ETOWAH COUNTY MS4

Storm Water Management Program Plan

APRIL 2022

Etowah County, Alabama
NPDES Permit No. ALR040009
Prepared by: S&ME, Inc.

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1.0 Introduction

S&ME, Inc. has prepared this Storm Water Management Program Plan (SWMPP) for the Etowah County, Alabama Phase II Small Municipal Separate Storm Sewer System in accordance with S&ME Proposal No. 215660G, dated June 14, 2021.

The SWMPP is required by Part III of the Alabama Department of Environmental Management (ADEM) National Pollutant Discharge Elimination System (NPDES) General Permit ALR040000 for discharges from regulated small municipal separate storm sewer systems (MS4).

1.1 Permit History

The Storm Water Phase II Final Rule issued by the United States Environmental Protection Agency (USEPA) in 1999 requires nationwide coverage of all operators of small MS4s located within the boundaries of an "urbanized area" as defined by the latest decennial Census. Based on the results of the 2010 census, the Bureau of the Census designated the *Gadsden, Alabama Urbanized Area* to include the City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, City of Rainbow City, the City of Southside, and portions of unincorporated Etowah County. A map outlining the approximate boundary of the 2010 *Gadsden, Alabama Urbanized Area* is included in **Appendix A** as **Figure 1**. Revised urbanized area boundaries based on the 2020 Census were not available as of April 1, 2022.

The City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, City of Rainbow City, the City of Southside, and Etowah County initially applied for and received a NPDES MS4 Phase II General Permit from ADEM in 2003, with the seven entities as co-permittees under authorization number ALR040009. The five-year permit expired on March 9, 2008. A Notice of Intent for renewal of the permit was submitted 180 days prior to expiration and permit coverage was administratively continued until the re-issuance of the MS4 Phase II General Permit with an effective date of February 1, 2011.

The 2011 permit expired on February 1, 2016. A Notice of Intent for renewal of the permit was submitted by each entity 180 days prior to expiration; therefore, the permit coverage was extended until the re-issuance of the MS4 Phase II General Permit in September. To assist in compliance tracking, the Gadsden-Etowah MS4 entities were each issued a separate permit, although the entities agreed to continue under a joint SWMPP and monitoring plan. The Etowah County MS4 was authorized to discharge under authorization number ALR040009 with an effective date of October 1, 2016.

The 2016 permit expired on September 30, 2021. A Notice of Intent for renewal of the permit was submitted 180 days prior to expiration, and the MS4 Phase II General Permit was re-issued with an effective date of October 1, 2021. The current permit will expire on September 30, 2026. Under the new permitting system, Etowah County was required to prepare a separate SWMPP detailing the individual actions taken by the County to comply with the 2021 permit, as well as the joint activities shared with the remaining Gadsden-Etowah MS4 entities.

A copy of the NPDES General Permit is included in **Appendix B**.

1.2 Storm Sewer System

A Municipal Separate Storm Sewer System (MS4) is defined by 40 CFR Part 122.26(b)(8) to be a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is:

(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 an Indian tribe or an authorized Indian tribal organization, 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) Not a combined sewer; and,

(iv) Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

1.3 Etowah County MS4 Area

The Etowah County Municipal Separate Storm Sewer System (Etowah County MS4) is defined as the unincorporated area within both the county and the urbanized area boundary. As defined by the 2010 Census, the *Gadsden, Alabama Urbanized Area* encompasses approximately 74.8 square miles. The Etowah County MS4 comprises approximately 12.7 square miles (17%) of the 2010 *Gadsden, Alabama Urbanized Area*. Revised urbanized area boundaries based on the 2020 Census were not available as of April 1, 2022. A map depicting the Etowah County MS4 limits is located in **Appendix A** as **Figure 2**.

1.4 Hydrologic Units in the Urbanized Area

Neely Henry Lake (Coosa River) is the primary receiving water for the Etowah County MS4. Hydrologic Hierarchy, Watersheds, and Subwatersheds are provided in the tables below.

Table 1-1 Hydrologic Hierarchy

Type	Code	Name
REGION	03	South Atlantic-Gulf
SUBREGION	03-15	Alabama River Basin
BASIN	0315-01	Coosa-Tallapoosa: Above the confluence of and including the Coosa and Tallapoosa River Basins

Type	Code	Name
SUBBASIN	031501-06	Middle Coosa

Table 1-2 Watersheds in the MS4 Area

Watershed	10 Digit HUC
Big Wills Creek	03150106-01
Black Creek-Coosa River	03150106-02
Big Canoe Creek- Coosa River	03150106-03

Table 1-3 Subwatersheds in the Etowah County MS4 Area

Subwatershed	12 Digit HUC	Total Area (Acres)	Area within Etowah County MS4 (Acres)
Big Cove Creek	03150106-02-03	18,082	178
Black Creek	03150106-01-07	40,879	554
Coosa River-H. Neely Henry Lake	03150106-03-09	46,439	4,084
Horton Creek	03150106-01-08	16,902	1,823
Little Wills Creek	03150106-01-06	18,151	279
Lower Big Canoe Creek	03150106-03-06	33,306	52
Thorton Lakes-Dry Creek	03150106-02-02	9,777	24
Turkey Town Creek	03150106-02-04	57,474	1,126

A map showing the HUC12 subwatersheds in relation to the Etowah County MS4 boundary is included as **Figure 3** in **Appendix A**.

1.5 Water Quality Concerns

Section 303(d) of the Clean Water Act (CWA), as amended by the Water Quality Act of 1987, and EPA's Water Quality Planning and Management Regulations (40CFR130) require states to identify waterbodies not in compliance with the water quality standards applicable to their designated use classifications. The identified waters are prioritized based on severity of the pollution. Section 303(d) then requires that total maximum daily loads (TMDLs) be determined for all pollutants causing violation of applicable water quality standards in each identified segment. The TMDL process establishes the allowable loading of pollutants, or other quantifiable parameters for a waterbody, based on the relationship between pollution sources and in-stream water quality conditions.

A map showing the impaired waterbodies in relation to the Etowah County MS4 is provided in **Appendix A** as **Figure 4**.

1.5.1 Impaired Waterbodies Within the MS4

Three impaired waterbodies are located within the Etowah County MS4 boundary.

Table 1-4 Impaired Waterbodies within the MS4

Waterbody	Impaired Segment	Type	Causes	Use
Black Creek (Neely Henry Lake)	AL03150106-0107-111	303(d)	Nutrients	F&W
Big Wills Creek (Neely Henry Lake)	AL03150106-0108-111	303(d)	Nutrients	F&W
Big Wills Creek	AL03150106-0108-102	303(d)	Pathogens (E. coli)	F&W
Coosa River (Neely Henry Lake)	AL03150106-0309-102	TMDL	Nutrients Organic enrichment (DO)	F&W

Black Creek

Black Creek originates approximately 17 miles northeast of downtown Gadsden and flows southwest along the valley between Lookout Mountain and Big Mountain. The stream length within the Etowah County MS4 is approximately 0.3 miles. The Black Creek watershed encompasses approximately 64 square miles, 0.9 of which are within the Etowah County MS4 boundary.

In 2018, the Black Creek embayment of the Coosa River was identified on the 303(d) as impaired for nutrients due to agriculture and urban runoff/storm sewers.

The designated use of the impaired segment of Black Creek within the Etowah County MS4 is Fish & Wildlife.

Big Wills Creek

Big Wills Creek originates north of Hammondville, Alabama, approximately 45 miles northeast of downtown Gadsden and flows southwest along the valley between Big Ridge and Mount Vera Ridge. The stream length within the Etowah County MS4 is approximately 6.3 miles. The Big Wills Creek watershed encompasses approximately 366 square miles, approximately 3.3 of which are within the Etowah County MS4 boundary.

In 2018, Big Wills Creek was identified on the 303(d) list as impaired for nutrients due to agriculture and urban runoff/storm sewers and for pathogens (E. coli) due to animal feeding operations, sewage collection system failure, and pasture grazing. The portions of Big Wills Creek within the MS4 are impaired due to nutrients and pathogens.

The designated use of the impaired segment of Big Wills Creek within the Etowah County MS4 is Fish & Wildlife.

Neely Henry Lake

Neely Henry Lake is an impoundment of the Coosa River created by Neely Henry Dam, approximately 16 miles south of downtown Gadsden. Neely Henry Lake is the ultimate receiving water for all discharges from the Etowah County MS4.

In 1996, the ADEM identified five of the six reservoirs on the Coosa River within the State of Alabama's borders as being impaired, including Neely Henry Lake. In 2008 the EPA approved TMDLs for Neely Henry Lake related to Nutrients (Total Phosphorous), pH, and Organic Enrichment/Dissolved Oxygen.

The designated uses of the impaired segments of the Coosa River within the Etowah County MS4 are Public Water Supply and Fish & Wildlife.

1.5.2 Impaired Watersheds Intersecting the MS4

In addition to the impaired waterbodies, the Etowah County MS4 encompasses portions of watersheds for the following impaired waterbodies:

Table 1-5 Portions of Impaired Watersheds within the MS4

Watershed	Impaired Segment	Type	Causes	Use
Black Creek (Neely Henry Lake)	AL03150106-0107-111	303(d)	Nutrients	F&W
Big Wills Creek (Neely Henry Lake)	AL03150106-0108-111	303(d)	Nutrients	F&W
Big Wills Creek	AL03150106-0108-102	303(d)	Pathogens (E. coli)	F&W

Watershed	Impaired Segment	Type	Causes	Use
Coosa River (Neely Henry Lake)	AL03150106-0204-102	TMDL	Nutrients pH Organic Enrichment (CBOD, NBOD) Priority Organics (PCBs)	PWS F&W
Coosa River (Neely Henry Lake)	AL03150106-0309-102	TMDL	Nutrients pH Organic Enrichment (CBOD, NBOD)	F&W

1.5.3 Priority Construction Sites

The Alabama Construction General NPDES Permit defines a Priority Construction Site as any site that discharges to a waterbody which is listed on the most recently EPA approved 303(d) list of impaired waters for turbidity, siltation, or sedimentation, any waterbody for which a Total Maximum Daily Load (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 ADEM Admin. Code r. 335-6-10-.10.

The Etowah County MS4 does not currently discharge to any waterbody meeting the criteria for a Construction Priority Site.

1.5.4 Neely Henry Lake TMDL

In 2008 the EPA approved TMDLs for Neely Henry Lake related to Nutrients (Total Phosphorous), pH, and Organic Enrichment/Dissolved Oxygen. The Etowah County MS4 directly and indirectly discharges to Neely Henry Lake; therefore, **the Etowah County MS4 is required to achieve a 30% reduction in Total Phosphorus discharge loading.**

Sources of nutrient and organic enrichment from non-point sources within the Coosa River watershed include:

- Runoff from pastures
- Runoff from animal operations
- Direct discharge to streams due to cattle
- Improper land application of animal waste
- Failing septic systems
- Urban runoff

Point source contributors of storm water pollution within the Coosa River watershed include:

- Discharge from wastewater treatment plants
- Discharge from industrial operations

Part IV.D of the NPDES General Permit requires that the SWMPP include BMPs and control measures specifically targeted to achieve the waste load allocations prescribed in the TMDL. The SWMPP must also include monitoring provisions to document that the waste load allocations prescribed in the TMDL are being achieved.

1.6 Coordination Between Entities

1.6.1 Steering Committee

The Gadsden-Etowah Steering Committee was first established in 2011 following re-issuance of the joint permit. The intent of the steering committee was to provide for coordination between the co-permittees. When the joint permit was superseded by the separate permits in 2016, the committee continued to work together to produce and implement a joint SWMPP and monitoring program.

The Steering Committee will continue under the 2021 permit. Despite the preparation of individual SWMPPs for each entity, the Gadsden-Etowah MS4 entities remaining committed to partnership and joint implementation of the monitoring program.

Each of the seven entities provide at least one member to the Gadsden-Etowah Storm Water Steering Committee. Each entity is responsible for providing the required annual updates and monitoring data to the Steering Committee.

Table 1-6 MS4 Storm Water Steering Committee

Entity	Contact	Phone Number	Email
City of Gadsden	Jeramy Ward	256-549-4527	jward@cityofgadsden.com
City of Gadsden	Heath Williamson	256-549-4520	hwilliamson@cityofgadsden.com
City of Attalla	Jason Nicholson	256-441-9200	jnicholson@attallacity.org
City of Rainbow City	Joel Garmon	256-413-1230	jgarmon@rbcalabama.com
City of Southside	Judd Rich	256-442-9775 Ext. 103	jrich@cityofsouthside.com
City of Glencoe	Todd Means	256-492-1424	toddmeans@cityofglencoe.net
City of Hokes Bluff	Lisa Johnson	256-492-2414	hbcity@cityofhokesbluff.net
Etowah County	Robert Nail	256-549-5358	rnail@etowahcounty.org

1.6.2 Monitoring Program

The monitoring program initially developed in 2011 to evaluate compliance with the Neely Henry Lake TMDL consist of quarterly wet-weather monitoring in several water bodies across the Gadsden-Etowah MS4. The City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, City of Rainbow City, the City of Southside, and Etowah County entered into a Cooperative Agreement on March 24, 2015 to jointly ensure the quarterly monitoring was performed.

The submission of individual SWMPPs and Annual Reports for each entity will require modification of the 2015 monitoring agreement. The Gadsden-Etowah Steering Committee will establish a revised cooperative agreement for the quarterly monitoring by March 31, 2023.

1.7 Responsible Party

The **Etowah County Engineering Department** is responsible for the coordination and implementation of the Storm Water Management Program Plan. Coordination between County departments is established in each section of the SWMPP.

The **Storm Water Steering Committee** is responsible for the implementation of the monitoring plan.

2.0 SWMPP Development, Review, and Update

2.1 SWMPP Components

Part II of the Individual Phase II Permit requires that the Permittee develop and implement a storm water management program plan that includes the following five minimum control measures:

1. Public Education and Public Involvement
2. Illicit Discharge Detection and Elimination (IDDE)
3. Construction Site Storm Water Runoff Control
4. Post-Construction Storm Water Management in New Development and Redevelopment
5. Pollution Prevention/Good Housekeeping for Municipal Operations

Program details are outlined in the following sections.

2.2 Annual Review

The Storm Water Management Program Plan will be reviewed annually by Etowah County as required by Part IV.B of the NPDES General Permit. The review will be performed in conjunction with the preparation of the Annual Report required by Part VI of the permit.

2.3 Updates to the SWMPP

The SWMPP may be updated following the procedures laid out in Part IV.B of the NPDES General Permit. Changes to the SWMPP adding components, controls, or requirements may be made at any time, provided ADEM is notified in writing. The changes must also be documented in the Annual Report.

Permission to make changes to the SWMPP to remove or replace components, controls, or requirements must be requested from the ADEM a minimum of 60 days prior to making the change. If the request is denied, ADEM will provide a written response giving the reason for the decision.

The Etowah County will also update their website with the most current SWMPP at the time the revisions are made.

2.4 Responsible Party

The **Engineering Department** is responsible for the coordination and implementation of the Storm Water Management Program Plan. Coordination with other departments or organizations is established in each section of the SWMPP.

3.0 Addressing Impairments and TMDLs

3.1 Rationale Statement

As discussed in Section 1.5, the Etowah County MS4 currently discharges to three impaired waterbodies. Part IV.D.3(a) of the NPDES General Permit requires that the SWMPP include BMPs targeted to address the impairments, achieve the waste load reductions/allocations outlined in the TMDLs, and a monitoring program to assess the effectiveness of the BMPs.

3.2 BMPs to Address Impairment

The Etowah County MS4 will implement the following BMPs to address nutrients and organic enrichment in Black Creek, Big Wills Creek, and Neely Henry Lake, address pathogens in Big Wills Creek, and decrease phosphorous in runoff from the MS4:

- Public education on proper use and disposal of fertilizers
- Dry-weather field screening of outfalls to waterbodies within the MS4
- Training for county personnel on illicit discharge identification and reporting
- A construction site runoff program that includes requiring erosion and sediment controls, permitting for qualifying sites, site inspections, and enforcement
- A program to report the discovery of unpermitted industrial facilities to ADEM
- A Vehicle Washing Standard Operating Procedure that include a specific prohibition on phosphate-containing soaps
- Public education on the storm water impacts of using phosphate-containing soaps in vehicle washing
- Methods for the public to report illicit discharges, including sanitary sewer overflows
- Public education on nutrient and pathogen pollution from agricultural activities

The implemented BMPs are discussed in detail in Sections 5 to 9 of the SWMPP.

3.3 Monitoring

The Etowah County MS4 is required to achieve a **30% reduction in Total Phosphorus discharge loading** and must conduct monitoring to evaluate compliance with the TMDL.

As previously discussed, the Etowah County MS4 has chosen to partner with the six other MS4 entities within the *Gadsden, Alabama Urbanized Area* to develop and implement a joint monitoring program. The Gadsden-Etowah Steering Committee is responsible for implementation of the Gadsden-Etowah Wet Weather Monitoring Program.

The intent of the proposed monitoring program is to evaluate the effectiveness of the County's BMPs in achieving the required phosphorous reduction as established in the TMDL and to generally evaluate overall water quality. Where deviations are documented and/or expected, the collected monitoring data will be used to determine the extent and cause of the pollutant of concern.

Details of the monitoring program are provided in the Gadsden-Etowah Wet Weather Monitoring Plan. A copy of the most recent plan is included in **Appendix C**.

3.3.1 Wet Weather Storm Water Monitoring

Strategy 1. Wet weather monitoring

The County will implement a monitoring program to assess the effectiveness of the County's BMPs in complying with the Neely Henry Lake TMDL.

Wet-weather monitoring will be conducted at selected monitoring points throughout the *Gadsden, Alabama Urbanized Area*. Under the program, water samples will be collected and analyzed for both field and laboratory parameters. The samples will be collected following a prescribed rain event according to the schedule established in the monitoring plan.

Evaluation Criteria: The County will include in the Annual Report copies of the reports for the monitoring events conducted during the reporting period.

Strategy 2. Mapping of storm water monitoring locations

Storm water monitoring locations are identified in the Gadsden-Etowah Wet Weather Monitoring Program included in **Appendix C**. Monitoring points located within the Etowah County MS4 boundaries are depicted on the County's Storm Water System Map. If additional monitoring locations are recommended as a result of the analysis of the monitoring data, The County will update the map with the revised or additional locations.

Evaluation Criteria: If additional sampling locations are added during the reporting period, The County will update the Storm Water System Map. A copy of the updated map will be provided with each Annual Report.

Strategy 3. Reporting

Field observations and analytical results will be recorded at the time of sampling. The resulting laboratory analytical reports will be retained by the County for a minimum of 3 years.

A report consolidating the results from each monitoring event will be submitted by the entity/company performing the monitoring to the members of the Gadsden-Etowah Steering Committee. Each monitoring report will be incorporated into the Annual Update of the SWMPP. Monitoring reports will be retained by the County for a minimum of 3 years.

Evaluation Criteria: The County will include in the Annual Report copies of the reports for the monitoring events conducted during the reporting period.

Strategy 4. Evaluation of monitoring data

The County will evaluate the collected monitoring data for indicators of potential illicit discharges within the County and to assess the effectiveness of the BMPs in reducing discharges of pathogens to Big Wills Creek and achieving the reductions outlined in the 2008 TMDL. Each year, statistical analysis will be performed on the cumulative monitoring data to determine whether there has been a statistically significant increase (SSI) of concentrations between specific monitoring points.

Evaluation Criteria: The County will report which monitoring points appear to have relatively higher pollutant levels, and whether pollutant loads appear to be increasing or decreasing across the Gadsden-Etowah MS4s. The County will make recommendations to the Gadsden-Etowah MS4 Storm Water Steering Committee to add and/or modify monitoring points to better characterize discharges from the Gadsden-Etowah MS4s.

3.4 Responsible Parties

The **Gadsden-Etowah Steering Committee** is responsible for implementation of the Gadsden-Etowah Wet Weather Monitoring Program.

4.0 Reporting and Record-Keeping

4.1 Annual Reports

Annual reports must be submitted to ADEM using the Alabama Environmental Permitting and Compliance System (AEPACS) by **May 31 of each year**. The annual report will cover the period from April 1 through March 31 of the year prior to the submittal date and will include:

1. List of contacts and responsible parties for the preparation of the Annual Report

2. Overall evaluation of the SWMPP developments and progress for the following:
    a. Major accomplishments
    b. Overall program strengths/weaknesses
    c. Future direction of the program
    d. Overall effectiveness of the SWMPP taking into account water quality/watershed improvement
    e. Measurable goals that were not performed and reasons why the goals were not accomplished
    f. Evaluation of monitoring data

3. Narrative report of the minimum storm water control measures referenced in Part III.B of this permit.
    a. Minimum control measures completed and in progress
    b. Assessment of the controls; and
    c. Discussion of proposed BMP revisions or any identified measurable goals that apply to the minimum storm water control measures.

4. Summary table of the storm water controls that are planned/scheduled for the next reporting cycle

5. Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the Maximum Extent Practicable (MEP).

6. Notice of reliance on another entity to satisfy some of the permit obligations

7. 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 latest 303(d) list, designated by ADEM as impaired, or for which a TMDL has been established or approved by EPA.

8. If monitoring is required, the monitoring results collected during the previous year.

4.2 Recordkeeping

The SWMPP must be retained until at least five years after coverage under the permit is terminated.

The following records must be maintained for a period of at least three years from the date of the sample, measurement, report, or application:

- Records of monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation)
- Copies of reports required by the permit
- Records of data used to complete the Notice of Intent

5.0 Public Education and Public Involvement on Storm Water Impacts

The following sections detail the rationale statement, targeted audiences, planned activities, evaluation criteria, and the responsible party regarding the referenced control measure.

5.1 Rationale Statement

The County's goal is to have a comprehensive and effective public education and public involvement program, the intent of which is to:

1. Generate awareness of storm water pollution prevention by educating people about the storm water system and its relationship to the health of local waterways;
2. Modify behavior patterns through education and encouragement of active participation in water pollution prevention;
3. Educate the public of steps they can take to reduce pollutants in storm water runoff; and
4. Involve the general public by providing activities and opportunities for public participation in the storm water management program.

5.2 Target Audiences

The primary target audiences within the County are as follows:

- General Public (homeowners and citizens)
- General Public, Businesses, Including Home-Based and Mobile Businesses
- Homeowners, Landscapers, and Property Managers
- Engineers, Contractors, Developers, Review Staff, and Land Use Planners

5.3 Strategies

The County plans to implement the following strategies as part of their Public Education and Public Involvement Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

5.3.1 Public Education on Pollution Reduction

Strategy 1. Maintain the storm water webpage

The County will provide information on the County's MS4 Program and permit on the Storm Water webpage within Etowah County's website. Links to various resources or educational materials will be provided.

The webpage will be updated periodically to:

- Include general information on the MS4 permit and SWMPP
- Discuss the storm water cycle and how common contaminants enter the storm water system
- Provide educational materials about proper and improper use, storage, and disposal of common household chemicals
- Provide educational materials on storm water impacts specifically related to litter, floatables, and debris
- Provide education on the storm water impacts of phosphate-containing soaps in vehicle washing
- Provide links to related storm water resources
- Provide information on how to identify and report illicit discharges

The storm water webpage can be viewed at the following link:
http://etowahcounty.org/engineering/storm-water/

Target Audience: General public, engineers, developers, landscapers, business owners, land use planners, property managers, and County personnel

Evaluation Criteria: The County will report what information was added to the webpage and the number of "hits" on the webpage. This information will indicate the number of people who view the webpage and the associated educational materials.

Strategy 2. Distribute storm water educational material on litter impacts

The County will partner with Keep Etowah Beautiful and/or Clean Water Partnership of Alabama to distribute storm water educational material on storm water impacts specifically related to litter, floatables, and debris.

Brochures will be placed in various County buildings (e.g., courthouse, engineering office, etc.) and replenished as necessary.

Target Audience: General public and businesses

Evaluation Criteria: The County will report the number of educational materials distributed during the reporting period, as well as the method of distribution. This information will indicate the number of people who received educational materials. An example of the educational materials will be provided with each Annual Report.

Strategy 3. Distribute storm water educational material on agricultural best practices

To address the discharge of nutrients and pathogens to the Etowah County MS4, the County will partner with the US Department of Agriculture (USDA) and/or the Natural Resources Conservation Service (NRCS) to distribute storm water educational material on the nutrient and pathogen pollution from crop and animal production.

Brochures will be placed in various County buildings (e.g., courthouse, engineering office, etc.) and replenished as necessary.

Target Audience: General public and businesses

Evaluation Criteria: The County will report the number of educational materials distributed during the reporting period, as well as the method of distribution. This information will indicate the number of people who received educational materials. An example of the educational materials will be provided with each Annual Report.

Strategy 4. Provide information on construction site storm water impacts

The County will provide pre-printed educational information on the impacts of erosion and sedimentation on water quality, as well as other potential impacts associated with runoff from construction sites to developers and/or engineers requesting a preliminary design review for a subdivision plat.

Target Audience: Engineers and developers

Evaluation Criteria: The County will report the number of subdivision plats reviewed during the reporting period. This information will indicate the number of people who received the educational materials. An example of the educational materials will be provided with each Annual Report.

Strategy 5. Provide information on Low Impact/Green Development

The County will provide pre-printed educational information on low impact/green development to developers and/or engineers requesting a preliminary design review for a subdivision plat. Information may include references to additional resources such as the Green Building Alliance, Low Impact Development Center, and U.S. Department of Housing and Urban Development.

Target Audience: Engineers, developers, and contractors

Evaluation Criteria: The County will report the number of subdivision plats reviewed during the reporting period This information will indicate the number of people who received the educational materials. An example of the educational materials will be provided with each Annual Report.

Cross-Reference: Section 8, Strategy 2

5.3.2 Public Input

Strategy 6. Annual Report and SWMPP availability

The County will provide the SWMPP and the current Annual Report available for public viewing on the County's storm water webpage at the following link:
http://etowahcounty.org/engineering/storm-water/

Target Audience: General public, engineers, developers, landscapers, business owners, land use planners, property managers, and County personnel

Evaluation Criteria: The County will report number of "hits" on the webpages. This information will indicate the number of people who view the webpage and the associated SWMPP and Annual Report.

Strategy 7. Seek public input

After completion of the SWMPP and/or each year's Annual Report, an announcement will be made at the following County Commission Meeting. Stakeholders will be encouraged to provide comments, questions, or concerns regarding the implementation of the SWMPP. The County will consider the received comments and respond as needed.

Target Audience: General public, engineers, landscapers, business owners, land use planners, property managers, and County personnel

Evaluation Criteria: Participation will be tracked by the number of comments or questions received. The County will report the number of stakeholder comments received on the SWMPP or Annual Report during the reporting period.

Strategy 8. Gadsden-Etowah MS4 Steering Committee meetings

The County will participate in meetings of the Gadsden-Etowah Storm Water Steering Committee for entity updates, networking, and coordination of activities and BMP strategies.

Steering Committee meetings will be held at least once during each reporting period.

Target Audience: County personnel, adjacent MS4s

Evaluation Criteria: The County will provide meeting agendas and attendance records during the reporting period. The County will report who attended each meeting. This information will indicate the participation of the steering committee and their interest in networking and coordination of activities.

Strategy 9. Alabama Stormwater Association participation

County personnel will participate in meetings, seminars, or other events held by the Alabama Stormwater Association (ASA) when possible.

Target Audience: General public, engineers, developers, landscapers, and land use planners

Evaluation Criteria: The County will provide agendas and attendance records for ASA events attended during the reporting period. The County will report the number of Gadsden employees who attended each ASA event.

5.3.3 Public Participation and Involvement

Strategy 10. Promote and participate in the Etowah County Water Festival

The *Etowah County Water Festival* is an annual event for fourth grade students from public schools in Etowah County, Alabama. The festival provides hands-on activities that teach students the importance of surface and groundwater, its role in the environment and its effect on human, animal, and plant life.

The County will promote and participate in the annual *Etowah County Water Festival* through County resources. County personnel will participate in the festival.

Target Audience: General public; schools

Evaluation Criteria: The County will report number of County volunteers at the event and the ways in which the County promoted and/or advertised the event. This information will indicate the County's participation and will help measure the public awareness of the event and degree of public and County employee participation.

Strategy 11. Public reporting and tracking system

The County provides a storm water complaint form on the county website for the public to report non-compliant construction sites, illicit discharges (including spills or illegal dumping), impaired waterways, and violations of ordinances relating to storm water pollution. The form is available at the following link: https://etowahcounty.org/report-storm-water-issues/

The County utilizes an Excel form to track the reports and follow up with investigations where necessary. A copy of the Complaint Tracking Log is included in **Appendix F**. Records of public reports, comments, or complaints will include:

- Date and description of the report
- Location of the complaint (if applicable)
- Identification of any actions taken (inspections, enforcement, corrections, etc.) that are sufficient to cross-reference inspection and enforcement records

The County will continue to publicize the reporting number on the County's website and track received reports and the County's responses to the received reports. The County will evaluate the current public reporting and tracking methods annually.

Target Audience: General public

Evaluation Criteria: The County will report the total number of received complaints, the number of addressed complaints, and the number of complaints resolved during the reporting period. This information will help measure the effectiveness of the reporting system, as well as public awareness and concern of storm water issues.

5.3.4 Litter Reduction

Strategy 12. Promote and participate in anti-litter/cleanup events

The County will partner with Keep Etowah Beautiful, Clean Water Partnership of Alabama, and/or Alabama Power to support, sponsor, and/or promote events such as *Renew Our Rivers*, *Message in a Bottle*, and/or community cleanup days.

County personnel will participate in at least one event organized or hosted by partner organizations each reporting period.

Target Audience: General public

Evaluation Criteria: The County will report the number of partnership activities conducted during the reporting period. The County will also report the number of County employees that participated in each event.

Cross-Reference: Section 9, Strategy 2

Strategy 13. Adopt-a-Mile program support

To involve the public and reduce the amount of litter entering the MS4, the County will continue to support the Adopt-a-Mile program. The County will maintain the Adopt-a-Mile signs along adopted roadways, provide trash bags to groups for Adopt-a-Mile cleanup events, and dispose of the collected litter in a permitted landfill following each event.

Target Audience: General public

Evaluation Criteria: The County will report the number of miles and streams adopted under the Adopt-a-Mile program. This information will help measure the public awareness of the Adopt-a-Mile program.

Cross-Reference: Section 9, Strategy 3

Strategy 14. Disposal days

To reduce illegal dumping, the County will continue to provide quarterly free disposal days. The County or a contracted disposal company will place containers at various locations in the County for citizens in unincorporated areas of Etowah County to drop off residential trash.

The quarterly evets will be advertised through public notices and will be announced at County Commission Meetings.

Target Audience: General public, homeowners, property managers

Evaluation Criteria: The County will report the dates the disposal events were held and the ways they were advertised during the reporting period. This information will help measure the public awareness of the disposal events.

Cross-Reference: Section 9, Strategy 4

Strategy 15. No dumping signs

To reduce illegal dumping, the County will continue to provide "No Dumping" signs upon request.

Target Audience: General public

Evaluation Criteria: The County will report the number of signs provided during the reporting period.

Cross-Reference: Section 9, Strategy 5

5.3.5 Program Evaluation

Strategy 16. Program Evaluation

As detailed above, the following information will be collected for each reporting period:

- What information was added to the webpage and the number of "hits" on the webpage
- Number of litter educational materials distributed and method of distribution
- Number of crop and animal production educational materials distributed and method of distribution
- Number of subdivision plats reviewed
- Number of stakeholder comments received on the SWMPP and/or Annual Report
- Agendas and County personnel attendance for Gadsden-Etowah Steering Committee meetings
- Agendas and County personnel attendance for ASA meetings
- Number of County volunteers who participated in the Etowah County Water Festival
- Ways in which the County promoted the Etowah County Water Festival
- Number of received complaints, the number of addressed complaints, and the number of complaints resolved
- Number of anti-litter/cleanup events promoted by the County
- Number of County employees participating in anti-litter/cleanup events
- Number of miles and streams adopted under the Adopt-a-Mile program
- Dates the free disposal events were held and the ways they were advertised
- Number of "No Dumping" signs provided

The County will utilize the collected information to evaluate the effectiveness of the public education/public involvement program.

In general, the number of webpage hits is expected to rise as the public becomes more aware of the MS4 program. If a decline in visitors is observed, the County may re-evaluate the structure and content of the webpage.

The comments received on the Annual Report and SWMPP will be used to determine if additional educational effort is needed on certain topics. The type and tone of the comments will help assess the effectiveness of previous public education efforts.

The number of illicit discharge reports or complaints received will be evaluated to determine if additional promotion of the reporting service is needed.

If low public participation in the Adopt-a-Mile or free disposal programs is observed, the County will evaluate increasing advertisements for the programs or changing advertising methods.

5.4 Responsible Parties

The **Engineering Department** is responsible for overseeing, developing, and coordinating the Public Education and Public Involvement efforts. The Engineering Department is also responsible for providing content for the Storm Water Webpage and performing plat review regarding drainage and flood control.

6.0 Illicit Discharge Detection and Elimination

6.1 Rationale Statement

The Etowah County Illicit Discharge Detection and Elimination (IDDE) program is designed to locate, identify, and correct illicit discharges to the MS4. Program emphasis will be placed on identifying and correcting pollutant discharges which could influence compliance with the Neely Henry Lake TMDLs.

6.2 Target Audiences

The primary target audiences within the County for the IDDE program are:

- **County Employees**
  - Primarily responsible for identifying and reporting illicit discharges
- **General Public (homeowners and citizens)**
  - Potential contributors of illicit discharges from activities such as dumping paint, motor oil, or other chemicals into a storm drain
- **Local Businesses**
  - Potential contributors of illicit discharges through inadequate management practices and/or unpermitted facilities

6.3 Strategies

A brief summary of strategies that the County will implement as part of their IDDE Program is provided below. A more detailed scope of the planned activities, rationale, and implementation process is presented in the *Etowah County Illicit Discharge Detection and Elimination Program* included in **Appendix D**. To evaluate the success of the strategies and aid in preparing the required Annual Reports, evaluation criteria have been established for each strategy.

6.3.1 Legal Authority

Strategy 1. IDDE regulatory mechanism

Etowah County does not currently have the authority to enact an ordinance or other regulatory mechanism to prohibit non-storm water discharges to the MS4.

Counties have no general grant of power in the Alabama State Constitution and must go to the Alabama Legislature for authority to engage in any activity not currently authorized by the State Constitution. Authority to enact local ordinances may be granted through constitutional amendments or by an act of the legislature known as "local legislation."

The County will continue to evaluate the possibility of developing an IDDE ordinance.

Evaluation Criteria: The County will report whether they will submit a resolution to the Alabama Legislature to establish an illicit discharge ordinance.

6.3.2 Storm Water System Mapping

Strategy 2. MS4 map

The County previously developed a map showing the known outfalls from the Etowah County MS4, the waters of the State that receive discharges from these outfalls, and the structural BMPS owned, operated, or maintained by the County. A copy of the current map is located in **Appendix A** as **Figure 5**.

The County will continue to maintain the map of the Etowah County MS4 area. The map will include, at a minimum:

- Latitude/longitude of all known outfalls
- Names of all waters of the State that receive discharges from the outfalls
- Locations of structural BMPs owned, operated, or maintained by the County

Evaluation Criteria: A copy of the updated map will be included with each Annual Report.

6.3.3 Priority Areas

Strategy 3. Identify Priority Areas

The County will designate Priority Areas within the Etowah County MS4 based on population density. The areas designated as Priority Areas will be identified in the Annual Report.

Evaluation Criteria: The County will report the number of Priority Areas designated during the reporting period and the basis for their selection. The County will also provide an updated map in each Annual Report showing the identified Priority Areas.

6.3.4 Dry Weather Field Assessment Activities

Strategy 4. Outfall reconnaissance inventory for new MS4 areas

Should the Urbanized Area boundary change as a result of the 2020 Census, the County will implement a stream-walking program designed to identify outfalls to the MS4 within the newly-added MS4 areas. The implementation process is detailed in Section 6 of the IDDE Program in **Appendix D**.

Evaluation Criteria: The County will maintain records of field observations. The County will report the number of outfalls identified and the stream length walked during the reporting period. The

County will provide updated tables and maps that include the outfalls identified by the stream-walking program.

Strategy 5. Outfall reconnaissance inventory for previously-unidentified outfalls

The County previously identified 48 outfalls within the MS4 Boundary. The most recent MS4 map is provided as **Figure 5** in **Appendix A**. The County will continue to implement a program to identify previously unknown outfalls to the MS4.

Previously unknown outfalls encountered during dry-weather inspections of known outfalls will be identified, inspected, and screened at the time of discovery. Following the initial inspection, the new outfall will be added to the MS4 outfall inventory and map.

Outfalls encountered during other field observations will be reported to the Engineering Department to be added to the outfall database for verification and inspection. Until verification, the outfall will be identified in the outfall inventory and on the map as a "Potential Outfall".

Evaluation Criteria: The County will maintain records of field observations. The County will report the number of outfalls identified during the reporting period. The County will provide updated tables and maps that include the verified and inspected outfalls.

Strategy 6. Verification of potential outfalls identified during final plat approval

As-built drawings for major subdivisions are required to be submitted to the County Engineer once infrastructure construction is complete. Information provided on the as-built drawings will be verified through field observation during the final inspection, prior to acceptance of the subdivision for County maintenance.

Outfalls identified during review of the as-built drawings or from the final inspection will be added to the outfall inventory and map as "Potential Outfalls" and will be inspected during the scheduled ORI activities. The implementation process is detailed in Section 6.3 of the IDDE Program in **Appendix D**.

Evaluation Criteria: The County will maintain records of field observations. The County will report the number of outfalls verified during the reporting period. The County will provide updated tables and maps that include the verified outfalls.

Strategy 7. Outfall Reconnaissance Inventory (ORI) during dry weather

ORI inspections will be conducted during dry weather conditions. Dry weather conditions are defined as a period in which no rainfall over 0.1 inch occurs in the previous 48 hours.

As required by the permit, a minimum of 15% of all known outfalls will be inspected during each reporting period and all known outfalls will be inspected in the 5-year permit cycle.

Priority Outfalls will be visually inspected at least once every three years.

The implementation process is detailed in Section 8 of the IDDE Program. Dry weather monitoring activities may be combined with outfall verification as described in Strategy 6.

Evaluation Criteria: The County will maintain records of field observations. The County will report the number of outfalls inspected during the reporting period.

Strategy 8. Suspect discharge screening

If a dry-weather flow is observed at an outfall during inspection, it will be screened to determine if it is a potential illicit discharge. The implementation process is detailed in Section 8.9 of the IDDE Program in **Appendix D**.

Evaluation Criteria: The County will maintain records of suspect discharge screening results. The County will report the number of identified dry weather flows observed during the reporting period, as well as the number of dry weather flows determined by field screening to be suspect discharges.

Strategy 9. Suspect discharge sampling

If a dry weather flow is observed, procedures for determining whether further analysis is required are specified on the ORI field sheet. If a dry weather flow has a severity index of 3 on one or more indicators in Section 4 of the Outfall Reconnaissance Inventory Field Sheet, or if field screening indicates a suspect discharge, field crews will collect samples for further analysis. The implementation process is detailed in Section 8.10 of the IDDE Program.

Evaluation Criteria: The County will report the number of identified dry weather flows, suspect discharges, and samples collected during the reporting period. The County will report the analysis results for the collected samples. The County will report if the suspect discharge was confirmed to be an illicit discharge and, if known, the type of illicit discharge.

6.3.5 Illicit Discharge Investigation

Strategy 10. Outfall ranking

Data from each Outfall Reconnaissance Inventory Field Sheet will be analyzed to designate the observed outfall as having obvious, suspect, possible, or unlikely discharge potential. Obvious and suspect illicit discharges will be investigated according to the schedule detailed in Section 8.12 of the IDDE Program in **Appendix D**.

Evaluation Criteria: The County will report the number of outfalls that required further investigation.

Strategy 11. Illicit discharge investigation

Illicit discharge investigations will be performed to determine the source of a discharge problem and the responsible party. The implementation process is detailed in Section 9 of the IDDE Program located in **Appendix D**.

Evaluation Criteria: The County will report the number of illicit discharge investigations performed during the reporting period. The County will also report the number of confirmed illicit discharges, if a source was determined, and if the discharge was eliminated.

6.3.6 Corrective Actions

Strategy 12. Corrective action record keeping

When a suspect illicit discharge or illicit connection is identified, a case log detailing pertinent information will be created. Throughout the corrective action process, information related to the resolution of the illicit discharge will be documented in the case log.

Evaluation Criteria: The County will maintain records of the correction actions. The County will report the number of confirmed illicit discharges and the number of illicit discharges corrected or eliminated during the reporting period. The County will also report the number of confirmed illicit discharges where corrective action is pending.

Strategy 13. Illicit discharge elimination

Identified illicit discharges will be reported to the appropriate department or agency for corrective action. Chemical spills will be referred to the Etowah County EMA. Discharges of sewage will be reported to the Etowah County Health Department. Discharges of potable water will be referred to the appropriate utility. Illegal dumping will be referred to the Sheriff and/or Keep Etowah Beautiful. Other illicit discharges will be reported to ADEM for enforcement action.

Evaluation Criteria: The County will report the number of illicit discharges referred to other agencies or departments for corrective action during the reporting period.

6.3.7 IDDE Public Education

Strategy 14. Public reporting and tracking system

The County provides a storm water complaint form on the county website for the public to report non-compliant construction sites, illicit discharges (including spills or illegal dumping), impaired waterways, and violations of ordinances relating to storm water pollution. The form is available at the following link: https://etowahcounty.org/report-storm-water-issues/

The County utilizes a form to track the reports and follow up with investigations where necessary. A copy of the Complaint Tracking Log is included in **Appendix F**. Records of public reports, comments, or complaints will include:

- Date and description of the report
- Location of the complaint (if applicable)
- Identification of any actions taken (inspections, enforcement, corrections, etc.) that are sufficient to cross-reference inspection and enforcement records

The County will continue to publicize the reporting number on the County's website and track received reports and the County's responses to the received reports. The County will evaluate the current public reporting and tracking methods annually.

Evaluation Criteria: The County will report the total number of received complaints, the number of addressed complaints, and the number of complaints resolved during the reporting period. This information will help measure the effectiveness of the reporting system, as well as public awareness and concern of storm water issues.

6.3.8 Training

Strategy 15. Annual county employee IDDE training

County workers will be trained in the identification of illicit discharges. The training session will be conducted annually during each reporting period.

County workers will be notified of the procedures for reporting suspected illicit discharges to their supervisor, including the preferred method of contact and the information to be included in the report (e.g., location, date, time, observations). The supervisor will then report the discharge to the Engineering Department.

Evaluation Criteria: The County will provide details on the IDDE training topics presented to the County workers. The County will maintain attendance records and report the number of individuals trained during the reporting period. This information will help evaluate the County employees' awareness of illicit discharges and storm water issues.

Cross-Reference: Section 9, Strategy 15

6.3.9 ADEM Notification

Strategy 16. Notify ADEM of illicit discharges from an adjacent MS4

The Etowah County MS4 is bordered in several areas by the Attalla MS4, the Gadsden MS4, the Glencoe MS4, the Rainbow City MS4, and the Southside MS4. Should the County identify a suspect illicit discharge originating within a neighboring MS4, the County will notify the appropriate MS4 and the ADEM Water Division within 48 hours of observation of the suspect illicit discharge.

The notification to the responsible MS4 and ADEM will include the following information:

1. Location of the suspect illicit discharge, including latitude and longitude, if known
2. Type of illicit discharge, if known
3. Estimated quantity or flow rate, if known
4. Origin or suspected origin of the suspect illicit discharge, if known
5. Date and time the suspect illicit discharge was observed
6. Description of affected media, including the name of the receiving waterbody, if known
7. Corrective actions being taken within the Etowah County MS4, if any

Evaluation Criteria: The County will report the total number of suspect illicit discharges reported to adjacent MS4s and ADEM during the reporting period. Copies of the notification reports will be included in the Annual Report.

Strategy 17. Notify ADEM of unpermitted industrial sites

As authorized by the Clean Water Act, the NPDES Permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Title 40, Part 122 of the Code of Federal Regulations (40CFR122) specifies that discharges associated with certain industrial activities must obtain an NPDES permit. ADEM currently provides for individual and general NPDES permitting.

Should the County identify an unpermitted industrial facility (i.e., through illicit discharge investigation) the facility will be reported to the Industrial Section of ADEM in Montgomery, Alabama by phone and/or email. Etowah County continues to rely on ADEM for industrial NPDES permitting and enforcement.

Evaluation Criteria: The County will provide the number of unpermitted facilities reported to ADEM during the reporting period, if any. Communication records will be maintained. This

information will help measure the effectiveness of the reporting and identification of unpermitted facilities.

6.4 Responsible Party

The **Engineering Department** is responsible for overseeing, developing, and coordinating the IDDE program in the Etowah County regulated MS4 area.

7.0 Construction Site Storm Water Runoff

7.1 Rationale Statement

The County's construction site storm water runoff control program is primarily designed to address storm water pollution due to off-site sedimentation from qualifying construction sites to the maximum extent practicable.

7.2 Target Audiences

The primary target audiences within the County are:

- **Developers, Contractors, and Homebuilders**
  - Potential contributors of storm water pollution through development and construction activities.

- **Engineers**
  - Responsible for designing effective best management practices to minimize off-site sedimentation from construction activities.

7.3 Strategies

The County plans to implement the following activities as part of their Construction Site Storm Water Runoff Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

7.3.1 Legal Authority

Strategy 1. Erosion and sediment control regulations

The County's Subdivision Regulations govern erosion and sediment control for the construction of infrastructure in subdivisions within the County. The regulations are limited to construction activities within future County right-of-way for roadways (e.g., roads, storm sewers, etc.). The County does not currently have authority over construction activities beyond the initial infrastructure, nor does the County have the authority to regulate private developments such as commercial sites, individual home sites, or private subdivisions. A copy of the Subdivision Regulations is provided in **Appendix E.**

Aside from subdivision infrastructure within future County right-of-way, Etowah County does not currently have the legal authority to enact an ordinance or other regulatory mechanism to regulate construction sites within the MS4.

Require ADEM Permitting

Article V, Section 5-4-4 (Road Construction Requirements) requires that a proof of coverage under the Alabama Construction General Permit ALR100000 be provided to the County prior to starting any phase of road construction in a subdivision.

Require Erosion and Sediment Controls

Article V, Section 5-1 establishes the ADEM rules and standards as part of the minimum requirements for all subdivision plats.

Article V, Section 5-4-4 (Road Construction Requirements) requires that best management practices for erosion control be used through road construction and development and that the developer be responsible for obtaining coverage under the Alabama Construction General Permit and complying with ADEM regulations.

Sanctions to Ensure Compliance

Etowah County does not currently have authority to enforce compliance with the requirement to implement erosion and sediment controls. The County intends to refer non-compliant sites to ADEM for enforcement.

Evaluation Criteria: The Subdivision Regulations will be evaluated annually on their effectiveness in addressing erosion and sediment control. The County will report if changes are made to the Subdivision Regulations during the reporting period.

7.3.2 Training

Strategy 2. BMP training program

County personnel tasked with conducting BMP inspections will be certified under an ADEM-approved Qualified Credentialed Inspector (QCI) training program and will attend annual refreshers.

Evaluation Criteria: The County will provide a copy of the QCP certification and/or QCI certificates and records of awareness training received during the reporting period.

7.3.3 Site Plan Review and Approval

Strategy 3. Require plat submittal

Article III, Section 3-3 (Proposed Plat Submission for Major Subdivisions) requires the submittal of a Proposed Plat Application Assembly to the County Engineer. The plat must be submitted to the Engineering Department for review prior to approval by the County Commission.

Evaluation Criteria: The County will report the number of subdivision plats reviewed during the reporting period.

Strategy 4. Sediment and erosion control plan review procedures

The County will not review submitted plats for erosion and sediment control measures and will instead rely on the designated Qualified Credentialed Professionals preparing the Construction Best Management Practices Plans. Sediment and erosion control measures certified by a Qualified Credentialed Professional as defined in the Alabama Construction General Permit will be deemed adequate and will not be reviewed by County personnel.

Evaluation Criteria: The County will report the total number of plats approved during the reporting period.

7.3.4 Site Inspection

Strategy 5. Maintain inventory of qualifying construction sites

The County will maintain a list of active qualifying construction sites (sites one acre or larger in size or part of a common plan of development) within the MS4 boundary. Priority Construction Sites (as defined in the Alabama Construction General Permit) will be identified on the list. The inventory will include:

- Contact information for each site
- Size of the construction site
- Whether the site has submitted an NOI for coverage under the Alabama NPDES Construction General Permit
- Whether the site is a Priority Site

Evaluation Criteria: The County will include the most recent list of active qualifying construction sites with each annual report.

Strategy 6. Inspection of qualifying non-Priority sites

Qualifying construction sites will be inspected by designated County personnel at a minimum frequency of every three months until stabilization or NPDES permit termination, whichever comes first, provided the sites meet one of the following criteria:

1. The site is a County-owned project, or
2. The site is located within future County right of way in a subdivision.

Engineering Department personnel will work together to perform the necessary inspections and implement work orders for subsequent inspections and potential enforcement when sites are non-compliant.

Inspections will be documented using the *BMP Inspection Form* located in **Appendix F** or an equivalent form. The County will maintain inspection documentation for review upon request. Inspection documentation shall include the following, at a minimum:

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, and email)

f. Description of conditions of BMPs, including but not limited to the following:
   - Vegetation and soils
   - Inlet and outlet channels and structures
   - Embankments, slopes, and safety benches
   - Spillways, weirs, and other control structures
   - Sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures

g. Photographic documentation of storm water BMP components

If deficiencies are noted during the inspection, the inspector will notify the owner and/or operator of the subject site. A copy of the inspection report will be provided to the owner and/or operator.

Evaluation Criteria: The County will report the number of inspections completed, the number of non-compliant construction sites identified by the County, the number of enforcement actions taken, the number of non-compliant sites reported to the ADEM, and whether the individuals responsible for identified non-compliant construction sites are repeat offenders.

Strategy 7. Inspection of Priority construction sites

The Etowah County MS4 does not currently incorporate any waterbodies or watersheds that are impaired for siltation or turbidity; therefore, no construction sites within the Etowah County MS4 are considered Priority Construction Sites, as defined in Part V of the 2021 Alabama Construction General Permit.

Should a waterbody or watershed within the MS4 be identified on a future 303(d) list as being impaired for siltation and/or turbidity, the County will identify qualifying construction sites within the affected watershed for which they have inspection authority. The County will conduct inspections of Priority Construction Sites within the Etowah County MS4 at a minimum frequency of once per month, provided they meet one of the following criteria:

1. The site is a County-owned project, or

2. The site is located within future County right of way in a subdivision.

Priority Construction Site inspections will be conducted using the same method outlined in Strategy 6 and documented using the *BMP Inspection Form* located in **Appendix F** or an equivalent form.

If deficiencies are noted during the inspection, the inspector will notify the owner and/or operator of the subject site. A copy of the inspection report will be provided to the owner and/or operator.

Evaluation Criteria: The County will report the number of BMP inspections conducted at Priority Construction Sites by County employees during the reporting period.

Strategy 8. Re-inspection of sites

If deficiencies are noted during the routine inspection and cannot be corrected at the time of the inspection, the site will be scheduled for re-inspection. The timeframe for re-inspection will be determined by the inspector based on the severity of the observed non-compliances.

Re-inspections will be conducted by the Engineering Department using the same method outlined in Strategy 6 and documented using the *BMP Inspection Form* located in **Appendix F** or an equivalent form.

Evaluation Criteria: The County will report the number of re-inspections conducted at deficient sites by County employees during the reporting period.

7.3.5 Public Reporting

Strategy 9. Public reporting and tracking system

The County provides a storm water complaint form on the county website for the public to report non-compliant construction sites, illicit discharges (including spills or illegal dumping), impaired waterways, and violations of ordinances relating to storm water pollution. The form is available at the following link: https://etowahcounty.org/report-storm-water-issues/

The County utilizes a form to track the reports and follow up with investigations where necessary. A copy of the Complaint Tracking Log is included in **Appendix F**. Records of public reports, comments, or complaints will include:

- Date and description of the report
- Location of the subject construction site
- Identification of any actions taken (inspections, enforcement, corrections, etc.) that are sufficient to cross-reference inspection and enforcement records

The County will continue to publicize the reporting number on the County's website and track received reports and the County's responses to the received reports. The County will evaluate the current public reporting and tracking methods annually.

Evaluation Criteria: The County will report the total number of received complaints, the number of addressed complaints, and the number of complaints resolved during the reporting period. This information will help measure the effectiveness of the reporting system, as well as public awareness and concern of storm water issues.

7.3.6 ADEM Notification

Strategy 10. Notify ADEM of unpermitted sites

The County will notify ADEM of any qualifying construction site that is not permitted under the Alabama Construction General Permit.

Evaluation Criteria: The County will report the total number of unpermitted qualifying construction sites reported to ADEM during the reporting period.

Strategy 11. Notify ADEM of non-compliant sites

Non-compliant construction sites will be reported to ADEM. Records of each referral will be maintained and will include:

- Name of the owner/operator
- Location of construction project
- Description of violation(s)

Evaluation Criteria: The County will report the total number of non-compliant construction sites reported to ADEM during the reporting period.

7.4 Responsible Party

The **Engineering Department** is responsible for implementing the Construction Site Storm Water Runoff Control Program.

8.0 Post-Construction Storm Water Management in New Development and Redevelopment

8.1 Rationale Statement

Post-construction runoff can significantly impact a water body by increasing the type and quantity of pollutants in storm water runoff and by increasing the volume of water delivered to the water body during storms. As runoff flows over areas altered by development, it collects sediment and chemicals such as oil, grease, pesticides, heavy metals, and nutrients. Instead of infiltrating, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff are delivered to the nearest receiving water. Both impacts can be mitigated by proper post-construction planning.

8.2 Target Audiences

The primary target audiences within the County are:

- **Developers, Contractors, and Homebuilders**
  - Responsible for development and construction activities that can impact post-construction storm water management
- **Engineers**
  - Responsible for designing post construction storm water management plans

8.3 Strategies

The County plans to implement the following activities as part of their Post-Construction Storm Water Management Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

8.3.1 Legal Authority and Design Standards

Strategy 1. Post-construction storm water management ordinance

The County's Subdivision Regulations outline the design standards for the construction of infrastructure in subdivisions within the County. The regulations are limited to construction activities within future County right-of-way for roadways (e.g., roads, storm sewers, etc.). The County does not currently have authority over construction activities beyond the initial infrastructure, nor does the County have the authority to regulate private developments such as commercial sites, individual home sites, or private subdivisions. A copy of the Subdivision Regulations is provided in **Appendix E.**

Aside from subdivisions, Etowah County does not currently have the legal authority to enact an ordinance or other regulatory mechanism to regulate post-construction storm water runoff within the MS4.

Reducing Post-Construction Runoff Volume

Article V, Section 5-4-4 (Road Construction Requirements) requires that an adequate storm drainage system be provided for the drainage of surface water from roadways, and that the system be based on the 25-year design storm.

Maintenance Requirements for Post-Construction Controls

Article V, Section 5-4-4 (Road Construction Requirements) requires that post-construction controls (i.e., detention ponds) be located on private property. The article further requires that the parcel of land containing the post-construction control be retained by the developer or Home Owner's Association, with responsibility for the maintenance of the post-construction control remaining with either the developer or HOA.

Evaluation Criteria: The Subdivision Regulations will be evaluated annually on their effectiveness in reducing storm water pollution from new development or redevelopment. The County will report if changes are made to the Subdivision Regulations during the reporting period.

Strategy 2. Encourage low-impact development/green infrastructure practices

The County will provide educational information on green development through the County website. The County will provide pre-printed educational information on low impact/green development to developers and/or engineers requesting a preliminary design review for a subdivision plat. Information may include references to additional resources such as the Green Building Alliance, Low Impact Development Center, and U.S. Department of Housing and Urban Development.

Evaluation Criteria: The County will report the number of subdivision plats reviewed during the reporting period. This information will indicate the number of people who received the educational materials.

Cross-Reference: Section 5, Strategy 5

8.3.2 Plan Review and Oversight

Strategy 3. Require plat submittal

Article III, Section 3-3 (Proposed Plat Submission for Major Subdivisions) requires the submittal of a Proposed Plat Application Assembly to the County Engineer. The plat must be submitted to the Engineering Department for review prior to approval by the County Commission.

Evaluation Criteria: The County will report the number of subdivision plats reviewed during the reporting period.

Strategy 4. Plat review procedures

The Engineering Department will review the Proposed Plat Application Assembly submitted by the applicant to ensure compliance with the subdivision regulations. The plat will be reviewed for compliance with the design criteria established in the Subdivision Regulations. Major subdivisions will be reviewed within 30 days of submittal of the complete application.

If the reviewed plat is determined to meet the applicable criteria, the plan will be approved in writing.

Evaluation Criteria: The County will report the number of subdivision plats reviewed during the reporting period.

Strategy 5. Require as-built certification

Article III, Section 3-8 (Final Plat Approval) requires that a final as-built set of plans be provided to the Engineering Department either:

1) Following completion of infrastructure construction for a major subdivision, or

2) Following approval of the proposed plat for a minor subdivision or large acreage tract.

Evaluation Criteria: The County will report the number of as-built plans submitted during the reporting period.

Strategy 6. Post-installation inspections

Etowah County does not currently have the authority to inspect post-construction BMPs on private property. Poorly-functioning post-construction controls that result in illicit discharges will be reported to ADEM for enforcement.

Evaluation Criteria: The County will report the total number of illicit discharges reported to ADEM during the reporting period.

8.3.3 Long-Term Operation and Maintenance

Strategy 7. Require long-term maintenance on storm water controls

Article V, Section 5-4-4 (Road Construction Requirements) requires that post-construction controls (i.e., detention ponds) be located on private property. The article further requires that the parcel of land containing the post-construction control be retained by the developer or Home

Owner's Association, with responsibility for the maintenance of the post-construction control remaining with either the developer or HOA.

Evaluation Criteria: The County will report the number of subdivision plats reviewed during the reporting period.

Strategy 8. Inventory of post-construction structural controls

The County will compile an inventory of post-construction structural controls located within the Etowah County MS4, including those owned by the County. Controls that are considered low impact or green infrastructure will be noted in the inventory. The inventory will also identify the owner/operator of each control and the construction date (if known).

The inventory will be updated annually. Structural BMPs owned or operated by Etowah County will be identified on the map of the Etowah County MS4.

Evaluation Criteria: The updated inventory will be provided to ADEM with each Annual Report.

Strategy 9. Annual inspections of County-owned post-construction storm water controls

The County will inspect County-owned or managed post-construction BMPs within the Etowah County MS4 at a minimum of once per year.

Inspection and maintenance records for post-construction BMPs will be maintained for a period of five years from the date of inspection or maintenance and will be made available to ADEM upon request. Documentation of the inspections of County-owned or managed facilities will be maintained using the *Post-Construction Annual Inspection Form* included in **Appendix F** and shall include, at a minimum:

1) Facility type
2) Inspection date
3) Name and signature of inspector
4) Site location
5) Owner information (name, address, phone number, fax, and email)
6) Description of the storm water BMP condition
7) Photographic documentation of all critical storm water BMP components

8) Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP

9) Maintenance agreements for long-term BMP operation and maintenance

Evaluation Criteria: The County will report the number of inspections performed by County personnel on post-construction BMPs during the reporting period.

Strategy 10. Annual inspections of privately-owned post-construction storm water controls

The County does not currently have authority to inspect post-construction controls located on private property. Poorly-functioning post-construction controls that result in illicit discharges will be reported to ADEM for enforcement.

Evaluation Criteria: The County will report the total number of illicit discharges reported to ADEM during the reporting period.

8.3.4 Enforcement and Abatement

Strategy 11. Corrective actions for County-owned post-construction controls

Should a routine inspection of a county-owned post-construction control identify a maintenance issue, The County will perform or require necessary maintenance or repairs. Additional inspections will be conducted as necessary to determine if the required repairs have been made.

Evaluation Criteria: The County will report the number of corrective actions taken regarding deficient County-owned post-construction BMPs during the reporting period.

Strategy 12. Procedures to address non-compliant post-construction BMPs

Poorly-functioning privately-owned post-construction controls that result in an illicit discharge will be reported to ADEM. Records of each referral will be maintained and will include:

- Name of the owner/operator
- Location of the post-construction control
- Description of illicit discharge(s)
- Date the illicit discharge was observed

Evaluation Criteria: The County will report the total number of illicit discharges sites reported to ADEM during the reporting period.

8.4 Responsible Party

The **Engineering Department** is responsible for establishing design criteria for subdivision storm drainage systems, evaluating the Subdivision Regulations, reviewing submitted subdivision plats, and performing inspections of County-owned post-construction BMPs.

9.0 Pollution Prevention and Good Housekeeping for County Operations

9.1 Rationale Statement

Etowah County will develop and utilize BMPs designed to minimize pollution related to County operations and maintenance. These BMPs are intended to address storm water pollution from nutrients, sediments, petroleum products, and other common pollutants.

9.2 Target Audiences

The primary target audiences within the County are:

- **County Employees**
  - Primarily responsible for identifying and reporting illicit discharges
  - Potential contributors to storm water impacts through municipal operations

9.3 Strategies

The County will implement the following activities as part of their Pollution Prevention and Good Housekeeping for County Operations Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

9.3.1 County Facilities

Strategy 1. County facilities inventory

The current inventory of County facilities is provided in **Appendix H**. The County currently has three facilities, two of which have the potential to discharge pollutants through storm water runoff.

The County will continue to maintain the inventory listing all County facilities, including County facilities that have the potential to discharge pollutants via storm water runoff. The inventory will be updated annually.

During the annual inventory, County facilities will be evaluated to determine which facilities have operations with the potential to contribute pollutants to storm water runoff. The evaluation will consider the following:

- Types and amounts of chemicals stored at the facility
- Types and capacities of tanks, totes, or drums at the facility
- Outfall locations and types (e.g., ditch, culvert, pipe, etc.)

- Exterior operations at the facility (e.g., equipment washing, equipment fueling, etc.)

Evaluation Criteria: The County will provide a summary of the County facility inventory for the reporting period with each Annual Report, including which facilities are determined to have the potential to discharge pollutants.

9.3.2 Litter, Floatables, and Debris Reduction

Strategy 2. Promote and participate in anti-litter/cleanup events

The County will partner with Keep Etowah Beautiful, Clean Water Partnership of Alabama, and/or Alabama Power to support, sponsor, and/or promote events such as *Renew Our Rivers*, *Message in a Bottle*, and/or community cleanup days.

County personnel will participate in at least one event organized or hosted by partner organizations each reporting period.

Evaluation Criteria: The County will report the number of partnership activities conducted during the reporting period. The County will also report the number of County employees that participated in each event.

Cross-Reference: Section 5, Strategy 12

Strategy 3. Adopt-a-Mile program support

To involve the public and reduce the amount of litter entering the MS4, the County will continue to support the Adopt-a-Mile program. The County will maintain the Adopt-a-Mile signs along adopted roadways, provide trash bags to groups for Adopt-a-Mile cleanup events, and dispose of the collected litter in a permitted landfill following each event.

Evaluation Criteria: The County will report the number of miles and streams adopted under the Adopt-a-Mile program. This information will help measure the public awareness of the Adopt-a-Mile program.

Cross-Reference: Section 5, Strategy 13

Strategy 4. Disposal days

To reduce illegal dumping, the County will continue to provide quarterly free disposal days. The County or a contracted disposal company will place containers at various locations in the County for citizens in unincorporated areas of Etowah County to drop off residential trash.

The quarterly evets will be advertised through public notices and will be announced at County Commission Meetings.

Evaluation Criteria: The County will report the dates the disposal events were held and the ways they were advertised during the reporting period. This information will help measure the public awareness of the disposal events.

Cross-Reference: Section 5, Strategy 14

Strategy 5. No dumping signs

To reduce illegal dumping, the County will continue to provide "No Dumping" signs upon request.

Evaluation Criteria: The County will report the number of signs provided during the reporting period.

Cross-Reference: Section 5, Strategy 15

Strategy 6. Scrap tire collection

The County will continue to manage scrap tires collected by County litter crews from public right of ways, as well as tires collected during Renew Our Rivers cleanups. Collected tires will be aggregated at the County shop, then disposed of properly.

Evaluation Criteria: The County will report the number of scrap tires disposed of during the reporting period.

Strategy 7. Inmate cleanup crews

The County will continue to utilize inmates from the Etowah County Jail for litter removal along County roadways when possible.

Evaluation Criteria: The County will report the amount of litter collected by inmate crews during the reporting period.

Strategy 8. Evaluate effectiveness of litter reduction program

To evaluate the effectiveness of the litter reduction program, the County will track the following metrics for each reporting period:

- Number of anti-litter/cleanup partnership activities conducted
- Number of County employees that participated in each anti-litter/cleanup event
- Number of miles and streams adopted under the Adopt-a-Mile program
- Dates the free disposal events were held and the ways they were advertised

- Number of "No Dumping" signs provided
- Number of scrap tires collected by litter crews or during litter cleanup events
- Number of inmate litter crews deployed

The County will utilize the collected information to evaluate the effectiveness of the litter reduction program.

If low public participation in the Adopt-a-Mile or free disposal programs is observed, the County will evaluate increasing advertisements for the programs or changing advertising methods.

9.3.3 Standard Operating Procedures

Strategy 9. Vehicle and equipment maintenance SOP

Etowah County owns and operates a variety of vehicles and equipment used in County operations and maintenance, including passenger cars, trucks, vans, and equipment.

The County previously developed Standard Operating Procedures detailing storm water pollution prevention measures for the following operations related to vehicle and equipment maintenance:

- Spill control
- Equipment and machinery maintenance
- Waste disposal
- Materials storage

The SOP will be evaluated each year by March 31. A summary of proposed changes to the SOP will be included in the Annual Report. A copy of the current SOP is provided in **Appendix G**.

Evaluation Criteria: The County will report the results of the annual evaluation of the Vehicle and Equipment Maintenance SOP in each Annual Report.

Strategy 10. Equipment and vehicle washing SOP

The County currently operates one vehicle washing area at the County's Gadsden Shop.

Vehicle washing will be performed only in designated areas. Each location will be reviewed, inspected, and modified as needed throughout the year. During the annual employee training, the County will notify all employees of the locations of the designated wash areas.

To reduce discharges of phosphates to the MS4, the County will prohibit the use of phosphate-containing soaps for County vehicle and equipment washing.

The County will develop a written Standard Operating Procedure for vehicle washing operations by March 31, 2023. The SOP will be implemented no later than March 31, 2024.

Once implemented, the SOP will be evaluated each year by March 31. A summary of proposed changes will be included in the Annual Report.

Evaluation Criteria: The County will report completion of the vehicle washing SOP in the 2022-2023 Annual Report. The County will report the results of the annual evaluation of the SOP in each Annual Report.

The County will also report the number of designated municipal vehicle washing areas in operation during each reporting period.

Strategy 11. County vehicle fueling SOP

The County does not operate a fueling area; instead, County vehicles are fueled at commercial facilities.

The County will develop a written Standard Operating Procedure for County vehicle fueling operations by March 31, 2023. The SOP will be implemented no later than March 31, 2024.

Once implemented, the SOP will be evaluated each year by March 31. A summary of proposed changes will be included in the Annual Report.

Evaluation Criteria: The County will report completion of the vehicle fueling SOP in the 2022-2023 Annual Report. The County will report the results of the annual evaluation of the SOP in each Annual Report.

Strategy 12. Herbicide SOP

Herbicide application in County right of way is performed by County personnel. The County will maintain all necessary certifications and licensing as well as training for personnel.

The County will develop a written Standard Operating Procedure for herbicide operations by March 31, 2023. Topics covered by the SOP will include, but are not limited to:

- Storage of herbicides
- Disposal of herbicides
- Application of herbicides

The SOP will be implemented no later than March 31, 2024.

Once implemented, the SOP will be evaluated each year by March 31. A summary of proposed changes will be included in the Annual Report.

Evaluation Criteria: The County will report completion of the herbicide SOP in the 2022-2023 Annual Report. The County will report the results of the annual evaluation of the SOP in each Annual Report.

9.3.4 Inspection Program

Strategy 13. Quarterly inspection of County facilities

County facilities that have been determined to have the potential to discharge pollutants via storm water runoff will be inspected for good housekeeping practices once per quarter. The checklist included in **Appendix F** will be used during inspections and to track noted deficiencies.

Evaluation Criteria: The County will provide the update inventory of County facilities, the number of inspections performed at each facility that has the potential to discharge pollutants via storm water runoff, and the number of noted deficiencies. This information will help measure the County workers awareness of storm water issues.

Strategy 14. Corrective actions at County facilities

If deficiencies are noted during a quarterly County facility inspection, the deficiencies will be addressed within 72 hours of the inspection. Should the deficiency require additional time to correct, a specific timeframe will be established for completion of corrective actions and recorded on the inspection form.

The County facility will be re-inspected following correction of the deficiencies, and the date of the corrective actions will be noted on the inspection form.

Evaluation Criteria: The County will provide the number of deficiencies noted during quarterly County facility inspections. The County will also report the number of re-inspections conducted. This information will help measure the County workers' awareness of storm water issues.

9.3.5 County Employee Training

Strategy 15. Annual employee training

Appropriate County personnel will undergo annual training on good housekeeping practices, the developed SOPs, and potential threats to storm water quality. Topics may include, but are not limited to:

- Equipment washing
- Maintenance of County roads
- Storage and disposal of chemicals and waste materials
- Vegetation control, cutting, removal, and disposal of the cuttings
- Vehicle fleets/equipment maintenance and repair
- Materials storage facilities and storage yards

Evaluation Criteria: The County will provide details on the training topics presented to County workers during the reporting period. The County will report the dates County employees underwent training, the number of attendees, and the departments represented.

Cross-Reference: Section 6, Strategy 15

9.4 Responsible Party

The **Engineering Department** will be responsible for conducting the County facility evaluations and maintaining records of the facility inspections. The Engineering Department is also responsible for coordinating the annual reviews of the SOPs, performing roadway maintenance, and coordinating litter reduction efforts.

10.0 Agency Certification

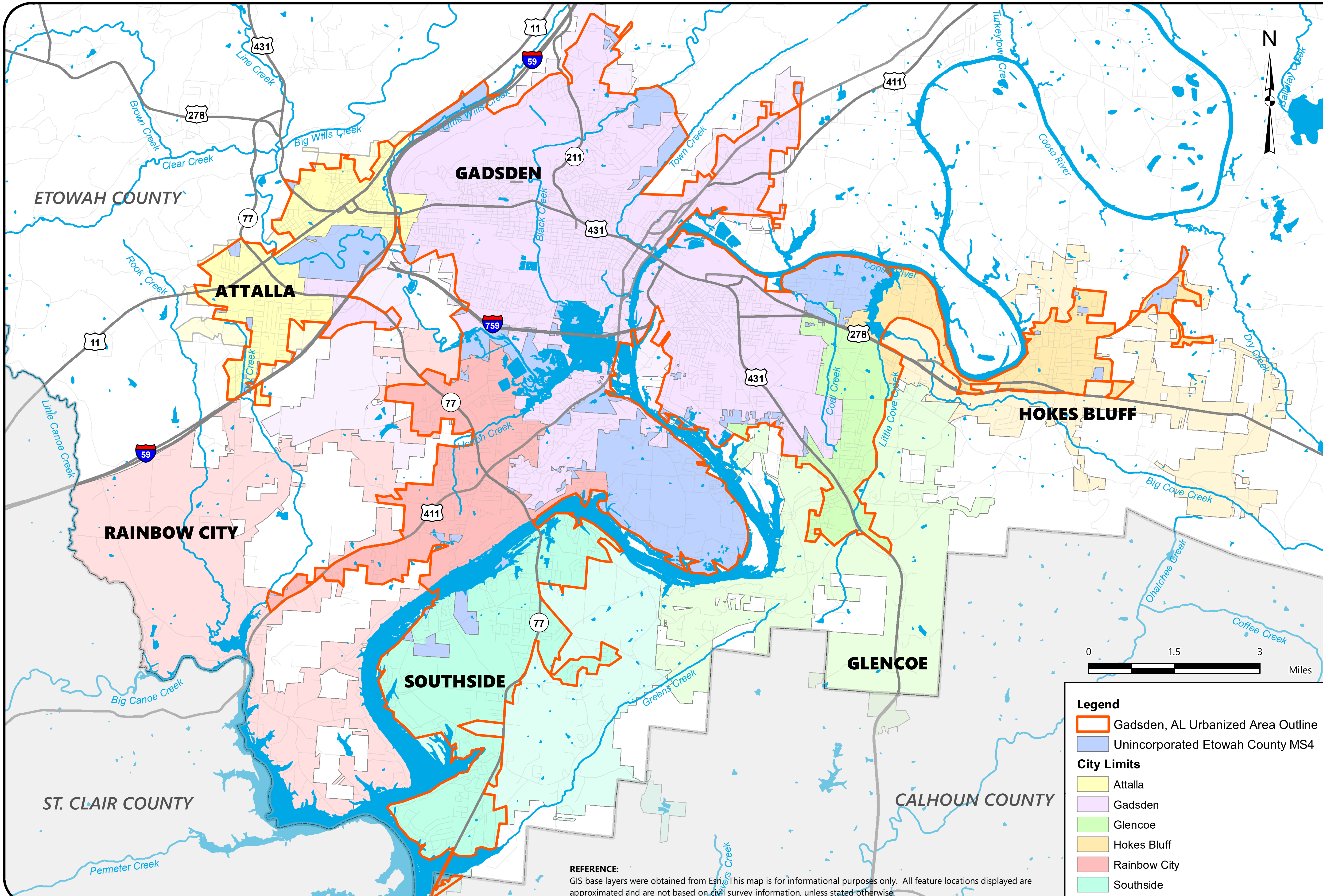
I certify under penalty of law that this document and all attachments pertaining to Etowah County were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the 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 fine or imprisonment for knowing violations.

Shane Ellison, Chief Administrative Officer
Etowah County Commission

3-31-22
Date

Appendices

Appendix A – Figures



REFERENCE:
GIS base layers were obtained from Esri. This map is for informational purposes only. All feature locations displayed are approximated and are not based on civil survey information, unless stated otherwise.

GADSDEN-ETOWAH MS4 BOUNDARIES

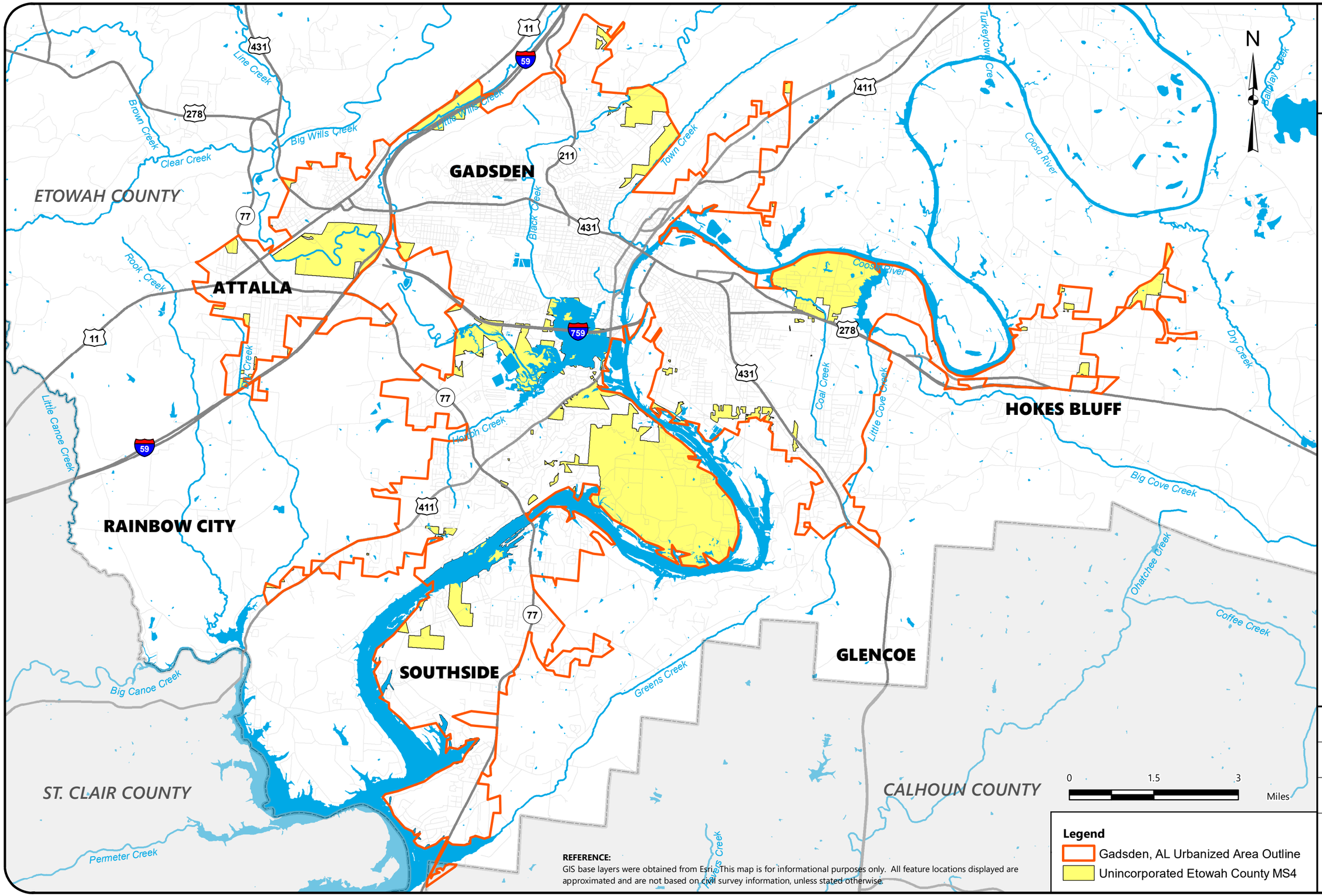
GADSDEN ALABAMA URBANIZED AREA
PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES GENERAL PERMIT ALR040009

SCALE:
1:100,000

DATE:
02/18/2022

PROJECT NUMBER
215660

FIGURE NO.
1



REFERENCE:
GIS base layers were obtained from Esri. This map is for informational purposes only. All feature locations displayed are approximated and are not based on civil survey information, unless stated otherwise.

ETOWAH COUNTY MS4 BOUNDARIES

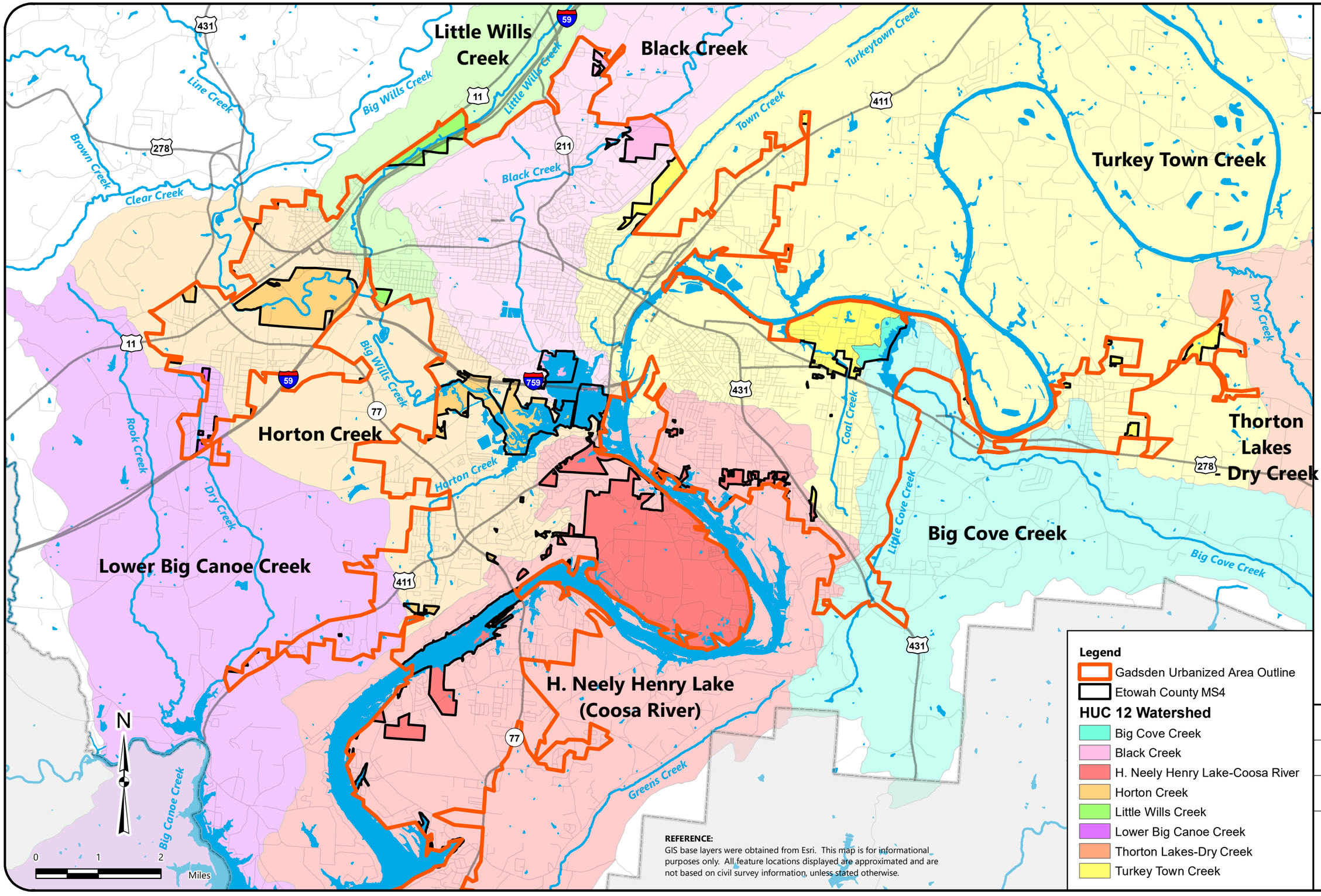
ETOWAH COUNTY MS4
PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES GENERAL PERMIT ALR040009

SCALE:
1:100,000

DATE:
03/24/2022

PROJECT NUMBER
215660G

FIGURE NO.
2



REFERENCE:
GIS base layers were obtained from Esri. This map is for informational purposes only. All feature locations displayed are approximated and are not based on civil survey information, unless stated otherwise.

HUC 12 WATERSHEDS

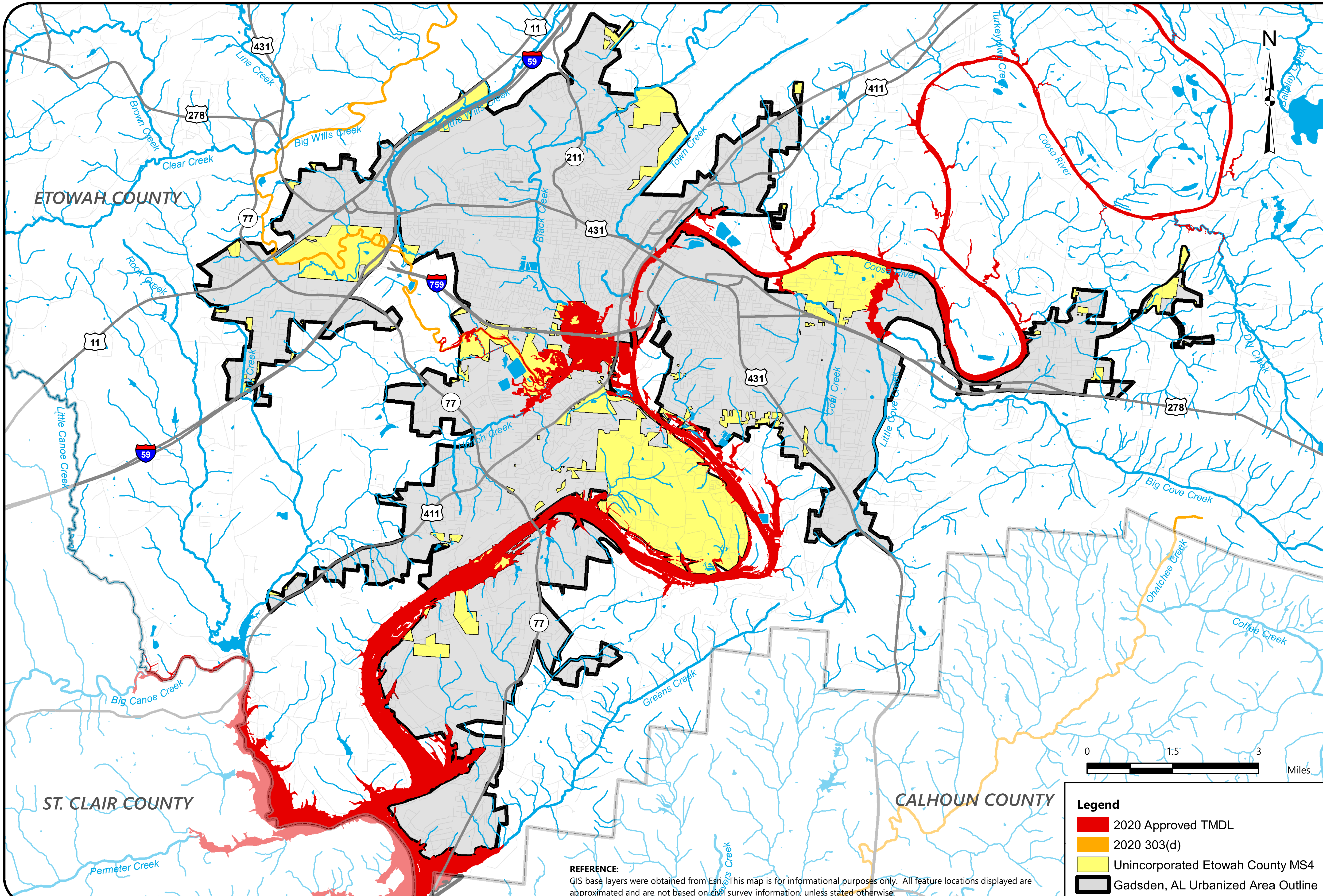
ETOWAH COUNTY MS4
PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES GENERAL PERMIT ALR040009

SCALE:
1:90,000

DATE:
03/24/2022

PROJECT NUMBER
215660B

FIGURE NO.
3



IMPAIRED WATERBODIES

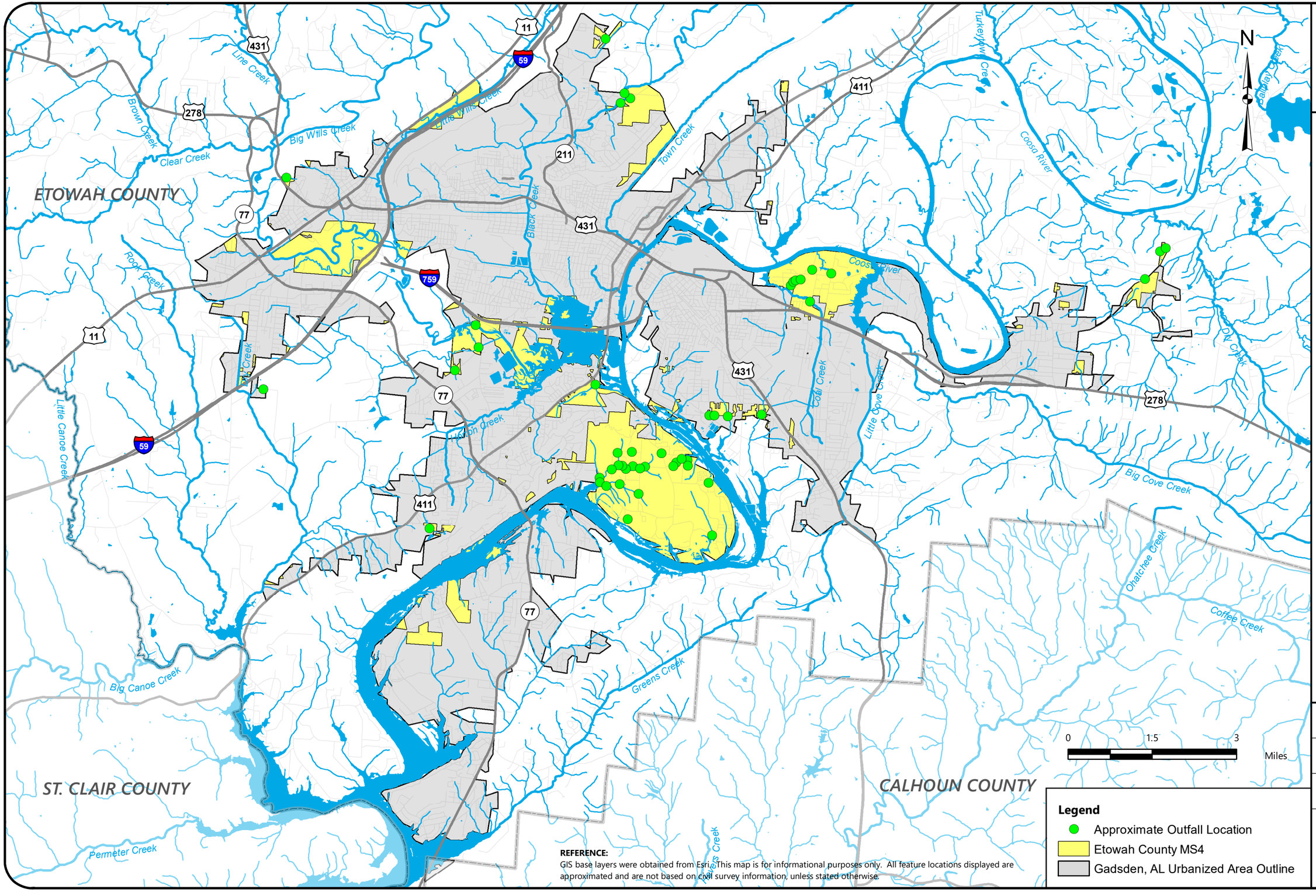
ETOWAH COUNTY MS4
PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES GENERAL PERMIT ALR040009

SCALE:
1:100,000

DATE:
03/25/2022

PROJECT NUMBER
215660G

FIGURE NO.
4



REFERENCE:
GIS base layers were obtained from Esri. This map is for informational purposes only. All feature locations displayed are approximated and are not based on civil survey information, unless stated otherwise.

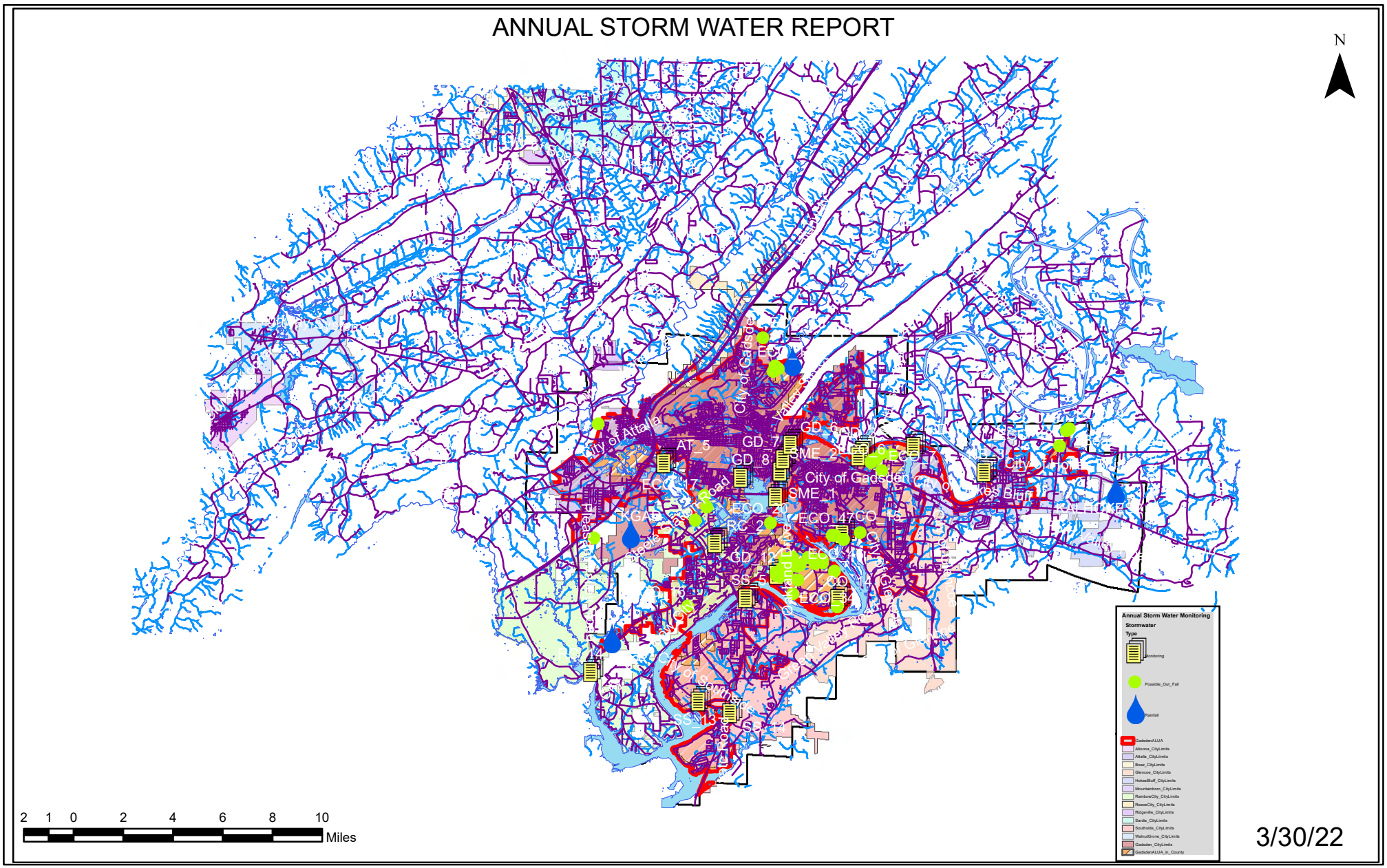
Legend
- Approximate Outfall Location
- Etowah County MS4
- Gadsden, AL Urbanized Area Outline

ETOWAH COUNTY MS4 OUTFALLS

ETOWAH COUNTY MS4
PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES GENERAL PERMIT ALR040009

SCALE: 1:100,000
DATE: 03/31/2022
PROJECT NUMBER 215660G
FIGURE NO. 5

ANNUAL STORM WATER REPORT



Appendix B – NPDES Permit

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

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

September 29, 2021

Chairman Jamie Grant
Commission President, Etowah County
800 Forrest Avenue
Gadsden, AL 35901

RE: Small Municipal Separate Storm Sewer System (MS4) General Permit
NPDES Permit No. ALR040009
Etowah County (055)

Dear Chairman Grant:

The Department has made a final determination to reissue General NPDES Permit No. ALR040000 for discharges from regulated small municipal separate storm sewer systems (MS4s). The reissued permit will become effective on October 1, 2021 and will expire on September 30, 2026.

The Department notified the public of its tentative determination to reissue General NPDES Permit No. ALR040000 on July 2, 2021. Interested persons were provided the opportunity to submit comments on the Departments' tentative decision through August 3, 2021. In accordance with ADEM Admin. Code r. 335-6-6-.21(7), a response to comments received during the public comment period will be available on the Department's eFile system.

Based on your request, as evidenced by the submittal of a Notice of Intent, and on the information contained in the Notice of Intent coverage under **General NPDES Permit Number ALR040009** is granted. The effective date of coverage is October 1, 2021.

Coverage under this permit does not authorize the discharge of any pollutant or non-stormwater that is not specifically identified in the permit and by the Notice of Intent which resulted in the granting of coverage.

A copy of the General NPDES Permit under which coverage of your stormwater discharges has been granted is enclosed. If you have any questions concerning this permit, please contact Melanie Ratcliffe by email at melanie.ratcliffe@adem.alabama.gov or by phone at (334) 270-5616.

Sincerely,

Jeffery W. Kitchens

Jeffery W. Kitchens, Chief
Water Division

Enclosure: Permit
File: NOI/15389

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 36608-1211
(251) 304-1176
(251) 304-1189 (FAX)

Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT

DISCHARGE AUTHORIZED: STORMWATER DISCHARGES FROM REGULATED SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

AREA OF COVERAGE: THE STATE OF ALABAMA

PERMIT NUMBER: ALR040009

RECEIVING WATERS: ALL WATERS OF THE STATE OF ALABAMA

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: September 16, 2021

EFFECTIVE DATE: October 1, 2021

EXPIRATION DATE: September 30, 2026

Jeffery W. Kitchen

Alabama Department of Environmental Management

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PART I: COVERAGE UNDER THIS GENERAL PERMIT

A. PERMIT COVERAGE

This permit covers the urbanized areas designated as a Phase II Municipal Separate Storm Sewer System (MS4) within the State of Alabama.

B. AUTHORIZED DISCHARGES

1. This permit authorizes discharges of storm water from small MS4s, as defined in 40 CFR Part 122.26(b)(16). An entity may discharge under the terms and conditions of this general permit if the entity:

    a. Owns or operates a small MS4 within the permit area described in Section A;

    b. Is not a “large” or “medium” MS4 as described in 40 CFR Part 122.26(b)(4) or (7);

    c. Submits a Notice of Intent (NOI) in accordance with Part II of this General Permit; and

    d. Either:

        i. Is located fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census, or

        ii. Is designated for permit authorization by the Department pursuant to 40 CFR Part 122.32(a)(2).

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 that they have been determined not to be substantial contributors of pollutants to a particular small MS4 applying for coverage under this permit and that is implementing the Storm Water Management Program (SWMP) set forth in this permit:

    a. Water line flushing

    b. Landscape irrigation

    c. Diverted stream flows

    d. Uncontaminated ground water infiltration

    e. Uncontaminated pumped groundwater

    f. Discharges from potable water sources

    g. Foundation drains

    h. Air conditioning condensate

    i. Irrigation water (not consisting of treated, or untreated, wastewater)

    j. Rising ground water

    k. Springs

    l. Water from crawl space pumps

    m. Footing drains

    n. Lawn watering runoff

    o. Individual residential car washing, to include charitable carwashes

    p. Residual street wash water

    q. Discharge or flows from firefighting activities (including fire hydrant flushing)

    r. Flows from riparian habitats and wetlands

s. Dechlorinated swimming pool discharges, and

t. 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:

   a. In compliance with a separate NPDES permit; or

   b. Determined by the Department not to be a significant contributor of pollutants to waters of the State;

2. Storm water discharges associated with industrial activity as defined in 40 CFR Part 122.26(b)(14)(i)-(ix) and (xi);

3. Storm water discharges associated with construction activity as defined in 40 CFR Part 122.26(b)(14)(x) or 40 CFR 122.26(b)(15) and subject to Alabama Department of Environmental Management (ADEM) Code r. 335-6-12;

4. Storm water discharges currently covered under another NPDES permit;

5. Discharges to territorial seas, contiguous zone, and the oceans unless such discharges are in compliance with the ocean discharge criteria of 40 CFR Part 125, Subpart M;

6. Discharges that would cause or contribute to instream exceedances of water quality standards; Your SWMPP must include a description of the Best Management Practices (BMPs) that you will be using to ensure that this will not occur. The Department may require corrective action or an application for an individual permit or alternative general permit if an MS4 is determined to cause an instream exceedance of water quality standards;

7. Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been approved or developed by EPA unless your discharge is consistent with the TMDL; This eligibility condition applies at the time you submit a NOI for coverage. If conditions change after you have permit coverage, you may remain covered by the permit provided you comply with the applicable requirements of Part V. You must incorporate any limitations, conditions and requirements applicable to your discharges, including monitoring frequency and reporting required, into your SWMPP in order to be eligible for permit coverage. For discharges not eligible for coverage under this permit, you must apply for and receive an individual or other applicable general NPDES permit prior to discharging;

8. This permit does not relieve entities that cause illicit discharges, including spills, of oils or hazardous substances, from responsibilities and liabilities under State and federal law and regulations pertaining to those discharges.

9. The discharge of sanitary wastewater through cross connections or other illicit discharges through the MS4 is prohibited.

D. OBTAINING AUTHORIZATION

1. To be authorized to discharge storm water from small MS4s, you must submit a Notice of Intent (NOI) and a description of your SWMP) in accordance with the deadlines presented in Part II of this permit.

2. You must submit the information required in Part II on the latest version of the NOI form. Your NOI must be signed and dated in accordance with Part VII of this permit.

3. No discharge under the general permit may commence until the discharger receives the Department's acknowledgement of the NOI and approval of the coverage of the discharge by the general permit. The Department may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI.

4. Where the operator changes, or where a new operator is added after submittal of an NOI under Part II, a new NOI must be submitted in accordance with Part II within thirty (30) days of the change or addition.

5. For areas extended within your MS4 by the latest census or annexed into your MS4 area after you received coverage under this general permit, the first annual report submitted after the annexation must include the updates to your SWMP, as appropriate.

E. IMPLEMENTATION

1. This permit requires implementation of the MS4 program under the State and federal NPDES Regulations. MS4s shall modify their programs if and when water quality considerations warrant greater attention or prescriptiveness in specific components of the municipal program.

2. If a small MS4 operator implements the minimum control measures in 40 CFR 122.34(b) and the discharges are determined to cause or contribute to non-attainment of an applicable water quality standard as evidenced by the State of Alabama's 303(d) list or an EPA-approved or developed TMDL, the operator must tailor its BMPs within the scope of the six minimum control measures to address the pollutants of concern and implement permit requirements outlined in Part IV.D. and Part V of this permit.

3. Existing MS4s, unless otherwise stated within this permit, shall implement each of the minimum control measures outlined in Part III.B. of this permit immediately upon the effective date of coverage. Newly designated MS4s, unless otherwise stated in this permit, shall implement the minimum control measures outlined in Part III.B. of this permit within 365 days of the effective date of coverage. However, for newly designated MS4s, where new or revised ordinances are required to implement any of the minimum control measures, such ordinances shall be enacted within 730 days from the effective date of coverage.

PART II: NOTICE OF INTENT (NOI) REQUIREMENTS

A. DEADLINES OF APPLICATIONS

1. If you are automatically designated under 40 CFR Part 122.32(a)(1) or designated by the Department, then to request recoverage, you are required to submit an NOI or an application for an individual permit and a description of your SWMP at least 90 days before the expiration of this permit.

2. If you are designated by the Department after the date of permit issuance, then you are required to submit an NOI or an application for an individual permit and a description of your SWMP within 180 days upon notification. Within six months of initial issuance, the operator of the regulated small MS4 shall submit a SWMPP to the Department for review. A SWMPP shall be submitted electronically as described in Part II.D of this permit.

3. You are not prohibited from submitting an NOI after the dates provided in Part II.A.1-2. If a NOI is submitted after the dates provided in Part II.A.1-2., your authorization is only for discharges that occur after permit coverage is granted. The Department reserves the right to take appropriate enforcement actions for any unpermitted discharges.

4. Within six months of the date of re-issuance of coverage under this permit, all operators of regulated small MS4s shall submit a revised SWMPP to the Department for review.

B. CONTINUATION OF THE EXPIRED GENERAL PERMIT

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the ADEM Code r. 335-6-6 and remain in force and effect if the Permittee re-applies for coverage as required under Part II of this permit. Any Permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

1. Reissuance or replacement of this permit, at which time you must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; or

2. Issuance of an individual permit for your discharges; or

3. A formal permit decision by the Department not to reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit.

C. CONTENTS OF THE NOTICE OF INTENT (NOI)

The Notice of Intent must be signed in accordance with Part VII.G of this permit and must include the following information:

1. The correct fee pursuant to ADEM Admin. Code R.335-1, Fee Schedule D.

2. Information on the Permittee:

   a. The name of the regulated entity, specifying the contact person and responsible official, mailing address, telephone number and email address; and

   b. An indication of whether you are a federal, State, county, municipal or other public entity.

3. Information on the MS4:

   a. The name of your organization, county, city, or town and the latitude/longitude of the center or the MS4 location;

   b. The name of the major receiving water(s) and an indication of whether any of your receiving waters are included on the latest 303(d) list, included in an EPA-approved and/or EPA developed TMDL or otherwise designated by the Department as being impaired. If you have discharges to 303(d) or TMDL waters, a certification that your SWMPP complies with the requirements of Part V;

c. If you are relying on another governmental entity, regulated under the storm water regulations (40 CFR Part 122.26 & 122.32) to satisfy one or more of your permit obligations (see Part III), the identity of that entity(ies) and the elements(s) they will be implementing. The Permittee remains responsible for compliance if the other entity fails to fully perform the permit obligation, and may be subject to enforcement action if neither the Permittee nor the other entity fully performs the permit obligation; and

d. Must include if you are relying on the Department for enforcement of erosion and sediment controls on qualifying construction sites in accordance with Part III.B.3.b.

4. Include a brief summary of the BMPs for the minimum control measures in Part III of this permit (i.e. a brief summary of the MS4's SWMPP), a timeframe for implementing new or additional BMPs, and the person or persons responsible for implementing or coordinating your SWMPP.

D. WHERE TO SUBMIT MS4 DOCUMENTS

The Permittee must complete and submit its NOI or individual application electronically, and a description of your SWMP as allowed under Part II.A., signed in accordance with the signatory requirements of Section VII of this permit, to the Department via the Alabama Environmental Permitting and Compliance System (AEPACS) unless the Permittee submits in writing valid justification 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: https://adem.alabama.gov/AEPACS. Permit requests for initial issuance and modifications of the existing permit shall all be submitted through the AEPACS.

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

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

PART III: STORM WATER POLLUTION PREVENTION AND MANAGEMENT PROGRAM

A. STORM WATER MANAGEMENT PROGRAM (SWMP)

1. The Permittee is required to develop, revise, implement, maintain and enforce a 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 Parts 122.30-122.37. These requirements shall be met by the development and implementation of a SWMPP which addresses the 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).

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 storm water control measures referenced in Part III.B. to include the following:

   a. A map of the Permittee's MS4 urbanized areas;

   b. The BMPs that will be implemented for each control measure. Low impact development/green infrastructure shall be considered and actively encouraged where feasible. Information on LID/Green Infrastructure is available on the following websites: http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf and https://epa.gov/nps/urban-runoff-low-impact-development;

   c. The measureable goals for each of the minimum controls outlined in Part III.B.;

   d. The proposed schedule—including interim milestones, as appropriate, inspections, and the frequency of actions needed to fully implement each minimum control; and

   e. The person and/or persons responsible for implementing or coordination the BMPs for each separate minimum control measure.

4. Unless otherwise specified in this permit, the Permittee shall be in compliance with the conditions of this permit by the effective date of coverage.

B. MINIMUM STORM WATER CONTROL MEASURES

1. Public Education and Public Involvement on Storm Water Impacts

   a. The Permittee must develop and implement a public education and outreach program to inform the public about the impacts of 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. The Permittee shall also comply, at a minimum, with applicable State and local public notice requirements when implementing a public involvement/participation program. Each year, the Permittee shall implement a minimum of four BMPs, with two BMP emphasizing public education and two BMP emphasizing public involvement.

   b. The Permittee shall include within the SWMPP the following information:

      i. Annually, seek and consider public input in the development, revision, and implementation of the SWMPP, that may include, but is not limited to publishing in local newspaper, posting on the Permittee's website, etc.;

      ii. Address in its public education program, the targeted pollutant sources to include, at a minimum the land development community (i.e., construction contractors/developers);

      iii. Specifically address the reduction of litter, floatables and debris from entering the MS4, that may include, but is not limited to:

(1) Establishing a program to support volunteer groups for labeling storm drain inlets and catch basins with “no dumping” message; post and

(2) Posting signs referencing local codes that prohibit littering and illegal dumping at selected designated public access points to open channels, creeks, and other relevant waterbodies;

iv. Inform and involve individuals and households about the steps they can take to reduce storm water pollution;

v. Plans to inform and involve individuals and groups on how to participate in the storm water program (with activities that may include, but not limited to, local stream and lake restoration activities, storm water stenciling, advisory councils, watershed associations, committees, participation on rate structures, stewardship programs and environmental related activities, outreach on LID/GI). 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:

(1) General Public

(a) General impacts litter has on water bodies, how trash is delivered to streams via the MS4 and ways to reduce the litter;

(b) General impacts of storm water flows into surface water from impervious surface; and

(c) Source control BMPs in areas of pet waste, vehicle maintenance, landscaping and rain water reuse.

(2) General Public, Businesses, Including Home-Based and Mobile Businesses

(a) BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials; and

(b) Impacts of illicit discharges and how to report them.

(3) Homeowners, Landscapers, and Property Managers

(a) Yard care techniques that protect water quality;

(b) BMPs for use and storage of pesticides and fertilizers;

(c) BMPs for carpet cleaning and auto repair and maintenance;

(d) Runoff reduction techniques, which may include but not limited to site design, pervious paving, retention of forests, mature trees, and maintenance required for LID/GI; and

(e) Storm water pond maintenance.

(4) Engineers, Contractors, Developers, Review Staff and Land Use Planners

(a) Technical standards for construction site sediment and erosion control;

(b) Storm water treatment and flow control BMPs;

(c) Impacts of increased storm water flows into receiving water bodies; 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.

vi. 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.

c. The Permittee shall report each year in the annual report the following information:

i. A description of the method used to seek and consider input from the public in the development, revision, and implementation of the SWMPP;

ii. A description of the activities used to involve groups and/or individuals in the development, revision, and implementation of the SWMPP;

iii. A description of the targeted pollutant sources the public education and public involvement program addressed;

iv. A description of the individuals and groups targeted and how many groups and/or individuals participated in the programs;

v. A description of the activities used to address the reduction of litter, floatables and debris from entering the MS4 as required in Part III.B.1.b.iii.;

vi. A description of the communication mechanism(s) or advertisement(s) used to inform individuals, households, public and/or groups as well as the quantity that were distributed (i.e. number of printed brochures, copies of newspapers, workshops, public service announcements, etc.); and

vii. Results of the evaluation of the public education and public involvement program as required in Part III.B.1.b.vi.

d. The Permittee shall make their SWMPP and their annual reports required under this permit available to the public when requested. The current SWMPP and the 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.

2. Illicit Discharge Detection and Elimination (IDDE) Program

a. The Permittee shall implement an ongoing program to detect and eliminate illicit discharges into the MS4, to the maximum extent practicable. The program shall include, at a minimum, the following:

i. An initial map shall be provided in the SWMPP with updates, if any, provided each year in the annual report. The map shall include, at a minimum:

(1) The latitude/longitude of all known outfalls;

(2) The names of all waters of the State that receive discharges from these outfalls; and,

(3) Structural BMPs owned, operated, or maintained by the Permittee, if applicable.

ii. To the extent allowable under State law, an ordinance or other regulatory mechanism that effectively prohibits non-storm water discharges to the MS4. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary and shall:

(1) Include escalating enforcement procedures and actions; and

(2) Require the removal of illicit discharges 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 an expeditious 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.

iii. 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 percent (15%) of the outfalls once per year with all (100 percent) screened at least once per five 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. If any indication of a suspected illicit discharge, from an unidentified source, is observed during the dry weather screening, then the Permittee shall follow the screening protocol as outlined in the SWMPP.

iv. 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.

v. Procedures for eliminating an illicit discharge as outlined in the SWMPP;

vi. Procedures to notify ADEM of a suspect illicit discharge entering the Permittee's MS4 from an adjacent MS4 as outlined in the SWMPP;

vii. A mechanism for the public to report illicit discharges discovered within the Permittee's MS4 and procedures for appropriate investigation of such reports;

viii. A training program for appropriate personnel to be trained on identification, reporting, and corrective action of illicit discharges, at a minimum of at least once per five years;

ix. Address the following categories of non-storm discharges or flows (i.e., illicit discharges) only if the Permittee or the Department identifies them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (infiltration is defined as 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), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering run-off, individual residential car washing, flows from riparian habitats and wetlands, discharge or flows from firefighting activities (to include fire hydrant flushing); dechlorinated swimming pool discharges, and residual street wash water, discharge authorized by and in compliance with a separate NPDES permit; and

x. The Permittee may also develop a list of other similar occasional incidental non- storm water discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non- storm water discharges must not be reasonably expected (based on information available to the Permittees) to be significant sources of pollutants to the municipal separate storm sewer system, because of either the nature of the discharges or conditions you have established for allowing these discharges to your MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to impaired waterbodies, BMPs on the wash water, etc.). You must document in your SWMPP any local controls or conditions placed on the discharges. The Permittee must include a provision prohibiting any individual non- storm water discharge that is determined to be contributing significant amounts of pollutants to your MS4.

b. The Permittee shall report each year in the annual report the following information:

i. List of outfalls observed in the annual reporting year to demonstrate that 100% of outfalls are screened at least once per five years during the dry weather screening;

ii. Updated MS4 map(s) as required by Part III.B.2.a.i. 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;

iii. Copies of, or a link to, the IDDE ordinance or other regulatory mechanism as required by Part III.B.2.a.ii. When there are no changes to the ordinance or other regulatory mechanism, the annual report should state this;

iv. Date(s) of training conducted for appropriate personnel; and

v. The number of illicit discharges investigated, the screening results, and the summary of corrective actions taken to include dates and timeframe of response.

3. Construction Site Storm Water Runoff Control

a. The Permittee must 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:

i. Specific procedures for construction site plan (including erosion prevention and sediment controls) review and approval: The MS4 procedures must include an evaluation of plan completeness and overall BMP effectiveness;

ii. To the extent allowable under State law, an ordinance or other regulatory mechanism to require erosion and sediment controls, sanctions to ensure compliance, and to provide all other authorities needed to implement the requirements of Part III.B.3 of this permit. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary;

iii. A training program for MS4 site inspection staff in the identification of appropriate construction BMPs (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 at least once per year;

iv. Within 365 days of the effective date of the permit, develop and implement a construction site inspection form to include at least the items listed in Parts III.B.3.d.i.

v. Within 365 days of the effective date of the permit, maintain an inventory of qualifying construction sites containing relevant contact information for each construction site (i.e., tracking number and construction site contact name, address, phone number, etc.), the size of the construction site, whether the construction site has submitted for permit coverage under ADEM's Construction General Permit ALR100000, and the date the MS4 Permittee approved the site construction plan. The MS4 Permittee must make the inventory available upon the Department's request.

vi. Procedures for the inspection of qualifying construction sites to verify the use of appropriate erosion and sediment control practices that 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"). The frequency and prioritization of inspection activities shall be documented in the SWMPP. Inspection of construction sites to verify use and proper maintenance of appropriate BMPs shall be performed in accordance with the frequency specified in the table below:

Site	Inspection Frequency
Priority Construction Sites (defined in Part VII.W.)	At a minimum, inspections must occur monthly.
Other sites determined by the Permittee or Permitting Authority to be a significant threat to water quality.*	
All qualifying construction sites not meeting the criteria specified above.	At a minimum, inspections must occur every three 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 303d 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.

vii. For sites determined to have ineffective BMPs, a follow-up inspection shall be conducted and appropriately documented as outlined in Part III.B.3.d.i.

viii. Procedures, as outlined in the SWMPP, to notify ADEM of construction sites that do not have a NPDES permit or ineffective BMPs that are discovered during the periodic inspections. The notification must provide, at a minimum, the specific location of the construction project, the name and contact information from the owner or operator, and a summary of the site deficiencies; and

ix. A mechanism for the public to report complaints regarding discharges from qualifying construction sites.

b. ADEM implements a State-wide NPDES construction storm water regulatory program. As provided by 40 CFR Part 122.35(b), the Permittee may rely on ADEM for the setting of standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls, and must document this in its SWMPP. If the Permittee elects not to rely on ADEM's program, then the Permittee must include the following, at a minimum, in its SWMPP:

i. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs 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");

ii. 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;

iii. Development and implementation of an enforcement strategy that includes escalating enforcement remedies to respond to issues of non-compliance;

iv. An enforcement tracking system designed to record instances of non-compliance and the MS4's responding actions. The enforcement case documentation should include:

(1) Name of owner/operator

(2) Location of construction project or industrial facility

(3) Description of violations

(4) Required schedule for returning to compliance

(5) Description of enforcement response used, including escalated responses if repeat violation occur or violations are not resolved in a timely manner;

(6) Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violation, etc.);

(7) Any referrals to different departments or agencies; and

(8) Date violation was resolved

v. The Permittee must keep records of all inspections (i.e. inspection reports) and employee training required by Part III.B.3.a.

c. The Permittee shall include within the SWMPP the following information:

i. Procedures for site plan reviews as required by Part III.B.3.a.i;

ii. A copy or link of the ordinance or other regulatory mechanism required by Part III.B.3.a.ii.;

iii. Plans for the training of MS4 site inspection staff as required by Part III.B.3.a.iii; and

iv. A copy of the construction site inspection form meeting the requirements of Part III.B.3.a.iv.

d. The Permittee shall maintain the following information and make it available upon request:

   i. Documentation of all inspections conducted of qualifying construction sites as required by Part III.B.3.a.vi. The inspection documentation shall include, at a minimum, the following:

      (1) Facility type;

      (2) Inspection date;

      (3) Name and signature of inspector;

      (4) Location of construction project;

      (5) Owner/operator information (name, address, phone number, email);

      (6) Description of the storm water BMP condition 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

      (7) Photographic documentation of any issues and/or concerns.

   ii. Documentation of referrals of noncompliant construction sites and/or enforcement actions taken at construction sites to include, at a minimum, the following:

      (1) Name of owner/operator

      (2) Location of construction project;

      (3) Description of violation;

      (4) Required schedule for returning to compliance;

      (5) Description of enforcement response used, including escalated responses if repeat violations occur; and

      (6) Accompanying documentation of enforcement responses (e.g. notices of non-compliance, notices of violations, etc.).

   iii. Records of public complaints including:

      (1) Date, time and description of the complaint;

      (2) Location of subject construction sites; and

      (3) Identification of any actions taken (e.g. inspections, enforcement, corrections). Identifying information must be sufficient to cross-reference inspection and enforcement records.

e. The Permittee shall report each year in the annual report the following information:

   i. A description of any completed or planned revisions to the ordinance or regulatory mechanism required by Part III.B.3.a.ii. and the most recent copy, or a link to the ordinance; and

   ii. List of all active construction sites within the MS4 to include the following summary:

      (1) Number of construction site inspections;

      (2) Number of non-compliant construction site referrals and/or enforcement actions and description of violations;

      (3) Number of construction site runoff complaints received; and

      (4) Number of MS4 staff/inspectors trained. Include copies of certifications or attendance records for those MS4 staff/inspectors.

4. Post-Construction Storm Water Management in New Development and Redevelopment

a. Post-construction storm water management refers to the activities that take place after construction occurs, and includes structural and non-structural controls including low-impact development and green infrastructure practices to obtain permanent storm water management over the life of the property's use. These post construction controls should be considered during the initial site development planning phase.

i. The Permittee must develop/revise, implement, and enforce a program to address storm water runoff from qualifying new development and redevelopment projects, to the maximum extent practicable. This program shall ensure that controls are in place to prevent or minimize water quality impacts. Specifically, the Permittee shall:

(1) Develop/revise and outline in the SWMPP procedures for the site-plan review and approval process and a required re-approval process when changes to post-construction controls are required; and

(2) Develop/revise and outline in the SWMPP procedures for a post-construction process to demonstrate and document that post-construction storm water measures have been installed per design specifications, which includes enforceable procedures for bringing noncompliant projects into compliance.

ii. The Permittee must develop and implement strategies which may include a combination of structural and/or non-structural BMPs designed to ensure, to the maximum extent practicable, that the post construction runoff mimics pre-construction hydrology. A design rainfall event with an intensity up to that of a 2yr-24hr storm event shall be the basis for the design and implementation of post- construction BMPs.

iii. Encourage and educate landowners and developers to incorporate the use of low impact development (LID)/green infrastructure where feasible. Information on low impact development (LID)/green infrastructure is available on the following websites: http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf; http://epa.gov/nps/lid. The Permittee shall include a narrative description in the SWMPP as to the means that will be taken to implement the requirement to encourage landowners and developers to incorporate the use of low impact development (LID)/green infrastructure;

iv. To the extent allowable under State law, the Permittee must develop and institute the use of an ordinance or other regulatory mechanism to address post-construction runoff from qualifying new development and redevelopment projects. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary;

v. The Permittee must require adequate long-term operation and maintenance of BMPs. One or more of the following as applicable:

(1) The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; and/or

(2) Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or

(3) 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

(4) Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices.

vi. The Permittee shall perform or require the performance of post-construction inspections, at a minimum of once per year, to confirm that post-construction BMP's are functioning as designed. The Permittee shall include an inspection schedule, to include inspection frequency, within the SWMPP. The Permittee shall document or require documentation of the post-construction inspection. Such documentation shall include, at a minimum:

(1) Facility type

(2) Inspection date

(3) Name and signature of inspector

(4) Site location

(5) Owner information (name, address, phone number, fax, and email)

(6) 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;

(7) Photographic documentation of all critical storm water BMP components;

(8) Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP; and

(9) Maintenance agreements for long-term BMP operation and maintenance.

vii. 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 and require corrective actions to poorly functioning or inadequately maintained post-construction BMP's.

b. The Permittee shall report each year in the annual report the following information:

i. Copies of, or link to, the ordinance or other regulatory mechanism required by Part III.B.4.a.iv.;

ii. 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 low impact development (LID)/green infrastructure, if applicable;

iii. Updated inventory of post-construction structural controls including those owned by the Permittee;

iv. Number of inspections performed on post-construction structural controls; and,

v. Summary of enforcement actions, if applicable.

5. Pollution Prevention/Good Housekeeping for Municipal Operations

a. The Permittee shall develop, implement, and maintain a program that will prevent or reduce the discharge of pollutants in storm water run-off from municipal operations to the maximum extent practicable. The program elements shall include, at a minimum, the following:

i. 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;

ii. Strategies for the implementation of BMPs to reduce litter, floatables and debris from entering the MS4 and evaluate those BMPs annually to determine their effectiveness. If a BMP is determined to be ineffective or infeasible, then an alternate BMP must be implemented. The Permittee shall also develop a plan to remove litter, floatable and debris material from the MS4, including proper disposal of waste removed from the system;

iii. Standard Operating Procedures (SOPs) detailing good housekeeping practices to be employed at municipal facilities (that have the potential to discharge pollutants via stormwater runoff) and during municipal operations that may include, but not limited to, the following:

(1) Equipment washing;

(2) Street sweeping;

(3) Maintenance of municipal roads including public streets, roads, and highways, including but not limited to unpaved roads, owned, operated, or under the responsibility of the Permittee;

(4) Storage, use, and disposal of chemicals, Pesticide, Herbicide and Fertilizers (PHFs) and waste materials;

(5) Vegetation control, cutting, removal, and disposal of the cuttings;

(6) Vehicle fleets/equipment maintenance and repair;

(7) External Building maintenance; and

(8) Materials storage facilities and storage yards.

iv. A program for inspecting municipal facilities for good housekeeping practices, including BMPs. The program shall include checklists and procedures for correcting noted deficiencies;

v. A training program for municipal facility staff in good housekeeping practices as outlined in the SOP developed pursuant to Part III.B.5.a.iii; and

b. The Permittee shall include within the SWMPP the following information:

i. The inventory of municipal facilities required by Part III.B.5.a.i;

ii. Evaluate and include a discussion of how effectiveness is measured for Part III.B.5.a.ii;

iii. Schedule for developing the SOP of good housekeeping practices required by Part III.B.5.a.iii;

iv. An inspection plan and schedule to include inspection frequency, checklists, and any other materials needed to comply with Part III.B.5.a.iv; and

v. A description of the training program and training schedule to include training frequency required by Part III.B.5.a.v.

c. The Permittee shall report each year in the annual report the following information:

i. Any updates to the municipal facility inventory;

ii. An estimated amount of floatable material collected from the MS4 as required by Part III.B.5.a.ii;

iii. Any updates to the inspection plan

iv. The number of inspections conducted; and

v. Any updates to the SOP of good housekeeping practices.

d. The Permittee shall maintain the following information and make it available upon request:

i. Records of inspections and corrective actions, if any; and

ii. Training records including the dates of each training activities and names of personnel in attendance.

PART IV: SPECIAL CONDITIONS

A. RESPONSIBILITIES OF THE PERMITTEE

1. 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 all requirements of this permit, except as provided by Part III.B.3.b and reliance on another entity will not be a defense or justification for non-compliance if the entity fails to implement the permit requirements.

2. If the Permittee is relying on the Department for the enforcement of erosion and sediment controls on qualifying construction sites and has included that information in the SWMPP as required by Part III.B.3.b., the Permittee is not responsible for implementing the requirements of Part III.B.3.b of this permit as long as the Department receives notification of non-compliant qualifying constructions sites from the Permittee as required by Part III.B.3.a.viii.

B. SWMPP PLAN REVIEW AND MODIFICATION

1. The Permittee shall submit a SWMPP and/or revised SWMPP to the Department as required by Part II.A of the permit. The Permittee shall implement plans to seek and consider public input in the development, revision and implementation of this SWMPP, as required by Part III.B.1.b.i. Thereafter, the Permittee shall perform an annual review of the current SWMPP and must revise the SWMPP, as necessary, to maintain compliance with the permit. Any revisions to the SWMPP shall be submitted to the Department at the time a revision is made for the Department review and the Permittee's website shall be updated with the revised version of the SWMPP. Revisions 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; and

2. The Permittee shall implement the SWMPP on all new areas added to their municipal separate storm sewer system (or for which they become responsible for implementation of storm water quality controls) as soon as practicable, but not later than one (1) year from addition of the new areas. Implementation of the program in any new area shall consider the plans of the SWMPP of the previous MS4 ownership, if any.

C. DISCHARGE COMPLIANCE WITH WATER QUALITY STANDARDS

This general permit requires, at a minimum, that the Permittee develop, implement and enforce a Storm Water Management Program designed to reduce the discharge of pollutants to the maximum extent practicable. Full implementation of BMPs, using all known, available, and reasonable methods of prevention, control and treatment to prevent and control storm water pollution from entering waters of the State of Alabama is considered an acceptable effort to reduce pollutants from the municipal storm drain system to be the maximum extent practicable.

D. 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;

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 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. 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 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.

E. REQUIRING AN INDIVIDUAL PERMIT

The Department may require any person authorized by this permit to apply for and/or obtain an individual NPDES permit. When the Department requires application for an individual NPDES permit, the Department will notify the Permittee in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application from and a statement setting a deadline for the Permittee to file the application.

PART V: MONITORING AND REPORTING

A. MONITORING REQUIREMENTS

1. If there are no 303(d) listed or TMDL waters located within the Permittee's MS4 area, no monitoring shall be required. The SWMPP shall include a determination stating if monitoring is required.

2. If a waterbody 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 implement a monitoring program, within 6 months, to include monitoring that addresses the impairment or TMDL. A monitoring plan shall be included with the SWMPP and any revisions to the monitoring program shall be documented in the SWMPP and Annual Report.

3. Proposed monitoring locations, and monitoring frequency shall be described in the monitoring plan with actual locations described in the annual report;

4. The Permittee must include in the monitoring program any 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.

5. Analysis and collection of samples shall be done in accordance with the methods specified at 40 CFR Part 136. Where an approved 40 CFR Part 136 does not exist, then a Department approved alternative method may be used.

6. If the Permittee is unable to collect 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.).

B. REPORTING OF MONITORING RESULTS

Monitoring results must be reported with the subsequent Annual Report and shall include the following monitoring information:

1. The date, latitude/longitude of location, and time of sampling;

2. The name(s) of the individual(s) who performed the sampling;

3. The date(s) analysis were performed;

4. The name(s) of individuals who performed the analysis;

5. The analytical techniques or methods used; and

6. The results of such analysis.

PART VI: ANNUAL REPORTING REQUIREMENTS

A. ANNUAL REPORT SUBMITTAL

1. The Permittee shall submit to the Department an annual report and all other information and documents via the AEPACS system no later than May 31st of each year. The AEPACS system can be accessed at the following link: https://adem.alabama.gov/AEPACS. The annual report shall cover the previous April 1 to March 31. If an entity comes under coverage for the first time after the issuance of this permit, then the first annual report should cover the time coverage begins until March 31st of subsequent year.

2. The Permittee shall sign and certify the annual report in accordance with Part VII.G. If the Responsible Official has designated a duly authorized representative in accordance with Part VII.G. to sign the annual report, then include a copy of the written designation with the annual report.

B. ANNUAL REPORT CONTENTS

The annual report shall include the following information, at a minimum, and in addition to those requirements referenced in Part III-V:

1. 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;

2. Overall evaluation of the SWMP developments and progress for the following:

   a. Major accomplishments;

   b. Overall program strengths/weaknesses;

   c. Future direction of the program;

   d. Overall determination of the effectiveness of the SWMPP taking into account water quality/watershed improvements;

   e. Measureable goals that were not performed and reasons why the goals were not accomplished; and

   f. If monitoring is required, evaluation of the monitoring data.

3. Narrative report of all minimum storm water control measures referenced in Part III.B of this permit. The activities shall be discussed as follows:

   a. Minimum control measures completed and in progress;

   b. Assessment of the controls; and

   c. Discussion of proposed BMP revisions or any identified measureable goals that apply to the minimum storm water control measures.

4. Summary table of the storm water controls that are planned/scheduled for the next reporting cycle;

5. Results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.

6. Notice of reliance on another entity to satisfy some of your permit obligations;

7. 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 latest §303(d) list (or designated by the Department as impaired) or for which a TMDL has been established or approved by EPA; and

8. If monitoring is required, all monitoring results collected during the previous year in accordance with Part V, if applicable. The monitoring results shall be submitted in a format acceptable to the Department.

PART VII: STANDARD AND GENERAL PERMIT CONDITIONS

A. DUTY TO COMPLY

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

B. CONTINUATION OF THE EXPIRED GENERAL PERMIT

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the ADEM Code r. 335-6-6 and remain in force and effect if the Permittee re-applies for coverage as required under Part II of this Permit. Any Permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

1. Reissuance or replacement of this permit, at which time you must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; or

2. Issuance of an individual permit for your discharges; or

3. A formal permit decision by the Department not to reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit.

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for you 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.

D. DUTY TO MITIGATE

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. 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, revoking and reissuing, suspending, or terminating the permit or to determine compliance with the permit. The Permittee shall also furnish to the Director upon request, copies of records required to be kept by the permit.

F. OTHER INFORMATION

If you become aware that you have failed to submit any relevant facts in your Notice of Intent or submitted incorrect information in the Notice of Intent or in any other report to the Department, you must promptly submit such facts or information.

G. SIGNATORY REQUIREMENTS

All Notices of Intent, reports, certifications, or information submitted to the Department, or that this permit requires be maintained by you shall be signed and certified as follows:

1. Notice of Intent.

All Notices of Intent shall be signed by a responsible official as set forth in ADEM Admin. Code r. 335-6-6-.09.

2. Reports and other information.

All reports required by the permit and other information requested by the Department or authorized representative of the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. Signed authorization. The authorization is made in writing by a person described above and submitted to the Department.

b. Authorization with specified responsibility. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility for environmental matters for the regulated entity.

3. Changes to authorization.

If an authorization is no longer accurate because a different operator has the responsibility for the overall operation of the MS4, a new authorization satisfying the requirement of Part VII.G.2.b. above must be submitted to the Department prior to or together with any reports or information, and to be signed by an authorized representative.

4. Certification.

Any person signing documents under Part VII.G.1-2. above shall make the following certification:

"I certify under 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 gathered and evaluated 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 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 fine and imprisonment for knowing violations."

H. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor it does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of federal, State or local laws or regulations.

I. PROPER OPERATION AND MAINTENANCE

You must at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by you to achieve compliance with the conditions of this permit and with the conditions of your SWMPP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by you only when the operation is necessary to achieve compliance with the conditions of the permit.

J. INSPECTION AND ENTRY

You must allow the Department or an authorized representative upon the presentation of credentials and other documents as may be required by law, to do any of the following:

1. Enter your premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

K. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

L. PERMIT TRANSFERS

This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Act.

M. ANTICIPATED NONCOMPLIANCE

You must give advance notice to the Department of any planned changes in the permitted small MS4 or activity which may result in noncompliance with this permit.

N. COMPLIANCE WITH STATUTES AND RULES

1. The permit is issued under ADEM Admin. Code r. 335-6-6. All provisions of this chapter that are applicable to this permit are hereby made a part of this permit.

2. This permit does not authorize the noncompliance 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.

O. SEVERABILITY

The provisions 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 this permit shall be affected thereby.

P. BYPASS PROHIBITION

Bypass (see 40 CFR 122.41(m)) is prohibited and enforcement action may be taken against a regulated entity for a bypass; unless:

1. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during the normal periods of equipment downtime. This condition is not satisfied if the regulated entity should, in the exercise of reasonable engineering judgment, have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.

3. The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the Permittee is granted such authorization, and the Permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.

The Permittee has the burden of establishing that each of the conditions of Part VII.P. have been met to qualify for an exception to the general prohibition against bypassing and an exemption, where applicable, from the discharge specified in this permit.

Q. UPSET CONDITIONS

An upset (see 40 CFR 122.41(n)) constitutes an affirmative defense to an action brought for noncompliance with technology-based permit limitations if a regulated entity shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

1. An upset occurred and the Permittee can identify the specific cause(s) of the upset;

2. The Permittee's facility was being properly operated at the time of the upset; and

3. The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.

The Permittee has the burden of establishing that each of the conditions of Part VII.Q. of this permit have been met to qualify for an exemption from the discharge specified in this permit.

R. PROCEDURES FOR MODIFICATION OR REVOCATION

Permit modification or revocation will be conducted according to ADEM Admin. Code r. 335-6-6-.17.

S. RE-OPENER CLAUSE

If there is evidence indicating potential or realized impacts on water quality due to storm water discharge covered by this permit, the regulated entity may be required to obtain an individual permit or an alternative general permit or the permit may be modified to include different limitations and/or requirements.

T. RETENTION OF RECORDS

1. The Permittee shall retain the storm water quality management program developed in accordance with Part III-V of this permit until at least five years after coverage under this permit terminates.

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.

U. MONITORING METHODS

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

2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

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. 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 permit is effective.

2. AWPCA means Code of Alabama 1975, Title 22, the Alabama Water Pollution Control Act, as amended.

3. Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

4. 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.

5. 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.

6. Department means the Alabama Department of Environmental Management or an authorized representative.

7. Discharge, when used without a qualifier, refers to "discharge of a pollutant" as defined as ADEM Admin. Code r. 335-6-6-.02(m).

8. 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 storm water or runoff on the site where it is generated.

9. Hydrology refers to the physical characteristics of storm water discharge, including the magnitude, duration, frequency, and timing of discharge.

10. Illicit Connection means any man-made conveyance connecting an illicit discharge directly to municipal separate storm sewer.

11. Illicit Discharge is defined at 40 CFR Part 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

12. Indian Country, as defined in 18 USC 1151, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

13. 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.

14. 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.

15. 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 Part 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 VII.W.15.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 separate storm sewers 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 VII.W.15.a., b. or c.).

16. Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage storm water 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 storm water as a resource rather than a waste product.

17. 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 Part 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 VII.W.17.a. and 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 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 VII.W.17.a., b. or c.

18. MEP is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR Part 122.34.

19. 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.

20. 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 Admin. Code r. 335-6-6-.02(nn).

21. NOI is an acronym for "Notice of Intent" to be covered by this permit and is the mechanism used to "register" for coverage under a general permit.

22. 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.

23. 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.

24. 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, and any waterbody assigned specific water quality criteria, such as 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 ADEM Admin. Code r. 335-6-10-.10.

25. 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.

26. 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.

27. Small municipal separate storm sewer system is defined at 40 CFR Part 122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, 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 an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States, but is not defined as "large" or "medium" municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

28. 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.

29. Storm Water Management Program (SWMP) refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system.

30. SWMP is an acronym for "Storm Water Management Program."

31. Total Maximum Daily Load (TMDL) means the calculated maximum permissible pollutant loading to a waterbody at which water quality standards can be maintained. The sum of wasteload allocations (WLAs) and load allocations (LAs) for any given pollutant.

32. You and Your as used in this permit is intended to refer to the Permittee, the operator, or the discharger as the context indicates and that party's responsibilities (e.g., the city, the country, the flood control district, the U.S. Air Force, etc.).

Appendix C – Monitoring Program

WET-WEATHER MONITORING PROGRAM

April 2022
to March 2027

City of Attalla • City of Gadsden • City of Glencoe
City of Hokes Bluff • City of Rainbow City
City of Southside • Etowah County

Prepared by
S&ME, Inc.

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Appendices

1.0 Introduction

S&ME, Inc. has prepared this Wet-Weather Monitoring Program for the regulated Phase II Small Municipal Separate Storm Sewer Systems within the *Gadsden-Etowah Urbanized Area* in accordance with S&ME Proposals No. 215660A-G, dated June 14, 2021.

The seven MS4 entities within the *Gadsden, Alabama Urbanized Area* (hereafter referred to collectively as the Gadsden-Etowah MS4) all currently discharge to an impaired waterbody for which a Total Maximum Daily Load (TMDL) has been established. Part IV.D of the NPDES General Permit requires that the SWMPP include a monitoring plan to assess the effectiveness of the BMPs in achieving the waste load reductions/allocations outlined in the TMDL.

1.1 Permit History

The Storm Water Phase II Final Rule issued by the United States Environmental Protection Agency (USEPA) in 1999 requires nationwide coverage of all operators of small MS4s located within the boundaries of an "urbanized area" as defined by the latest decennial Census. Based on the results of the 2010 census, the Bureau of the Census designated the *Gadsden, Alabama Urbanized Area* to include the City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, City of Rainbow City, the City of Southside, and portions of unincorporated Etowah County. A map outlining the approximate boundary of the 2010 *Gadsden, Alabama Urbanized Area* is included in **Appendix A** as **Figure 1**. Revised urbanized area boundaries based on the 2020 Census were not available as of April 1, 2022.

The City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, City of Rainbow City, the City of Southside, and Etowah County initially applied for and received a NPDES MS4 Phase II General Permit from ADEM in 2003, with the seven entities as co-permittees under authorization number ALR040009. The five-year permit expired on March 9, 2008. A Notice of Intent for renewal of the permit was submitted 180 days prior to expiration and permit coverage was administratively continued until the re-issuance of the MS4 Phase II General Permit with an effective date of February 1, 2011.

The 2011 permit expired on February 1, 2016. A Notice of Intent for renewal of the permit was submitted by each entity 180 days prior to expiration; therefore, the permit coverage was extended until the re-issuance of the MS4 Phase II General Permit in September 2016. To assist in compliance tracking, the Gadsden-Etowah MS4 entities were each issued a separate permit, although the entities agreed to continue under a joint SWMPP and monitoring plan. The separate NPDES permit authorizations were issued to each entity with an effective date of October 1, 2016.

The 2016 permit expired on September 30, 2021. Notices of Intent for renewal of the permit were submitted 180 days prior to expiration, and the MS4 Phase II General Permit authorizations were re-issued with an effective date of October 1, 2021. The current permit will expire on September 30, 2026.

Table 1-1 Permit Numbers and Responsible Officials

Entity	Permit Number	Name
City of Attalla	ALR040052	Larry Means, Mayor
City of Gadsden	ALR040053	Sherman Guyton, Mayor
City of Glencoe	ALR040054	Chris Hare, Mayor
City of Hokes Bluff	ALR040055	Scott Reeves, Mayor
City of Rainbow City	ALR040056	Joe Taylor, Mayor
City of Southside	ALR040057	Dana Snyder, Mayor
Etowah County	ALR040009	Robert Nail, Engineer

1.2 Steering Committee

The Gadsden-Etowah Storm Water Steering Committee was first established in 2011 following re-issuance of the joint permit. The intent of the steering committee was to provide for coordination between the co-permittees. When the joint permit was superseded by the separate permits in 2016, the committee continued to work together to produce and implement a joint SWMPP and monitoring program.

The Steering Committee will continue under the 2021 permit. Despite the preparation of individual SWMPPs for each entity, the Gadsden-Etowah MS4 entities remain committed to partnership and joint implementation of the monitoring program.

Each of the seven entities provide at least one member to the Gadsden-Etowah Storm Water Steering Committee. Each entity is responsible for providing the required annual updates and monitoring data to the Steering Committee.

Table 1-2 MS4 Storm Water Steering Committee

Entity	Contact	Phone Number	Email
City of Gadsden	Jeramy Ward	256-549-4527	jward@cityofgadsden.com
City of Gadsden	Heath Williamson	256-549-4520	hwilliamson@cityofgadsden.com
City of Attalla	Jason Nicholson	256-441-9200	jnicholson@attallacity.org
City of Rainbow City	Joel Garmon	256-413-1230	jgarmon@rbcalabama.com
City of Southside	Judd Rich	256-442-9775 Ext. 103	jrich@cityofsouthside.com
City of Glencoe	Todd Means	256-492-1424	toddmeans@cityofglencoe.net
City of Hokes Bluff	Lisa Johnson	256-492-2414	hbcity@cityofhokesbluff.net
Etowah County	Robert Nail	256-549-5358	rnail@etowahcounty.org

2.0 Water Quality Concerns

Neely Henry Lake is the primary receiving water for the Gadsden-Etowah MS4. In 1996, the ADEM identified five of the six reservoirs on the Coosa River within the State of Alabama's borders as being impaired, including Neely Henry Lake. The following table summarizes the impaired segments of Neely Henry Lake that receive discharges from the Gadsden-Etowah MS4.

Table 2-1 Impaired Waterbody Segments in the Urbanized Area

Assessment Unit ID	Waterbody Name	Uses	Causes
AL03150106-0204-102	Coosa River (Neely Henry Lake)	Public Water Supply Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD)
AL03150106-0204-101	Coosa River (Neely Henry Lake)	Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD)
AL03150106-0309-102	Coosa River (Neely Henry Lake)	Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD)
AL03150106-0309-101	Coosa River (Neely Henry Lake)	Swimming Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD)

Sources of nutrient and organic enrichment from non-point sources within the Coosa River watershed include:

- Runoff from pastures
- Runoff from animal operations

- Direct discharge to streams due to cattle
- Improper land application of animal waste
- Failing septic systems
- Urban runoff

Point source contributors of storm water pollution within the Coosa River watershed include:

- Sanitary sewer overflows (SSOs)
- Discharge from wastewater treatment plants
- Discharge from industrial operations

In 2008 the EPA approved TMDLs for Neely Henry Lake related to Nutrients (Total Phosphorous), pH, and Dissolved Oxygen. The Gadsden-Etowah MS4 is required to achieve a **30% reduction in Total Phosphorus discharge loading**.

3.0 Storm Water Monitoring

3.1 Rationale Statement

The intent of the proposed monitoring program is to evaluate the effectiveness of the City's BMPs in achieving the required reduction as established in the TMDL and to generally evaluate overall water quality. Where deviations are documented and/or expected, the collected monitoring data will be used to determine the extent and cause of the pollutant of concern.

3.2 Monitoring Parameters

The Gadsden-Etowah MS4 is required to achieve a 30% reduction in Total Phosphorus discharge loading. To demonstrate the MS4's compliance with the established waste load reduction, the MS4 will conduct monitoring along the Coosa River throughout the *Gadsden, Alabama Urbanized Area* using grab sampling for field and laboratory analyses.

Both point and non-point sources of particulate and dissolved phosphorous are linked to runoff. Particulate phosphorous moves primarily by soil erosion. Dissolved phosphorous may result from leaking septic systems, animal wastes, or the over-application of fertilizer. The greatest opportunity for excess phosphorous loading into the Coosa River from the Gadsden-Etowah MS4 is likely to occur during runoff events; therefore, **wet-weather monitoring will be conducted within 72 hours of a qualifying rain event of 0.75 inch or greater**.

Monitoring parameters were selected to indicate the effectiveness of the BMPs outlined in the *Gadsden, Alabama Urbanized Area* Storm Water Management Program. In addition to total phosphorous and orthophosphate,

parameters related to soil erosion (sedimentation) and eutrophication (nutrient enrichment) were also selected for monitoring.

Monitoring will be conducted **quarterly** at the designated monitoring locations for the following parameters:

- Total Phosphorous
- Orthophosphate
- Total Suspended Solids (TSS)
- Nitrate-Nitrite
- Total Kjeldahl Nitrogen (TKN)

The following parameters will also be measured in the field at the time of sample collection:

- Turbidity
- pH
- Dissolved Oxygen (DO)
- Temperature

3.3 Field Documentation

The following observations will be documented in the field at each monitoring location:

- Monitoring point ID
- Date and time
- Person conducting the sampling
- Equipment used
- Depth of sample collection
- Weather conditions
- Waterbody conditions
- Field parameters (turbidity, pH, DO, temperature)

3.4 Sampling Procedures

Monitoring will be conducted within 72 hours of a qualifying storm event of at least 0.75 inch, as measured at three rain gauges within the MS4. The rain gauges must be located a minimum of 3 miles apart. The duration between the storm event sampled and the end of the previous measurable storm event (greater than 0.1 inch of rain) must be a minimum of 48 hours.

3.4.1 Sampling on Land

Samples collected on land will be obtained from approximately the mid-channel of each stream at mid-depth or two feet below the water surface, whichever is shallower. Samples may be collected using a stainless steel bucket or a horizontal Van Dorn sampler or equivalent. Care will be taken to avoid contacting the bottom of the stream and stirring bottom sediments.

If multiple grab samples are necessary to obtain enough water to complete the required analyses at each monitoring point, the samples will be composited by mixing them in a decontaminated stainless steel bucket. The sample containers will then be filled using the composited water.

Fast-flowing streams less than three feet in depth may also be sampled using the hand-dip method. The stream must be accessible by wading or other means. Samples will be collected from the mid-channel of each stream at mid-depth by inserting the sample container directly into the waterbody with the bottle facing upstream. The person sampling will stand downstream of the collection point, and sediment disturbed by entry into the waterbody will be allowed to flow downstream before the sample is collected. If preservative is added to the sample containers prior to sample collection, care will be taken to avoid washing out the preservative.

3.4.2 Sampling from a Boat

Samples collected from a boat will be obtained using a horizontal Van Dorn sampler or equivalent. The sampler will be inserted into the water upstream of the boat and lowered to a depth of five feet below the water surface before the seals are triggered to collect the sample.

If multiple grab samples are necessary to obtain enough water to complete the required analyses at each monitoring point, the samples will be composited by mixing them in a decontaminated stainless steel bucket. The sample containers will then be filled using the composited water.

3.5 Monitoring Locations

A series of monitoring locations have been identified along the river and in contributing tributaries at points determined to be representative of the typical land uses in the sub-watersheds. The monitoring points have been sited to provide data on MS4 activities as well as baseline data from waterbodies entering and leaving the MS4.

The selected monitoring locations are identified on **Figure 2** in **Appendix A**. Coordinates for each point are listed in the table below.

Table 3-1 Monitoring Point Coordinates – Land Access

Point ID	Latitude	Longitude	Access	Waterbody Evaluated
AT 5	34.006446°	-86.069061°	LAND	Big Wills Creek / Little Wills Creek
GD 8	33.999535°	-86.024463°	LAND	Black Creek
RC 2	33.967683°	-86.039476°	LAND	Horton Creek
SS 13	33.891352°	-86.049229°	LAND	U.T. to Neely Henry Lake

Point ID	Latitude	Longitude	Access	Waterbody Evaluated
SS 14	33.885921°	-86.030683°	LAND	U.T. to Neely Henry Lake
GD 12	33.952567°	-86.003495°	LAND	U.T. to Neely Henry Lake
GD 6	34.015350°	-85.995617°	LAND	Town Creek
CO 15	33.972280°	-85.965354°	LAND	U.T. to Neely Henry Lake
SME 7	34.006225°	-86.111277°	LAND	Big Wills Creek (upstream of MS4)
SME 9	34.002807°	-85.871879°	LAND	U.T. to Neely Henry Lake
SME 10	33.985669°	-85.878605°	LAND	U.T. to Big Cove Creek (exiting Hokes Bluff)

Table 3-2 Monitoring Point Coordinates – Boat Access

Point ID	Latitude	Longitude	Access	Waterbody Evaluated
HB 3	34.002129°	-85.882808°	BOAT	U.T. to Neely Henry Lake
GD 5	34.014324°	-85.924013°	BOAT	Big Cove Creek / Little Cove Creek
GD 7	34.008361°	-85.999777°	BOAT	Storm sewer from downtown Gadsden to Coosa River
GD 9	33.989718°	-85.998472°	BOAT	U.T. to Neely Henry Lake
SS 5	33.941329°	-86.021569°	BOAT	U.T. to Coosa River
RC 14	33.905786°	-86.111656°	BOAT	Rook Creek / Dry Creek embayment
SME 1	33.990184°	-86.004048°	BOAT	Big Wills Creek / Black Creek embayment
SME 3	34.009698°	-85.956230°	BOAT	Coal Creek embayment
SME 4	34.001667°	-85.883342°	BOAT	Neely Henry Lake (upstream of MS4)
SME 5	33.940514°	-86.029885°	BOAT	Neely Henry Lake (midpoint of MS4)
SME 6	33.852125°	-86.049695°	BOAT	Neely Henry Lake (downstream of MS4)

3.6 Quality Assurance / Quality Control

Quality Assurance (QA) and Quality Control (QC) activities are designed to achieve the specific data quality goals associated with the sampling program and will follow EPA and ADEM guidance.

3.6.1 Sample Containers and Preservation

All samples will be collected in new laboratory-provided containers containing analyte-appropriate preservatives as listed below:

Table 3-3 Sample Containers and Preservation

Parameter	Container	Preservative	Hold Time
Total Suspended Solids (TSS)	HDPE - 1 L	NONE	7 days

Parameter	Container	Preservative	Hold Time
Total Phosphorous	HDPE - 250 mL	H2SO4	48 hours
Orthophosphate	HDPE - 250 mL	NONE	48 hours
Nitrate-Nitrite	HDPE - 250 mL	H2SO4	28 days
Total Kjeldahl Nitrogen (TKN)	HDPE - 250 mL	H2SO4	28 days

3.6.2 Quality Assurance

A minimum of one duplicate for every 10 samples will be submitted to the laboratory.

3.6.3 Equipment Decontamination

All reusable sampling equipment will be decontaminated immediately prior to the start of the monitoring event using the following procedure:

- Rinse with tap water
- Wash with non-phosphatic detergent solution
- Rinse with deionized water
- Allow equipment to air dry
- Containerize rinsate for disposal

Sampling equipment will be decontaminated in between uses using the following procedure:

- Rinse with deionized water
- Rinse three times with on-site water
- Dispose of rinsates downstream of the monitoring location

3.6.4 Sample Identification

Sample containers will be labeled with the following information in waterproof ink:

- Project number
- Sample location

- Collection date and time
- Preservative
- Analysis to be performed

3.6.5 Chain of Custody

Chain of custody documents will originate in the field and will accompany the samples to the laboratory. Copies of the chain of custody documents will be included with the laboratory reports in the annual report.

3.6.6 Sample Shipment

The samples will be shipped overnight to the laboratory in sealed coolers containing ice.

4.0 Analytical Results and Reporting

Field observations and analytical results will be recorded at the time of sampling. The resulting field notes and laboratory analytical reports will be retained by each entity for a minimum of three years.

A report consolidating the results from each quarterly monitoring event will be submitted by the entity/company performing the monitoring to the representatives of the City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, the City of Southside, the City of Rainbow City, and Etowah County. Each quarterly monitoring report will be incorporated into the Annual Update of each entity's SWMPP. Monitoring reports will be retained by each entity for a minimum of three years.

The monitoring reports will include the following:

- Date, latitude/longitude of location, and time of sampling
- Name(s) of individual(s) who performed the sampling
- Date(s) analysis were performed
- Name(s) of individual(s) who performed the analysis
- Analytical techniques or methods
- Results of analysis

5.0 Evaluation of Results

The Gadsden-Etowah Storm Water Steering Committee has performed quarterly monitoring within the Gadsden-Etowah MS4 since 2013. As of the date of this plan, 37 quarterly monitoring events have been conducted.

Results from each sampling event will be evaluated annually, during the preparation of the Annual Report. Data collected during the reporting year (April 1 to March 31) will be evaluated by May 31 of each year.

5.1 Statistical Analysis

Statistical analysis will be performed each year on the cumulative monitoring data (2013 to present) to determine whether there has been a statistically significant increase (SSI) of concentrations between specific monitoring points.

5.1.1 Wilcoxon Rank-Sum Tests

The Wilcoxon rank-sum test evaluates potential differences in the medians of two populations.

Specific monitoring points will be chosen for direct comparison based on their location within the MS4 area respective to other monitoring point locations and trend of collected data. Multiple pairs of points will be evaluated to observe trends across the MS4 area.

For each pair, the cumulative data for each monitored parameter for the two selected points will be evaluated to determine if a statistically significant difference is present using a statistical significance value (alpha) of 0.01. If a statistically significant difference is observed, the median values of each point will be compared to evaluate whether a point had a statistically significant increase (SSI) over the background point.

5.1.2 Sen's Slope Estimates

Sen's non-parametric estimator of slope is a method of estimating the slope (change in concentration over time) of the data. Because this method is non-parametric, it is suitable for high percentage of non-detects and is not significantly affected by outliers.

Sen's slope estimates will be produced for pairs of monitoring points and the corresponding parameters for which an SSI was observed. The results will indicate whether there is an upward, downward, or no trend in the concentration data.

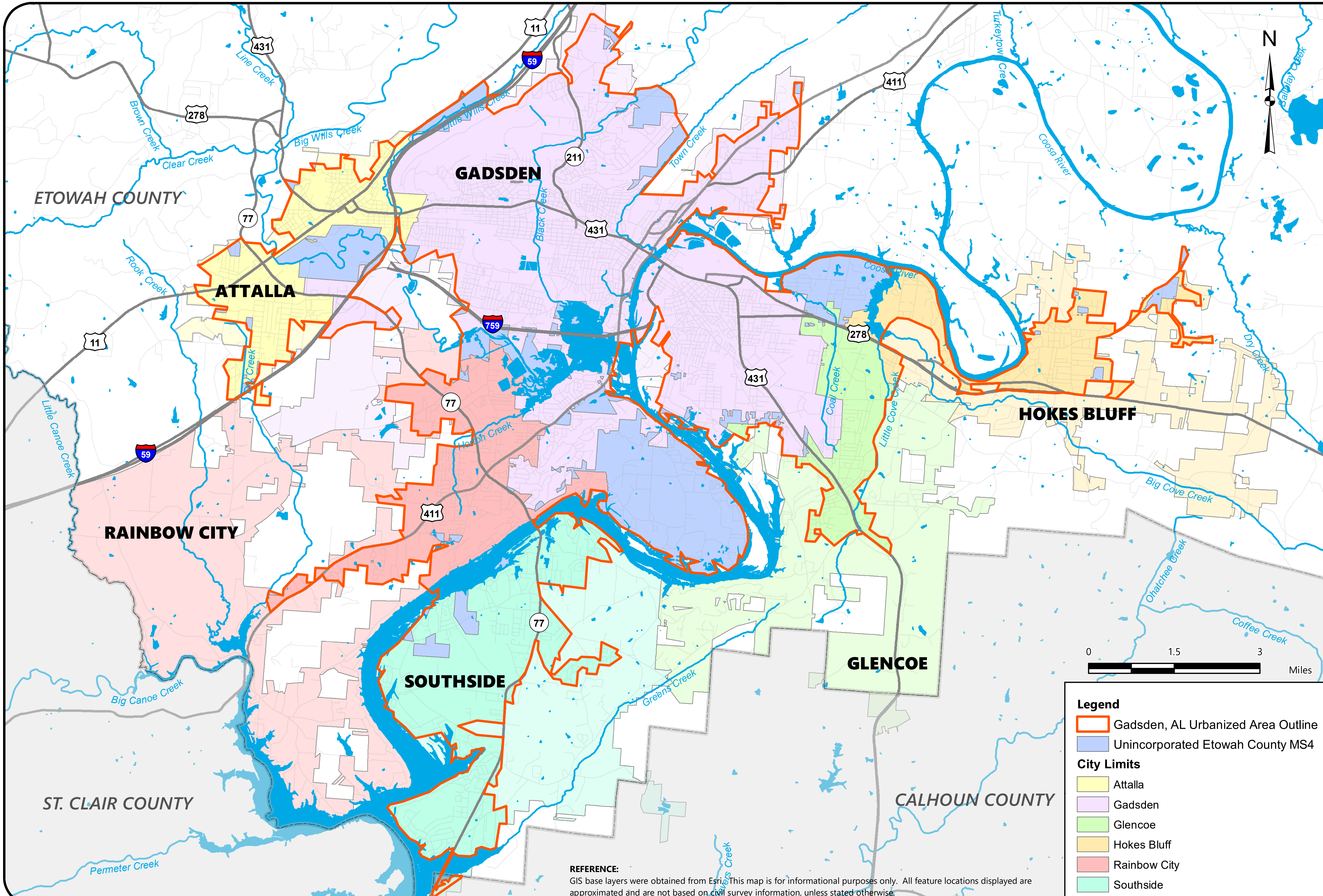
5.2 Evaluation of Monitoring Data

The results of the statistical analysis will be used to evaluate trends in water quality across the MS4. The monitoring data and results of the statistical analysis will also be used to determine if additional monitoring points should be considered.

Areas where an upward trend in phosphorous, orthophosphate, nitrate-nitrite, or TKN is observed will be evaluated for additional BMPs. Data from monitoring points SME 4, 5, and 6 will be used to evaluate the general impacts of the Gadsden-Etowah MS4 on the Coosa River.

Appendices

Appendix A – Figures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ST. CLAIR COUNTY
CALHOUN COUNTY
GADSDEN
ATTALLA
RAINBOW CITY
SOUTHSIDE
GLENCOE
HOKES BLUFF
Line Creek
Brown Creek
Clear Creek
Big Wills Creek
Little Wills Creek
Rook Creek
Little Canoe Creek
Big Canoe Creek
Permeter Creek
Black Creek
Town Creek
Horton Creek
Coal Creek
Little Cove Creek
Coosa River
Turkeytown Creek
Ballplay Creek
Dry Creek
Big Cove Creek
Ohatchee Creek
Coffee Creek
Greens Creek
431
278
11
59
77
211
759
411
N
0
1.5
3
Miles
Legend
Gadsden, AL Urbanized Area Outline
Unincorporated Etowah County MS4
City Limits
Attalla
Gadsden
Glencoe
Hokes Bluff
Rainbow City
Southside
REFERENCE:
GIS base layers were obtained from Esri. This map is for informational purposes only. All feature locations displayed are approximated and are not based on civil survey information, unless stated otherwise.

GADSDEN-ETOWAH MS4 BOUNDARIES

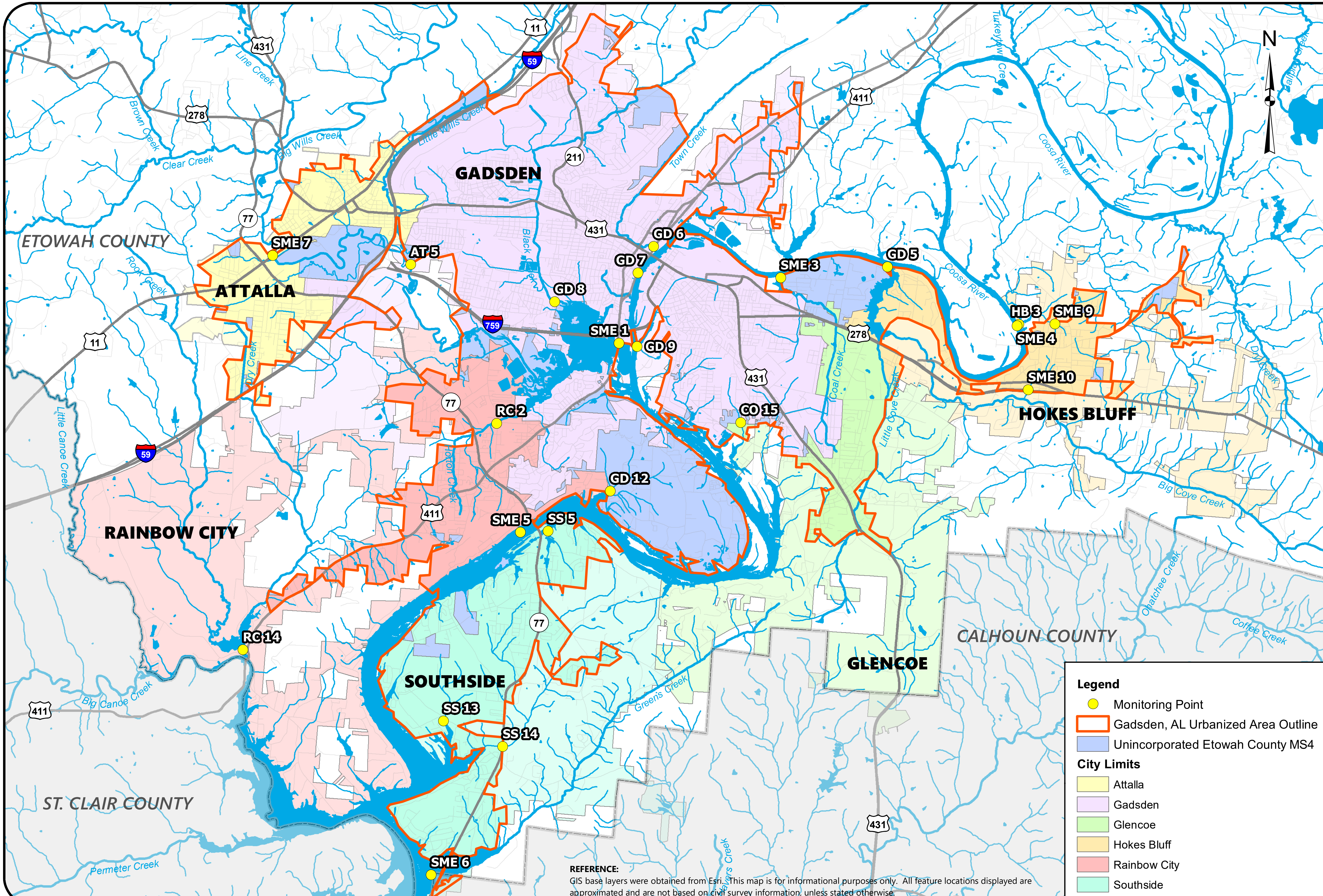
GADSDEN ALABAMA URBANIZED AREA
PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES GENERAL PERMIT ALR040009

SCALE:
1:100,000

DATE:
02/18/2022

PROJECT NUMBER
215660

FIGURE NO.
1



REFERENCE:
GIS base layers were obtained from Esri. This map is for informational purposes only. All feature locations displayed are approximated and are not based on civil survey information, unless stated otherwise.

WET-WEATHER MONITORING LOCATIONS

GADSDEN ALABAMA URBANIZED AREA
PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES GENERAL PERMIT ALR040009

SCALE:	1:100,000
DATE:	03/23/2022
PROJECT NUMBER	215660
FIGURE NO.	2

Appendix D – IDDE Program


ETOWAH MS4

Illicit Discharge Detection and Elimination Program


APRIL 2022

Etowah County, Alabama
NPDES Permit No. ALR040009
Prepared by: S&ME, Inc.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Appendices

1.0 Introduction

S&ME, Inc. has prepared this Illicit Discharge Detection and Elimination Program (IDDE) for the unincorporated Etowah County Phase II Small Municipal Separate Storm Sewer System in accordance with S&ME Proposal No. 215660G, dated June 14, 2021.

The Illicit Discharge Detection and Elimination (IDDE) Program is required by Part III.B.2 of National Pollutant Discharge Elimination System (NPDES) General Permit ALR040009 for discharges from regulated small municipal separate storm sewer systems (MS4s), issued to the Etowah County MS4 by the Alabama Department of Environmental Management (ADEM).

2.0 Etowah County MS4

The Etowah County Municipal Separate Storm Sewer System (Etowah County MS4) is defined as the unincorporated area within both the county and the urbanized area boundary. As defined by the 2010 Census, the *Gadsden, Alabama Urbanized Area* encompasses approximately 74.8 square miles. The Etowah County MS4 comprises approximately 12.7 square miles (17%) of the 2010 *Gadsden, Alabama Urbanized Area*. A map depicting the Etowah County's urbanized area is provided in the SWMPP.

2.1 Receiving Waters

As described in Section 1.4 of the SWMPP, Neely Henry Lake (Coosa River) is the primary receiving water for the Etowah County MS4. The MS4 encompasses eight subwatersheds.

Table 2-1 Subwatersheds in the Etowah County MS4 Area

Subwatershed	12 Digit HUC	Total Area (Acres)	Area within Etowah County MS4 (Acres)
Big Cove Creek	03150106-02-03	18,082	178
Black Creek	03150106-01-07	40,879	554
Coosa River-H. Neely Henry Lake	03150106-03-09	46,439	4,084
Horton Creek	03150106-01-08	16,902	1,823
Little Wills Creek	03150106-01-06	18,151	279
Lower Big Canoe Creek	03150106-03-06	33,306	52
Thorton Lakes-Dry Creek	03150106-02-02	9,777	24
Turkey Town Creek	03150106-02-04	57,474	1,126

2.2 Water Quality Concerns

2.2.1 Impaired Waterbodies Within the MS4

Three impaired waterbodies are located within the Etowah County MS4 boundary.

Table 2-2 Impaired Waterbodies within the MS4

Waterbody	Impaired Segment	Type	Causes	Use
Black Creek (Neely Henry Lake)	AL03150106-0107-111	303(d)	Nutrients	F&W
Big Wills Creek (Neely Henry Lake)	AL03150106-0108-111	303(d)	Nutrients	F&W
Big Wills Creek	AL03150106-0108-102	303(d)	Pathogens (E. coli)	F&W
Coosa River (Neely Henry Lake)	AL03150106-0309-102	TMDL	Nutrients Organic enrichment (DO)	F&W

2.2.2 Impaired Watersheds Intersecting the MS4

In addition to the impaired waterbodies, the Etowah County MS4 encompasses portions of watersheds for the following impaired waterbodies:

Table 2-3 Portions of Impaired Watersheds within the MS4

Watershed	Impaired Segment	Type	Causes	Use
Black Creek (Neely Henry Lake)	AL03150106-0107-111	303(d)	Nutrients	F&W
Big Wills Creek (Neely Henry Lake)	AL03150106-0108-111	303(d)	Nutrients	F&W
Big Wills Creek	AL03150106-0108-102	303(d)	Pathogens (E. coli)	F&W

Watershed	Impaired Segment	Type	Causes	Use
Coosa River (Neely Henry Lake)	AL03150106-0204-102	TMDL	Nutrients pH Organic Enrichment (CBOD, NBOD) Priority Organics (PCBs)	PWS F&W
Coosa River (Neely Henry Lake)	AL03150106-0309-102	TMDL	Nutrients pH Organic Enrichment (CBOD, NBOD)	F&W

2.2.3 *Priority Construction Sites*

The Etowah County MS4 does not currently discharge to any waterbody meeting the criteria for a Construction Priority Site, as defined in the Alabama Construction General Permit.

2.2.4 *Neely Henry Lake TMDL*

In 2008 the EPA approved TMDLs for Neely Henry Lake related to Nutrients (Total Phosphorous), pH, and Organic Enrichment/Dissolved Oxygen. The Etowah County MS4 directly and indirectly discharges to Neely Henry Lake; therefore, **the Etowah County MS4 is required to achieve a 30% reduction in Total Phosphorus discharge loading.**

Sources of nutrient and organic enrichment from non-point sources within the Coosa River watershed include:

- Runoff from pastures
- Runoff from animal operations
- Direct discharge to streams due to cattle
- Improper land application of animal waste
- Failing septic systems
- Urban runoff

Point source contributors of storm water pollution within the Coosa River watershed include:

- Discharge from wastewater treatment plants
- Discharge from industrial operations

3.0 Storm Sewer System

A Municipal Separate Storm Sewer System is defined by 40 CFR Part 122.26(b)(8) to be a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is:

(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 an Indian tribe or an authorized Indian tribal organization, 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) Not a combined sewer; and,

(iv) Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

3.1 Municipal Separate Storm Sewer Outfalls

An MS4 outfall is defined as a point source where an MS4 discharges to waters of the State. This definition does not include open conveyances connecting two municipal separate storm sewers. Also excluded are pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

Waters of the State are defined by Chapter 335-6-10-.02(10) of the ADEM Administrative Code as all waters of any river, stream, watercourse, pond, lake, coastal, or surface water, wholly or partially within the State, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation, unless such waters are used in interstate commerce.

3.2 Major and Minor Outfalls

A major outfall is defined by 40 CFR Part 122.26(b)(8) to be a municipal separate storm sewer outfall that discharges from:

(i) A single pipe with an inside diameter of 36 inches or more;

(ii) A single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres;

(iii) A single pipe with an inside diameter of 12 inches or more that receives storm water from lands zoned for industrial activity; or,

(iv) A single conveyance other than a circular pipe associated with a drainage area of 2 acres or more that receives storm water from lands zoned for industrial activity.

Minor outfalls are smaller than these thresholds. Both major and minor outfalls can be a source of illicit discharges.

4.0 Non-Storm Water Discharges

4.1 Rationale Statement

Section 402(p)(3)(B)(ii) of the Clean Water Act of 1987 requires that permits for municipal separate storm sewers include a requirement to effectively prohibit non-storm water discharges into the storm sewers. The Alabama General NPDES Permit authorizes specific non-storm water discharges, provided they do not cause or contribute to a violation of water quality standards and they have been determined not to be substantial contributors of pollutants.

4.2 Authorized Non-Storm Water Discharges

NPDES Permit ALR040009 authorizes the following non-storm water discharges:

a. Water line flushing
b. Landscape irrigation
c. Diverted stream flows
d. Uncontaminated ground water infiltration
e. Uncontaminated pumped groundwater
f. Discharges from potable water sources
g. Foundation drains
h. Air conditioning condensate
i. Irrigation water (not consisting of treated or untreated wastewater)
j. Rising ground water
k. Springs
l. Water from crawl space pumps
m. Footing drains
n. Lawn watering runoff
o. Individual residential car washing, to include charitable carwashes
p. Residual street wash water
q. Discharge or flows from firefighting activities (including fire hydrant flushing)
r. Flows from riparian habitats and wetlands
s. De-chlorinated swimming pool discharges, and
t. Discharge authorized by and in compliance with a separate NPDES permit

4.3 Illicit Discharges

An illicit discharge is any direct or indirect non-stormwater discharge to the stormwater drainage system, except as permitted or exempted by the Alabama General NPDES Permit or local ordinances.

Currently, the Etowah County has adopted an ordinance regulating illicit discharges.

5.0 Identifying Priority Areas

5.1 Rationale Statement

Priority areas within an MS4 are those areas more likely to have illicit discharges. Typically, illicit discharges are not uniformly distributed across a community. Instead, illicit discharges are generally clustered within areas defined by characteristics such as land use or infrastructure age.

5.2 Designating Priority Areas

The Etowah County MS4 encompasses approximately 9.9 square miles and consist primarily of undeveloped land. To assist with data collection and evaluation, Priority Areas will be designated based on population density.

The County has chosen to designate two portions of the MS4 as Priority Areas, due to the number of residences located within the areas. Priority Area 1 is composed of the Whorton Bend portion of the MS4. Priority Area 2 is the Tillison Bend portion of the MS4 between Cove Creek and Coal Creek.

The Etowah County may also choose to designate additional priority areas if there are specific concerns or past problems in that area.

6.0 MS4 Map

6.1 Rationale Statement

Part III.B.2.a.i of the NPDES Permit ALR040009 requires the Etowah County MS4 to develop and annually update a map of the MS4. Accurate and up-to-date maps of the storm sewer system are critical to the implementation of the IDDE program. Maps are used to direct field crews, locate outfalls, assess illicit discharge potential, track reports, and track corrective actions.

6.2 Identification of Previously Unidentified Outfalls

The County previously identified a total of 47 outfalls. Existing outfalls that were not identified during the previous stream-walking program may be encountered in two ways:

- Discovery during dry-weather inspections of known outfalls

- Discovery during other field activities (e.g., County inspections, IDDE investigation, verification of citizen complaints, etc.)

Previously unknown outfalls encountered during dry-weather inspections of known outfalls will be identified, inspected, and screened at the time of discovery. Following the initial inspection, the new outfall will be added to the MS4 outfall inventory and map.

Outfalls encountered during other field observations will be reported to the **Engineering Department** to be added to the outfall database for verification and inspection. Until verification, the outfall will be identified in the outfall inventory and on the map as a "Potential Outfall".

Field observation to verify and identify previously unidentified outfalls includes collection of the following data:

1. Outfall coordinates
2. Conveyance type (ditch, culvert, pipe, etc.)
3. Conveyance shape
4. Conveyance size (pipe diameter, ditch width and depth, box culvert dimensions, etc.)
5. Conveyance material (RCP, PVC, CMP, etc.)
6. Outfall condition
7. Outfall elevation
8. Surrounding land use
9. Pictures of the outfall, with outfall identification shown in the picture

The outfall verification data will be recorded on the *Outfall Reconnaissance Inventory Field Sheet* (located in **Appendix A**) or on an equivalent form.

Following verification of the outfall, the outfall will be classified as either major or minor, based on the criteria established in 40 CFR Part 122.26(b)(8) and detailed in Section 3.2 of this plan.

The County will continue to update the MS4 Map as additional outfalls are identified.

6.3 Verification of Potential Outfalls Identified During Plan Review

Following construction of post-construction storm water controls, as-built drawings will be required to be submitted to the Engineering Department. Information provided on the as-built drawings will be verified through field observation during the final inspection. Outfalls identified during plan review will be added to the outfall inventory and map as "Potential Outfalls."

Field observation to verify Potential Outfalls includes collection and/or confirmation of the following information:

1. Outfall coordinates
2. Conveyance type (ditch, culvert, pipe, etc.)
3. Conveyance shape
4. Conveyance size (pipe diameter, ditch width and depth, box culvert dimensions, etc.)

5. Conveyance material (RCP, PVC, CMP, etc.)
6. Outfall condition
7. Outfall elevation
8. Surrounding land use
9. Pictures of the outfall, with outfall identification shown in the picture

The outfall verification data may be recorded on the *Outfall Reconnaissance Inventory Field Sheet* (located in **Appendix A**) or on a separate form. Verification of Potential Outfalls will be conducted in conjunction with dry-weather monitoring activities discussed in Section 6.0 of this plan.

Following verification of the Potential Outfall, the outfall will be classified as either major or minor, based on the criteria established in 40 CFR Part 122.26(b)(8) and detailed in Section 3.2 of this plan.

The County will continue to update the MS4 Map as additional outfalls are identified.

6.4 New MS4 Areas

As of April 1, 2022, the U.S Census bureau has not altered the boundary of the *Gadsden, Alabama Urbanized Area*. Should the boundary be expanded to include parts of the County previously not included in the Etowah County MS4 boundary, a stream-walking program will be implemented to map and incorporate new outfalls within the boundary.

Starting at the location where a waterbody exits a delineated drainage basin, field crews will move upstream to identify points where storm water discharged from the MS4 enters the waterbody. Field observation to identify outfalls includes collection of the following data:

1. Outfall coordinates
2. Conveyance type (ditch, culvert, pipe, etc.)
3. Conveyance shape
4. Conveyance size (pipe diameter, ditch width and depth, box culvert dimensions, etc.)
5. Conveyance material (RCP, PVC, CMP, etc.)
6. Outfall condition
7. Outfall elevation
8. Surrounding land use
9. Pictures of the outfall, with outfall identification shown in the picture

The outfall identification data will be recorded on the *Outfall Reconnaissance Inventory Field Sheet* or on a separate form. The forms will be used to add the identified outfalls to the MS4 map. An updated map will be provided with the Annual Report.

7.0 IDDE Ordinance

7.1 Permit Requirement

Part III.B.2.a.ii of NPDES Permit ALR040009 requires the Etowah County MS4 to effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into the storm sewer system that are not listed in Part I.B.2 of the Permit and implement appropriate enforcement procedures and actions. The purpose of an illicit discharge ordinance is to provide legal authority to the Etowah County to prohibit illicit discharges, investigate suspected illicit discharges, require elimination of illicit discharges, and carry out enforcement actions.

The IDDE ordinance must explicitly prohibit non-storm water discharges into the storm sewer system, with the exception of those non-storm discharges specifically allowed by NPDES Permit ALR040009. The IDDE ordinance must also explicitly prohibit illicit connections to the storm sewer system. The prohibition of illicit connections should be retroactive, to include connections made in the past, whether or not the connection was permissible at the time.

7.2 County Obstacles to Compliance

Etowah County does not currently have the authority to enact an ordinance or other regulatory mechanism to prohibit non-storm water discharges to the MS4. Counties have no general grant of power in the Alabama State Constitution and must go to the Alabama Legislature for authority to engage in any activity not currently authorized by the State Constitution. Authority to enact local ordinances may be granted through constitutional amendments or by an act of the legislature known as "local legislation."

7.3 Evaluation

The County will continue to evaluate the possibility of developing an IDDE ordinance.

8.0 Dry Weather Screening Program

8.1 Rationale Statement

Part III.B.2.a.iii of NPDES Permit ALR040009 requires the Etowah County MS4 to develop and implement a dry weather screening program designed to detect and address non-storm water discharges to the MS4. Visual inspections of outfalls are critical to the identification and elimination of illicit discharges. Indicators of potential illicit discharges include outfalls that are flowing during dry weather, indicating a potential illicit connection, or outfalls that have high turbidity, strong odors, or unusual colors. Where suspect discharges are observed, additional testing can assist in determining the discharge source.

The Etowah County will conduct field assessment activities for the purpose of verifying outfall locations, identifying previously unknown outfalls, and locating, identifying, and correcting illicit discharges to the MS4.

8.2 Prioritization Schedule

The County or trained subcontractors will conduct visual inspections of a minimum of 15% of all known outfalls during each reporting period and all known outfalls will be inspected at least once during each five-year permit cycle. Outfalls located in Priority Areas will be visually inspected at least once every three years.

Priority Areas will be re-evaluated **by April 30 of each year** (e.g., by April 30, 2022 for the April 1, 2022 through March 31, 2023 reporting period). The anticipated inspection schedule for the following reporting period will be included in each Annual Report.

8.3 Responsibility

ORI inspections within the jurisdiction of the Etowah County are the responsibility of the County's **Engineering Department**. Inspections may be performed by County staff or by subcontracted crews. All field reports will be received and reviewed by the County's **Engineering Department**.

8.4 Inspection conditions

ORI inspections should be conducted when the outfall is accessible, unobstructed, and when there will be no storm water flows.

The preferred conditions for outfall inspections include:

- Dry season (e.g., summer or early fall)
- No rainfall over 0.1 inch in the previous 48 hours
- Recently mowed, low vegetation, or leaf-off conditions
- Due to sample hold time, discharge samples should not be collected on a Friday, Saturday, or Sunday.

8.5 Equipment

Prior to conducting field work, crews should assemble the required equipment listed below and review records from prior inspections in the same area to become familiar with the outfall locations and any potential inspection challenges. Field crews should prepare for consecutive days of field work when possible.

1. Minimum 2-person crew
2. Safety gear (e.g., vest, gloves, boots, cones)
3. County identification
4. Field notebook and pencils
5. Outfall Reconnaissance Inventory Field Sheet
6. Map or aerial photo of inspection area
7. GPS unit with charged battery
8. Cell phone with charged battery

9. Digital camera with charged battery
10. Compass
11. Machete or clippers
12. Flashlight or headlamp with charged battery
13. Tape measure
14. Dry erase board and marker (to identify outfall in photos)
15. First aid kit
16. Stopwatch or watch with second hand
17. Clear 1-liter sample bottle to evaluate field parameters
18. Sampling kits (see Section 7.9)
19. Cooler with ice
20. Permanent marker
21. Thermometer
22. pH probe
23. Ammonia test strips
24. Nitrile or latex gloves
25. Wide-mouth container
26. Hand Sanitizer

8.6 Safety Considerations

Health and safety considerations for outfall inspection and sampling include, but are not limited to, the potential for contact with:

- Contaminated water
- Allergenic/poisonous plants
- Sharp debris and objects
- Wild animals
- Landowners
- Confined spaces

Field crews should be comprised of at least two individuals, each equipped with proper footwear (e.g., sturdy waterproof boots or waders) and gloves (e.g., neoprene, latex, or rubber).

Private properties should not be accessed unless proper notification has been provided, preferably in advance. Field crews should carry identification or wear clothing that identifies them as County workers or subcontractors.

It is recommended that field crews be vaccinated against Hepatitis B, particularly if the crews will be accessing waters known to be contaminated with illicit sewage discharges.

A confined space refers to a space that has limited openings for entry and exit, unfavorable natural ventilation that could contain or produce hazardous atmospheres, and is not intended for continuous employee occupancy. Examples of confined spaces field crews might encounter are manholes or tunnels. In the event a confined space is encountered during an IDDE investigation, the space will be investigated using cameras. **Under no circumstances should inspection personnel enter a confined space.**

If confined space entry is necessary to complete the IDDE investigation, the **Engineering Department** may coordinate with other County departments or municipalities to locate personnel with the appropriate confined space entry training and equipment. Under no circumstances should any person enter a confined space until all required safeguards have been accomplished and entry permits completed.

8.7 Inspection Procedure

The ORI inspection procedure includes the following activities:

1. Visually inspect the outfall and the immediate surrounding area
2. Photograph the current conditions (using the whiteboard to identify the outfall in the photos)
3. Complete the Outfall Reconnaissance Inventory Field Sheet

If flow is observed continue with steps 4 and 5.

4. Measure observed flow by timing how long it takes to fill a wide-mouth container of known volume
5. Perform field screening of observed flow

Potential illicit discharges are indicated by outfalls that have flow in dry weather and/or foul odors or discolored water in or around the outfall pipe. During field inspections, crews should also note whether outfalls have maintenance issues, such as damaged infrastructure or trash accumulation.

When a potential illicit discharge is identified, field crews will photograph the discharge and outfall, then conduct a brief visual inspection of the surrounding area to identify possible sources of the discharge.

A flow chart outlining the screening and sampling procedure is included in **Figures 8-1 and 8-2**.

8.8 Visual Inspection

Visual observations are used to observe conditions at the outfall and complete the *Outfall Reconnaissance Inventory Field Sheet* (see **Appendix A**). Sections 1, 2, and 5 of the Field Sheet require information on outfall location, surroundings, condition, and type. Sections 3 and 4 of the Field Sheet are used to record the following dry-weather flow observations:

- Flow rate

- Color of discharge
- Odor
- Turbidity
- Floatables

8.9 Field Screening

Where dry weather flows are noted, but no obvious illicit discharge is identified, field crews will screen the discharge for indicators of illicit discharges. Field screening will include testing for temperature, pH, and ammonia.

Table 8-1 Field Screening Values

Parameter	Unlikely	Suspect
Temperature	<85 °F	>85 °F
pH	5.5 to 9.0	<5.5 or >9.0
Ammonia	<1 mg/L	>1 mg/L

Sanitary wastewater and certain industrial discharges can substantially increase outfall discharge temperatures. Elevated discharge temperatures may indicate a sanitary or industrial illicit discharge. Discharge temperatures over 90 °F indicate an obvious illicit discharge, likely due to an industrial source such as cooling water or boiler blowdown.

Extreme pH levels can indicate the presence of an industrial illicit discharge.

Ammonia concentrations in groundwater or tap water are typically low. High ammonia concentrations in dry-weather flows may indicate the discharge of sanitary wastewater or liquid wastes from some industrial sites.

8.10 Discharge Sampling

If a discharge has a severity index of 3 on one or more indicators in Section 4 of the ORI Field Sheet, or if field screening results indicate a suspect discharge, field crews will collect samples to be analyzed for the following parameters:

Table 8-2 Illicit Discharge Indicators

Parameter	Indicator
Surfactants	>0.25 mg/L indicates discharge is contaminated by sewage or washwater
Fluoride	>0.13 and <0.6 mg/L indicate tap water source >0.6 mg/L indicates industrial source
Ammonia (NH_3)	A/P ratio >1 indicates sewage; A/P ratio <1 indicates washwater ≥50 mg/L indicates industrial discharge

Parameter	Indicator
Potassium	A/P ratio >1 indicates sewage; A/P ratio <1 indicates washwater ≥20 mg/L indicates industrial discharge
Total Phosphorous	>0.4 mg/L indicates contamination from lawn practices, agriculture, sewage, or washwater

The table below provides the preferred laboratory method, sampling container, required preservative, and analysis hold time for each parameter. The County will use this as a guideline for sampling protocols.

Table 8-3 Laboratory Analysis

Parameter	EPA Method	Container	Preservative	Hold Time
MBAS (Surfactants)	5540 C-2011	HDPE – 1 L	None	**48 hours**
Ammonia Nitrogen	350.1	HDPE – 500 mL	$Na_2S_2O_3$ + H_2SO_4	28 days
Fluoride	300.0	HDPE – 125 mL	None	28 days
Total Phosphorous	365.2	HDPE – 250 mL	H_2SO_4	28 days
Potassium	200.7	HDPE – 500 mL	HNO_3	180 days

Following receipt of the analytical results, the type or source of the illicit discharge may be characterized based on the indicators listed in Table 8-2. The listed indicators are intended as a guideline to assist in the identification of an illicit discharge source and should not be used as the sole method of investigating a suspect discharge.

The following flow charts outline the screening and sampling procedure, and the discharge identification procedures.

Figure 8-1 Evaluating When to Collect a Sample

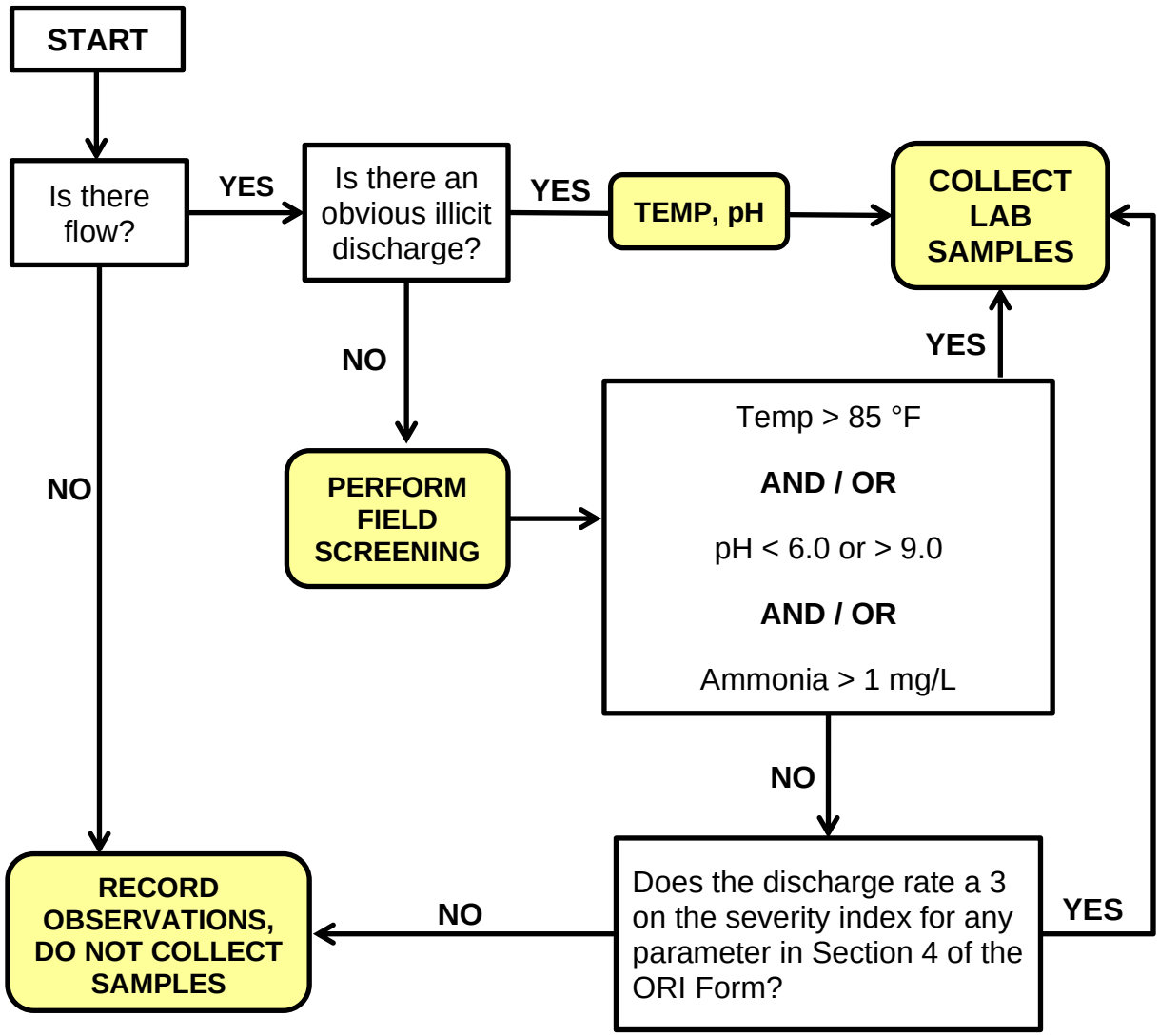
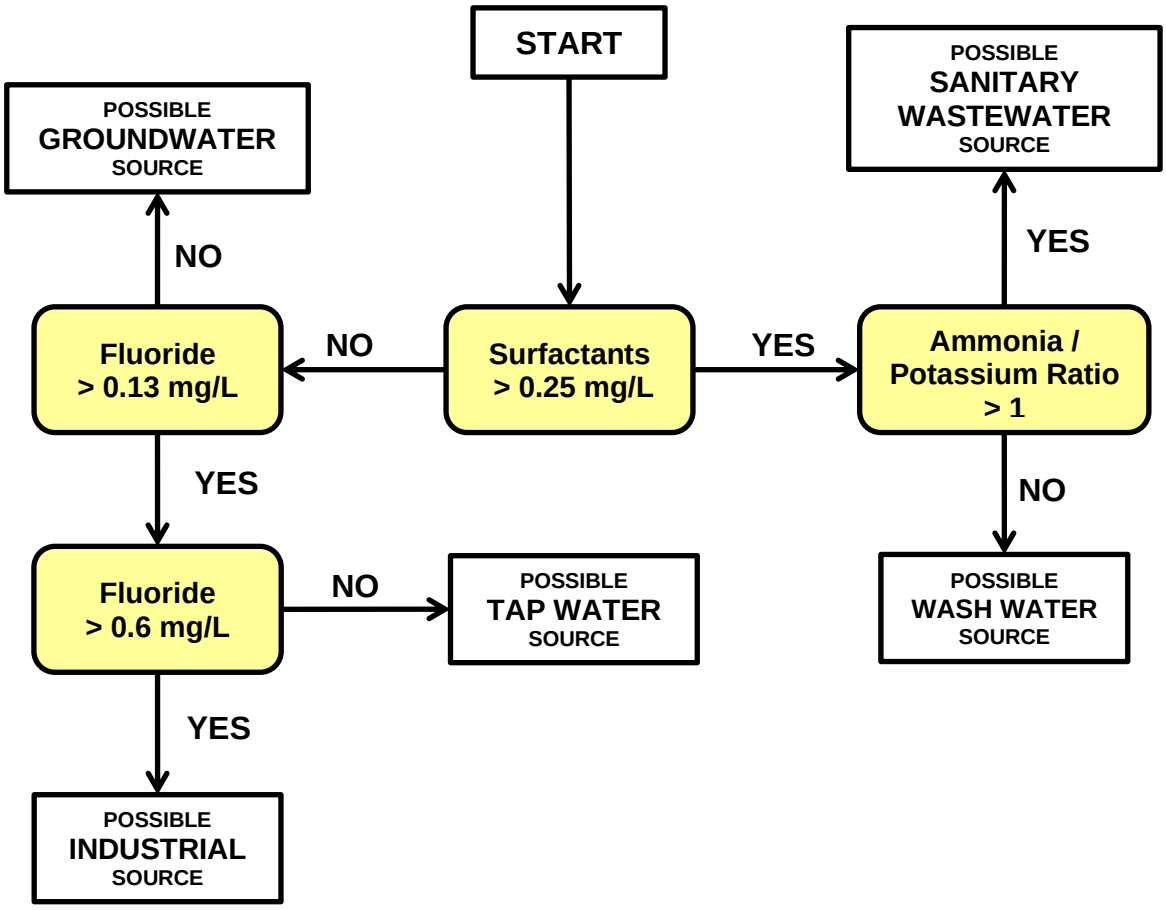


Figure 8-2 Evaluating Analytical Data to Determine Discharge Type



8.11 Inspection Reporting

If the inspection crew encounters a transitory discharge, such as a liquid or oil spill, during inspection activities, the observed spill or environmental hazard will be immediately reported to the County's **Engineering Department**. Obvious illicit discharges will also be reported upon observation.

Completed ORI Field Sheets, photos, and additional information collected during the ORI inspection will be submitted to the County's **Engineering Department**.

8.12 Outfall Ranking

Section 6 of the ORI Field Sheet requires the inspector to characterize the observed outfall as having obvious, suspect, possible, or unlikely discharge potential.

Discharges with an "obvious" ranking will be investigated within 10 days of determination, assuming the source was not identified at the time the discharge was observed. Discharges with a "suspect" ranking will be investigated within 30 days. Discharges that have a "potential" ranking will be investigated within 60 days. Discharges with an "unlikely" ranking will be noted for comparison during future inspections. Investigations will generally follow the procedures outlined in Section 8.

Table 8-4 Outfall Ranking

Response Time	Ranking	Characteristics
10 days	Obvious	Outfalls where there is an illicit discharge that doesn't require sample collection for confirmation
30 days	Suspect	Flowing outfalls with high severity (ranking of 3) on one or more physical indicators
60 days	Potential	Flowing or non-flowing outfalls with presence of two or more physical indicators
-	Unlikely	Non-flowing outfalls with no physical indicators of an illicit discharge

9.0 Illicit Discharge Investigation

9.1 Rationale Statement

Part III.B.2.a.iv of NPDES Permit ALR040009 requires the Etowah County MS4 to develop and implement procedures for tracing the source of a suspect illicit discharge. The following procedures are intended to assist the County with the investigation of various types of illicit discharges that could occur in the MS4 area.

9.2 Corrective Action Record Keeping

When a suspect illicit discharge or illicit connection is identified, the **Engineering Department** will open a case log detailing:

- Type of suspected discharge
- Location of suspected discharge
- Copy of the ORI or citizen report
- IDDE investigation activities and dates
- IDDE investigation results
- Responsible party information
- All communications with the responsible party
- Documentation of corrective actions

Throughout the problem investigation and corrective action activities, information related to the incident or property in question should be documented in the case log.

9.3 Initiating an Investigation

Once an illicit discharge is suspected or detected at an outfall or in a stream, one of four types of illicit discharge investigations is triggered to track down the source:

- Storm drain network investigations
- Drainage area investigations
- On-site investigations
- Septic system investigations

When an illegal dumping or illicit discharge problem is directly observed by County personnel or a County subcontractor, it is generally not necessary to follow these investigation procedures, as the source of the problem discharge is already known.

9.4 Storm Drain Network Investigations

Storm sewer investigations use field crews to trace the source of a discharge problem to a single segment of a storm sewer. The investigation starts at the outfall and works progressively up the trunk from the outfall. Common investigative methods include:

- Visual inspection at manholes
- Sandbagging or damming the trunk
- Dye testing
- Smoke testing
- Video testing

9.5 Drainage Area Investigations

Drainage area investigations are initially conducted in the office and involve a parcel-by-parcel analysis of potential generating sites within the drainage area of the suspect outfall. Drainage area investigations are appropriate when the flow type in the discharge appears to be specific to a certain type of land use or generating site.

These investigations may include the following techniques:

- Analysis of land use
- Obtaining permit information from EPA and ADEM
- Review of as-built drawings
- Aerial photography analysis
- Infrared aerial photography analysis

9.6 On-site Investigations

On-site investigations are typically performed by dye testing the plumbing systems of households and buildings. Where septic systems are prevalent, inspections of tanks and drain fields may be needed.

9.7 Septic System Investigations

If a septic system is suspected as the source of an illicit discharge, the entity responsible for the investigation will notify the **Etowah County Health Department, Environmental Services Division** at (256) 439-2586.

Once a complaint is received, the Health Department will visit the property to inspect and verify the complaint. If problems are observed with the septic system, the Health Department will issue a Notice to the property owner requiring corrective actions within a certain timeframe, typically 30 days.

The County's **Engineering Department** will be responsible for coordinating with the Etowah County Health Department to confirm that the required corrective actions have been completed.

10.0 Illicit Discharge Elimination

10.1 Rationale Statement

Part III.B.2.a.v of NPDES Permit ALR040009 requires the Etowah County MS4 to develop and implement procedures for eliminating identified illicit discharges.

Following the identification of an illicit discharge or connection, the County's **Engineering Department** will first attempt to secure voluntary compliance through education. If corrective actions are not taken, the County will report the illicit discharge to the ADEM Water Division for enforcement.

10.2 Voluntary Compliance

When an illicit discharge or illicit connection is identified, the County's **Engineering Department** will first pursue voluntary compliance through responsible party education. Business operators and property owners may not be aware of illicit connections or illegal discharge activities on their property, or the illicit discharge/connection may have been legal at one time. In these cases, the non-compliance may be adequately addressed by providing information about the connection or operation, the environmental consequences of the illicit discharge, and suggestions on how to remedy the problem.

Property owners and/or operators will be notified that the identified illicit discharge or illicit connection must be corrected in a timely manner and that the County's **Engineering Department** will conduct a follow-up site visit to verify compliance. Field staff should also provide the property operator with an educational brochure targeting illicit discharge violations.

10.3 Enforcement Actions

When voluntary compliance does not produce the desired result, the County's **Engineering Department** will report the illicit discharge to the appropriate department or agency for corrective action. Chemical spills will be referred to the Etowah County EMA. Discharges of sewage will be reported to the Etowah County Health Department. Discharges of potable water will be referred to the appropriate utility. Illegal dumping will be referred to the Sheriff and/or Keep Etowah Beautiful. Other illicit discharges will be reported to ADEM for enforcement action.

11.0 Notification of ADEM

11.1 Rationale Statement

Part III.B.2.a.vi of NPDES Permit ALR040009 requires the Etowah County MS4 to establish procedures to notify ADEM of a suspect illicit discharge entering the Etowah County MS4 from an adjacent MS4.

11.2 Discharges from an Adjacent MS4

The Etowah County MS4 is bordered in several areas by the Attalla MS4, the Gadsden MS4, the Glencoe MS4, the Rainbow City MS4, and the Southside MS4. Should the County identify a suspect illicit discharge originating within a neighboring MS4, the County will notify the appropriate MS4 and the ADEM Water Division within 48 hours of observation of the suspect illicit discharge.

The notification to the responsible MS4 and ADEM will include the following information:

1. Location of the suspect illicit discharge, including latitude and longitude, if known
2. Type of illicit discharge, if known
3. Estimated quantity or flow rate, if known
4. Origin or suspected origin of the suspect illicit discharge, if known
5. Date and time the suspect illicit discharge was observed
6. Description of affected media, including the name of the receiving waterbody, if known
7. Corrective actions being taken within the Etowah County MS4, if any

12.0 Public Reporting

12.1 Rationale Statement

Part III.B.2.a.vii of NPDES Permit ALR040009 requires the Etowah County to develop and implement a mechanism for the public to report illicit discharges within the MS4. The County must also develop procedures to investigate reports from the public.

12.2 Public Reporting System

The County provides a storm water complaint form on the county website for the public to report non-compliant construction sites, illicit discharges (including spills or illegal dumping), impaired waterways, and violations of ordinances relating to storm water pollution. The form is available at the following link: https://etowahcounty.org/report-storm-water-issues/

Illicit discharge reports will be investigated within five business days of receipt.

12.3 Investigation of Public Complaints

The County utilizes a Complaint Tracking Log to track illicit discharge reports and follow up with investigations where necessary. Records of public reports, comments, or complaints will include:

- Date, time, and description of the report
- Location of the complaint (if applicable)
- Identification of any actions taken (inspections, enforcement, corrections, etc.) that are sufficient to cross-reference inspection and enforcement records

The **Engineering Department** will be responsible for initiating investigative or corrective actions in accordance with Sections 9.0 and 10.0 of this plan.

13.0 Personnel Training

13.1 Rationale Statement

Part III.B.2.a.viii of NPDES Permit ALR040009 requires the Etowah County MS4 to develop and implement a training program for appropriate County personnel on identification, reporting, and correction of illicit discharges.

13.2 Annual Awareness Training

Appropriate County personnel will undergo annual training on illicit discharge identification, reporting, and corrective actions. County departments storing, using, or disposing of potential pollutants are responsible for selecting all appropriate personnel to attend annual awareness training.

14.0 Responsible Parties

The **Engineering Department** is responsible for overseeing, developing, and coordinating the IDDE program in the Etowah County regulated MS4 area.

15.0 Program Evaluation

15.1 Rationale Statement

The IDDE program is currently based on assumptions of illicit discharge types and potential. As the program moves forward and more data become available, the IDDE plan will be adapted to reflect the actual scope and nature of illicit discharges within the Etowah County MS4.

15.2 IDDE Tracking System

Suspect illicit discharges will be logged in a case file. The data collected by the tracking system will be reviewed annually to help identify common illicit discharge types and locations.

As specific illicit discharges are identified, the monitoring results may be used to compile benchmarks for common illicit discharge types. The indicators listed in Section 8.10 may require adjustment for conditions specific to each drainage basin.

Results of the tracking system evaluation and/or indicator benchmark assessment will be discussed in the Annual Report.

15.3 Priority Areas

Currently, priority drainage basins are identified based on population density. The purpose of designating priority areas is to pin-point areas where program funds and efforts can be targeted to the most effect. Too few or too many priority areas are not beneficial to the implementation of the IDDE program; therefore, the methods for determining priority areas will be evaluated annually to ensure that the criteria are not too inclusive or exclusive. Additional criteria may be removed or added as necessary. The rationale for eliminating or adding criteria will be discussed in the Annual Report.

15.4 Field Screening

The field screening values identified in Section 8.9 of this plan will be reviewed periodically to determine if the screening values should be adjusted. The County will use the data collected from screening both unlikely and suspect dry-weather flows to evaluate the ranges for determining whether a discharge is suspect.

Appendices

Appendix A – Forms

OUTFALL RECONNAISSANCE INVENTORY FIELD SHEET

Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.): Last 24 hours: Last 48 hours:		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	

Land Use in Drainage Area (Check all that apply):

☐ Industrial ☐ Open Space

☐ Urban Residential ☐ Institutional

☐ Suburban Residential Other: _____

☐ Commercial Known Industries: _____

Notes (e.g.., origin of outfall, if known):

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ Rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No	***If No, Skip to Section 5***			
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		**RESULT**	**UNIT**	**EQUIPMENT**
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stop watch
☐Flow #2	Flow depth		Inches	Tape measure
	Flow width	_____' _____"	Ft, In	Tape measure
	Measured length	_____' _____"	Ft, In	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Standard Units	Test strip / probe
Ammonia			mg/L	Test strip

OUTFALL RECONNAISSANCE INVENTORY FIELD SHEET (CONTINUED)

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (*If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (toilet paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; Origin not obvious	☐ 2 – Some; Indications of origin (e.g., possible suds or oil sheen)	☐ 3 – Some; Origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No (*If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oil ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

Section 7: Data Collection

1.	Sample for the lab?	☐ Yes	☐ No	If Yes, what time was the sample collected?
2.	If yes, collected from:	☐ Flow	☐ Pool	
3.	Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Appendix E – Ordinances

State of Alabama, Etowah County
I certify this instrument was filed
and fees collected on:

2009 May -18 9:12AM

Instrument Number 3313552 Pages 70
--------MISCELLANEOUS --------
RECORDING 210.00 CERTIFICA 3.00
SCAN FEE 10.00 MENTAL HE 2.00
PROBATE J 3.00
Total Fees ---------- 228.00
Bobby Junkins, Judge of Probate

STATE OF ALABAMA
COUNTY OF ETOWAH

RESOLUTION OF THE ETOWAH COUNTY COMMISSION

AUTHORIZING THE SUBDIVISION REGULATIONS OF ETOWAH COUNTY, ALABAMA

WHEREAS, the Etowah County Commission will follow procedures and standards for the design and development of proposed subdivisions or additions to existing subdivisions within the subdivision jurisdiction of Etowah County, Alabama, and

WHEREAS, the Etowah County Commission does hereby set a policy to exercise the power and authority to review, approve, and disapprove plats for all subdivisions within the subdivision jurisdiction of Etowah County, Alabama, and

WHEREAS, the Etowah County Commission further does hereby exercise the authority to inspect any development within its subdivision jurisdiction to ensure that there are no violations of its rules and regulations, to charge fees for said inspection.

NOW, THEREFORE, BE IT RESOLVED BY THE ETOWAH COUNTY COMMISSION, the regulations set out herein shall be in force and applicable to the development of all subdivisions in the subdivision jurisdiction of the Etowah County Commission from and after the date of adoption by resolution..

BE IT FURTHER RESOLVED BY THE ETOWAH COUNTY COMMISSION that upon the completion of the execution of said agreement by all parties a copy of said agreement be kept of record by the County Clerk.

ADOPTED this 5th day of May, 2009

We, the members of the Etowah County Commission, do hereby certify that the above is a true and correct copy of a resolution adopted at the regular meeting on May 5, 2009, and the same appears in the minutes of said meeting.

ATTEST:

J. Patrick Simms, CCA
Chief Executive Officer

FOREWORD

A subdivision is defined as the development and division of a lot, tract, or parcel of land into **two (2) or more lots, plats, sites,** or otherwise for the purpose of establishing or creating a subdivision through the **sale, lease, or building development of the lot or lots**. Further explanation of the definition and any exemptions from these subdivision regulations can be found in Section 2-1-60 of these regulations.

Any individual who plans to develop and/ or divide a parcel of land in the County should consult with the County Engineer early in the planning phase of the development to assure compliance with these regulations.

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ARTICLE I

PURPOSE AND POLICY

SECTION 1-1 PURPOSE AND POLICY

The subdivision regulations set out herein have been adopted pursuant to authority granted by Code of Alabama 1975, § 11-24-1(b) to establish procedures and standards for the design and development of proposed subdivisions or additions to existing subdivisions within the subdivision jurisdiction of Etowah County, Alabama. These regulations shall be applicable to the development of any subdivision within the county's subdivision jurisdiction, and shall include, at a minimum, the minimum size of lots, the planning and construction of all public streets and roads, drainage structures, and proper placement of public utilities to be located in a subdivision. Additionally, unless waived by the Etowah County Commission, these regulations shall also apply to the county's plat approval for developments within the territorial jurisdiction of a municipal planning commission; provided, however, that in such instance, the County's approval shall be limited to the approval required in Code of Alabama 1975, § 11-52-30(b) regarding approval of plats, and shall not include enforcement.

By Resolution _____ of the Etowah County Commission, adopted on the 5th day of May, 2009, and pursuant to the powers and jurisdiction granted by Code of Alabama 1975, § 11-24-1 et seq., the Etowah County Commission does hereby set a policy to exercise the power and authority to review, approve, and disapprove plats for all subdivisions within the subdivision jurisdiction of Etowah County, Alabama. The Etowah County Commission further does hereby exercise the authority to inspect any development within its subdivision jurisdiction to ensure that there are no violations of its rules and regulations, to charge fees for said inspection as set out in Section 1-3 of these regulations and authorized under Code of Alabama 1975, § 11-24-3, and to enforce these regulations as provided in Section 1-4 and authorized in Code of Alabama 1975, § 11-24-3.

The regulations set out herein shall be in force and applicable to the development of all subdivisions in the subdivision jurisdiction of the Etowah County Commission from and after the date of adoption by resolution. Subdivision regulations previously in place in Etowah County are hereby repealed and rescinded.

These regulations shall be in effect and shall apply to the development of any subdivision within the subdivision jurisdiction of Etowah County as defined in Section 2-1-62 from and after thirty (30)

days from the date of the County's filing a certified copy of these regulations with the Probate Judge. No street or road shall be accepted and maintained by the County, nor shall any utilities or county services be extended to the subdivision, unless and until the requirements set forth in these regulations have been complied with and the subdivision has been given final approval by Etowah County.

It is not the purpose of these regulations to govern the acceptance of roads or streets for maintenance by the County Commission. The current policy for acceptance of roads and bridges by the Etowah County Commission is available at the office of the County Commission or the County Engineer.

SECTION 1-2 TITLE

The regulations shall hereafter be known, cited and referred to as the Subdivision Regulations of Etowah County, Alabama.

SECTION 1-3 FEES

Etowah County has established the following schedule of fees, as authorized under Code of Alabama 1975 Section 11-24-3, to cover costs associated with the inspection and review of subdivision developments. The total fee is dependent on the size type of subdivision (as defined in Section 2-1-61) The schedule below **is a guide** to the charges that will be incurred by the developer. The developer is responsible for **all** charges, including inspection and testing, incurred by the county during the subdivision approval process. The fee schedule is as follows:

Major Subdivision:

(1) Permit to Develop: A permit fee of $ 25

(2) Proposed Plat Review Fee: $500 per submission of proposed plat

(3) Lot Fee: $25 per lot, site, or unit

(4) Road Fee: $0.75 per linear foot of road to be constructed and inspected

Minor Subdivision:

(1) No Fee

SECTION 1-4 ENFORCEMENT AND VIOLATIONS

Pursuant to authority granted under Code of Alabama 1975, § 11-24-3(d), the Etowah County Commission shall enforce the provisions of these regulations by the issuance of citations issued by a county license inspector appointed by the Etowah County Commission to enforce these regulations. Acting under authority granted in Code of Alabama 1975, § 11-24-3(d) and § 40-12-10, the county license inspector may issue a citation for the failure to properly obtain the permit to develop required under Section 3-6 and/or for any other violations of these regulations or of Code of Alabama 1975, § 11-24-1 *et seq*.

As authorized by Code of Alabama 1975, § 11-24-3(a), the fine for noncompliance of any provisions of these regulations shall be $1000 per lot that has been sold, offered for sale, transferred, or leased. A separate citation shall be issued for each violation.

All fines shall be paid to the office of the judge of probate within thirty (30) days of the issuance of a citation by the county license inspector, and all fines shall be doubled upon the failure to remit the fine within thirty (30) days of the issuance of the citation.

In addition to the issuance of citations for violation of these regulations, the Etowah County Commission retains the right to seek an injunction against any developer or owner who fails to comply with these regulations as provided in Code of Alabama 1975, § 11-24-3(b), and may bring action against a developer or owner to compel compliance with these regulations in the event that work on the subdivision has been completed in violation of these regulations and the requirements of Code of Alabama 1975, § 11-24-1 *et seq*.

SECTION 1-5 AMENDMENTS

The Etowah County Commission may adopt amendments to these regulations. Procedures to adopt amendments are detailed in Section 10-4.

ARTICLE II

DEFINITIONS

2-1 DEFINITION OF TERMS

SECTION 2- 1 DEFINITION OF TERMS

2-1-1 ACCESS: Deeded portion of property or lot that provides travel way to a city, county, or state road. All access must have thirty (30) foot minimum width from the city, county, or state road to the building site. [Parcels excluded in Section 2-1-60(d) must have a minimum of sixty (60) foot access along with any lot in a subdivision of land covered by these regulations which has the ability to be further divided to provide additional building sites/ lots.]

2-1-2 ADT (AVERAGE DAILY TRAFFIC): total volume of vehicles during a given time period, in whole days, as measured during a non-holiday weekday.

2-1-3 ALLEY: A right-of-way primarily designed to serve as a secondary access to the side or rear of those properties whose principal frontage is on some other street. Etowah County will not permit public right-of-ways for alleys and will only permit alleys that are to be retained by the developer or his designee.

2-1-4 APPLICANT: The owner of land proposed to be subdivided or a person designated in writing by the legal owner as his or her representative.

2-1-5 APPLICATION ASSEMBLY: The packet of materials that the developer is required to submit with his or her application for proposed plat approval.

2-1-6 ARTERIAL: A term used to describe a road or street whose primary purpose is to connect areas that produce a large amount of trip generation. These routes have a dual function to move traffic and to provide access to land uses, particularly the high trip-generating commercial activities. In terms of counties, major and minor collector routes, as classified by the Federal Highway Administration, may require treatment as this type of route even though they are termed collector roads.

2-1-7 BLOCK: A tract of land bounded by streets, or by a combination of streets and public parks, cemeteries, railroad right-of-way, shorelines of waterways or other boundary lines.

2-1-8 BUILDING: Any structure built for the support, shelter, or enclosure of persons, animals, chattels, or movable property of any kind, and includes any structure.

2-1-9 BUILDING SETBACK LINE: A line parallel to the property over which no structure may be

erected.

2-1-10 COLLECTOR: A route whose primary function is to collect traffic from an area and move it to the arterial street system while also providing substantial service to abutting land use, and which typically does not have extensive continuity.

2-1-11 CONSTRUCTION PLANS: Plans detailing the design and requirements for the construction of public improvements. These plans shall detail such items as the location of all existing and proposed roads, plan and profiles of all roads, curve data, hydraulic data, etc. (See Section 4-2 for complete list of items required.)

2-1-12 CORNER LOT: A lot which occupies the interior angle at the intersection of street lines.

2-1-13 COUNTY: The County of Etowah, Alabama.

2-1-14 COUNTY ADMINISTRATOR: The duly designated Chief Executive Officer, CEO, of Etowah County, Alabama.

2-1-15 COUNTY COMMISSION: The County Commission of the County of Etowah, Alabama.

2-1-16 COUNTY ENGINEER: The duly designated Engineer of the County of Etowah, Alabama.

2-1-17 COUNTY SPECIFICATIONS: All construction specifications which are included in these regulations and any special specifications required by the County Engineer or other state or local entity based upon the particular development.

2-1-18 CUL-DE-SAC: A minor street with only one outlet and having an appropriate terminal for the safe and convenient reversal of traffic movement.

2-1-19 DAY: A calendar day.

2-1-20 DEDICATION: The transfer of property from private to public ownership.

2-1-21 DEVELOPER: The owner of land proposed to be subdivided or a person designated in writing by the legal owner as his or her representative.

2-1-22 DEVELOPMENT: The design work of lot layout, the construction of drainage structures, the construction of buildings or public use areas, the planning and construction of public streets and public roads, and the placement of utilities, and any other applicable construction or improvement required or included in a certain subdivision project.

2-1-23 DEPTH OF LOT: The mean horizontal distance between the front and rear lot lines.

2-1-24 DOUBLE FRONT LOT: A lot having frontage on two (2) non-intersecting streets as distinguished from a corner lot.

2-1-25 EASEMENT: A grant by the property owner of use, by the public, a corporation, or person(s) of a strip of land for specified purposes or as created by operation of law.

2-1-26 EXPRESSWAY OR FREEWAY: Facilities that accommodate a high volume of traffic through the prohibiting of ingress and egress except at controlled intervals. Freeways involve complete control of access while expressways permit at grade intersections at infrequent intervals. The expressway or freeway has only one function - to carry traffic.

2-1-27 ENGINEERING PLAN: A post construction record giving details of construction and locations of improvements as they were built or installed.

2-1-28 FINAL PLAT: A plat of a tract of land which meets the requirements of these regulations and is in form for recording in the Office of the Probate Judge of Etowah County, Alabama.

2-1-29 FLOODPROOFING: Any combination of structural or nonstructural additions, changes, or adjustments which reduce or eliminate flood damage to real property, or improved real property, water supply and sanitary sewer facilities, electrical systems, and structures and their contents. For the purpose of these regulations, floodproofing shall be defined and governed by the County's Flood Damage Prevention Ordinance.

2-1-30 FLOODWAY: The stream channel and the portion of the adjacent floodplain which must be reserved solely for the passage of flood-waters in order to prevent an increase in upstream flood heights of more than one (1) foot above the predevelopment conditions. For the purpose of these regulations, floodways shall be defined and governed by the County's Flood Damage Prevention Ordinance.

2-1-31 LAND SUBJECT TO FLOODING: For the purpose of these regulations, land subject to flooding shall be defined in the County's Flood Damage Prevention Ordinance.

2-1-32 FLOOD, ONE HUNDRED (100) YEAR: A flood that has, on the average, a one (1) percent chance of being equaled or exceeded in any given year.

2-1-33 FLOOD, TEN (10) YEAR: A flood that has, on average, been equaled or exceeded at a frequency of once every ten (10) years.

2-1-34 FLOOD, TWENTY-FIVE YEAR: A flood that has on average been equaled or exceeded at a frequency of once every twenty-five (25) years.

2-1-35 HARDSHIP: An unusual situation on the part of an individual property owner which will not permit the full utilization of property. A hardship exists only when it is not self-created.

2-1-36 HEALTH DEPARTMENT: Alabama State Department of Public Health or Etowah County Health Department.

2-1-37 IMMEDIATE FAMILY MEMBER: As defined in *Black's Law Dictionary*, a person's parents,

spouse, children, and siblings.

2-1-38 LICENSED ENGINEER: An engineer properly licensed and registered in the State of Alabama in good standing with the Alabama State Board of Licensure for Professional Engineers and Land Surveyors.

2-1-39 LICENSE INSPECTOR: The person or persons appointed by the County Commission to enforce the county's subdivision regulations pursuant to Code of Alabama 1975, § 11-24-3, utilizing the authority granted to a license inspector under Code of Alabama 1975, § 40-12-10.

2-1-40 LICENSED LAND SURVEYOR: A land surveyor properly licensed and registered in the State of Alabama in good standing with the Alabama State Board of Licensure for Professional Engineers and Land Surveyors.

2-1-41 LOT: A tract, plot, or portion of a subdivision or other parcel of land intended as a unit for the purpose, whether immediate or future, of transfer of ownership, lease or rental, or for building development.

2-1-42 MARGINAL ACCESS: A service road or other treatment used to provide adequate protection of properties in cases where an arterial runs through or near a subdivided area.

2-1-43 MAJOR SUBDIVISION: See Section 2-1-61(a), Subdivision Categories.

2-1-44 MINOR ROAD OR STREET: A route used to connect collector roads in a road system and service only the residents of that road.

2-1-45 MINOR SUBDIVISION: See Section 2-1-61(b), Subdivision Categories.

2-1-46 MONUMENT: A permanent object serving to indicate a limit or to mark a boundary.

2-1-47 OWNER: Any person, group of persons, firm or firms, corporation or corporations, or any other legal entity having legal title to or sufficient proprietary interest in the land sought to be subdivided under these regulations.

2-1-48 OWNER'S ENGINEER: The licensed engineer who is the agent of the owner or developer of land which is proposed to be subdivided or which is in the process of being subdivided.

2-1-49 PERMANENT REFERENCE POINTS: As defined by the Minimum Technical Standards set out and required by the Alabama Society of Professional Land Surveyors.

2-1-50 PERMIT FEE: The fee assessed to obtain the permit to develop required in Section 3-6.

2-1-51 PERMIT TO DEVELOP: An instrument issued by the County Engineer following the approval of a proposed plat by the County Commission and which authorizes the developer to proceed with the development of the subdivision.

2-1-52 PROPOSED PLAT: A plan for a subdivision of land which is submitted for approval to develop the subdivision as required in Section 3 of these subdivision regulations and Code of Alabama 1975,§ 11-24-2.

2-1-53 PROBATE JUDGE: The Judge of Probate of Etowah County, Alabama.

2-1-54 RESUBDIVISION: A change in a map of an approved or recorded subdivision plat if such change affects any street layout on such map or area reserved thereon for public use, or any lot line; or if it affects any map or plan legally recorded prior to the adoption of any regulations controlling subdivisions.

2-1-55 ROAD OR STREET: A right-of-way for vehicular traffic that affords the principal means of access to abutting property.

1. CITY ROAD: Public road maintained by the city.

2. COUNTY ROAD: Public road which has been accepted into the county road system through construction by the county, dedication and formal acceptance by the county commission, or prescription and is maintained by the county. A road which has been dedicated to the public and is used by the public is not a county road, unless it has been accepted into the county road system through construction, acceptance or prescription as set out herein.

3. PUBLIC ROAD: A street or road that has been constructed for public use, established by statutory proceedings, or dedicated for public use. A public road may or may not be a county road.

4. PRIVATE ROAD: Road which has not been dedicated to the public and is not owned or maintained by the city, county, or state whether or not it has public access.

5. STATE ROAD: Public road owned or maintained by the state of Alabama.

2-1-56 SETBACKS: A setback is synonymous to “building setback line”. See Section 2-1-9.

2-1-57 SINGLE TIER LOT: A lot which backs upon a street, a railroad, a physical barrier, or a residential or non-residential use, and to which access from the rear of the lot is usually prohibited.

2-1-58 SKETCH PLAN: Drawing submitted prior to the preparation of the Proposed Plat (or Final Plat in cases of minor subdivisions) to enable the applicant to save time and expense in reaching general agreement with the County Engineer as to the form of the plat and the objectives of these regulations.

2-1-59 SUBDIVIDER: Any person who (1) having an interest in land, causes it, directly or indirectly, to be divided into a subdivision or who (2), directly or indirectly, sells, leases, or develops, or offers to sell, lease, or develop, or advertises for sale, lease, or development, any interest, lot, parcel, site, unit, or plat in a subdivision, or who (3) is employed by or directly or indirectly controlled by, or under direct, or indirect common control with any of the foregoing.

2-1-60 SUBDIVISION: As defined in Code of Alabama 1975, § 11-24-1(a)(4), the development and division of a lot, tract, or parcel of land into two (2) or more lots, plats, sites, or otherwise for the purpose of establishing or creating a subdivision through the sale, lease, or building development of the lot or lots.

EXCLUSIONS: A subdivision shall not include any of the following:

a. The construction or development of roads or buildings on private property to be used for agricultural purposes. See, Code of Alabama 1975, § 11-24-1(a)(4);

b. The public acquisition by purchase or donation of strips of land for the widening or opening of streets:

c. Property divided between immediate family members as provided in Code of Alabama 1975, § 11-24-2(d);

d. The division of land into parcels greater than five (5) acres wherein all of the following criteria are met and shown on a plat to be filed in the judge of probate with a certificate on the plat stating that all criteria are met:

(i) frontage on existing roads of each parcel is at least 60 feet,

(ii) the extension of public utilities is not required ,

(iii) in the opinion of the developer's licensed engineer, with the concurrence of the Etowah County Engineer, there will be no additional storm water runoff created, and

(iv) deeded right-of-way on existing county, state, or city roads of each parcel is at least sixty (60) feet, (or, if there is less than sixty (60) feet of deeded right-of-way; a quitclaim deed issued to the county, state, or city for the roadway to provide for a sixty (60) feet right-of-way) and

(v) Parcels qualify for exemptions from subdivision criteria and rules and regulations imposed by the State Board of Health pursuant to Code of Alabama 1975, § 22-26-7

e. The creation of a single new parcel that has frontage on an existing County road. The County road must have a minimum of sixty (60) feet right-of-way, or the developer must convey a right-of-way to the County of at least thirty (30) feet from the centerline of said road. This exception may not be used to circumvent the regulations by subdividing one (1) lot at a time.

f. The creation of a single new parcel that is adjoining to a current landowner, who will be purchasing the subdivided parcel. This exception may not be used to create a parcel that will be landlocked.

2-1-61 SUBDIVISION CATEGORIES:

a. SUBDIVISION, MAJOR: Generally any subdivision that involves the dedication of a new street (or road), or requires the extension of public facilities, or requires the creation of new public improvements, or in the opinion of the County Engineer creates additional storm water runoff. Any subdivision not considered a minor subdivision or large acreage tract.

b. SUBDIVISION, MINOR: Any subdivision with parcels or lots five (5) [(see section 2-1-60(d)] acres or less fronting on an existing county road that does not involve any new street (or road) or the extension of public facilities, does not require the creation of any public improvements, and does not, in the opinion of the developer's licensed engineer with the concurrence of the County Engineer, create any additional storm water runoff.

c. LARGE ACREAGE TRACT: A subdivision with all parcels ten (10) acres or larger, with a total of five parcels or less, that will be accessed from a private road to be maintained by the property owners.

2-1-62 SUBDIVISION JURISDICTION: All areas outside the corporate limits of any municipality in Etowah County, except areas within the territorial jurisdiction of a municipal planning commission presently organized and functional or which shall become organized and functional within six months of the date Etowah County first assumes such jurisdiction by publishing and adopting notice of these regulations. Where any subdivision lies within the extraterritorial planning jurisdiction of any municipality having exercised said extraterritorial jurisdiction, the requirement for approval of improvements by the County Engineer shall in now way diminish, waive or otherwise lesson the requirements of such municipality. The more strict requirements, whether of the municipality or of the county, must be complied with by the developer.

2-1-63 SURETY: Any bond, certificate of deposit, irrevocable letter of credit, cashier check, or other acceptable guarantee as approved by the County Commission or their authorized agent.

2-1-64 TERRITORIAL JURISDICTION OF MUNICIPAL PLANNING COMMISSION: As provided

in Code of Alabama 1975, § 11-52-30(a), all land located in the municipality and all land lying within five miles of the corporate limits of the municipality and not located in any other municipality. In the case of any such nonmunicipal land lying within five miles of more than one municipality having a planning commission, the jurisdiction shall terminate at a boundary line equidistant from the respective corporate limits of such municipalities.

2-1-65 VARIANCE: Permission to depart from the literal requirements of these subdivision regulations by virtue of unique hardship due to special circumstances regarding property to be developed. A waiver of the strictest letter of the regulations upon substantial compliance without sacrificing the spirit and purpose of the regulations.

2-1-66 WATERCOURSE: Any depression serving to give direction to a flow of water, having a bed and defined banks. The definition shall also include other generally or specifically designated areas where flooding may occur. The flow of water need not be on a continuous basis, but may be intermittent resulting from the surface runoff of precipitation.

2-1-67 WIDTH OF LOT: The mean horizontal distance between the two side lot lines.

ARTICLE III

APPROVAL OF SUBDIVISION PLATS

SECTION 3-1 APPROVAL OF SUBDIVISION PLATS

This section details the **general** steps necessary to achieve approval of a subdivision in Etowah County. A flow chart is included in Appendix II further outlining this process.

SECTION 3-2 SKETCH PLAN

Whenever the subdivision of a tract of land is proposed within the jurisdiction of these regulations, the developer, or subdivider, is urged to consult early and informally with the County Engineer. The subdivider may submit sketch plans and data showing existing conditions within the site and in its vicinity along with the proposed layout and development of the subdivision. The purpose of this sketch plan review is to afford the subdivider an opportunity to avail himself of the advice and assistance of the County Engineer in order to facilitate the subsequent preparations and approval of plans.

SECTION 3-3 PROPOSED PLAT SUBMISSION FOR MAJOR SUBDIVISIONS

Following sketch plan review or in the event the subdivider does not submit a sketch plan for review; the subdivider shall submit a **complete** Application Assembly to the county engineer for review of the proposed plat. The application shall be submitted at least thirty (30) days prior to any consideration for proposed plat approval by the County Commission. The Proposed Plat Application Assembly shall include each of the following:

(1) A letter stating that the proposed plat is being submitted for review. This letter shall state the developer's intent as to the final ownership of any new roads included on the proposed plat, if applicable. (The developer is reminded to refer to Appendix V

for the County's Road Acceptance Policy);

(2) Application for Proposed Plat Review (Appendix II);

(3) At least three (3) copies of the proposed plat **prepared in accordance with the requirements** detailed in Section 4-1 of these regulations;

(4) Construction Plans for all required improvements **prepared in accordance with the requirements** detailed in Section 4-2 of these regulations;

(5) A letter from the Health Department detailing field review by the Health Department for the general lot layout has been completed;

(6) Any variances requested accompanied by detailed supporting documentation;

(7) The names and addresses of each adjoining landowner and utility entitled to notice pursuant to Code of Alabama 1975, §11-24-2(b); and

(8) A permit fee of $25.

Failure to submit a complete Proposed Plat Application Assembly initially shall delay the consideration of such plat for approval by the County Engineer and the County Commission. The thirty day review period will not begin until a complete Proposed Plat Application Assembly is received.

SECTION 3-4 REVIEW BY COUNTY ENGINEER

(1) Major Subdivisions

The County Engineer shall use this minimum thirty (30) day period to review the submitted Application Assembly and ensure its compliance with these regulations. In the event the Application Assembly does not meet these regulations, the County Engineer shall notify the developer that it is deficient. No further action will be taken by the County Commission or County Engineer until and unless the developer shall correct the deficiencies and resubmit the corrections to the County Engineer for his approval.

If upon completion of the review the County Engineer determines that the Application Assembly complies with these regulations, he or she shall notify the developer in writing to that effect. The County Engineer shall also send proper notice of his/her recommendation for approval, as required in Code of Alabama 1975, § 11-24-2(b), to each of the adjoining landowners and the affected utilities submitted by the developer.

If the developer wishes to sell, offer for sale, transfer, or lease lots; the County Engineer shall require the developer to submit a detailed construction estimate covering all proposed infrastructure

for approval. Once the County Engineer receives and approves this detailed construction estimate, the **developer** shall be required to provide an acceptable surety to Etowah County equal to 150% of the estimated cost of installing all improvements, including, but not limited to, grading, drainage, base, paving of the streets, and installation of all required utilities and fees encountered during execution of improvements.

(2) Minor Subdivisions

The County Engineer shall review the submitted Application Assembly within seven (7) days to ensure its compliance with these regulations. In the event the Application Assembly does not meet these regulations, the County Engineer shall notify the developer that it is deficient. No further action will be taken by the County Engineer until and unless the developer shall correct the deficiencies and resubmit the corrections to the County Engineer for his approval.

If upon completion of the review the County Engineer determines that the Application Assembly complies with these regulations, he or she shall notify the developer in writing to that effect. The County Engineer shall also send proper notice of his/her recommendation for approval, as required in Code of Alabama 1975, § 11-24-2(b), to each of the adjoining landowners and the affected utilities submitted by the developer. The developer may then proceed to the steps for the final plat approval.

(3) Large Acreage Tracts

The County Engineer shall review the submitted Application Assembly within seven (7) days to ensure compliance with the following conditions.

(a) All parcels must be ten (10) acres in size or greater after the proposed division of property, with a total of five (5) parcels or less, with the property shown on a plat to be filed with the judge of probate.

(b) All parcels must have access to the private road or an existing public roadway.

(c) A covenant connected to all parcels using the private roadway must be filed with the probate judge, stating that the roadway is private, and shall be maintained by the property owners.

In the event the Application Assembly does not meet the conditions, the County Engineer shall notify the developer that it is deficient. No further action will be will be taken by the County Engineer until and unless the developer shall correct the deficiencies and resubmit the corrections to the County Engineer for his approval.

If upon completion of the review the County Engineer determines that the Application Assembly complies with these regulations, he or she shall notify the developer in writing to that effect. The County Engineer shall also send proper notice of his/her recommendation for approval, as required in Code of Alabama 1975, § 11-24-2(b), to each of the adjoining landowners and the affected utilities submitted by the developer. The developer may then proceed to the steps for the final plat approval.

SECTION 3-5 COUNTY COMMISSION APPROVAL OF PROPOSED PLAT

Once the County Engineer verifies that the Application Assembly meets the County Regulations and, if applicable, the developer provides the required surety, the Proposed Plat for Major Subdivisions shall be submitted to the County Commission for their approval at the next regularly scheduled County Commission meeting. Pursuant to Code of Alabama 1975, § 11-24-2(b), the County Commission shall approve the proposed plat in the event that the County Engineer has determined that the proposed plat meets these regulations.

SECTION 3-6 PERMIT TO DEVELOP

Following the approval of the Proposed Plat by the County Commission, the County Engineer shall issue a Permit to Develop for the Proposed Plat for a fee of $25. The Permit to Develop allows the developer to proceed with construction of the development in compliance with these regulations. Additionally, the developer may **offer** lots in the proposed subdivision for sale, transfer, or lease **; provided, however, that no sale, transfer, or lease may be completed or recorded until after the final plat has been recorded in office of the Probate Judge pursuant to the requirements of Code of Alabama 1975, § 11-24-2(c)**.

SECTION 3-7 CONSTRUCTION OF MAJOR SUBDIVISION

Once the permit to develop has been issued, the developer of a major subdivision may proceed with construction of the proposed subdivision in accordance with these regulations. The developer should refer to Article V for detailed requirements pertaining to construction. The developer of a minor subdivision shall proceed in accordance with the requirements set out in Section 3-8 of these regulations.

The developer shall have one (1) year from the date of issuance of the permit to develop to begin substantial work on the proposed development. If work does not begin within the one (1) year time frame, the proposed plat must be resubmitted to the County Engineer and County Commission for approval as if the plat had never been submitted.

If any changes in the development plans of the approved proposed plat are required for any reason, the developer shall submit the proposed changes to the County Engineer **prior** to construction or implementation of the proposed changes. Approval of the County Engineer shall be required before any changes are constructed. Any changes or deviations from the approved proposed plans prior to the County Engineer's approval shall be in violation of these regulations and shall be subject to removal or correction at the expense of the developer.

Changes to the proposed subdivision construction plans that do not change the overall layout of the subdivision may be reviewed and approved by the County Engineer without the requirement of the proposed plat having to be resubmitted for approval by the County Commission. Any changes that

do change the overall layout of the subdivision shall require the proposed plat to be resubmitted for approval by the County Commission.

SECTION 3-8 FINAL PLAT APPROVAL

A final plat shall be submitted to the County Engineer, with any original signatures required for approval having already been signed, for approval of the proposed subdivision as follows:

(1) Once infrastructure construction is complete for a major subdivision;

(2) Immediately following approval of the proposed plat for minor subdivisions or large acreage tracts.

At the point that the final plat is submitted for approval, the developer shall comply with each of the following:

(1) Remit all testing and inspection charges required under Section1-3 of these regulations as authorized in Code of Alabama 1975, § 11-24-3

(2) A final as-built set of plans;

(3) Three (3) copies of the Final Plat as approved by the County; and

(4) A letter from the Health Department certifying the compliance of the subdivision with their regulations.

Final plat approval does not include the acceptance of roads. If the developer desires to have the roads accepted into the county road system by the county commission, he or she shall comply with the procedures for road acceptance set out in Appendix V. The surety bond required for proposed plat approval shall be retained pending final acceptance of all roads. Developers of major subdivisions whose infrastructure has been constructed to be privately owned and maintained shall have their surety bond released following the signing of the final plat.

Once the final plat has been signed and recorded pursuant to these regulations and Code of Alabama 1975, § 11-24-2(c), the developer may proceed with the actual sale, transfer, or lease of any lots, sites, etc. No building development shall take place until the final plat has been recorded in the office of the Judge of Probate pursuant to these regulations and Code of Alabama 1975, § 11-24-2(c).

ARTICLE IV

PLAT AND PLAN REQUIREMENTS

SECTION 4-1 PROPOSED PLAT REQUIREMENTS

The Proposed Plat shall be prepared by a licensed land surveyor and shall be clearly and legibly drawn at a convenient scale of not less than one (1) inch equals one hundred (100) feet, and the sheets shall be numbered in sequence if more than one (1) sheet is used. The sheet size shall be of such size as is acceptable for filing in the Office of the Probate Judge. The Proposed Plat shall include the following:

(1) Name and addresses of owners of record;

(2) Proposed name of subdivision, date, north point, scale and location;

(3) Name and seal of licensed land surveyor;

(4) Vicinity map showing location of the subdivision;

(5) Exact boundaries of the tract of land being subdivided, shown with bearings and distances;

(6) Sufficient data to determine readily and reproduce on the ground the location, bearing, and length of every street line, lot line, boundary line, and block line, whether straight or curved, including the radius, central angle, point of tangency, tangent distance, and arcs and chords; and “Point of beginning” as referred to in the written description;

(7) Names and addresses of the owners of land immediately adjoining the tract of land being subdivided, as the names appear on the plats in the County Tax Assessor or Revenue Commissioner’s office;

(8) Wetlands or any other conditions affecting the site;

(9) The location of existing streets, buildings, water courses, railroads, transmission lines, drainage structures, public utilities, jurisdiction lines, and any public utility easements on and adjacent to the tract being subdivided;

(10) The names and locations of adjoining subdivisions and streets, with reference to recorded plats by record name;

(11) Proposed rights-of-way or easements including locations, widths, purposes, and street numbers;

(12) Proposed lot lines with bearings and distances and lot and block numbers;

(13) Proposed minimum building setback lines;

(14) Proposed parks, school sites, or other public open spaces, if any;

(15) Site data, which includes:

a. Acreage in total tract;
b. Smallest lot size;
c. Total number of lots;
d. Linear feet in streets;

(16) Any area within or adjacent to the proposed subdivision subject to inundation by the 100-year flood projections as defined by the County Flood Damage Prevention Ordinance, with the Base Flood Elevation shown (Area should be clearly shown as a shaded or hatched area);

(17) Base Flood Elevation for any development in unnumbered A-zone, in accordance with Etowah County Flood Ordinances (Developer shall determine the Base Flood Elevation if the subdivision contains 50 lots or 5 acres, which ever is the lesser).

(18) The following endorsements and certificates shall be submitted with and placed on the Proposed Plat (see Appendix I for sample certificates):

a. Licensed Land Surveyor's Certificate and Description of Land Platted;

b. Licensed Engineer's Certificate of Engineering Design and Construction (Proposed Plat Statements);

c. Dedication by owner;

d. A notary's Acknowledgment of the Dedication Certificate referred to in "c";

e. A Certificate of Approval by the appropriate electric utility distributor;

f. A Certificate of Approval by the appropriate water and sewer utility;

g. A Certificate of Approval by the County Engineer of Etowah County;

h. Certificate of Approval by the Etowah County Commission;

i. A Certificate of Approval by the Etowah County Health Department (if septic tanks and/or wells are necessary).

j. A Flood Zone Certificate (if any portion of the subdivision falls in the one hundred (100) year flood zone.

SECTION 4-2 CONSTRUCTION PLAN REQUIREMENTS

At the time of submission of a Major Subdivision Proposed Plat, the applicant shall also submit Construction Plans for all required improvements as part of the Proposed Plat Application Assembly required under Section 3-3. All plans shall meet the minimum standards of design and general requirements for the construction of public improvements as set forth in these regulations. Construction Plans shall be drawn at a scale of not less than one (1) inch equals fifty (50) feet, and map sheets shall be of the same size as the Proposed Plat. Construction Plans shall be prepared by a licensed engineer. The following construction plans shall be included:

(1) Street plan containing all of the following information:

a. Location of all proposed and existing streets or rights-of-way in or adjacent to the subdivision;

b. Width of existing and proposed rights-of-way and easements;

c. Road numbers/names;

d. Plan and profile of all proposed streets, showing natural and finished grades drawn to a scale of not less than one (1) inch equals one hundred (100) feet horizontal and one (1) inch equals ten (10) feet vertical;

e. Cross sections of proposed streets at a minimum of 50′ stations or as required by the County Engineer;

f. Curve data for the centerline of each street: Delta, Tangent, and Radius;

g. Location of all required sidewalks and crosswalks;

h. Location of all proposed utilities.

i. Size and location of side drains required for each lot.

j. A legal description of all roadways proposed.

(2) Storm Drainage Plan containing all of the following information:

a. Location of proposed drainage ways, streams, and ponds in the subdivision;

b. Topography at suitable contour intervals, as approved by the County Engineer, to show proposed drainage;

c. Location, size, and invert elevations of proposed drainage structures including culverts, bridges, pipes, drop inlets, and top elevations of head walls, etc., showing details on Drainage Plan, including conduit schedule;

d. Construction details of typical manholes, connections, and other drainage structures proposed;

e. Area of land contributing run-off to each drainage structure along with run-off calculations and applicable coefficients depending on method used [i.e. Rational method: runoff coefficient (C), rainfall intensity (I), catchment area (A), and the discharge at the structure (Q)].

f. Location of easements and rights-of-way for drainage ways and maintenance access thereof;

g. Typical cross-sections of each drainage way;

h. Direction of water flow throughout subdivision and compatibility with existing drainage.

(3) Sanitary Sewer Plan, if applicable, containing the location of all existing and proposed sewers, location of sewer laterals, location of each manhole and other sewage system appurtenances including lift stations, oxidation ponds, and treatment plants, and the plan and profile of the sewage system. Construction details of typical manholes, connections, and other proposed sewage structures should also be shown.

(4) Water Distribution Plan containing the location and size of water distribution system including pipes, valves, fittings, hydrants, high-pressure pumping equipment, etc.

(5) Electric Distribution Plan containing the location of all poles or subsurface facilities as necessary to serve each lot or parcel of land within the subdivision.

(6) Gas Distribution Plan, if applicable, containing the location of all above ground and subsurface facilities as necessary to serve each lot or parcel of land in the subdivision.

(7) Digital Copy of the Plat in a format acceptable to the Etowah County Engineer.

SECTION 4-3 FINAL PLAT REQUIREMENTS

The final plat shall be identical to the proposed plat with the exception of the certificate detailed in Section 4-2-18(b) which is for proposed plat submission. This certificate shall be replaced with the appropriate certificate for final plat submission found in Appendix I.

ARTICLE V

DEVELOPMENT STANDARDS

SECTION 5-1 MINIMUM STANDARDS

In addition to the requirements established herein, the following minimum requirements are established for all subdivision plats:

(1) All applicable statutory provisions;

(2) The special requirements and rules of the Health Department and/or appropriate state agencies;

(3) The rules and standards of the Alabama Department of Transportation if the subdivision or any lot contained therein abuts a state highway;

(4) The rules and standards of the Alabama Department of Environmental Management (ADEM) and any other appropriate state or federal agencies;

(5) The standards and regulations adopted by all boards, commissions, agencies, and officials of Etowah County;

(6) The standards, specifications and rules of appropriate utility companies.

Plat approval may be withheld if the subdivision is not in conformity with the above guidelines or the policy and purpose of these regulations as established in Article I of these regulations.

SECTION 5-2 GENERAL REQUIREMENTS

5-2-1 CHARACTER OF THE LAND

Development of any land within the floodplain shall be governed by the Etowah County Flood Damage Prevention Ordinance. This ordinance shall supplement these regulations to govern

floodplain/ floodway issues.

5-2-2 SUBDIVISION NAME

The proposed name of the subdivision shall not duplicate, or too closely approximate phonetically, the name of any other subdivision in the area covered by these regulations. The County Engineer shall have final authority to reject the name of the subdivision. Such rejection shall be made at the Proposed Plat Review stage.

5-2-3 WATERBODIES AND WATERCOURSES

If a tract being subdivided contains a water body, or portion thereof, lot lines shall be so drawn as to distribute the entire ownership of the water body among adjacent lots. The County Engineer may approve an alternative plan provided the ownership of and responsibility for safe maintenance of the water body is so placed that it will not become a County responsibility. No public roadways will be approved which provide access across dams nor will any part of a lake dam be allowed on the public road right-of-way.

SECTION 5-3 ROAD OR STREET PLAN

The arrangement, character, extent, location, and grade of all roads shall be laid out according to good land planning principles and shall be integrated with all existing and planned roads. Consideration for the planning of new roads shall include topographical conditions, orientating to vistas, public convenience and safety, and the proposed uses of land to be served by them. All lots must have access to a city, county, or state road as defined in Section 2-1-1.

5-3-1 CONTINUATION OF ADJOINING ROAD SYSTEM

Proposed new roads shall extend existing roads or their projections at the same or greater width, but in no case less than the minimum required width, unless for reasons of topography or design, the County Engineer deems variations necessary.

5-3-2 MARGINAL ACCESS ROADS

Where, in the opinion of the County Engineer, development which abuts or has included within the proposed subdivided area any arterial, the County Engineer may require a marginal access road or other treatment which may be necessary to provide for the adequate protection of properties, and to afford separation of through and local traffic.

5-3-3 ADDITIONAL WIDTH ON EXISTING ROADS:

Subdivisions that adjoin existing streets with inadequate right-of-way shall dedicate additional right-of-way to meet the minimum street width requirements.

(1) The entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing street.

(2) When the subdivision is located on only one side of an existing street, a minimum of one-half (1/2) of the required right-of-way, measured from the centerline of the existing street, shall be provided.

5-3-4 ROAD NUMBERS/ NAMES

Proposed roads, which are obviously in alignment with others existing and numbered, shall bear the assigned number of the existing roads. The County Engineer and/or the Etowah County 911 Board shall assign Road numbers / names.

5-3-5 VACATING A ROAD OR EASEMENT

Vacation of a road or easement shall be in accordance with the procedures set out in Code of Alabama 1975, § 23-4-1 et seq., if by the county, and Code of Alabama 1975, § 23-4-20 et seq., if by abutting land owners.

5-3-6 FRONTAGE ON IMPROVED ROADS

No subdivision shall be approved unless the area to be subdivided shall have frontage on, and access from an existing maintained state, county or city road.

Where a proposed subdivision, addition or extension of an existing subdivision or development has no frontage on an existing public road, the Owner or Developer must provide and dedicate suitable rights of way, for ingress and egress. This connecting road becomes part of the road system of the proposed subdivision or development and is subject to all regulations set out herein.

5-3-7 TOPOGRAPHY AND ARRANGEMENT

(1) All proposed roads shall be properly integrated with the existing system of roads.

(2) All arterials shall be properly related to special traffic generators such as industries, business districts, schools, churches, and shopping centers; to population densities, and to the pattern of existing and proposed land uses.

(3) Minor roads as defined in Section 2-1-44 shall be laid out to conform as much as possible to the topography, to discourage use by through traffic, to permit efficient drainage and utility systems, and to require the minimum number of streets necessary to provide convenient and safe access to property.

(4) The rigid rectangular gridiron street pattern need not necessarily be adhered to, and the use of curvilinear streets, cul-de-sacs, or U-shaped roads shall be encouraged where such use will result in a more desirable layout.

(5) Proposed roads shall be extended to the boundary lines of the tract to be subdivided, unless prevented by topography or other physical conditions, or unless in the opinion of the County Engineer, such extension is not necessary or desirable for the coordination of the layout of the subdivision or with the existing layout of the most advantageous future development of adjacent tracts.

(6) In business and industrial developments, the roads and other access ways shall be planned in connection with the grouping of buildings, location of rail and port facilities, and the provision of alleys, truck loading and maneuvering area, and walks and parking areas so as to minimize conflict of movement among the various types of traffic, including pedestrian.

5-3-8 ACCESS TO ARTERIALS

Where a subdivision borders on or contains an existing or proposed arterial, the County Commission may require that access to such arterial be limited by one of the following means:

(1) The subdivision of lots so as to back onto the arterial and front onto a parallel minor road; with no access to be provided from the arterial, and screening to be provided in a strip of land along the rear property line of such lots;

(2) A series of cul-de-sacs, U-shaped streets, or short loops entered from and designed generally at right angles to such a parallel street, with the rear lines of their terminal lots backing onto the arterial;

(3) A marginal access or service road (separated from the arterial by a planting or grass strip and having access thereto at suitable points).

5-3-9 EXCESS RIGHT-OF-WAY OR EASEMENTS

Right-of-way or easement widths in excess of the standards designated in these regulations shall be required whenever, due to topography, additional width is necessary to provide adequate earth slopes. Such slopes shall not be in excess of three horizontal to one vertical.

5-3-10 RAILROADS, ARTERIALS, AND MAJOR THOROUGHFARES

Railroad rights-of-way, arterials, and expressways where so located as to affect the subdivision of adjoining lands shall be treated as follows:

(1) In residential districts, a buffer strip at least 20 (twenty) feet in depth in addition to the normal depth of the lot required in the district shall be provided adjacent to the railroad right-of-way, arterial, or expressway. This strip shall be part of the platted lots and shall be designated on the plat with the statement, “This strip is reserved for screening. The placement of structures hereon is prohibited”;

(2) In areas proposed for business, commercial, or industrial uses, the nearest road extending parallel or approximately parallel to the railroad shall, wherever practical, be at a sufficient distance therefrom to ensure suitable depth for commercial or industrial sites;

(3) Roads parallel to the railroad when intersecting a road that crosses the railroad at grade shall, to the extent practical, be at a distance of at least 150 feet from the railroad right-of-way. Such distance shall be determined with due consideration of the minimum distance required for future separation of grades by means of appropriate approach gradients. The railroad must also grant approval for any new or upgraded crossing.

5-3-11 CUL-DE-SACS

Dead end roads shall be provided with a turnaround having a roadway diameter of at least eighty (80) feet and a right-of-way diameter of at least one hundred (100) feet. They shall be provided with a transition radius of twenty-five (25) feet.

5-3-12 INTERSECTIONS

Road intersections shall be laid out as follows:

(1) Adequate sight distance shall be provided at all intersections. For Average Daily Traffic (ADT) less than 2500, the Alabama Department of Transportation's (hereinafter "ALDOT") "County Road Design Policy" shall be used. [Example: A 35 mph design speed for the through road would translate into 355 feet of required sight distance.] For roads with ADT over 2500, the American Association of State Highway and Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Streets" shall be used. [Example: A 35 mph design speed for the through road would need 400 feet of required sight distance.]

(2) Roads shall be laid out so as to intersect as nearly as possible at right angles. A proposed intersection of two (2) new roads at an angle of less than seventy-five (75) degrees shall not be acceptable. An oblique road should be curved approaching an intersection and should be approximately at right angles for at least one hundred (100) feet therefrom. Not more than two (2) roads shall intersect at any one point unless specifically approved by the County Commission;

(3) Proposed new intersections along one side of an existing road shall, wherever practical, coincide with any existing intersections on the opposite side of such street. Road jogs with centerline offsets of less than 125 feet shall not be permitted except where the intersected road has separated dual drives without median breaks at either intersection. Where minor roads intersect collector or arterials, their alignment shall be continuous. Intersections of arterials shall be at least eight hundred (800) feet apart. Where a road intersects a state highway, the design standards of the Alabama

Department of Transportation shall apply;

(4) Minimum curb radius at the intersection of two (2) minor roads shall be at least thirty (30) feet; and minimum curb radius at an intersection involving a collector road shall be at least thirty-five (35) feet;

(5) Intersections shall be designed with a flat grade wherever practical. In hilly or rolling areas, at the approach to an intersection, a leveling area shall be provided having not greater than a five percent (5%) grade at a distance of fifty (50) feet, measured from the nearest edge line of pavement of the intersecting road;

(6) The cross-slopes on all roads, including intersections, shall be five percent (5%) or less;

(7) Property lines at road intersections shall be rounded with a minimum radius of twenty-five (25) feet.

SECTION 5-4 DESIGN STANDARDS

Regardless of whether or not the developer intends to seek county acceptance of roads in the subdivision, the following design standards shall be considered minimum decision requirements for all subdivisions. It is the responsibility of the developer to communicate and schedule with the County Engineer prior to initiating any and all steps of the road building process. In addition to other penalties prescribed by law and by these regulations, any road construction performed without the knowledge and inspection of the County Engineer will not be considered for acceptance by the county. Refer to Section 5-4-4(1) for notification of work requirements and Section 1-1 regarding acceptance of roads and streets for county maintenance.

If the county establishes separate requirements for non-residential subdivisions, they shall be such as the County Engineer deems appropriate, but shall in no event be less than the requirements of residential subdivisions, unless the developer is granted a variance under the procedures set out in Article XIII.

5-4-1 RIGHT-OF-WAY WIDTHS

Minimum street right-of-way widths shall be not less than sixty (60) feet on roadway with an open ditch. Minimum street right-of-way widths shall be not less than fifty (50) feet on a roadway with curb and gutter section. All roadways shall be in the center of the right-of-way. A ten (10) feet utility easement will be required on any new roadway section on both sides of the right-of-way.

5-4-2 PAVEMENT WIDTHS

All roads shall have a minimum pavement width of twenty (20) feet with a minimum shoulder width of four (4) feet. If curb is used, a minimum pavement width of twenty-four (24) feet from inside edge

of gutter to inside edge of gutter with a minimum shoulder width of four (4) foot back of curb is to be used.

5-4-3 GEOMETRIC DESIGN

(1) TYPICAL SECTIONS

Standard Section (Ditch) - See Appendix VI
Curb Section- See Appendix VI

(2) ROADS WITH LESS THAN 2500 ADT

All streets shall be designed to conform to the Alabama Department of Transportation "County Road Design Policy, Design Criteria for New and Reconstructed Roadways and Bridges with less than 2,500 ADT". Design speed shall be a minimum of twenty (20) miles per hour. Maximum grade allowed for any roadway is fifteen (15) percent, and the minimum curve radius shall be one hundred twenty five (125) feet.

(3) ROADS WITH GREATER THAN OR EQUAL TO 2500 ADT

All streets shall be designed to conform to AASHTO's "A Policy on Geometric Design of Highways and Streets".

(4) CLEAR ZONE REQUIREMENTS

All streets shall have a minimum of a ten (10) foot clear zone.

Any specifications for geometric design not covered by these regulations shall be governed by the applicable publication listed above.

5-4-4 ROAD CONSTRUCTION REQUIREMENTS

Construction of all roads shall meet the following minimum requirements and conform to the Alabama Department of Transportation's "Standard Specifications for Highway Construction". Best Management Practices for erosion control shall be used throughout construction and development. The developer shall be responsible for all erosion control in accordance with ADEM regulations and for securing any required permits by ADEM. A copy of the ADEM permit should be provided to the county prior to work beginning.

(1) Notification of Work: It shall be the duty and responsibility of the developer or contractor to give written notice to the County Engineer or his authorized agent, one working day prior to starting any phase of road construction. The developer or contractor shall notify the County Engineer or his authorized agent in writing the day work is resumed after a delay of more than five (5) working days. This includes all

phases of construction, clearing, grading, drainage, gutters, inlets, base, surfacing and any work that pertains to the street, road or development**. FAILURE TO NOTIFY AS SPECIFIED MAY BE GROUNDS FOR NONACCEPTANCE**.

(2) Testing: The County Engineer shall determine which tests shall be scheduled and performed and shall notify the developer. The tests normally consist of, but are not limited to: gradation; moisture; compaction; and asphalt analysis of road building materials. The developer shall notify the County Engineer, or his designee, twenty-four hours prior to any required tests. The County Engineer shall select a testing firm to complete all necessary tests. The developer may employ its own testing company, but all testing costs performed on behalf of the county shall govern acceptance and shall be reimbursed to the county before final plat approval is given or considered.

(3) All testing shall be conducted by an independent testing laboratory selected and employed by the County Engineer and Etowah County. Copies of all test reports are to be provided to the County Engineer before additional construction occurs. In the event problems exist that require remedial actions or design, the developer shall be required to submit appropriate engineering plans to the County Engineer before construction will be allowed to proceed.

(4) Clearing and Grubbing: All roads shall be graded to their full right-of-way width. All areas shall be cleared of all vegetation, trees, stumps, large rocks and other objectionable or unsuitable material prior to grading or filling unless otherwise approved, in writing, by the County Engineer;

(5) Slope Paving: Slope paving shall be required in ditches as determined necessary by the County Engineer. At a minimum, all ditches with slopes less than one (1) percent or greater than ten (10) percent shall include slope paving. Other alternatives must be approved by the County Engineer;

(6) Embankment Sections: The County Engineer will have the right to approve all borrow sources; however this does not relieve the developer from full responsibility for the quality of material used. Material shall be of AASHTO Classification A-4 or better (Classification chart in Appendix VII). Roadway fill or embankment of earth material shall be placed in uniform layers, full width, and not exceeding eight inch thickness (loose measurement). Each layer shall be compacted so that a uniform specified density is obtained. The embankment may be inspected by proof rolling, under the supervision of the County Engineer or his/her designee, with a fully loaded tandem axle dump truck to check for soft or yielding areas. Compaction tests shall be run at the frequency and location as directed by the County Engineer. Additional layers of fill shall not be added until directed by the County Engineer. For other than fill sections of earth material refer to Section 210 and Section 306 of the "Alabama Department of Transportation Standard Specifications for Highway Construction." The County Engineer or his representative shall inspect fill sections prior to placing the subgrade material. The developer shall contact the County Engineer at least two (2) days in

advance of placement of the subgrade. Maximum slope allowed on an embankment shall be three to one (3:1);

(7) Subgrade: The subgrade shall be compacted and properly shaped prior to the placing of base materials. The top six (6) inches of the roadbed shall be modified, with the work being performed under Section 230 Roadbed Processing, of the "Alabama Department of Transportation Standard Specifications for Highway Construction". It shall be full width of regular section and extend two (2) feet outside of curb and gutter and/or valley gutter sections. Curb sections are thirty-two (32) feet in width, while open ditch roadway sections are twenty-eight (28) feet in width. The subgrade may be inspected by proof rolling, under the supervision of the County Engineer or his/her designee, with a fully loaded tandem axle dump truck to check for soft or yielding areas. Any unsuitable materials shall be removed and replaced with a suitable material compacted to density requirements in accordance with Section 5-4-4(6) of these regulations. Suitable material shall be determined by the County Engineer. The County Engineer or his representative shall inspect subgrade prior to placing the base course. The developer shall contact the County Engineer at least two (2) days in advance of placement of the base.

(8) Base: Base course shall meet the requirements for crushed aggregate as set forth in section 301 of the Alabama Department of Transportation Standard Specifications for Highway Construction. Base course shall have a minimum thickness of six (6) inches compacted thickness for curb sections, and a minimum thickness of eight (8) inches for ditch sections, full width of regular section and shall extend two (2) feet outside of curb sections. Regular sections are twenty-eight (28) feet in width, while curb sections are thirty-two (32) feet in width. The density requirements for compaction shall be in accordance with Section 306 of the Alabama Department of Transportation Standard Specifications for Highway Construction. The County Engineer or his representative shall inspect the base layer prior to placing the overlaying layer. The base section may be inspected by proof rolling, under the supervision of the County Engineer or his/her designee, with a fully loaded tandem axle dump truck to check for soft or yielding areas. The developer shall contact the County Engineer at least two (2) days in advance of placement of the overlaying layer. If the developer wishes to vary from any subgrade, embankment, or base layer requirements a California Bearing Ratio must be performed, and a geotechnical report stating the proposed buildup must be submitted to the County Engineer for a variance.

(9) Roadbed Width: The minimum roadbed width shall be twenty-eight (28) feet for standard sections and thirty-two (32) feet for curb sections.

(10) Roadway Pavement: All roads and/or streets shall be paved and comply with the following:

a. The minimum pavement width shall be not less than twenty (20) feet on standard sections and twenty-four (24) feet for curb sections. Type of curb to be used shall be approved by the County Engineer.

b. A bituminous pavement shall be constructed on a suitable base as approved by the County Engineer. Minimum requirements for the bituminous pavement shall be a double bituminous surface treatment of KG or JG as covered in Section 401 of the ALDOT Standard Specifications for Highway Construction for ditch sections; or two hundred pounds per square yard (200 LBS/ SY) of Bituminous Concrete Plant Mix, Binder Layer type 424, with an overlay of a minimum of one hundred ten pounds per square yard (110 LBS/SY) of Bituminous Concrete Plant Mix, Wearing Surface type 424 for curb sections. The mix shall be approved by the County Engineer and be covered in the latest memorandum recommendation from the office of the ALDOT County Transportation Engineer or as specified by the ALDOT Standard Specifications for Highway Construction, latest edition. The placement of this minimum required bituminous pavement does not relieve the developer of meeting the current policy for acceptance of roads and streets by the Etowah County Commission. As covered in Section 1-1, the current policy is available from the office of the County Commission or the County Engineer.

(11) Storm Drainage: An adequate storm drainage system based on a minimum twenty-five (25) year design storm including curb, pipes, culverts, headwalls, and ditches shall be provided for the drainage of surface water. All cross drains shall have sufficient length for required typical section and shall be installed according to ALDOT specifications. Minimum diameter of cross drain pipes shall be eighteen (18) inches. Cross drains shall be Class III, wire reinforced, concrete pipe and shall meet or exceed the current ALDOT specifications. Exit velocities of pipes/storm drains shall not exceed ten (10) feet per second (fps). Pipe shall have a sloped paved headwall. Curb inlets, drop inlets, and junction boxes shall be certified and designed by a licensed engineer.

Water will not be permitted to run along the road(s) more than five hundred (500) feet. In a curb and gutter section water shall not be allowed higher than the middle of the outside wheel path.

In a subdivision with streets or roads designed on a ditch cross section, developers or owners will not be able to install side drain pipes in the ditch section except to provide a driveway access to each lot. Driveway side drains shall be a minimum size of fifteen (15) inches and a minimum of twenty-four (24) feet long and a maximum of thirty-two (32) feet long. No more than two (2) driveway side drains will be allowed per lot. Where a lot has two (2) driveway side drains, they must be separated by at least thirty (30) feet.

Flood retention ponds or sedimentation ponds shall be located on private property and shall be denoted as such. Parcels of land containing either a flood retention pond or sedimentation pond shall be retained by the developer or home owner's association with the maintenance of said ponds to be the responsibility to remain with either the developer or home owner's association.

(12) Installation of Utilities: After grading is completed and approved by the County Engineer and before any roadbed processing of the subgrade is performed all of the underground utilities within the roadway prism shall be installed completely and approved by the County Engineer throughout the length of the street and across the section. Once pavement is placed, it shall not be open cut except with written permission of the County Engineer. Any utility desiring to cross the road shall go over the road or dry bore under the road. All water lines located under pavement shall be encased. Backfill placed in utility trenches shall be as covered in Section 5-4-4 (6) of these regulations. Temporary easements for utility installation are covered in Section 4-2-1 (h). Easements for utilities shall be shall be a minimum of at least ten (10) feet wide. The developer is encouraged, but not required, to place all utilities underground. All utility facilities existing and proposed throughout the subdivision shall be shown on the Proposed Plat. Proper coordination shall be established between the applicant and the applicable utility companies for the establishment of utility easements.

(13) Signage of Subdivision: Proper signage in accordance with the "Manual of Uniform Traffic Control Devices" (MUTCD) shall be required and maintained in all subdivisions. The Developer will be responsible for the placement and maintenance of proper signage of new streets or roads until and unless the road is accepted into the county road system. A signage plan shall be submitted to the County Engineer for approval prior to the installation of any street signs. Regulatory and Warning Signs shall be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Additionally, the developer or owner of the subdivision is required to install a sign of reasonable size at the entrance of the subdivision stating "PRIVATE ROAD" and it is the responsibility of the developer or owners of the subdivision to maintain this sign until and unless the road is accepted by the county. It is also required that the plat and deeds have a statement printed on them stating that the streets are private in such a development.

(14) Topsoil and Grassing: When all construction is completed, all slopes and shoulders shall be covered with a sufficient amount of topsoil and shall have a stand of permanent grass to prevent undue erosion, either by sprigging or seeding.

(15) Widening and Realignment of Existing Roads: Where a subdivision borders an existing road with a right-of-way less than that specified in these regulations, the applicant shall be required to dedicate such additional areas for widening or realignment of such roads. The applicant shall dedicate existing substandard roads to the full width as required by these subdivision regulations.

(16) Drainage Easements: Where a subdivision is traversed by a watercourse, drainage way, channel, or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse, and of such width and construction as will be adequate for the purpose. Minimum width of such drainage easements will be twenty (20) feet. Drainage easements shall not cross lots

with channelized water and should follow property lines only.

(17) Encroachments: No permanent structure or object will be allowed on the right-of-way (i.e. non-breakaway signs, retaining walls, island medians, planter boxes, fences, trees, etc.). No non-breakaway mailboxes will be allowed on the right-of-way. The location and construction of all mailboxes shall conform to the rules and regulations of the U.S. Postal Service.

SECTION 5-5 BLOCKS

(1) Blocks shall have sufficient width to provide for two (2) tiers of lots of appropriate depths. Exceptions to this prescribed block width shall be permitted in blocks adjacent to expressways, arterials, railroads, or waterways where single-tier lots are required to separate residential development from through vehicular traffic or non-residential uses;

(2) Blocks shall not exceed fifteen hundred (1500) feet nor be less than five hundred (500) feet in length except as approved by the County Engineer or County Commission as a variance;

(3) In long blocks, the County Engineer may require the reservation of an easement through the block to accommodate utilities, drainage facilities, or pedestrian traffic.

(4) Pedestrian ways or crosswalks, not less than ten (10) feet wide, may be required by the County Engineer through the center of blocks more than eight hundred (800) feet long where deemed essential to provide circulation or access to schools, playgrounds, shopping centers, transportation, or other community facilities.

(5) Blocks designed for industrial uses shall be of such length and width as may be determined suitable by the County Engineer for prospective use.

SECTION 5-6. LOTS

Residential lots shall comply with the following requirements:

(1) The minimum lot size where public water and/ or sewer are not provided shall be determined by the regulations of the Health Department. (See required submittals in proposed and final plat application assemblies);

(2) The subdivision plat shall provide each lot with satisfactory access as defined in Section 2-1-1;

(3) Where land is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged so as to allow for the opening of future roads and logical further

resubdivision;

(4) Depth and width of properties reserved for commercial and industrial purposes shall be adequate to provide for off-road parking and loading for the use contemplated;

(5) Double frontage lots shall be avoided, except where essential to provide separation of residential development from traffic arteries, or to overcome specific disadvantages to topography and orientation;

(6) Each lot in a subdivision shall contain a flood-free building site as defined in the County's Flood Damage Prevention Ordinance.

(7) The minimum building setbacks allowed shall be twenty (20) feet.

ARTICLE VI

INSTALLATION OF PERMANENT REFERENCE POINTS

6-1 PERMANENT REFERENCE POINTS

SECTION 6-1 PERMANENT REFERENCE POINTS

Prior to the signing of the Final Plat, permanent reference points shall have been placed in accordance with the following requirements and the Standards of Practice for Surveying in the State of Alabama:

6-1-1 SUBDIVISION CORNER TIE

At least one corner of the subdivision shall be designated by course and distance (tie) from an accepted corner of the Government Survey of Etowah County. The subdivision corner shall be marked with a monument and shall appear on the map with a description of bearings and distances from the Government Survey corner.

6-1-2 MONUMENTS

Concrete monuments four (4) inches in diameter or four (4) inches square and two (2) feet long with a flat top shall be set at all exterior corners that are located on the right-of-way of the subdivision and on the right of way lines at two locations along the interior roadways. The top of the monument shall have identifying cap of surveyor.

6-1-3 PROPERTY MARKERS

All lot corners not marked with a monument shall be marked with an iron pin not less than one-half (1/2) inch in diameter or in width, and eighteen (18) inches long, and driven so as to be flush with the finished grade. The top of the marker shall have identifying cap of surveyor. All lot pins shall be established prior to final approval of the plat.

ARTICLE VII

GUARANTEE OF CONSTRUCTION

SECTION 7-1 SURETY

The developer or subdivider shall be responsible for all required infrastructure construction related to the subdivision. The developer shall be required to complete the full installation of all required infrastructure prior to the signing of the Final Plat along with providing financial guarantee of performance under conditions set out in these regulations prior to approval of the Proposed Plat.

The guarantee of performance by the subdivider shall be a surety in a form approved by the County Engineer and in the amount detailed in Section 3-4 of these regulations. If within twelve (12) months after filing said surety, the subdivider has not completed all necessary construction or if, in the opinion of the County Engineer, said construction have not been satisfactorily installed, the County may take such steps as may be necessary to require performance under the bond.

SECTION 7-2 CONSTRUCTION, INSPECTION AND CERTIFICATION

The County Engineer or his designee shall monitor and periodically inspect for defects in the construction of the required improvements. The developer shall pay to the County the inspection fee as set out in Section 1-3 and authorized by Code of Alabama 1975, § 11-24-3, and the County Engineer shall not sign the final plat unless such fees have been paid at the time of application for final plat approval. If the County Engineer finds upon inspection that any of the required improvements have not been constructed in accordance with the County's adopted construction standards and specifications, the developer shall be responsible for correcting any deficiencies prior to final plat approval. Wherever the cost of improvements is covered by a surety, the developer and the Surety Company shall be severally and jointly liable for completing or paying the cost of the improvements according to specifications.

Upon completion of the improvements, the applicant shall file with the County Engineer a statement stipulating the following:

(1) That all required infrastructure construction is complete;

(2) That these improvements are in compliance with the minimum standards specified by the County and the County Engineer for their construction;

(3) That the developer knows of no defects in these improvements; and

(4) That these improvements are free and clear of any encumbrances or liens.

SECTION 7-3 RELEASE OF GUARANTEE

Upon satisfactory completion of all improvements and approval by the County Engineer, the County Commission shall authorize the release of the improvement surety bond.

ARTICLE VIII

VARIANCES

SECTION 8-1 GENERAL

A variance may be granted in circumstances where the developer demonstrates that extraordinary hardships or practical difficulties, such as commercial development, may result from strict compliance with these regulations. The initial application for variance shall be made to the county engineer as part of the application for proposed plat approval. The County Engineer shall review the application and the circumstances, and make a recommendation in writing to the County Commission, with a copy provided to the developer, as to whether or not the variance should be granted. The engineer's report shall set out in detail the basis for the recommendation.

If the County Engineer recommends that the variance be granted, he or she may recommend that it be conditioned upon the developer complying with special requirements as set out in the variance approval. Where the county engineer has recommended granting the variance, the County Commission shall vote on the request along with proposed plat approval.

If the County Engineer recommends that the request for variance be denied, the developer may appeal that recommendation to the County Commission, which shall consider the issue at the next regularly scheduled County Commission meeting following notice of the recommendation. The county engineer or his or her designee shall be present at the County Commission meeting and shall present his or her reasons for recommending that the variance not be granted. The developer shall also be given an opportunity to be heard. A decision to grant the variance shall be made by recorded vote and shall require a majority of the membership of the County Commission.

In determining whether to grant the variance, the county engineer and the County Commission shall make findings based upon the evidence presented to it in each specific case that:

(a) The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property;

(b) The conditions for which the request for a variance is based are unique to the property for which the variance is sought and are not applicable generally to other property;

(c) Because of the particular physical surroundings, shape, or topographical conditions of the specific property involved, a particular hardship to the owner, as distinguished from a mere inconvenience, would result if the strict letter of these regulations are carried out;

(d) The variance will not in any manner vary the provisions of other adopted policies and regulations of Etowah County.

SECTION 8-2 CONDITIONS

In approving variances, the County Commission may require such conditions as will, in its judgment, secure substantially the objectives, standards or requirements of these regulations.

The County Commission shall not grant any variance within the floodway unless the developer submits a study prepared by a registered professional engineer certifying that no increase in the 100-year flood level would result from the proposed development.

ARTICLE IX

CONFLICT WITH PUBLIC AND PRIVATE PROVISIONS

SECTION 9-1 PUBLIC PROVISIONS

These regulations are not intended to interfere with, abrogate, or annul any other ordinance, rule, regulation, statute, or other provision of law. Where any provision of these regulations imposes restrictions different from those imposed by any other ordinance, rule, regulation, or other provision of law, the provisions of which are more restrictive or impose higher standards shall control.

SECTION 9-2 PRIVATE PROVISIONS

These regulations are not intended to abrogate any easement, covenant or any other private agreement or restriction; provided, however, that where the provision of these regulations are more restrictive or impose higher standards or regulations than such easement, covenant, or other private agreement or restriction, the requirements of these regulations shall govern. To the extent that any easement, covenant, or private agreement is not inconsistent with these regulations or any determinations made by the County Commission in approving a subdivision or in enforcing these regulations, such private provisions shall be operative and supplemental to these regulations; provided, however, that neither the County Commission nor the County Engineer shall be responsible for enforcing, regulating, or ensuring compliance with any such easement, covenant, or other private agreement or restriction.

ARTICLE X

LEGAL PROVISIONS

SECTION 10-1 SEVERABILITY

If any part or provision of these regulations is adjudged invalid by any court of competent jurisdiction, such judgment shall be confined to its terms and shall not affect or impair the validity of the remainder of these regulations or their application to other persons or circumstances.

SECTION 10-2 SAVINGS PROVISION

Except as expressly provided in these regulations, these regulations shall have prospective application only and shall not be construed as abating, modifying, or altering any action, including any penalty, pending under any subdivision regulations in existence on the effective date of these regulations. These regulations shall not affect the rights or liability of any person, firm, or corporation, nor operate as a waiver of any right of the County under any section or provision existing at the time of adoption of these regulations. Notwithstanding the foregoing, any application for plat approval made after the County Commission's adoption of these regulations which is pending on the effective date of these regulations shall be reviewed, approved, or disapproved in accordance with these regulations, provided that the owner or developer was given written notice at the time of application that these regulations would be utilized in the approval of the subdivision's design and development.

SECTION 10-3 INCORPORATION BY REFERENCE

Code of Alabama 1975, § 11-24-1 et seq., Code of Alabama 1975, § 11-52-30, and Code of Alabama 1975, § 40-12-10 are attached hereto as Appendix IV, and are hereby specifically incorporated by reference and made a part of these regulations.

SECTION 10-4 AMENDMENT PROCEDURE FOR COMMISSION

The County Commission may adopt amendments to these regulations at a regularly scheduled meeting of the County Commission. In addition, the amendments shall not take effect for thirty (30) days after the action of the County Commission. Amendments adopted by the County Commission shall not apply to any plat submitted prior to the date that the amendments take effect.

APPENDIX I

SAMPLE CERTIFICATES

Example A

(Proposed Plat)

CERTIFICATE OF ENGINEERING DESIGN BY A PROFESSIONAL ENGINEER

I, _____, a professional engineer licensed in the State of Alabama, License Number _____, do hereby certify that the streets and drainage system for _____ Subdivision have been designed under my supervision.

I further certify that the drainage system has been designed to meet the _____ year storm criteria. This design will ensure that all drainage waters occurring during a storm of less than _____ year storm magnitude will flow within the rights-of-way or drainage easements indicated as such on the official plat for this subdivision.

I further certify that the streets are designed for a design speed of _____ to meet applicable design criteria for safety, geometry, profile, and typical sections according to the Alabama Department of Transportation's "County Road Design Policy."**

NAME_____

P.E.# _____

TITLE _____

FIRM _____

DATE _____

** Refer to Section 5-4-3 for correct design criteria depending on ADT.

Example B

(Final Plat)

SURVEYOR'S CERTIFICATE AND DESCRIPTION OF LAND PLATTED

STATE OF ALABAMA
COUNTY OF _____

I, (name of surveyor), a Licensed Professional Land Surveyor in the State of Alabama, for (Survey Company) state that this is a plat of an actual field survey of lots through _____, inclusive of (Name of Subdivision), more particularly described as follows:

DESCRIPTION
(Out boundary Description)

I hereby certify that all parts of this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Surveying in the State of Alabama to the best of my knowledge, information, and belief.

This the _____ day of _____, 20___.

___(Signature of Surveyor)_____

___(Typed Name of Surveyor) _____

Alabama License #_____

Note: One of the following notary's acknowledgments must appear for each Surveyor's Certificate (see example E-1 and E-2). Surveyor's name should be used in the Acknowledgement.

Example C

(Final Plat)

ENGINEER'S CERTIFICATE OF ENGINEERING DESIGN AND CONSTRUCTION

I, _____, a professional engineer licensed in the State of Alabama, License Number _____, do hereby certify that the streets and drainage system for _____ Subdivision have been designed and constructed under my supervision in accordance with the construction plans submitted to the County Engineer.

I further certify that the drainage system has been designed and constructed to meet the _____ year storm criteria. This design will ensure that all drainage waters occurring during a storm of less than _____ year storm magnitude will flow within the rights-of-way or drainage easements indicated as such on the official plat for this subdivision.

I further certify that the streets are designed and constructed for a design speed of _____ to meet applicable design criteria for safety, geometry, profile, and typical sections according to the Alabama Department of Transportation's "County Road Design Policy." **

I further certify that I have checked all test reports and that all base material, concrete, and asphalt have been installed in accordance with the typical sections, profiles and plan details and meet minimum requirements as set out in the most current edition of the State of Alabama Department of Transportation's Standard Specifications for Highway Construction.

I further certify that all Federal and State permits required for construction of the subdivision were obtained and complied by during construction.

NAME_____

P.E.# _____

TITLE _____

FIRM _____

DATE _____

** Refer to Section 5-4-3 for correct design criteria depending on ADT.

Example D

(Final Plat)

DEDICATION

I, _____, the owner(s) of said lands surveyed by _____, do hereby certify that title was and is vested in said owner(s) and join in the foregoing statement made by said _____, and as stated in Code of Alabama 1975, § 35-2-50 et seq., do hereby certify that it was and is my (our) intention to divide said lands into lots as shown by said plat and do hereby dedicate, grant, and convey for public use the streets, alleys and public grounds as shown on said plat.

Signed and sealed in the presence of:

_____

Property Owner

Note: One of the following notary's acknowledgments must appear for each Dedication Certificate (see example E-1 and E-2). Owner's name should be used in Acknowledgement.

In cases where a subdivision is to remain private, the above dedication (Example D) shall state that the "streets, alleys, and public grounds shall remain private grounds as shown on said plat."

Example of (E-1)

ACKNOWLEDGMENT

STATE OF ALABAMA)
COUNTY OF _____)

I, _____, Notary Public in and for said County, in said State, hereby certify that (corporate officer's name), whose name as (title) of the (corporation name), is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day that, being informed of the content of the instrument, he/she as such officer and with full authority, executed the same voluntarily for and as the act of said corporation.

GIVEN under my hand and official seal this _____ day of _____, 20___.

_____
NOTARY PUBLIC

Example of (E-2)

ACKNOWLEDGMENT

STATE OF ALABAMA)
COUNTY OF _____)

I, _____, Notary Public in and for said County, in said State, hereby certify that (owner's or surveyor's name), whose name is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day that, being informed of the content of the instrument, executed the same voluntarily.

GIVEN under my hand and official seal this _____ day of _____, 20___.

_____
NOTARY PUBLIC

Example F

(Final Plat)

CERTIFICATE OF APPROVAL BY THE (insert name of electric utility)

The undersigned, as authorized by the (name of electric utility) hereby approved the within plat for the recording of same in the Probate Office of _____ County, Alabama, this _____ day of _____, 20____.

_____
(Electric utility authorized signature)

Example G

(Final Plat)

CERTIFICATE OF APPROVAL BY THE
(insert name of water and sewer, if available, utility)

The undersigned, as authorized by the (name of water and sewer utility) hereby approved the within plat for the recording of the same in the Probate Office of _____ County, Alabama, this the _____ day of _____, 20____.

_____
(water and sewer utility authorized signature)

Example H

(Final Plat)

CERTIFICATE OF APPROVAL BY THE COUNTY ENGINEER

The undersigned, as County Engineer of the County of _____, Alabama, hereby certifies approval of this plat for the recording of same in the Probate Office of _____ County, Alabama, this _____day of _____,20___.

_____
County Engineer
County of _____, Alabama

Example I

(Final Plat)

CERTIFICATE OF APPROVAL BY THE _____ COUNTY HEALTH DEPARTMENT

The undersigned, as authorized by the _____ County Health Department, Alabama. hereby certifies this subdivision meets the approval of the _____ County Health Department subject to certain conditions of approval and/or lot deletions on file with the said health department, which conditions are made a part of this approval as if set out hereon. I hereby approve the within plat for the recording of same in the Probate Office of _____ County, Alabama, this _____day of _____, 20___.

_____
Health Officer

Example J

(Final Plat)

CERTIFICATE FOR SUBDIVISION LOCATED IN A FLOOD ZONE

According to the FIRM for Etowah County, Alabama, map number _____ dated _____, part of this property lies within Zone _____ which is a special flood hazard area inundated by the 100-year flood. A development permit from the Etowah County Engineering Department will be required before construction begins (including but not limited to building, filling, grading, excavating, storage & accessory buildings) within the designated 100-year flood area.

APPENDIX II

SAMPLE FORMS

APPLICATION FOR PROPOSED PLAT REVIEW

DATE:_____

1. Name of Subdivision _____

2. Name of Applicant _____ Phone _____

   Address _____

3. Owner of Record _____

   Address _____

4. Engineer _____ Phone _____

   Address _____

5. Land Surveyor _____ Phone _____

   Address _____

6. Attorney _____ Phone _____

   Address _____

7. Subdivision Location: _____

_____

_____

_____

_____

_____

_____

8. Total Acreage _____ Number of Lots _____

9. Has this plan been before the Commission in the past? _____ If yes, have any changes been made since this plans was last before the Commission? _____

If so, describe the changes _____

_____

_____

_____

_____

10. List all adjacent property owner(s) name and addresses.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

11. Attach four (4) copies of proposed plat.

12. Attach two (2) copies of construction plans.

APPENDIX III

AMENDMENTS

APPENDIX IV

APPLICABLE STATE LAWS

Section 11-24-1

Definitions; regulation of lots, streets, drainage, utilities, etc.; developer to reimburse utility for uneconomical placement.

(a) When used in this chapter, the following words shall have the following meanings:

(1) COUNTY. A political subdivision of the state created by statute to aid in the administration of government.

(2) COUNTY COMMISSION. The chief administrative or legislative body of the county.

(3) STREETS. Streets, avenues, boulevards, roads, lanes, alleys, viaducts, and other roads.

(4) SUBDIVISION. The development and division of a lot, tract, or parcel of land into two or more lots, plats, sites, or otherwise for the purpose of establishing or creating a subdivision through the sale, lease, or building development. Development includes, but is not limited to, the design work of lot layout, the construction of drainage structures, the construction of buildings or public use areas, the planning and construction of public streets and public roads, and the placement of public utilities. A subdivision does not include the construction or development of roads or buildings on private property to be used for agricultural purposes.

(b) The county commission or like governing body of each county in the state shall be authorized to regulate the minimum size of lots, the planning and construction of all public streets, public roads, and drainage structures and require proper placement of public utilities to be located in proposed subdivisions of land or in proposed additions to subdivisions of land existing at the time of the enactment of this chapter where the subdivisions are situated outside the corporate limits of any municipality in the county. The placement of public utilities shall not be inconsistent with the requirements of the Southern Standard Building Code, state and federal laws, and regulations of state and federal regulatory agencies. If the county commission or like governing body of any county shall require the placement of public utility facilities in any subdivision or addition thereto in a manner which is other than the most economical method available from an engineering standpoint, then the developer of the subdivision or addition shall reimburse the utility for the difference in cost between the method so required by the county governing body and the most economical method available.

(c) The county commission or like governing body of each county in the state may establish a board of developers to make suggestions to the commission regarding the development and division of subdivisions. The board may advise the commission on the contents of the regulations, revisions that need to be made to the regulations, and assist in resolving disputes between the commission and developers.

(1)*(Acts 1979, No. 79-553, p. 1002, §1; Acts 1997, No. 97-422, p. 718, §1.)*

Section 11-24-2

Submission, review, and approval of plats; permit.

(a) It shall be the duty of the owner and developer of each subdivision to have all construction completed in conformity with this chapter and, prior to beginning any construction or development, to submit the proposed plat to the county commission for approval and obtain a permit to develop as required in this section. The permit to develop shall be obtained before the actual sale, offering for sale, transfer, or lease of any lots from the subdivision or addition to the public, it must include a plan to deliver utilities including water, and shall only be issued upon approval of the proposed plat by the county commission. As a condition for the issuance of a permit, the county commission may require any of the following for approval of the proposed plat:

(1) The filing and posting of a reasonable surety bond with the county commission by the developers of the proposed subdivisions or proposed additions to guarantee the actual construction and installation are in accordance with approved plans for public streets, public roads, drainage structures, and public utilities.

(2) The names and addresses of each adjoining landowner and utility subject to the notice as provided in subsection (b).

(3) A permit fee, which shall not exceed twenty-five dollars ($25).

(b) No proposed plat shall be approved or disapproved by the county commission without first being reviewed by the county engineer or his or her designee. Following the review, the county engineer or his or her designee shall certify to the commission whether the proposed plat meets the county's regulations. If the proposed plat meets the regulations, it shall be approved by the commission. Should the proposed plat be determined by the county engineer to be deficient in any regard, the county engineer shall detail the deficiency to the county commission along with a recommendation that it be disapproved. Notice of the recommendation of the engineer shall be sent to the owner or developer whose name and address appears on the submitted proposed plat by registered or certified mail at least 10 days before the recommendation shall be presented to the county commission for action. A similar notice shall be mailed to the owners of land immediately adjoining the platted land as their names appear upon the plats in the office of the county tax assessor and their addresses appear in the directory of the county or on the tax records of the county and to each utility affected thereby. Each utility notified in writing by the commission shall be given at least 10 days to review the proposed plat and submit a written report to the commission as to whether all provisions affecting the service to be provided by the utility are reasonable and adequate. If any utility affected by the proposed plat is not properly

notified then the approval or disapproval by the county commission shall not be valid until the affected utility has been given at least 10 days' notice prior to such approval or disapproval as provided by this subsection.

(c) In addition to the foregoing, once the owner or developer of all proposed subdivisions or proposed additions to existing subdivisions of land situated outside the corporate limits of any municipality in the county has met all requirements of the county's regulations, he or she shall submit the final plat of the developed subdivision or addition to existing subdivision to the county engineer for signature verifying that the subdivision or addition to existing subdivision meets the county's regulations. After the final plat has been signed by the county engineer, it shall be filed for record or received for filing in the office of the judge of probate. Subject to the penalties set out in Section 11-24-3, it shall be a violation of this chapter for the developer to file or to have filed any plat, deed, property description, or document of property transfer without full compliance with this section.

(d) Notwithstanding the provisions of subsections (a), (b), and (c), this section shall not apply to the sale, deed, or transfer of land by the owner to an immediate family member, except that, in the event that there is any sale, deed, or transfer of land by the owner or an immediate family member to someone other than an immediate family member, this chapter shall then apply to any subdivision of property as defined in subdivision (4) of subsection (a) of Section 11-24-1.

(2)(Acts 1979, No. 79-553, p. 1002, §2; Acts 1997, No. 97-422, p. 718, §1; Act 2006-227, §1.)

Section 11-24-3

Fines; injunctions; inspections; enforcement of chapter.

(a) Any owner or developer failing to comply with the permitting requirement or otherwise violating this chapter or any rule or regulation made pursuant to this chapter shall be fined one thousand dollars ($1,000) per lot that has been sold, offered for sale, transferred, or leased to the public.

(b) In the event that the developer or owner fails to comply with this chapter, the county commission shall have the right to enjoin action of the developer or owner by a civil action for the injunction brought in any court of competent jurisdiction or, in the event that work on the subdivision has been completed, to bring action to compel the developer or owner to comply with this chapter. In addition to injunction, the county commission may recover the penalty as provided by this section in any court of competent jurisdiction.

(c) The county commission may employ inspectors and may request the county license inspector to see that its rules and regulations are not violated and that the plans and specifications for the minimum size of lots, the planning and construction of public streets, public roads, and drainage structures, and the placement of public utilities are not in conflict with the rules and regulations of the county. The county commission may charge inspection fees, not to exceed actual costs, to be paid by the owners of the property inspected.

(d) This chapter may be enforced by the county license inspector under Section 40-12-10, including issuing citations as provided in subsection (j) of Section 40-12-10 for failure to properly obtain the permit to develop required pursuant to subsection (a) of Section 11-24-2. The license inspector may issue subsequent citations for failure to properly obtain a permit to develop if, after 30 days following the issuance of the previous citation for the same violation, the owner or developer of the subdivision has not made proper application for a permit pursuant to the requirements of this chapter. The applicable fines set out in subsection (a) shall be doubled and separately assessed against the owner or developer of the subdivision for each subsequent citation issued by the license inspector as provided herein.

(3)*(Acts 1979, No. 79-553, p. 1002, §3; Acts 1997, No. 97-422, p. 718, §1; Act 2006-227, §1.)*

Section 23-4-2

Procedure.

(a) Whenever the governing body of a municipality or county proposes to vacate a public street, alley, or highway, or portion thereof, the governing body shall schedule a public hearing prior to taking final action and shall publish notice of the proposed hearing on the vacation in a newspaper of general circulation in the portion of the county where the street, alley, or highway lies once a week for four consecutive weeks in the county prior to deciding the issue at a regularly scheduled meeting of the governing body. A copy of the notice shall be posted on a bulletin board at the county courthouse and shall also be served by U.S. mail at least 30 days prior to the scheduled meeting on any abutting owner and on any entity known to have facilities or equipment such as utility lines, both aerial or buried, within the public right-of-way of the street, alley, or highway to be vacated. The notice shall describe the street, alley, highway, or portion thereof proposed to be vacated and also give the date, time, and location of the meeting of the governing body at which the proposed vacation is scheduled to be addressed. Any citizen alleging to be affected by the proposed vacation may submit a written objection to the governing body or may request an opportunity to be heard at the public hearing held as required herein.

(b) If the governing body elects to vacate, it shall adopt a resolution which shall describe with accuracy the street, alley, or highway, or portion thereof, to be vacated and shall give the names of the owner or owners of the abutting lots or parcels of land and also the owner or owners of such other lots or parcels of land, if any, which will be cut off from access thereby over some other reasonable and convenient way. The resolution shall further set forth that it is in the interest of the public that such street, alley, or highway, or portion thereof, be vacated and shall be filed in the probate court of the county. In counties which elect the members of the county commission by single-member districts, the motion to approve the vacation shall be made by the commissioner in whose district the portion of the public street, alley, or highway to be vacated is located. The vacation shall not deprive other property owners of any right they may have to convenient and reasonable means of ingress and egress to and from their property, and if that right is not afforded by the remaining streets and alleys, another street or alley affording that right must be dedicated. The filing of the resolution as required herein shall operate as a declaration of the governing body's vacation and shall divest all public rights and liabilities,

including any rights which may have been acquired by prescription, in that part of the public street, alley, or highway vacated. Title and all public rights, including the right to close the street, alley, or highway vacated, shall vest in the abutting landowners. Entities with utility lines, equipment, or facilities in place at the time of vacation, shall have the right to continue to maintain, extend, and enlarge their lines, equipment, and facilities to the same extent as if the vacation had not occurred. Notice of the governing body's action shall be published once in a newspaper in the county no later than 14 days after its adoption.

(4)*(Acts 1931, No. 49, p. 62; Code 1940, T. 56, §27; Act 2004-323, p. 548, §1.)*

APPENDIX V

ACCEPTANCE OF ROADS AND STREETS FOR COUNTY MAINTENANCE

ACCEPTANCE OF ROADS AND STREETS FOR COUNTY MAINTENANCE

As stated in Section 1-1, the purpose of these regulations is not to provide acceptance of roads into the county maintenance system, but rather to provide the approval of the design and layout of a proposed subdivision as required by Code of Alabama 1975, 11-24-1.

The Etowah County Commission, by Resolution, has adopted the road design standards of these Subdivision Regulations as part of their acceptance policy for roads and streets.

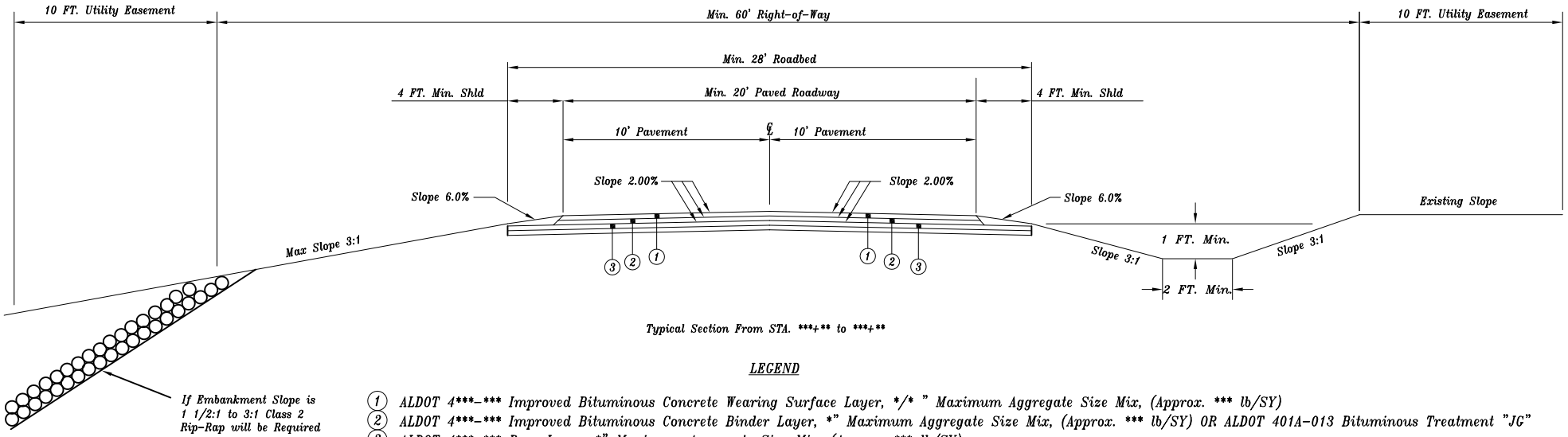
After the Subdivision receives Final Approval from the County Commission and the roadway pavement meets acceptance requirements, the developer or owner may request, in writing, to the County Engineer for the start of the maintenance period. A maintenance bond in the amount of ten (10) percent of the cost of improvements should be included with the request for the start of the maintenance period. After County Commission Approval, the developer shall maintain this road(s) for the maintenance period. The maintenance period shall be defined as a period of three (3) years. At the end of this maintenance period, the developer or owner shall request acceptance, in writing, to the County Engineer. The County Engineer shall conduct an inspection of the roadway and any deficiencies shall be corrected by the developer. After deficiencies have been corrected to the satisfaction of the County Engineer, the roadway will then be accepted and the County will begin maintenance of the road(s).

By adoption of this policy the County Engineer shall determine when the subdivision roads meet the County's acceptance policy and qualify for county maintenance.

APPENDIX VI

TYPICAL SECTIONS

TYPICAL SECTION
ETOWAH COUNTY
NOT TO SCALE



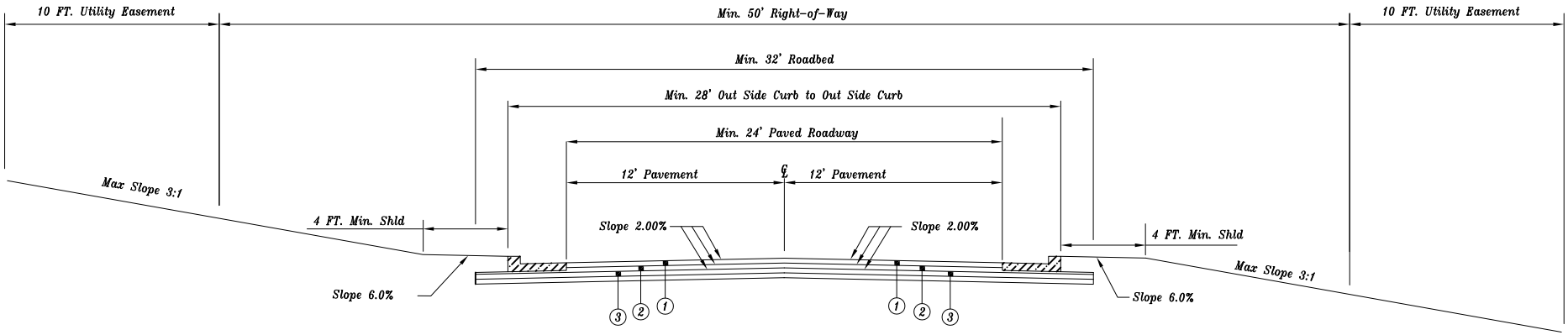
*Typical Section From STA. ***+** to ***+****

If Embankment Slope is 1 1/2:1 to 3:1 Class 2 Rip-Rap will be Required

LEGEND

1. *ALDOT 4***-*** Improved Bituminous Concrete Wearing Surface Layer, */* " Maximum Aggregate Size Mix, (Approx. *** lb/SY)*
2. *ALDOT 4***-*** Improved Bituminous Concrete Binder Layer, *" Maximum Aggregate Size Mix, (Approx. *** lb/SY) OR ALDOT 401A-013 Bituminous Treatment "JG"*
3. *ALDOT 4***-*** Base Layer, *" Maximum Aggregate Size Mix, (Approx. *** lb/SY)*

TYPICAL SECTION
ETOWAH COUNTY
NOT TO SCALE



*Typical Section From STA. ***+** to ***+****

LEGEND

1. *ALDOT 4***-*** Improved Bituminous Concrete Wearing Surface Layer, */* " Maximum Aggregate Size Mix, (Approx. *** lb/SY)*
2. *ALDOT 4***-*** Improved Bituminous Concrete Binder Layer, *" Maximum Aggregate Size Mix, (Approx. *** lb/SY) OR ALDOT 401A-013 Bituminous Treatment "JG"*
3. *ALDOT 4***-*** Base Layer, *" Maximum Aggregate Size Mix, (Approx. *** lb/SY)*

Appendix F – Forms

Location	Date Reported	Determination	Action Taken	Followup

ETOWAH COUNTY DEVELOPMENT CONSTRUCTION BMP INSPECTION FORM

NAME OF DEVELOPMENT _____ **INSPECTOR** _____

TYPE OF DEVELOPMENT _____ **SIGNATURE** _____

LOCATION _____ **OWNER NAME** _____

SIZE (IN AC) _____ **OWNER ADDRESS** _____

INSPECTION DATE/TIME _____ **OWNER PHONE** _____

INSPECTION TYPE _____ **OWNER EMAIL** _____

WEATHER

HAS SEDIMENT OR OTHER POLLUTANTS DISCHARGED FROM THE SITE? _____

WERE BMPS PROPERLY IMPLEMENTED AND MAINTAINED? _____

ARE ADDITIONAL BMPS NEEDED? _____

HAVE ANY BMPS FAILED TO OPERATE AS DESIGNED? _____

ARE BMPS INSTALLED PER THE CONSTRUCTION DRAWINGS? _____

HAVE ALL PREVIOUS ISSUES BEEN ADDRESSED AND CORRECTED? _____

ADDITIONAL COMMENTS: _____

BMP	CONDITION: SATISFACTORY, NEEDS IMPROVEMENT, TURBID DISCHARGE, SEDIMENT LOSS	REMARKS

ETOWAH COUNTY DEVELOPMENT POST-CONSTRUCTION BMP INSPECTION FORM

NAME OF DEVELOPMENT _____ **INSPECTOR** _____

TYPE OF DEVELOPMENT _____ **SIGNATURE** _____

LOCATION _____ **OWNER NAME** _____

SIZE (IN AC) _____ **OWNER ADDRESS** _____

INSPECTION DATE/TIME _____ **OWNER PHONE** _____

WEATHER _____ **OWNER EMAIL** _____

OWNER FAX _____

IS THERE A MAINTENANCE AGREEMENT FOR LONG-TERM BMP'S? _____

ARE BMPS WORKING PROPERLY? _____

ARE BMPS BEING PROPERLY MAINTAINED AT THE TIME OF INSPECTION? _____

ARE ADDITIONAL BMPS NEEDED? _____

HAVE PHOTOGRAPHS OF ALL CRITICAL STORM WATER BMP COMPONENTS BEEN TAKEN AS PART OF THIS INSPECTION? _____

HAVE ALL PREVIOUS ISSUES BEEN ADDRESSED AND CORRECTED? _____

ADDITIONAL COMMENTS: _____

BMP	CONDITION: SATISFACTORY, NEEDS IMPROVEMENT, TURBID DISCHARGE, SEDIMENT LOSS	REMARKS

INSPECTION CHECKLIST FOR ETOWAH COUNTY
FLEET MAINTENANCE SHOP AND VEHICLE/EQUIPMENT WASHING AREA

FORM COMPLETED BY:

DATE OF INSPECTION:

Spill Control

	YES	NO
Are all spills wiped up quickly?		
Are procedures followed as indicated on the material safety data sheet?		
Are spill absorbents used for greasy, oily, flammable or toxic materials?		
Are used rags and absorbents disposed of promptly and safely?		
Is a spill area surrounded by a barrier to prevent a spill from spreading?		

Equipment and Machinery Maintenance

	YES	NO
Is equipment in good working order, with all necessary guards or safety features operational or in place?		
Is equipment damaged or outdated?		
Are tools and machinery inspected regularly for wear or leaks?		
Is equipment repaired promptly?		
Are drip pans or absorbent materials used if leaks cannot be stopped at the source?		
Is a machine that splashes oil fitted with a screen or splash guard? Are machines and tools cleaned regularly?		

Waste Disposal

	YES	NO
Are there adequate number of containers?		
Are there separate and approved containers for toxic and flammable waste?		
Are waste containers located where the waste is produced?		
Are waste containers emptied regularly?		
Are toxic and flammable waste chemicals handled properly?		

Storage

	YES	NO
Are storage areas safe and accessible?		
Is material stacked securely, blocked or interlocked if possible?		
Are materials stored in areas that do not obstruct stairs, fire escapes, exits or firefighting equipment?		
Are materials stored in areas that do not interfere with workers or the flow of materials?		
Are bins or racks provided where material cannot be piled?		
Are all storage areas clearly marked?		
Do workers understand material storage and handling procedures?		

Vehicle Washing

	YES	NO
Is vehicle and equipment washing performed over a pervious surface?		
Is wash water contained on the property?		
Is wash water prevented from entering the storm water system to minimize pollutants?		
Is water turned off when not actively washing vehicles or equipment?		
Are degreasers being used?		
Are soaps that contain phosphates being used?		

EXPLAIN ANY DEFICIENCIES AND NOTE ANY ITEMS THAT NEED IMPROVEMENT BELOW

Appendix G – Standard Operating Procedures

Spill Control

- Are all spills wiped up quickly?
- Are procedures followed as indicated on the material safety data sheet?
- Are spill absorbents used for greasy, oily, flammable or toxic materials?
- Are used rags and absorbents disposed of promptly and safely?
- Is a spill area surrounded by a barrier to prevent a spill from spreading?

Equipment and Machinery Maintenance

- Is equipment in good working order, with all necessary guards or safety features operational or in place?
- Is equipment damaged or outdated?
- Are tools and machinery inspected regularly for wear or leaks?
- Is equipment repaired promptly?
- Are drip pans or absorbent materials used if leaks cannot be stopped at the source?
- Is a machine that splashes oil fitted with a screen or splash guard?
- Are machines and tools cleaned regularly?

Waste Disposal

- Are there adequate number of containers?
- Are there separate and approved containers for toxic and flammable waste?
- Are waste containers located where the waste is produced?
- Are waste containers emptied regularly?
- Are toxic and flammable waste chemicals handled properly?

Storage

- Are storage areas safe and accessible?
- Is material stacked securely, blocked or interlocked if possible?
- Are materials stored in areas that do not obstruct stairs, fire escapes, exits or firefighting equipment?
- Are materials stored in areas that do not interfere with workers or the flow of materials?
- Are bins or racks provided where material cannot be piled?
- Are all storage areas clearly marked?
- Do workers understand material storage and handling procedures?

Appendix H – County Inventories

Etowah County MS4 Outfall Inventory

	LOCATION	OUTFALL ID	LATITUDE	LONGITUDE	ACCESS
1	Green_Leaf_Road	ECO_1	34.00685	-85.948693	Land
2	Burger_Circle_1	ECO_2	34.007804	-85.947988	Land
3	Burger Circle_2	ECO 3	34.008225	-85.947277	Land
4	Meadowlark Place	ECO 4	34.008547	-85.94576	Land
5	Robert_Lee_Road	ECO 5	34.011229	-85.942422	Land
6	Lonz Road	ECO_6	34.010724	-85.93638	Land
7	McCluney_St_&_Mimosa_St	ECO_7	34.003013	-85.942328	Land
8	Centre Road	ECO 48	34.014913	-85.839036	Land
9	Day Circle_1	ECO_8	34.022324	-85.83502	Land
10	Day Circle_2	ECO_9	34.023231	-85.833318	Land
11	Lay_Springs Road_1	ECO 10	34.052228	-86.002485	Land
12	Lay Springs Road_2	ECO_11	34.050849	-86.005427	Land
13	Delmont Drive@Black Creek	ECO 12	34.053495	-86.004431	Land
14	Fairview Road	ECO 13	34.067154	-86.01146	Land
15	Morgan Drive_Northwest	ECO_14	34.025493	-86.10732	Land
16	Pine View Circle	ECO_15	33.970462	-86.109709	Land
17	Township Road	ECO_16	33.937567	-86.055204	Land
18	Sutton Bridge_Rd@Big Will	ECO_17	33.990894	-86.045406	Land
19	Sutton_Bridge RD_2	ECO_18	33.985223	-86.044002	Land
20	Steele Station RD	ECO_19	33.978874	-86.050866	Land
21	Whorton_Bend_RD_1	ECO_20	33.977681	-86.007028	Land
22	Whorton_Bend_RD_2	ECO_21	33.961145	-85.985072	Land
23	Pine_Haven_Road_1	ECO_22	33.957385	-85.989847	Land
24	Pine_Haven_Road_2	ECO_24	33.957286	-85.993604	Land
25	Richard Road	ECO_25	33.956505	-85.995781	Land
26	Pine_Haven_Road_3	ECO 26	33.957294	-85.99696	Land
27	Pine_Haven_Road_4	ECO_27	33.957317	-85.99813	Land
28	Cherokee Road	ECO 28	33.956127	-86.000088	Land
29	Garmon_Road_1	ECO_29	33.961028	-85.994342	Land
30	Garmon Road_2	ECO_30	33.960485	-85.998639	Land
31	Garmon_Road_3	ECO_31	33.953754	-86.003692	Land
32	Whorton_Bend_Road_3	ECO_32	33.952565	-86.003479	Land
33	Whorton_Bend_Road_4	ECO_33	33.951737	-86.001405	Land
34	Heron Drive_NW	ECO_34	33.9435	-85.994128	Land
35	Lakeshore_Drive	ECO_35	33.94089	-85.967656	Land
36	Clokey Drive	ECO_36	33.954425	-85.969839	Land
37	Beech Ridge Road	ECO_38	33.959115	-85.980312	Land
38	Cross Creek Lane	ECO_39	33.958153	-85.981076	Land
39	River Ridge_Road_2	ECO_40	33.959924	-85.976839	Land
40	River_Ridge Road_1	ECO_37	33.958435	-85.976669	Land
41	River Ridge_Road_3	ECO_41	33.9602	-85.978686	Land
42	Oakland_Drive 1	ECO_23	33.956893	-85.991416	Land
43	Oakland Drive_2	ECO_42	33.950314	-85.991278	Land
44	Chrislyn Drive	ECO_43	33.952385	-85.997343	Land
45	College Parkway_1	ECO_44	33.971805	-85.971048	Land
46	College Parkway_2	ECO_45	33.971852	-85.969514	Land
47	College Parkway_3	ECO_46	33.971904	-85.965338	Land
48	College Parkway_4	ECO_47	33.972949	-85.954938	Land

ETOWAH COUNTY MS4
FACILITY INVENTORY

1. ETOWAH COUNTY COURTHOUSE
   800 FORREST AVENUE
   GADSDEN, AL 35901

2. GADSDEN SHOP
   402 TUSCALOOSA AVENUE
   GADSDEN, AL 35901

3. ATTALLA LOCATION
   1950 US HIGHWAY 431 NORTH
   ATTALLA, AL 35954