# STORM WATER MANAGEMENT PROGRAM PLAN

## January 2020

*Prepared For*

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*Prepared by*

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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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1/13/2020

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## CONTENTS

**INTRODUCTION** ..... **9**

Regulatory Overview ..... 9

MS4 Jurisdictional Boundary ..... 10

**LEGAL AUTHORITY AND ENFORCEMENT** ..... **10**

**STORM WATER COLLECTION SYSTEMS OPERATIONS** ..... **15**

Structural Controls Mapping ..... 15

Structural Controls Inspection ..... 15

Standard Operating Procedure (SOP) for Structural Control Inspection and Maintenance Procedures ..... 15

Stabilization and Re-Vegetation of Eroded Areas ..... 15

Floatables, Litter, Sediment and Debris in Structural Controls ..... 16

**PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPACTS** ..... **178**

Development and Implementation of the SWMPP ..... 18

Public Access to City Storm Water Documents ..... 18

Targeted Pollutant Sources for Public Education ..... 18

Reduction of Litter Floatables and Debris ..... 18

Educating Individuals and Households on Reducing Storm Water Pollution ..... 18

Community Involvement with the Storm Water Program ..... 19

General Public ..... 19

Businesses ..... 19

Homeowners, Landscapers, and Property Managers ..... 19

Engineers, Contractors, and Developers ..... 20

Evaluating the Effectiveness of the Public Education Program ..... 20

Public Awareness Activities ..... 20

**ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) ..... 21**

MS4 Map ..... 14

Ordinance/Regulatory Mechanism ..... 21

Dry Weather Screening Program ..... 21

Source Identification ..... 22

Illicit Discharge Elimination ..... 22

ADEM Notification by the City ..... 22

Illicit Discharge Reporting by the Public ..... 23

Personnel Training ..... 23

Ordinance/Regulatory Mechanism Availability ..... 23

**CONSTRUCTION SITE STORM WATER RUNOFF CONTROL ..... 24**

Erosion and Sedimentation Control Complaints ..... 24

Site Plan Reviews ..... 24

Site Inspection Plan ..... 24

Training of MS4 Site Inspection Staff ..... 24

Construction Site Inspection Checklist ..... 25

Enforcement Response Plan (ERP) ..... 25

Construction Site Operator Training ..... 25

**POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND RE-DEVELOPMENT ..... 26**

Ordinance/Regulatory Mechanism ..... 26

Inventory of Post Construction Structural Controls ..... 26

**SPILL PREVENTION AND RESPONSE ..... 27**

City Response Protocol ..... 27

Spill Prevention/Spill Response Plan ..... 27

Personnel Spill Prevention/Response Training ..... 27

**POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS** ..... **28**

Municipal Facilities Inventory ..... 28

Good Housekeeping Practices SOP ..... 28

Inspection Plan ..... 28

Good Housekeeping Training Program ..... 28

Short Term and long Term Trash Removal Strategy ..... 28

**APPLICATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS (PHFs)** ..... **29**

Application and Storage ..... 29

PHF Training Program ..... 29

**OILS, TOXICS, AND HOUSEHOLD HAZARDOUS WASTE** ..... **31**

Public Education on Proper Disposal ..... 31

Annual Employee Training ..... 31

**INDUSTRIAL STORM WATER RUNOFF** ..... **31**

Inventory of High Risk Facilities ..... 31

Inspection of High Risk Facilities ..... 31

**WET-WEATHER MONITORING AND REPORTING** ..... **34**

Monitoring Locations ..... 34

Impaired Waterways ..... 34

Monitoring Parameters and Frequency ..... 34

Sample Type, Collection and Analysis ..... 35

**Other requirements** ..... **38**

SWMPP Plan Review and Modification ..... 38

Annual Report ..... 38

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# FIGURES

Figure 1: MS4 Boundary..... .....14

Figure 1: Municipal Structural Controls.....17

Figure 2: Municipal Facilities..... .....30

Figure 3: Industrial and High Risk Facilities..... .....32

Figure 4: Municipal Sampling Sites.....36

# APPENDICES

Appendix A – Mountain Brook 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 - Spill Prevention and Response

Appendix F - Pollution Prevention/Good Housekeeping for Municipal Operations

Appendix G – Industrial Storm Water Runoff

# INTRODUCTION

## REGULATORY OVERVIEW

The City of Mountain Brook (City) was issued by the Alabama Department of Environmental Management (ADEM) a Municipal Separate Storm Sewer System (MS4) Individual Phase I Permit (ALS000018) on June 7th, 2017 (**Appendix A**). This permit went into effect on July 1, 2017. Previously, the City was included as a Co-Permittee under permit number ALS000001.

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 ALS000018, 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

The City of Mountain Brook's MS4 boundary is bound to the north by the city of Birmingham, to the south by the city of Vestavia, to the east by Irondale, and to the west by Homewood. Approximately 26 square miles of residential, commercial, industrial, undeveloped lands and streams make up the MS4 boundary. See **Figure 1: MS4 Boundary**.

There are two water bodies, Cahaba River and Shades Creek, which are considered impaired by the U.S. Environmental Protection Agency and ADEM within the MS4 boundary. The designated use for Cahaba River within the MS4 is Outstanding Alabama Water and Public Water Supply (OAW/PWS). The designated use for Shades Creek within the MS4 is Fish and Wildlife (F&W). Cahaba River has a United States Environmental Protection Agency (USEPA) approved Total Maximum Daily Load (TMDL) for Siltation and Habitant Alteration as well as for Nutrients. Shades Creek has a USEPA approved TMDL for Siltation, Turbidity and Habitant Alteration as well as for Fecal Coliform.

## 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. Below is a summary of the current ordinances, municipal codes, and regulations related to the management of The City of Mountain Brook's' MS4. These ordinances are found in **Appendix A**.

- **Ordinance 2024, Erosion and Sediment Control Ordinance:** Controls sedimentation leaving construction sites. The ordinance describes the fees, regulations, and the requirements surrounding a land disturbing permit issuance.

- **2013 Subdivision Regulations:** Approved by the Planning and Zoning Board and carry the force of a City Ordinance. They address design requirements for residential and commercial storm water infrastructure.

- **Ordinance 1351, Tree Commission**: Encourages the planting of trees and shrubs to aid in the prevention of erosion and sedimentation, reduce storm water runoff, help control drainage, and restore denuded soil subsequent to construction and grading.

- **Ordinance 1496, An Ordinance to regulate Storm Water Detention within the City of Mountain Brook, Alabama**: Encourages and requires a site plot plan showing improvement and impervious surface area to reduce and limit storm water run-off onto other property and the public storm water system.

- **Ordinance 1633, Flood Ordinance**: 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 50 & 54, Litter, Waste, & Weed Ordinance**: Makes it unlawful to litter, leave waste or weed nuisance on private property or of a sidewalk or street in the city.

- **Ordinance 1112 Abandoned or Inoperable Motor Vehicle Ordinances:** Establishes a law against leaving abandoned and non-usable motor vehicles in the public right of way or within public view on private property.

- **Ordinance 536, Depositing of soil, construction debris, etc., by person engaged in grading or construction Ordinance:** Institutes a misdemeanor violation for leaving or depositing construction debris or materials in the public right of way yard trash and debris in the gutter line. It also controls siltation and construction materials to be contained.

- **Ordinance 2023 Illicit Discharge Ordinance**: Creates an enforcement capability and complaint system in place for illicit discharge of substances into the municipal storm water system.

- **Ordinance 2032 Regulating Nuisance on Private Property**: Establishes clear violation of public nuisance in amending sections of 50, 54 and 1112 regarding litter, waste, weeds, and vehicle nuisance on private property in relation to the public view or interest to protect the neighbor or general public from such public safety nuisance.

- **Ordinance 2019 Post Construction Ordinance**: Enacts the post construction regulations as set forth by the NPDES Permit issued to the city.

- In 2011 The City of Mountain Brook adopted a Standard Operating Procedure Manual detailing activity guidelines and 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** | |
| Public Works/JCDH/SWMA | Maintain map of City owned/maintained structural controls |
| Public Works/Inspections | Semi-annual inspection of new and existing structural controls |
| Inspections | 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 |
| Public Works | Post signs prohibiting littering and illegal dumping |
| Administration | Educating individuals and households on reducing storm water pollution |
| Administration | 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/SWMA | Develop MS4 map of outfalls |
| Administration | Develop applicable ordinances and other regulatory mechanisms |
| JCDH/SWMA | Screen 20% of the stream miles during dry weather conditions |
| JCDH/SWMA/City Personnel | Illicit discharge source identification |
| JCDH/Code Enforcement | Elimination of illicit discharges |
| Administration | Procedures to notify ADEM of a suspected illicit discharge entering the MS4 from an adjacent MS4 |
| Administration | Illicit discharge public reporting system |
| JCDH/SWMA | Educating employees on detecting an IDDE , tracing the source of and eliminating illicit discharge |
| Administration | Ordinance/Regulatory mechanism availability |
| **Construction Site Storm Water Runoff Control** | |
| Engineering | Site plan reviews |
| Inspections/Engineering | Site inspection plan |
| Inspections | Inspection staff training |
| Inspections | Construction site inspection checklist |
| Administration | Enforcement Response Plan (ERP) |
| Administration and Inspections | Construction site operator education |
| **DEPARTMENT** | **RESPONSIBILITIES** |
| **Post-Construction Storm Water Management in New Development and Re-Development** | |
| Administration | Develop applicable ordinances and other regulatory mechanisms |
| Inspections | Inventory of post construction structural controls |

| | |
|---|---|
| **Spill Prevention and Response** | |
| Fire | Spill prevention/spill response plan |
| JCDH | Educating employees on spill prevention/spill response |
| **Pollution Prevention/Good Housekeeping for Municipal Operations** | |
| All Departments | Inventory of municipal facilities |
| All Departments | Good housekeeping practices SOP |
| All Departments | Inspection plan |
| JCDH | Educating employees on good housekeeping |
| **Application of Pesticides, Herbicides, and Fertilizers(PHFs)** | |
| Parks Board and Public Works | Application and storage of PHFs |
| JCDH | Educating employees on PHFs usage and storage |
| **Oils, Toxics, and Household Hazardous Waste Control** | |
| Administration | Public education on proper disposal |
| JCDH | Educating employees on oils, toxics, and household hazardous waste |
| **Industrial Storm Water Runoff** | |
| JCDH/Administration | Inventory of high risk facilities |
| JCDH | Inspection of high risk facilities |
| **Wet Weather Monitoring and Reporting** | |
| JCDH | Monitoring locations |
| JCDH | Impaired waterways review |
| JCDH | Sampling |
| **Other Requirements** | |
| JCDH/Administration | SWMPP plan review and modification |
| JCDH/Administration | Annual Report submittal |

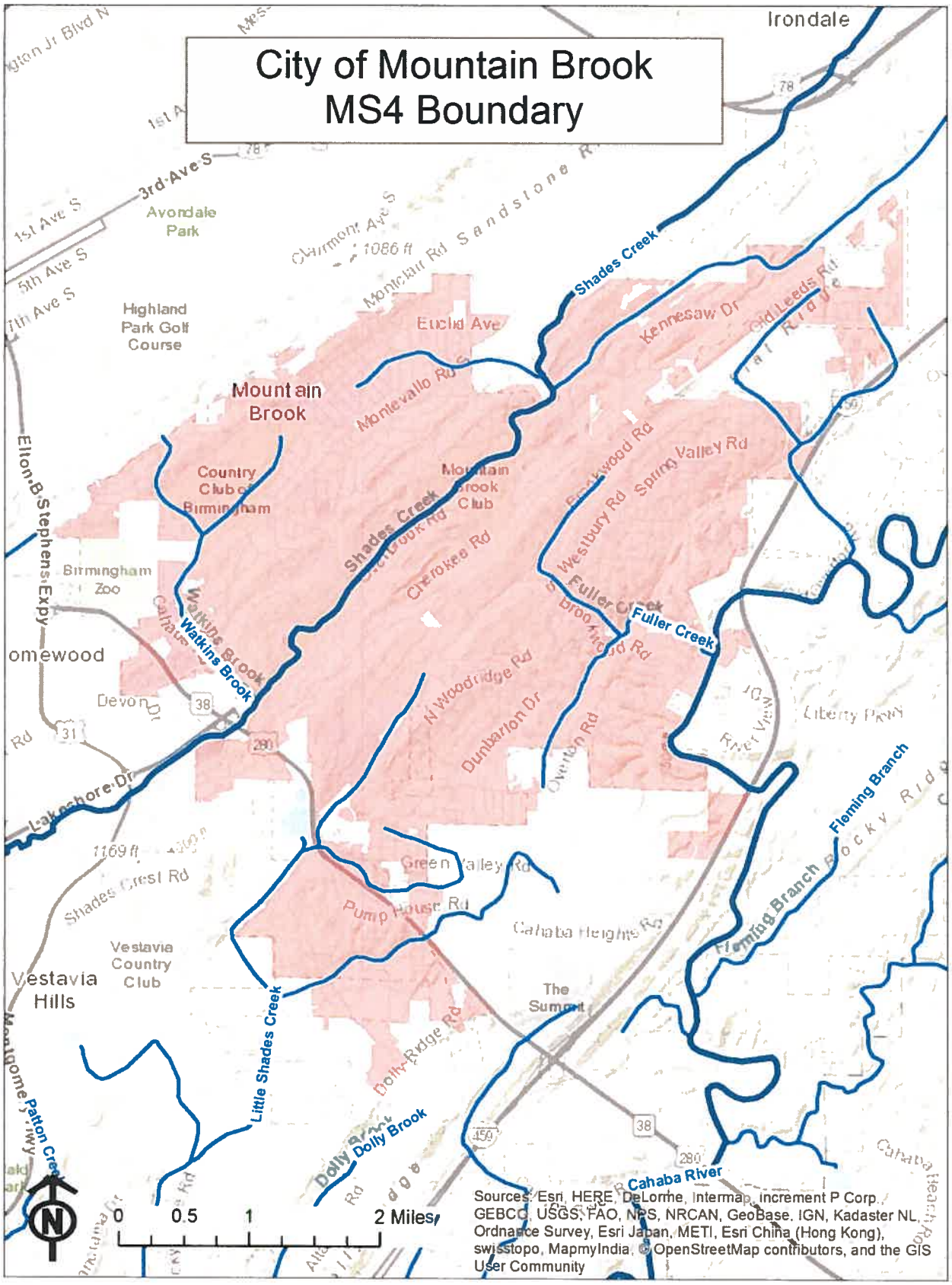


**Figure 1: MS4 Boundary**

## STORM WATER COLLECTION SYSTEMS OPERATIONS

### STRUCTURAL CONTROLS MAPPING

The City currently owns a structural control within our Public Works facility to mitigate volume flow off site onto the ALDOT ROW of I-459 but, maintains two private structural controls abutting the MS4 boundary limits (See **Figure 2: Structural Controls**). One structural control device is on the Birmingham Zoo property within the city limits of Birmingham and the other one is adjacent on Unincorporated Jefferson County property. The two devices work collectively to help control flooding in Mountain Brook.

The City will monitor the addition of any City owned/ maintained structural controls.

**Responsible Department: Public Works**

### 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 or the Engineer's recommendation** on a semi-annual basis, at a minimum. Although the City does not own but, maintains structure controls currently, any future inspections will be performed by a Public Works Supervisor and an annual report is submitted from our Consultant Engineer. Any deficiencies or maintenance recommendations listed on the inspection form in regards to the structural control will be addressed by our Public Works.

**Responsible Department: Public Works**

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

The standard inspection form found in **Appendix B** is used to document structural control inspections. Once any maintenance is completed, a city inspector and/or a contractor will re-inspect the Structural Control to ensure the structure can effectively function as designed.

**Responsible Department: Inspections/Public Works**

### 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.

**Responsible Department: Public Works**

## FLOATABLES, LITTER, SEDIMENT AND DEBRIS IN STRUCTURAL CONTROLS

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 inspection documentation and will remove the noted items. Public Works will maintain documentation of the estimated amounts of floatables, litter, sediment and debris removed during maintenance activities using the Storm Water Online Activity Record (SOAR) program.

**Responsible Department: Public Works**

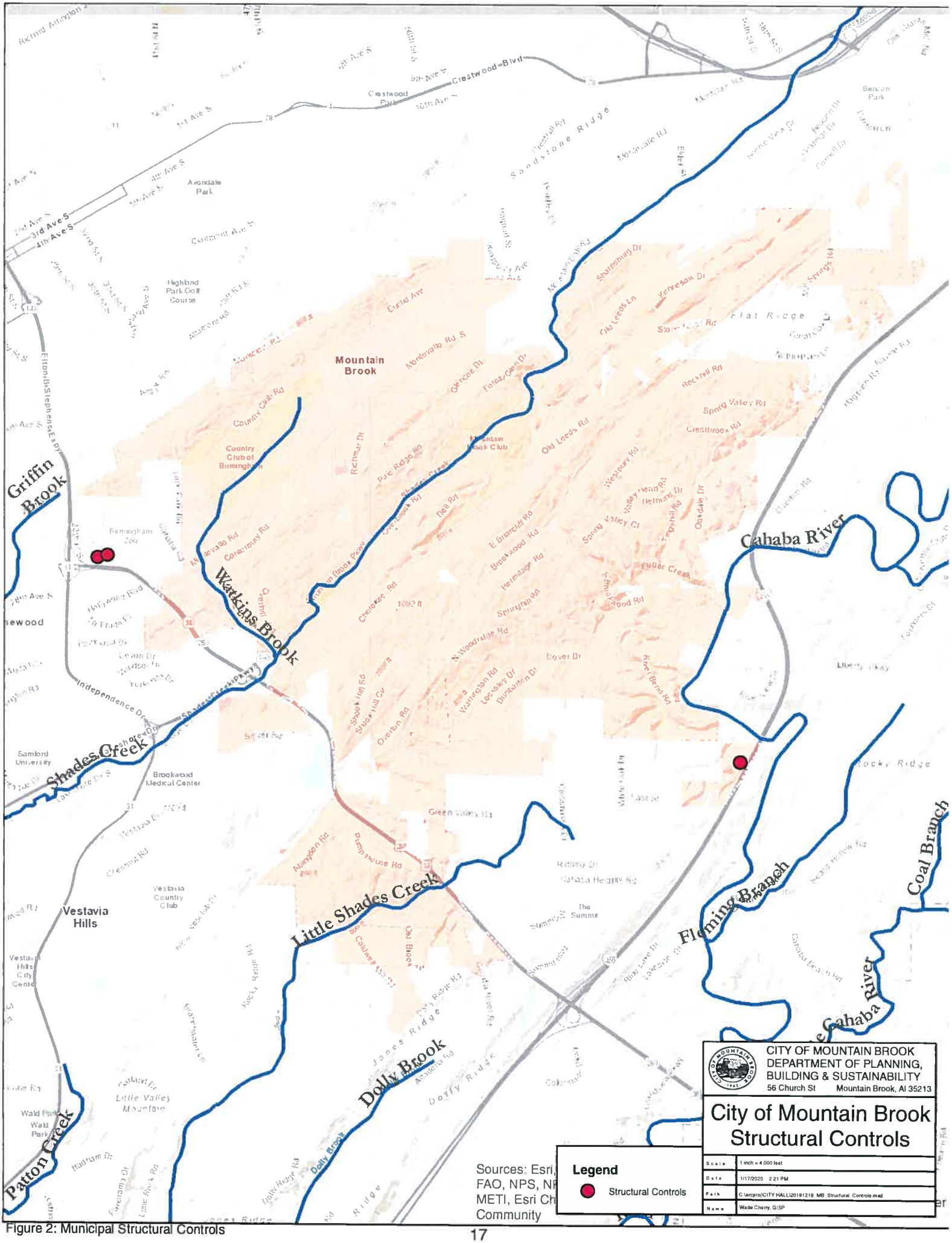


Figure 2: Municipal Structural Controls

# PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPACTS

## DEVELOPMENT AND IMPLEMENTATION OF THE SWMPP

The City seeks public input on the SWMPP by posting the SWMPP on Mountain Brook's website and city hall board for comments. Notification or request for comments announcement will be made at council meetings regarding updates or changes. The Council-approved SWMPP for the upcoming year will then be posted on the website and be submitted with the annual report.

**Responsible Department: Administration**

## PUBLIC ACCESS TO CITY STORM WATER DOCUMENTS

The City post copies of the current Annual Report, draft changes or updated SWMPP, current SWMPP and the NPDES permit on the City's website by the Inspection Department. The documents will then be updated on the website as they are approved by the city council and/or submitted to ADEM.

**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

The City currently maintains litter signage within the Mountain Brook City Property. 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 Department: Administration and Public Works**

## EDUCATING INDIVIDUALS AND HOUSEHOLDS ON REDUCING STORM WATER POLLUTION

The City has posted on its website, information describing The City of Mountain Brook's Storm Water Program. 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. The information and links will be modified and/or updated on the website as needed. These same brochures on storm water issues are placed at City Hall for public pickup.

**Responsible Department: Administration**

## COMMUNITY INVOLVEMENT WITH THE STORM WATER PROGRAM

### GENERAL PUBLIC

The City currently has all storm water information links on the Department of Building, Planning and Sustainability Tabs listed as Storm Water with other standards and brochures containing information that informs the general public of:

- General impacts litter has on water bodies 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**

### BUSINESSES

The City has new and old business topic related information on its website and place 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.

**Responsible Department: Administration**

### HOMEOWNERS, LANDSCAPERS, AND PROPERTY MANAGERS

The city has a storm water information page on its website and placed in city facilities brochures informing homeowners, landscapers, and property managers on the following topics:

- BMPs and storage of pesticides, herbicides, and fertilizers.

- 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, CONTRACTORS, AND DEVELOPERS

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

- Impacts of increased storm water flows into receiving water bodies.
- 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.
- Contact for any questions, complaint or illicit discharge information.

These materials will be updated as needed.

**Responsible Department: Administration**

## EVALUATING THE EFFECTIVENESS OF THE PUBLIC EDUCATION PROGRAM

The City will 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 is picked up from the City facilities on an annual basis.

**Responsible Department: Administration**

## PUBLIC AWARENESS ACTIVITIES

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. Storm water education and awareness is done via booths at our Annual Library Festival, Citizen Appreciation Day, Elementary and Middle School events where SWMA is invited to participate and Jemison Park Shades Creek Festival as reported on the SOAR.

**Responsible Department: Administration**

## ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

### MS4 MAP

Maps of the major outfalls, structural controls owned/maintained by the City, 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** and a list of the structural controls' latitude and longitude can be found in **Appendix B**.

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

**Responsible Party: JCDH**

### ORDINANCE/REGULATORY MECHANISM

Ordinance 2023 and 2032 addresses illicit discharges as required by the City's Permit.

**Responsible Department: Administration**

### DRY WEATHER SCREENING PROGRAM

Dry weather screening of 20% of the stream miles will be performed annually with 100 percent 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. Protocols for dry weather are also found in the Standard Operating Procedure Manual also found in **Appendix A.** In addition to the required dry weather screening program, Public Works staff will be educated annually to recognize and report potential illicit discharges while conducting their day to day operations. Also, all citizen complaints regarding potential illicit discharges will be investigated.

**Responsible Party: JCDH**

## 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 Parties: City Personnel, SWMA and/or JCDH**

## ILLICIT DISCHARGE ELIMINATION

Once the source and responsible party of an illicit discharge has been identified, either the City will take action through its pertinent ordinances or JCDH will through its regulations. Ordinance 2023 specifically defines and identifies the process for compliance of illicit discharge activity.

**Responsible Parties: Mountain Brook Inspection Officer, SWMA or JCDH**

## 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: Administration**

## ILLICIT DISCHARGE REPORTING BY THE PUBLIC

The City receives calls for illicit discharges at the City Hall phone number 205-802-3800 or action center located on the home page of the web site. There is also a phone number, 205-802-3812 or email of merchant@mtnbrook.org, listed on the City's website to report illicit discharges.

**Responsible Department: Administration**

## PERSONNEL TRAINING

Non-First Responder City Personnel will be trained by JCDH on IDDE identification and response annually.

**Responsible Party: JCDH or SWMA**

## ORDINANCE/REGULATORY MECHANISM AVAILABILITY

All ordinances and regulatory mechanisms can be found on the City's website, http//cityofmountainbrook.org, or through the link to Municode on the City's website.

**Responsible Department: Administration**

## CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

### EROSION AND SEDIMENTATION CONTROL COMPLAINTS

The city receives calls about construction and sedimentation complaints, concerns or runoff at the city hall phone number (205-802-3800) or action center located on the home page of the city website. These calls are directed to the Department of Planning, Building and Sustainability Building Official at (205-802-3812) or via email through the automated action center for immediate notification.

**Responsible Department: Inspections**

### SITE PLAN REVIEWS

According to Ordinance # 2024, a BMP plan shall be submitted to the city along with the permit application before the commencement of 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: Inspections**

### SITE INSPECTION PLAN

The city will perform a monthly inspection, at a minimum, on sites that have been issued land disturbance permits. Monthly inspections are required due to the Cahaba River's impaired status resulting in Mountain Brook's sites being 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: Inspections**

### TRAINING OF MS4 SITE INSPECTION STAFF

Personnel responsible for construction site inspections receive BMP training annually from the JCDH or SWMA.

**Responsible Department: Inspections**

## CONSTRUCTION SITE INSPECTION CHECKLIST

See **Appendix D** for the city's construction site inspection checklist. The city inspection personnel use a record system documenting meetings, bmp maintenance, site inspections and final inspection records.

**Responsible Department: Inspections**

## ENFORCEMENT RESPONSE PLAN (ERP)

An Enforcement Response Plan is included in Ordinance # 2024 regarding active sites and Ordinance 2023 regarding illicit discharge on or off site with potential adverse effects on the municipal storm water system.

**Responsible Department: Administration**

## CONSTRUCTION SITE OPERATOR TRAINING

The city provides construction site operator's informational materials including the Erosion and Sediment Control and Storm Water Detention Ordinance regarding appropriate application when they receive their permits from the Inspections Department. Currently the Storm Water information is available between our permitting information and Subdivision Regulations on our Inspections Tab on the city Website. The city has information regarding storm water on the Storm Water page on its website and also brochures at city facilities that inform the engineers, contractors and developers on:

- Impacts of increased storm water flows into receiving water bodies.
- 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 Department: Administration and Inspections**

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

## ORDINANCE/REGULATORY MECHANISM

The City's Subdivision & Development Regulations address storm water design requirements for post-construction storm water management. The Post construction Ordinance 2019 identifies and establishes the criteria regarding post construction standards for qualifying sites.

The Post-Construction 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.

**Responsible Department: Administration**

## INVENTORY OF POST CONSTRUCTION STRUCTURAL CONTROLS

The city currently has one publically-owned structural controls. The City will develop a list of privately-owned structural controls for those built after July 1, 2018. The city will update annually the list of publicly-owned post construction structural controls and the privately-owned structurally controls under these requirements.

**Responsible Department: Inspections**

# SPILL PREVENTION AND RESPONSE

## CITY RESPONSE PROTOCOL

The city of Mountain Brook Fire and Rescue 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. The City of Mountain Brook Fire and Rescue and EMA track the spills, the response, and the cleanup activities for all spills.

## SPILL PREVENTION/SPILL RESPONSE PLAN

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

**Responsible Department: Fire**

## PERSONNEL SPILL PREVENTION/RESPONSE TRAINING

The City of Mountain Brook 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.

**Responsible Party: JCDH or SWMA**

## POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

### MUNICIPAL FACILITIES INVENTORY

See **Figure 2: Municipal Properties** for a map of municipal properties as well as the locations for vehicle and equipment maintenance facilities. The map shows corresponding department shall maintain listed properties. Generally, Parks and Recreation use pesticides, herbicides and fertilizers while Public Works only mows. The map will be reviewed annually and updated if needed. JCDH compiles the data provided by each Department.

**Responsible Department: All Departments**

### GOOD HOUSEKEEPING PRACTICES SOP

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

**Responsible Department: All Departments**

### INSPECTION PLAN

Annual inspections will be conducted for municipal facilities, to include municipal maintenance shops and equipment yards, for good housekeeping practices, including BMPs. See **Appendix F** for the inspection checklist.

**Responsible Department: 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.

**Responsible Party: JCDH**

### SHORT TERM AND LONG TERM TRASH REMOVAL STRATEGY

The City has a SOP for special events that promotes the reduction of trash and debris into the City's MS4 as well as Waters of the State (**Appendix F**).

**Responsible Party: JCDH**

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

### APPLICATION AND STORAGE

The Park and Recreation Department keeps annual records of pesticides, herbicides, and fertilizers (PHFs) used at municipal facilities. Each chemical used is applied per the labeling instructions. Material safety data sheets (MSDS) on each product are found in the chemical storage areas. City staff is 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 MSDS accessibility (**Figure 3: Municipal Properties**). The SOP manual (**Appendix A**) contains procedures related to usage and storage of PHFs.

**Responsible Department: Parks Board and Public Works**

### PHF TRAINING PROGRAM

City staff will be educated annually on proper PHF practices.

**Responsible Party: JCDH**

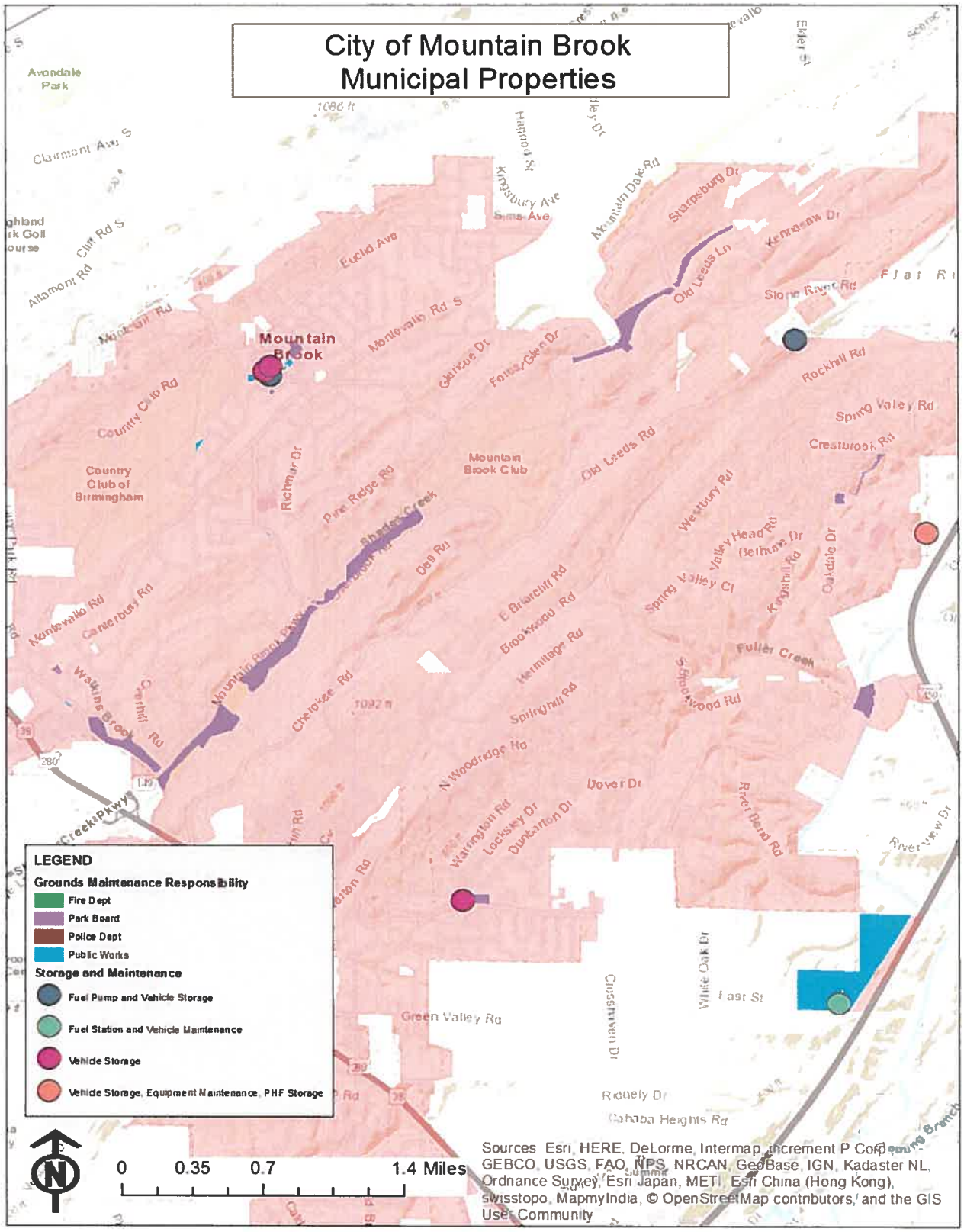


**Figure 3: Municipal Facilities**

## 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 http://earth911.com/ 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 by JCDH.

**Responsible Party: JCDH**

## INDUSTRIAL STORM WATER RUNOFF

### INVENTORY OF HIGH RISK FACILITIES

The City maintains a list of industrial and high risk facilities within the city limit, see **Appendix G**. The list of industrial facilities will be reviewed annually for accuracy and will be updated when necessary. A map of the industrial and high risk facilities can be found in **Figure 3: Industrial and High Risk Facilities.**

**Responsible Party: JCDH and Administration**

### INSPECTION OF HIGH RISK FACILITIES

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

**Responsible Party: JCDH**

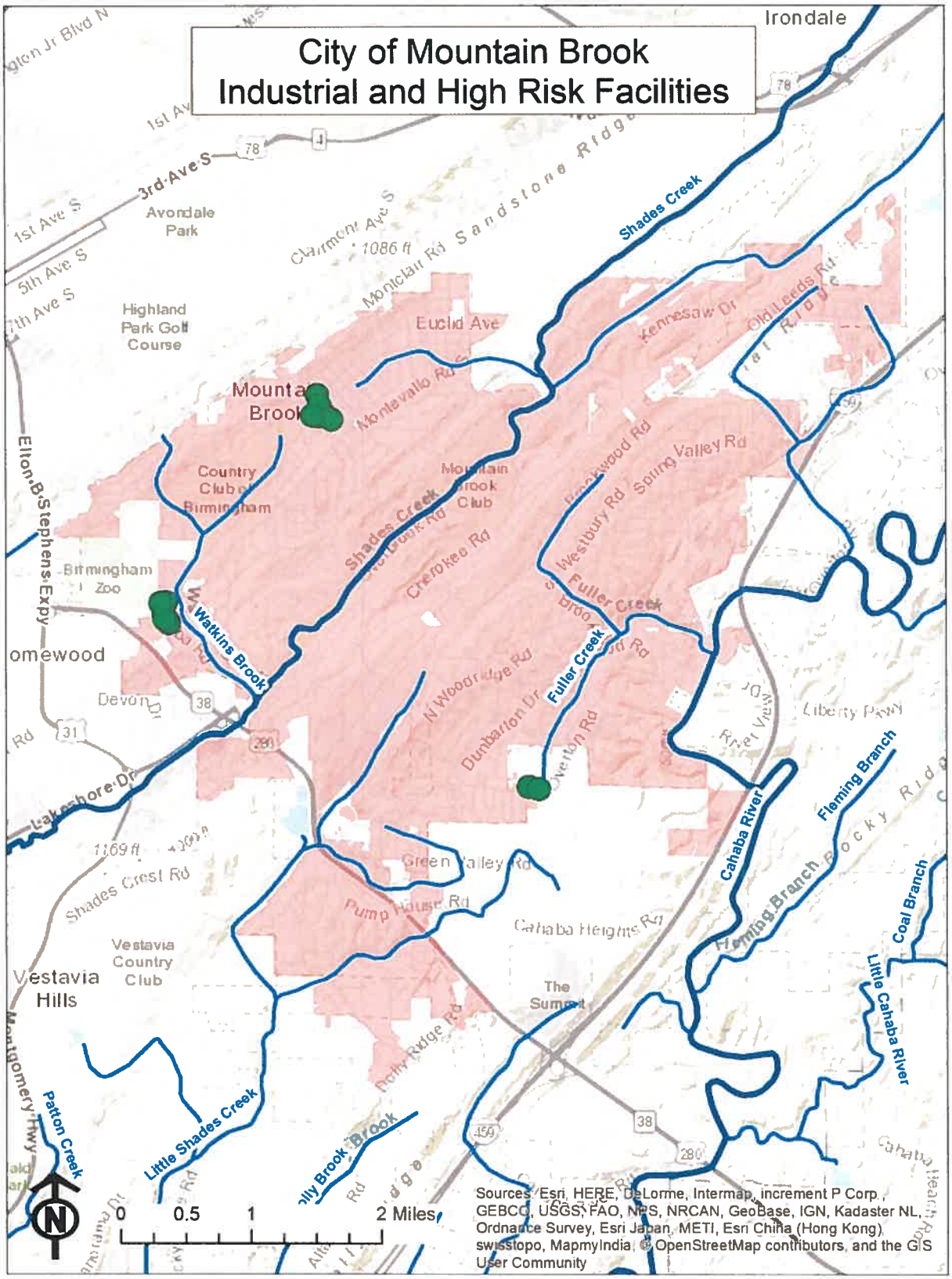


**Figure 4: Industrial and High Risk Facilities**

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## WET-WEATHER MONITORING AND REPORTING

### MONITORING LOCATIONS

JCDH will take wet-weather grab samples at sites on Fuller Creek, Shades Creek, and Watkins Branch annually on behalf of the City. See **Figure 5: Municipal Sampling Sites** for a map of the sampling sites

The site locations are as follows:

| Water Body | Latitude, Longitude | Description |
|---|---|---|
| Fuller Creek | 33.479676, -86.712698 | Grab Sample |
| Shades Creek | 33.48057, -86.759513 | Grab Sample |
| Watkins Branch | 33.476147, -86.763681 | Grab Sample |

**Responsible Party: JCDH**

### IMPAIRED WATERWAYS

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

**Responsible Party: JCDH**

### 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)
l. 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 will monitor the following parameters at least hourly:

a. Temperature
b. pH/ORP
c. Turbidity (NTU)
d. Conductivity
e. Dissolved Oxygen
f. Water level

**Responsible Party: JCDH**

## SAMPLE TYPE, COLLECTION AND ANALYSIS

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

**Responsible Party: JCDH**

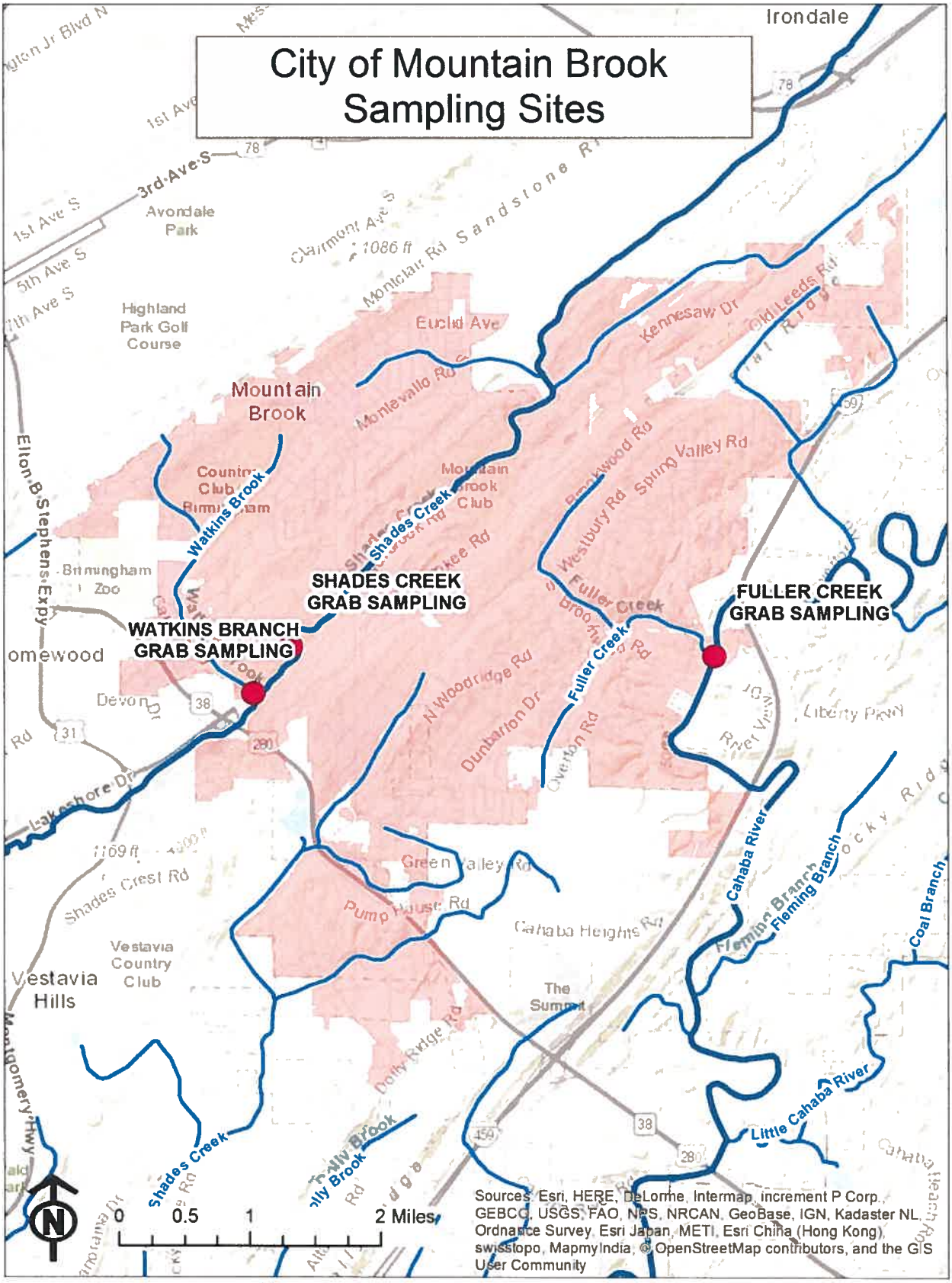


**Figure 5: Municipal Sampling Sites**

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# OTHER REQUIREMENTS

## SWMPP PLAN REVIEW AND MODIFICATION

This plan will be reviewed annually and updated as necessary.

**Responsible Department: All Departments**

## ANNUAL REPORT

The Annual report will be compiled by JCDH for the City of Mountain Brook

**Responsible Party: JCDH**