|                                                   | Rer                                                             | nove o     | debris                              |       |       |       | Repair outlet structure     |
| Remove illegal discharges     Repair ground cover |                                                                 |            |                                     |       |       |       |                             |
| Comments:                                         |                                                                 |            |                                     |       |       |       |                             |
|                                                   |                                                                 |            |                                     |       |       |       |                             |
|                                                   |                                                                 |            |                                     |       |       |       |                             |
|                                                   |                                                                 |            |                                     |       |       |       |                             |
| Signature:                                        |                                                                 |            |                                     |       |       |       |                             |
|                                                   |                                                                 |            |                                     |       |       |       |                             |
|                                                   | Please Remember to Document Totals Removed As Well as the Units |            |                                     |       |       |       |                             |
|                                                   | (Example:6.5 cubic feet of sediment removed)                    |            |                                     |       |       |       |                             |

| Structural Controls Maintenance Summary |         |     |                            |                   |                                |  |
|-----------------------------------------|---------|-----|----------------------------|-------------------|--------------------------------|--|
| General Information                     |         |     |                            |                   |                                |  |
| Facility Name:                          |         |     |                            | Facility ID:      | Facility ID:                   |  |
| Crew Leader:                            |         |     |                            | Organization:     | Organization:                  |  |
| Man hours:                              |         |     |                            | Maintenance date: | Maintenance date:              |  |
| Maintenance                             |         |     |                            |                   |                                |  |
|                                         | Actions |     |                            | Amount Removed    | Units (bags, cubic foot, etc.) |  |
| Y                                       | Ν       | N/A | Remove floatables?         |                   |                                |  |
| Υ                                       | Ν       | N/A | Remove litter?             |                   |                                |  |
| Υ                                       | Ν       | N/A | Remove sediment?           |                   |                                |  |
| Y                                       | Ν       | N/A | Remove debris?             |                   |                                |  |
| Y                                       | Ν       | N/A | Remove illegal discharges? |                   |                                |  |
| Υ                                       | Ν       | N/A | Remove illegal dumping?    |                   |                                |  |
| Y                                       | Ν       | N/A | Remove public hazards?     |                   |                                |  |
| Y                                       | Ν       | N/A | Unclog outlet structure?   |                   |                                |  |
| Y                                       | Ν       | N/A | Repair outlet structure    |                   |                                |  |
| Y                                       | Ν       | N/A | Repair ground cover?       |                   |                                |  |
| Comments:                               |         |     |                            |                   |                                |  |
|                                         |         |     |                            |                   |                                |  |
|                                         |         |     |                            |                   |                                |  |
|                                         |         |     |                            |                   |                                |  |
|                                         |         |     |                            |                   |                                |  |
| Signature:                              |         |     |                            |                   |                                |  |
|                                         |         |     |                            |                   |                                |  |
|                                         |         |     |                            |                   |                                |  |

## **Structural Control Inspection**

| Purpose of SOP:        | To inspect and maintain structural controls of MS4 |
|------------------------|----------------------------------------------------|
| ADEM Permit Reference: | Part II.B.1.a.ii.3                                 |
| Effective Date:        | March 2017                                         |

#### Personnel Qualifications

- 1. Knowledge of the types of structural components associated with storm water management facilities; and,
- 2. Initial training in the information and data to be collected during an inspection.

#### Procedural Steps

- 1. Obtain the necessary equipment and materials needed to perform the inspection. Equipment and materials shall include the following.
  - a. Updated inventory of structural controls
  - b. Structural Controls Quarterly Inspection Form or mobile app; and
  - c. Camera
- 2. Facility Information
  - a. Verify name, facility ID, location and watershed of structural controls
  - b. Select inspection type
  - c. Select weather conditions
  - d. Select land use
  - e. Identify structure type
  - f. Identify outlet type
  - g. Confirm that it is a structural control
- 3. Inspection observations
  - a. Walk the perimeter of the structural control and inspect for the items listed;
  - b. Provide comments as necessary to describe observations; and,
  - c. Take pictures to document existing conditions of the structural control.
- 4. Follow-up actions
  - a. Identify if follow-up actions or maintenance activities are required at the structural control;
  - b. Check the items that require follow-up actions; and,
  - c. Provide comments as necessary to describe the follow-up actions and/or maintenance required.
- 5. Inspector information
  - a. Complete all items; and,
  - b. Identify if photographs were taken as part of the inspection and attached to the report.
- 6. Finalize Structural Controls Inspection Form and include applicable photographs
- 7. Submit the inspection report on the mobile app to the GIS department. The GIS department will provide reports from this data.
Protection of Water Resources

City of Vestavia Hills, AL



Little Shades Creek

H A N S E N LANDSCAPE ARCHITECTURE

September 2019

Protection of Water Resources

City of Vestavia Hills, AL

#### Table of Contents

#### Site Locations

- 1. Mc Callum Park
- 2. Meadowlawn Park
- 3. Liberty Park Sports Complex
- 4. Sicard Holly Athletic Fields
- 5. Acton Road Property (former golf course)

Eradication Methods for invasive plants. (Extension Service Sheets)

- 1. Chinese Privet
- 2. Mimosa and Tallow Tree
- 3. Kudzu
- 4. Pond Maintenance

#### **Report Summary**

This report is for the purpose to identify invasive plants within the study area. The plant species identified are non-native and usually will dominate and crowd out native species that are beneficial to the natural environment. Eradication methods and schedule will be part of this report.

A follow up on site meeting will be held with city personnel to help them with the plant identification. As part of this meeting the eradications methods will be discussed and hands on work instruction. A spring and fall meeting will be held to look at the plants during each growing season and the best time of year to apply the eradication methods.

The following sites have been selected by the city for this report. Each of the sites have a flowing creek or pond that are both wet and dry. Eradication techniques will be addressed for these types of environments.

As part of the city's effort to eliminate invasive plants from these areas it would be recommended that a staff member of the city be certified to use the different chemicals identified by this report. It is imperative that the chemicals be handled and used as recommended by the manufacturer, state and federal laws.

City of Vestavia Hills, AL

#### **McCallum Park**

Rosemary Lane Little Shades Creek (flood plain, creek)



The park is located in the flood plain of Little Shades Creek. The main invasize species are Chinese Privet and Kudzu. The privet thrives as an understory to the larger native trees. The kudzu thrives in the locations that are typically in full sun, but are pushing into the native trees. It will be important to begin eradication on these edges to prevent the spread of the kudzu into the surrounding trees.

| Eradication Method                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------|
| Privet-Selective cutting and immediate application of Glyphosate or Ultra to exposed stem. Spot spray small plants w/ glyphosate. |
| Treatment Time: Fall                                                                                                              |
| Mimosa- Selective cutting and immediate application of Garlon to exposed stem.                                                    |
| Treatment Time: Early Spring                                                                                                      |
| Kudzu- Mowing AND Foliage Spray                                                                                                   |
| Treatment Time: Late Spring AND Early Fall, 2-3 years                                                                             |

City of Vestavia Hills, AL

#### **Meadowlawn Park**

Cahaba Heights (creek)

The park is bisected by the beginning of Little Shades Creek. It also serves as a source for storm water drainage the surrounding commercial and residential developments. The main invasive plants are kudzu and the mimosa tree. Both of these plants thrive in open sunny areas.







City of Vestavia Hills, AL

#### **Eradication Method**

Privet-Selective cutting and immediate application of Glyphosate or Ultra to exposed stem. Spot spray small plants w/ glyphosate.

Treatment Time: Fall

Mimosa- Selective cutting and immediate application of Garlon to exposed stem.

Treatment Time: Early Spring

Kudzu- Mowing AND Foliage Spray

Treatment Time: Late Spring AND Early Fall, 2-3 years

City of Vestavia Hills, AL

#### Liberty Park Sports Complex

Sicard Hollow Road (dry retention)

The retention pond requires an annual or bi-annual maintenance program that involves cutting the vegetation and selective removal of the invasive species, primarily the mimosa trees and privet.



#### **Eradication Method**

Privet-Selective cutting and immediate application of Glyphosate or Ultra to exposed stem. Spot spray small plants w/ glyphosate.

Treatment Time: Fall

Mimosa- Selective cutting and immediate application of Garlon to exposed stem.



City of Vestavia Hills, AL

#### **Sicard Hollow Athletic Complex**

#### Sicard Hollow Road

The two detention ponds appear to be in good shape and serve their functions. There is the normal maintenance such as removing the silt that occurs in a detention area. The cat tails are a good plant that will help filter the storm water. A good balance of cattails and open water should be maintained.



#### **Eradication Methods**

Low water- drain basin for several months. Mow plants low, apply Glyphosate after cutting.



City of Vestavia Hills, AL

#### Acton Road Property

Former Golf Course (creek)

The property is a former golf course located in the flood plain of the Cahaba River. Currently the site is used for passive recreation. The fairways and paths provide an excellent open space for the residents. There are a number of sites along the river that could be developed as launches for canoes and other portable boats.

Long term maintenance of the site needs to be carefully considered due to the large tract of land. Keeping the open area mowed 2- 3 times per year would incur a sizeable budget each year. Field succession would be allowing the land to slowly return back to the natural environment of a flood plain woodland. This process could be helped by the planting of natural occurring hardwood trees. The primary non-native plant is the grasses such as Bermuda. In time this would be eliminated by the shade from the trees.







Open Fields -Return to woodlands

Remove ornamental grasses



## **Control Options for Chinese Privet**

► The following recommendations for widely available privet control options can be used across a range of land management scenarios. This is not, however, exhaustive as certain herbicides used in forestry and rights-of-way are not covered.

Chinese privet (*Ligustrum sinense*) and other invasive privets in the genus *Ligustrum* are a serious problem for many homeowners, farmers, foresters, and land managers in Alabama.

Privet control often seems insurmountable because of its aggressive growth, prolific root and stump sprouting, copious seed production, and widespread seed dispersal by birds and other animals. However, with the correct approach and diligent follow-up treatments, privet can be effectively controlled.

## Hand Pulling

Hand pulling is an option that can be used only to remove privet seedlings and small saplings. It can be done any time of year but is easiest when soils are moist. Grasp privet stems by the base and pull upward, removing as much of the root system as possible. If the plant does not come up easily, it is likely a sprout from a lateral root and hand pulling will not be effective.

#### Weed Wrenching

Weed wrenches are effective for removing privet saplings up to 2 inches in diameter. Weed wrenches are steel, handheld tools that grasp woody stems at the base and use leverage to lift the plant out of the ground (Figure 2). They work best for single-stemmed plants but can also be used for some multistemmed clumps. Because privet has a shallow fibrous root system, pulling may severely disturb the soil and is not recommended along stream banks or steeply sloped areas where erosion may be of concern.

## **Hand Cutting**

Cutting, when used alone, does not provide satisfactory control because of rapid stump sprouting. However, it can be integrated with cut stump or foliar herbicide treatments described below.



**Figure 1.** Chinese privet is a woody shrub with opposite leaves that remain green throughout the winter and dark blue fruit that ripens in the fall. (Photo by Karan A. Rawlins, University of Georgia, Bugwood.org)

## **Brush Mulching**

Brush mulchers (Figure 3) are typically mounted on skid steers and grind or mulch entire shrubs and small trees. They quickly remove dense stands of privet, providing immediate access to an area. Most brush mulchers can mulch all sizes of privet and often leave a thick mulch layer. They do not remove the root system and sprouting will inevitably occur (Figure 4). Brush mulching cannot be effectively integrated with cut stump treatment because stumps will be buried under the mulch layer. However, brush mulching often results in very uniform privet regrowth that can easily be sprayed. Brush mulching can be used anytime but may spread privet seed if used in the fall.

#### **Herbicide Treatment**

Privet can be effectively controlled with foliar, cut stump, and basal bark herbicide treatments. Always read and follow the herbicide label, paying attention to site and rate restrictions and safety recommendations for applicators.



Figure 2. The weed wrench uses leverage to easily lift privet saplings out of the ground.



Figure 3. Skid steer mulchers can quickly grind dense stands of privet to the ground.

## **Foliar Herbicide Treatment**

For many situations, herbicides with the active ingredient glyphosate are the most effective option. However, not all glyphosate products are created equal. They can vary in concentration and may or may not include a surfactant, which improves absorption into the leaves. Use a concentrate type product with at least 41 percent glyphosate. Do not use glyphosate formulations that are called "Ready to Use" because they generally do not contain enough glyphosate to be effective. Mix the herbicide with water, preparing a 3 to 5 percent solution (4 to 6 fluid ounces of herbicide product per gallon). If the label recommends additional surfactant, add a nonionic surfactant at 0.5 percent (0.6 fluid ounces per gallon).

Privet foliar herbicide treatments can be applied with several types of sprayers, but single nozzle backpack sprayers are used in many situations (Figure 5). Spray the foliage to wet, but not to the point of runoff. Good spray coverage over the entire plant is very important as privet shrubs sprayed only on the sides will not be completely killed. If the privet is taller than 6 to 8 feet, consider using other methods such as brush mulching, basal bark, or cut stump treatment. The optimal timing for glyphosate treatment is late fall to early winter (November through early January) when day temperatures are mild. However, do not treat during extended cold weather when temperatures are at or below freezing. This late fall timing is very advantageous as most other vegetation is dormant and will not be harmed by glyphosate. Glyphosate treatments applied in the spring and summer may not provide effective control and the risk of damage to surrounding vegetation is much greater.

When applying glyphosate, volatility and soil activity are not a concern. Drift, however, can be a serious problem, especially on windy days. Be very careful where spray drift can damage or kill nearby desirable vegetation. Additionally, when spraying along streams, ponds, and lakes, use a glyphosate product and nonionic surfactant labeled for use in aquatic environments. Glyphosate products not labeled for use in or near water often contain a surfactant that is very harmful to many aquatic organisms.

## **Cut Stump Herbicide Treatment**

This method entails cutting followed by application of an herbicide to the surface of the stump. For best results, cut privet stems close to the ground and remove any sawdust from the stump. Then, within a few minutes at most, spray or paint the entire cut surface with the





Figure 4. Following mulching or other mechanical treatments, privet rapidly sprouts from stumps and lateral roots. This creates a good setup for a late fall foliar treatment with the herbicide glyphosate.

herbicide solution (Figure 6). Spray to wet, but do not puddle the herbicide around the stump. Use an herbicide concentrate product with either 41 percent or higher active ingredient glyphosate or 44 percent active ingredient triclopyr amine. Mix the herbicide with water, preparing a 25 percent solution (32 fluid ounces of herbicide product per gallon).

There are herbicide concentrate products available with lower concentrations of glyphosate (20 percent) or triclopyr amine (8 percent). These are applied to stumps at full strength. However, avoid formulations with lower concentrations as they do not contain enough glyphosate or triclopyr amine to be effective.

If the herbicide treatment must be delayed following cutting, a different approach must be used. Within a few weeks of cutting, use a triclopyr ester herbicide product mixed with oil instead of water. Mix the herbicide with an oil carrier such as diesel or bark oil, preparing a 20 percent solution (26 fluid ounces of herbicide product per gallon). There is also a triclopyr ester ready-to-use product with no mixing required. Spray the entire surface and sides of the stump.

Both water- and oil-based cut stump treatments work on any size privet, but it is critical to treat every cut stem. Untreated cut stems will sprout. Cut stump treatments can be done almost any time of year but late fall is the



Figure 6. Spray to wet the entire surface of the stump. A spray indicator helps keep track of what has been treated.

easiest from an operational standpoint. The only time cut stump treatments should not be done is in the early spring when privet shrubs are experiencing strong upward sap flow. This is evident when stumps appear to "bleed" water following cutting.



Figure 7. Chinese privet is very thin barked and even large diameter shrubs can be controlled with the basal bark treatment method.

## **Basal Bark Herbicide Treatment**

This method entails spraying the entire circumference of the bottom 12 to 15 inches of each stem with an oil soluble herbicide (Figure 7). Use a triclopyr ester herbicide product. Mix the herbicide with an oil carrier such as diesel or bark oil, preparing a 20 percent solution (26 fluid ounces of herbicide product per gallon). There is also a triclopyr ester ready-to-use product with no mixing required. Spray to wet, getting complete coverage of each woody stem, but do not puddle the herbicide on the soil. Fall is generally the best time for this treatment but it may be used any time of the year. This treatment may take a few months to kill privet but it is very effective. Triclopyr ester does have some soil activity, and damage to nontarget species can occur when numerous privet stems are treated in a small area.

## **Realities of Privet Control**

No single treatment will eradicate privet. There will almost always be a flush of new seedlings in the year following intensive control, especially along woodland edges. Some sprouting from lateral roots and stumps missed during initial treatment will also be inevitable. These seedlings and sprouts can be easily controlled with foliar glyphosate treatment, which is best done in the late fall. While privet seeds in the soil seed bank only survive for about one year, birds and flooding can reintroduce seed into the area. Follow-up monitoring and spot treatment of newly established plants should be done to prevent reinfestation.

Following privet control, many factors influence which species naturally recolonize the site. In addition to sunlight and moisture availability, these factors include surrounding vegetation and prior land use. To direct this process of recolonization and site restoration, land managers may choose to actively plant desired species. If replanting, continued monitoring and spot treatment of new privet is critical as there are no known plant communities in the southeastern United States that will completely resist privet invasion.



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ANR-2232

# **Management Options for Chinese Tallowtree**



Chinese tallowtree, *Triadica sebifera* (L.) Small, is one of the most invasive trees in the southeastern United States. It is a classic example of a plant introduced into the United States with good intentions but with very bad outcomes.

Benjamin Franklin is often cited as having introduced the tallowtree into the United States in 1772, but the species has been repeatedly promoted over the past 100 years for numerous purposes, including in the soap industry, as an ornamental shade tree, for honey production, and, most recently, for bioenergy. Chinese tallowtree is an ecosystem transformer with tremendous negative impacts in wetlands, pastures, prairies, and forests. In almost all of these areas, tallowtree invasion frequently results in a closed canopy tallowtree forest with few other species present.

Multiple factors can make tallowtree management difficult. It produces large numbers of fruits, which are spread by water and are consumed and spread by many species of birds. Bottomlands subject to periodic flooding may be repeatedly reinfested from upstream seed sources. Tallowtree is also an aggressive sprouter and rapidly regenerates from both stumps and lateral roots, so mechanical control methods frequently exacerbate the problem.

# Multiple factors can make tallowtree management difficult.

This publication provides recommendations for several control techniques that can be used for tallowtree across a range of environments. Some discussion of techniques that do not work is also provided. Not all techniques can be used in all situations, and tallowtree frequently grows along water in places that are difficult to access.

#### **Physical Removal**

Seedlings may be pulled when they are very small, but hand pulling is not generally an effective option for controlling established tallowtree. Tallowtree rapidly establishes a deep taproot, making saplings difficult to



remove, especially in heavier textured soils. The use of a weed wrench may help remove small saplings. However, stems that originate from lateral roots will break off just below the soil surface and new sprouts will form near the break point. The use of bulldozers and excavators may be effective in removing entire trees and stumps. However, many lateral roots will be missed during removal, and sprouting can rapidly occur from these pieces. Many land managers have reported rapid increases in the density of tallowtree stands following removal with heavy equipment.

#### Mowing, Cutting, and Brush Mulching

In pastures, annual mowing has been used to suppress Chinese tallowtree, but it can make the problem worse. Because tallowtree rapidly sprouts from the stump and from lateral roots, stem densities may increase over time with repeated mowing. Brush mulchers or shredders are effective in opening dense tallow stands and can be a good first step in tallowtree management. However, follow-up herbicide treatments are necessary for effective control. If cutting tallowtree with a chainsaw, immediately apply a recommended herbicide to the freshly cut stump to prevent sprouting (see following section on chemical control).

#### **Prescribed Fire**

Prescribed fire typically is not effective for Chinese tallowtree control. Chinese tallowtree leaf litter is rapidly degraded by decomposers, resulting in very little fine fuel accumulation to carry a fire. In prairies and grasslands, a summer fire applied when tallowtree is in flower may provide some suppression if the fire can completely girdle the stems. However, tallowtree will generally sprout following fire and follow-up herbicide treatment will be needed.

#### **Biological Control**

Grazing is usually not an option for Chinese tallowtree control. Although cattle will readily graze some other invasive plants such as kudzu and Chinese privet, they do not graze Chinese tallowtree at all. Goats will graze Chinese tallowtree, but they do not prefer it. Effective management would require numerous repeated grazing events by goats. Research evaluating potential insects for classical biocontrol of Chinese tallowtree is under way in Florida. However, there are currently no classical biological control agents that can be used for Chinese tallowtree control in the United States.



#### **Chemical Control**

Several herbicides may be used for effective Chinese tallowtree control. As with any treatment method, it is important to remember that there are no silver bullets and most herbicides will require multiple applications for complete kill. It is also important to remember that Chinese tallowtree frequently grows near water or where there is a shallow water table. This may preclude or limit the use of certain herbicides. Additionally, several herbicides listed may cause injury or death to surrounding vegetation. Always read and follow the herbicide label for specific information concerning applications near water and nontarget injury. Table 1 lists herbicides that have been shown to be effective for various application methods including broadcast, foliar individual plant treatment (IPT), basal bark, cut stump, and hack and squirt.



(Photo credit: Doug Streett, USDA Forest Service, Pineville, Louisiana)

#### Table 1. Herbicide Treatments Recommended for Chinese Tallowtree Control<sup>a</sup>

| Herbicide                            | Example<br>Trade Name(s) | Application Method                                      | Rate                                  | Site                                         |
|--------------------------------------|--------------------------|---------------------------------------------------------|---------------------------------------|----------------------------------------------|
| Aminopyralid                         | Milestone                | Cut stump                                               | 10%                                   | Noncrop, natural areas                       |
| Aminocyclopyrachlor +<br>metsulfuron | Streamline               | Broadcast IPT foliar <sup>b</sup>                       | 11.5 oz./A.<br>11.5 oz./100 gal.      | Noncrop, natural areas                       |
| lmazamox                             | Clearcast                | Broadcast<br>IPT foliar<br>Cut stump<br>Hack and squirt | 64 oz./A.<br>2%<br>50%<br>50%         | Noncrop, aquatic, natural areas              |
| lmazapyr                             | Arsenal, Habitat         | Broadcast<br>IPT Foliar<br>Cut stump<br>Hack and squirt | 2 to 4 pt./A.<br>2%<br>6 to 9%<br>50% | Noncrop, aquatic, forestry,<br>natural areas |
| Picloram + fluroxypyr                | Surmount                 | Broadcast                                               | 3 to 6 pt./A.                         | Grass pastures                               |
| Picloram + 2,4-D                     | Grazon P+D               | Broadcast<br>IPT foliar                                 | 4 qt./A.<br>1%                        | Grass pastures                               |
| Triclopyr amine                      | Garlon 3A, Renovate      | IPT foliar                                              | 2%                                    | Noncrop, aquatic, natural areas,<br>forestry |
| Triclopyr ester                      | Garlon 4, Pathfinder II  | Basal bark<br>Cut stump                                 | 20 to 30%<br>25%                      | Noncrop, forestry, natural areas             |

<sup>a</sup> The addition of a nonionic surfactant at 0.25% v/v for almost all foliar herbicide treatments or methylated seed oil at 1% v/v for imazamox is highly recommended.

<sup>b</sup> IPT = individual plant treatment. This term is used to distinguish herbicide rate recommendations on a percentage basis rather than on a per acre basis.

Additional notes on chemical control: Foliar broadcast and individual plant treatments are most effective when applied from late summer to early fall. Do not apply foliar treatments after leaves begin changing color in the fall. Cut-stump treatments are easiest and most effective when applied in the late fall and can be used on any diameter stump. For water-based cut-stump treatments, such as aminopyralid, imazamox, or triclopyr amine, always apply the herbicide immediately after cutting. Basal bark and hack and squirt treatments are also most effective when applied in the fall. Basal bark treatments are effective on trees less than 6 inches in diameter at the base. Hack and squirt treatments are effective on any size trees. For all application methods, avoid treatment in the spring when sap flow is upward and new leaves are forming.



#### ANR-2232

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#### **New Jan 2015**, ANR-2232

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## **APPENDIX C**

Illicit Discharge Detection and Elimination (IDDE)



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## DRY SCREENING FIELD DATA SHEET

| FIELD SITE DESCRIPTION                                                 |  |  |  |  |
|------------------------------------------------------------------------|--|--|--|--|
| MUNICIPALITY: LOCATION:                                                |  |  |  |  |
| PRIMARY LOCAL LAND USES: OUTFALL DESCRIPTION:                          |  |  |  |  |
| COMMENTS:                                                              |  |  |  |  |
| WEATHER (CIRCLE APPLICABLE)                                            |  |  |  |  |
| WEATHER CONDITIONS: CLEAR CLOUDY WINDY CALM RAINY DRY                  |  |  |  |  |
| COMMENTS:                                                              |  |  |  |  |
| RAIN INFORMATION                                                       |  |  |  |  |
| TIME SINCE LAST RAINFALL (HOURS):                                      |  |  |  |  |
| COMMENTS:                                                              |  |  |  |  |
| VISUAL OBSERVATIONS (CIRCLE APPLICABLE)                                |  |  |  |  |
| ODOR PRESENT: NONE MUSTY SEWAGE ROTTEN EGGS SOUR MILK OTHER            |  |  |  |  |
| TYPE OF FLOATABLES: NONE VISIBLE NATURAL DEBRIS PLASTICS PAPER OTHER   |  |  |  |  |
| COLOR: CLEAR RED GREEN YELLOW BLUE BROWN GREY OTHER                    |  |  |  |  |
|                                                                        |  |  |  |  |
| DEPOSITS: SILT VEGETATION OTHER                                        |  |  |  |  |
| VEGETATION CONDITION: NONE NORMAL EXCESSIVE GROWTH INHIBITED GROWTH    |  |  |  |  |
| BIOLOGICAL: NORMAL MOSQUITO LARVAE BACTERIA ALGAE OTHER                |  |  |  |  |
|                                                                        |  |  |  |  |
| OUTFALL DESCRIPTION                                                    |  |  |  |  |
| RIVER SIDE: DOWNSTREAM LEFT DOWNSTREAM RIGHT IN THE CREEK              |  |  |  |  |
| DIMENSIONS IE PIPE: VERTICAL DIAMETER HORIZONTAL DIAMETER LINITS       |  |  |  |  |
|                                                                        |  |  |  |  |
| CONDITION: NORMAL NEEDS REPAIR NEEDS CLEANOUT                          |  |  |  |  |
| NUMBER OF OUTFALLS:                                                    |  |  |  |  |
| MATERIAL: FARTHEN CONCRETE CORRUGATED METAL HDPE OTHER                 |  |  |  |  |
| SHAPE: BOX CIRCULAR ELIPTICAL ARCH TRAPAZOIDAL                         |  |  |  |  |
|                                                                        |  |  |  |  |
| FLOW PRESENT: YES NO                                                   |  |  |  |  |
| A) WATER SURFACE WIDTH: FFFT B) DEPTH OF WATER: FFFT                   |  |  |  |  |
| C) VELOCITY: ET/SEC ESTIMATED FLOW RATE (=A*B*C): ET <sup>3</sup> /SEC |  |  |  |  |
|                                                                        |  |  |  |  |
| PH (SU) WATER TEMPERATURE (C°)                                         |  |  |  |  |
| DISSOLVED OXYGEN (MG/L) SPECIFIC CONDUCTANCE (US/CM)                   |  |  |  |  |
|                                                                        |  |  |  |  |
|                                                                        |  |  |  |  |
|                                                                        |  |  |  |  |
|                                                                        |  |  |  |  |
|                                                                        |  |  |  |  |
| INSPECTOR #1                                                           |  |  |  |  |
| (PRINT)                                                                |  |  |  |  |
| INSPECTOR #1 INSPECTOR #2                                              |  |  |  |  |
| (SIGNATURE) (SIGNATURE)                                                |  |  |  |  |
|                                                                        |  |  |  |  |
| DATE: DATE:                                                            |  |  |  |  |

Standard Operating Procedure for:

# IDDE: Notification of Alabama Department of Environmental Management

| Purpose of SOP: | To notify Alabama Department of Environmental Management (ADEM) of a suspect illicit |  |
|-----------------|--------------------------------------------------------------------------------------|--|
|                 | discharge entering the Permittee's MS4 from an adjacent MS4                          |  |
|                 |                                                                                      |  |

#### Always:

1) If source of illicit discharge is not the permittee but an adjacent MS4 contact the following parties:

- 1) The adjacent MS4 permit
- 2) ADEM

Whenever Possible:

1) Turn over any water quality analysis data and notes.

## **APPENDIX D**

Construction Site Storm Water Runoff Control

| Ref                   | erer                                                            | nce #:_    | Inspector's Name                                                                                                                                                                   |  |  |
|-----------------------|-----------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Site                  | e Lo                                                            | cation     | : Facility Type:                                                                                                                                                                   |  |  |
|                       | Owner/Operator Information                                      |            |                                                                                                                                                                                    |  |  |
| Na                    | Name: Phone #:                                                  |            |                                                                                                                                                                                    |  |  |
| Ac                    | Address:                                                        |            |                                                                                                                                                                                    |  |  |
| En                    | nail                                                            | Addre      | SS:                                                                                                                                                                                |  |  |
|                       | Stage of Construction (Circle one)                              |            |                                                                                                                                                                                    |  |  |
| Pr                    | Pre-Construction Conference Clearing and Grubbing Rough Grading |            |                                                                                                                                                                                    |  |  |
| Bu                    | ildin                                                           | ig Cons    | struction Finish Grading Final Stabilization                                                                                                                                       |  |  |
|                       |                                                                 |            | Erosion Prevention                                                                                                                                                                 |  |  |
| Y                     | Ν                                                               | N/A        | Have all disturbed areas requiring temporary or permanent stabilization been adequately stabilized by an appropriate BMP (erosion control blankets, aggregate, seed, mulch, etc.)? |  |  |
| Y                     | Ν                                                               | N/A        | Are soil stock piles adequately stabilized with seeding and/or proper sediment control measures?                                                                                   |  |  |
| Y                     | Ν                                                               | N/A        | Are utility trenches properly stabilized?                                                                                                                                          |  |  |
| Y                     | Ν                                                               | N/A        | Are perimeter sediment control measures correctly installed, maintained and effective (silt fence, etc.)?                                                                          |  |  |
| Y                     | Ν                                                               | N/A        | Are finished cut and fill slopes adequately stabilized?                                                                                                                            |  |  |
| Y                     | Ν                                                               | N/A        | Are storm water conveyance channels adequately stabilized with channel lining?                                                                                                     |  |  |
|                       |                                                                 |            | Sediment Control                                                                                                                                                                   |  |  |
| Y                     | Ν                                                               | N/A        | Have sediment control BMP's been constructed as a first step in land disturbing activities (basins, etc.)?                                                                         |  |  |
| Y                     | Ν                                                               | N/A        | Are sediment control BMP's installed where needed?                                                                                                                                 |  |  |
| Y                     | Ν                                                               | N/A        | Have all sediment control BMP's been repaired and sediment removal been performed?                                                                                                 |  |  |
| Y                     | Ν                                                               | N/A        | Do all operational storm sewer inlets have adequate inlet protection?                                                                                                              |  |  |
|                       |                                                                 | <b>.</b> . | In-stream Construction                                                                                                                                                             |  |  |
| Y                     | Ν                                                               | N/A        | Is the in-stream construction permitted? (Check to see if U.S.A.C.E permit is needed)                                                                                              |  |  |
| Y                     | Ν                                                               | N/A        | Are current construction practices minimizing channel damage?                                                                                                                      |  |  |
| Y                     | Ν                                                               | N/A        | Are temporary stream crossings of non-erodible material installed where applicable?                                                                                                |  |  |
| Y                     | Ν                                                               | N/A        | Is necessary re-stabilization of in-stream construction complete?                                                                                                                  |  |  |
|                       |                                                                 |            | General Groundskeeping                                                                                                                                                             |  |  |
| Y                     | Ν                                                               | N/A        | Are soil and mud kept off public roadways at intersections with access roads (entrance BMPs)?                                                                                      |  |  |
| Y                     | Ν                                                               | N/A        | Have all temporary BMPs that are no longer needed been removed?                                                                                                                    |  |  |
| Y                     | Ν                                                               | N/A        | Are trash containment units available?                                                                                                                                             |  |  |
| Y                     | Ν                                                               | N/A        | Is the site clean and orderly?                                                                                                                                                     |  |  |
| Y                     | Ν                                                               | N/A        | Is there a concrete/contaminate washout basin in the vicinity?                                                                                                                     |  |  |
|                       |                                                                 |            | Violations                                                                                                                                                                         |  |  |
| Vi                    | olat                                                            | ion De     | escription:                                                                                                                                                                        |  |  |
|                       |                                                                 |            |                                                                                                                                                                                    |  |  |
| Enforcement Response: |                                                                 |            |                                                                                                                                                                                    |  |  |
| Compliance Timeline:  |                                                                 |            |                                                                                                                                                                                    |  |  |
|                       |                                                                 |            |                                                                                                                                                                                    |  |  |
| Inspector's           |                                                                 |            |                                                                                                                                                                                    |  |  |
| Si                    | gnat                                                            | ure:       | Date:                                                                                                                                                                              |  |  |

Please attach any photographic documentation, additional enforcement documentation, or referrals to other Departments or Agencies

## **APPENDIX E**

Post-Construction Stormwater Management in New Development and Qualifying Re-Development

#### Privately-Owned Post Construction BMPs

#### FY 2019-2020 reporting period

1 Anytime Fitness, 11971 Liberty Parkway (July 2019)

Bioswale

2 On Tap Sports Grill, 11967 Liberty Parkway (August 2019)

Bioswale

#### FY 2020-2021 reporting period

3 Swaid Medical Office Plaza, 1021 Old Montgomery Hwy (November 2019)

Pervious asphalt parking area

4 Baumhower's Victory Grill, 1270 Montgomery Hwy (December 2019)

Stormwater inlet filters

5 Publix Liberty Park, 10021 Liberty Parkway / 3215 Endeavor Lane (March 2020)

Stormwater filters

6 Hancock Office Building, 2828 Old 280 Court (July 2020)

**Detention Pond** 

#### FY 2021-2022 reporting period

7 Cottages on Green Valley, 1517 Cottage Grove (July 2021)

Detention pond; LID parking

8 Gentry Pharmacy, 3100 Blue Lake Drive (September 2021)

Pervious asphalt parking area

#### FY 2022-2023 reporting period

9 Liberty Park Chevron, 11981 Liberty Parkway

Detention pond; spill detection device


## APPENDIX F

Spill Prevention and Response

| Standard Operating                             | Procedure for:                                                                      |              |
|------------------------------------------------|-------------------------------------------------------------------------------------|--------------|
| Spill Prevention and Response: Spills, Illicit |                                                                                     |              |
| Discharges a                                   |                                                                                     |              |
| Purpose of SOP:                                | To notify the correct responder in the event of a spill, illicit discharge, or impr | oper disposa |

No Immediate Danger-If the event does not pose an immediate threat to life, health or safety

- Call City of Vestavia Hills Police Department Desk Sergeant 978-0140
- Notify the city through the <u>Vestavia Hills Action Center</u> at <u>www.vhal.org</u>

**Immediate Danger**-If the event does pose an immediate threat to life, health, or safety; or if you are uncertain if the event poses a threat:

- Call 911
- Call City of Vestavia Hills Police Department Desk Sergeant 978-0140

#### City of Vestavia Hills Fire Department Standard Operating Procedure (SOP)

If the event can be managed by Fire Department Personnel:

- If possible, shut off the source of the spill immediately
- Deploy absorbent products and/or diking materials to contain the spill.
- Spills on pervious areas may require removal of soil or other contaminated materials.
- Consult Jefferson County EMA for disposal requirements for all products and materials used to mitigate spills
- If the event requires outside personnel: The Vestavia Hills Fire Department will contact Jefferson County EMA and follow EMA protocol. Hazmat and decontamination units will be contacted as needed.

# **APPENDIX G**

Pollution Prevention/Good Housekeeping for Municipal Operations

#### **Municipal Facilities**

Public Works Equipment and Material Storage (temporary location) 1285 Montgomery Highway

- equipment storage, small amount of fuel and other

Aquatic Complex at Wald Park

720 Waldridge Road

- pool chemical storage

| Quarte                                                                                                                            | erly Inspection Checklist                                                        |                                                                    |                                  |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------|
| Inspection Area                                                                                                                   | Status (Please answer with<br>Acceptable/Needs Attention/Not<br>Applicable)      | Comments                                                           | Date Resolved<br>(if applicable) |
| Check refuse areas for trash on the ground that could contaminate stormwater or be washed away in stormwater                      |                                                                                  |                                                                    |                                  |
| Check all exterior vehicle and equipment areas for leaks,<br>spills, drips, or excess dirt - Street sweeping necessary?           |                                                                                  |                                                                    |                                  |
| Check all exterior vehicle and equipment areas for leaks,<br>spills, drips, or excess dirt - drip pan use acceptable?             |                                                                                  |                                                                    |                                  |
| Check fueling areas for leaks, spills, or drips                                                                                   |                                                                                  |                                                                    |                                  |
| Check exterior petroleum storage areas for leaks, spills, or drips                                                                |                                                                                  |                                                                    |                                  |
| Clean-up of tracked sand that might allow stormwater transport of sand                                                            |                                                                                  |                                                                    |                                  |
| Check calcium chloride tank for leaks, spills, or cracks                                                                          |                                                                                  |                                                                    |                                  |
| Check vehicle washing area for excess sediment or wastes                                                                          |                                                                                  |                                                                    |                                  |
| Other:                                                                                                                            |                                                                                  |                                                                    |                                  |
| Other:                                                                                                                            |                                                                                  |                                                                    |                                  |
| Instructions: This form needs to be used for regular (quarterl pollution prevention and good housekeeping can be found in manual) | וץ) inspections at vehicle/equipment m<br>ר Chapter 3 of the 2011 Guidelines and | aintenance facilities. More infor<br>Standard Operating Procedures | rmation on<br>Manual (SOP        |
| MunicipalityDivision_                                                                                                             |                                                                                  | Date                                                               |                                  |

| Standard Operating                                                                 | Procedure for:                                                                                  |                |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------|
| Pollution Prevention/Good Housekeeping for<br>Municipal Operations: Special Events |                                                                                                 |                |
| Purpose of SOP:                                                                    | To identity the ways the city reduces the amount of trash entering the MS4 waters of the State. | as well as the |

#### **City Policy for Special Events**

- Provide extra trash receptacles for event to reduce litter.
- Provide recycling receptacles during an event to reduce litter.
- Provide extra personnel during event to pick-up litter during and after event.
- Cleanup event area within 24 hours.













What happens when debris enters storm drains?

- It is ILLEGAL! Violators who put leaves, clippings or other materials in the storm drains are subject to fines or, when warranted, additional enforcement by the City.
- Clogged storm drains may result in **flooding**, creating safety hazards and causing property damage.
- Rotting leaves cause algae blooms in water bodies, harming plants and animals and reducing water quality.
- Debris clogging storm drains can be a breeding ground for rodents and insects.
- Cleaning out clogged storm drains costs taxpayers money.

# Report in the Action Center (vhal.org/action-center) or call 205.978.0100.

ESTAV

Alternatives: • Mulch • Compost • Bag for collection



### LANDSCAPING AND LAWN SERVICE CONTRACTOR

### NOTICE

It is a violation of City Ordinance 2998 to put leaves, clippings, debris, or other materials down a storm drain!

Landscapers and other violators who improperly dispose of leaves, clippings, and other materials into storm drains may be subject to a fine and/or other enforcement by the City.

Clippings, leaves, and small debris must be bagged for disposal or otherwise properly disposed.

Landscapers and lawn services are responsible to remove piles of large debris resulting from their work.



## CONTRATISTA DE SERVICIOS DE PAISAJISMO Y CÉSPED

## AVISO

¡Es una violación de la Ordenanza de la Ciudad 2998 tirar hojas, recortes, escombros u otros materiales en un desagüe pluvial!

Los paisajistas y otros infractores que desechen indebidamente hojas, recortes y otros materiales en los desagües pluviales pueden estar sujetos a una multa y/u otra aplicación por parte de la Ciudad.

Los recortes, las hojas y los escombros pequeños deben colocarse en bolsas para su eliminación o eliminarse adecuadamente de otra manera.

Los paisajistas y los servicios de jardinería son responsables de retirar las pilas de escombros grandes resultantes de su trabajo.



NOTICE: It is a violation of City ordinance and Federal law to put leaves, clippings, debris, or other materials down a storm drain!

Landscapers and other violators who improperly dispose of leaves, clippings, and other materials into storm drains may be subject to a fine and/or other enforcement by the City.

### LANDSCAPING AND LAWN SERVICE CONTRACTOR

#### AFFIDAVIT

I, (print name)\_\_\_\_\_, affirm the following:

- I am an Authorized Agent of \_\_\_\_\_\_ (company name). •
- I have been informed that it is a violation of City Ordinance 2998 to put leaves, clippings, debris, or other materials down a storm drain.
- I understand and accept that it is my responsibility to inform employees and others working on behalf of ٠ my business that it is a violation that is enforceable by law.
- I understand and accept that in the course of work performed it is the responsibility of my employees • and others working on behalf of my business to ensure clippings, leaves, and small debris are bagged for other otherwise properly disposed.
- I understand and accept that in the course of work performed it is the responsibility of my employees ٠ and others working on behalf of my business to remove piles of large debris generated by our services.

Authorized Agent Signature

Date

Witness

Date

## **APPENDIX H**

Application of Pesticides, Herbicides, and Fertilizers (PHFs)

#### **PHF Contractors**

The City currently utilizes the following contractors for various services and project areas:

- Field Maintenance: Specialty Turf Supply, "In the Fence" playing field surfaces
- Rights-of-way and Facilities Maintenance: Turf Management Systems, grass mowing and other services in medians and roadway shoulders and landscape maintenance at City Hall, Library and passive parks
- Vegetation Maintenance: Kellis Vegetation, spraying of kudzu and other invasives along roadside shoulders

Each contractor is properly licensed and permitted for their services. Each provide reporting information to the City that summarizes their annual applications.

See following map of the project areas.



# **APPENDIX I**

Industrial Storm Water Runoff

#### City of Vestavia Hills HIgh Risk Sites

| Industrial and High-Risk Facilities                               | updated:                 | Apr-23          |  |
|-------------------------------------------------------------------|--------------------------|-----------------|--|
|                                                                   |                          |                 |  |
| Name                                                              | Address                  | Туре            |  |
| Royal Automotive                                                  | 3010 Columbiana Rd       | Car Dealerships |  |
| Anthony's Car Wash                                                | 1009 Vestavia Pky        | Car Wash        |  |
| Mister Car Wash                                                   | 611 Montgomery Hwy       | Car Wash        |  |
| Bennett's Motor World                                             | 3193 Cahaba Heights Rd   | Engine Repair   |  |
| Bob's Power Equipment                                             | 637 Montgomery Hwy       | Engine Repair   |  |
| Cahaba Lawn & Garden                                              | 3940 Cypress Drive 35243 | Engine Repair   |  |
| Goodyear Tire                                                     | 721 Montgomery Hwy       | Engine Repair   |  |
| Pep Boys                                                          | 1453 Montgomery Hwy      | Engine Repair   |  |
| Rocky Ridge Auto Care                                             | 2505 Rocky Ridge Rd      | Engine Repair   |  |
| Sunoco / Vestavia Tire                                            | 1456 Montgomery Hwy      | Engine Repair   |  |
| U-Haul                                                            | 1024 Montgomery Hwy      | Engine Repair   |  |
| Unique Service Center                                             | 3160 Green Valley Rd     | Engine Repair   |  |
| Shell                                                             | 2423 Acton Rd            | Fuel/Car Wash   |  |
| Liberty Park Waste Treatment Plant<br>(NPDES Permt No. AL0067814) | 13051 Liberty Pky        | Misc. Hazards   |  |
| Express Oil                                                       | 1479 Montgomery Hwy      | Oil Change      |  |
| Express Oil                                                       | 2566 Rocky Ridge Rd      | Oil Change      |  |
| Express Oil                                                       | 3940 Crosshaven Dr       | Oil Change      |  |

#### Stormwater Discharge Inspection for Industrial and Commercial Facilities

| Inspection Team:         | Date:_                      | Time:       |
|--------------------------|-----------------------------|-------------|
| Facility Name:           | Facility Contact and Title: | NAICS code: |
| Facility Street Address: | City:                       | Zip:        |
| Phone Number:            | Fax Number:                 |             |
| Business License #:      | Facility Size (acres):      |             |

Provide a description of facility and the nature of work performed.

Provide a description of significant materials that are currently, or were formerly, treated, stored or disposed outside the facility or commercial establishment; materials management practices currently used to minimize contact of these materials with storm water runoff; and a description of any treatment the storm water receives prior to discharge.

Cleanup schedule for debris, material storage areas, garbage storage or disposal areas, or other areas that have the potential to pollute storm water

Description of plan of instruction, to employees of all levels, in ways to prevent storm water pollution. Identify specific periodic dates for such training.

Provide a site map showing existing buildings, parking, drives, type of each impervious surface, ditches, pipes, catch basins, drainage basin limits, area of facility, discharge points from the property or to Community Waters, and the name of the receiving waters.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system design to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Printed Name of Inspection Team Member: Title:

Signature:

| Printed Name of Inspection Te | eam Member: |
|-------------------------------|-------------|
|-------------------------------|-------------|

Title:

Signature: