ALABAMA A&M UNIVERSITY

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
ALABAMA AGRICULTURAL AND MECHANICAL UNIVERSITY
NORMAL, MADISON COUNTY, ALABAMA

2024-2025 ANNUAL REPORT

NPDES PERMIT NO. ALR040061

PREPARED BY:
MULLINS, LLC

MULLINS, LLC
CIVIL ENGINEERING, DEVELOPMENT DESIGN
SURVEYING, LANDSCAPE ARCHITECTURE

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1.0 INTRODUCTION

Mullins, LLC has prepared the 2024-2025 Annual Report for Alabama Agricultural and Mechanical University's Municipal Separate Storm Sewer System (MS4) per the requirements of the Alabama Department of Environmental Management's (ADEM) National Pollutant Discharge Elimination System Permit (ALR040061). This report summarizes the programs accomplishments, events, monitoring and on-going storm water management.

1.1 Permit History

The United States Environmental Protection Agency (EPA) requires that all operators of small MS4s, as defined in 40 CFR Part 122.26(b)(16), maintain coverage for all storm water discharges. A Notice of Intent was submitted to ADEM in 2017 and the MS4 Permit ALR040061 was issued on July 7, 2017. The permit was renewed, effective October 1, 2021, and will expire September 30, 2026.

1.2 MS4 Area

Alabama Agricultural and Mechanical University located in Normal, Alabama, is considered an entity within the City of Huntsville's city limits. The campus includes 2,300 acres with facilities for classrooms, student residences and athletic complexes. A map outlining the approximate boundary of the Alabama Agricultural and Mechanical University campus is included in Appendix A. The single outfall is located at 34°46'15.64"N, 86°34'56.12"W.

1.3 Hydrologic Units

The ultimate receiving water for Alabama Agricultural and Mechanical University MS4 is the Tennessee River (Region 06). The Subregion and Basin is Middle Tennessee Elk (06-03-00). The Subbasin is Wheeler Lake (06030002). The Watershed is Indian Creek (06030002-05) and the Subwatershed is Huntsville Spring Branch (060300020502). The onsite receiving water is Normal Branch which traverses the property from north to south.

1.4 Water Quality Concerns

The area covered under Alabama Agricultural and Mechanical University's MS4 Permit discharges at one single outfall, Normal Branch. Under Section 303(d) of the Clean Water Act, the State of Alabama is required to identify waterbodies that are not in compliance with the water quality standards for that particular use classification. Normal Branch does not discharge directly to an impaired waterbody. The stormwater layout for the MS4 permitted area can be found in Appendix B.

2.0 CONTACTS

The following personnel are directly responsible for the MS4 Program:

Mr. Brian Shipp
Director of Facilities and Administration
P.O. Box 1837
Normal, Alabama 35762
256-372-4276

Mr. Greg Bryant
Hazardous Environmental Manager
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Normal, Alabama 35762
256-372-4090
Gregory.bryant@aamu.edu

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Consultant
Mullins, LLC
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Huntsville, Alabama 35805
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barbara@mullinsllc.net

3.0 EVALUATION OF STORM WATER MANAGEMENT PROGRAM

3.1 Major Accomplishments

Alabama Agricultural and Mechanical University was issued its first MS4 permit in July 2017 and is recognized as a small MS4 entity within the City of Huntsville. The Department of Facilities and Administration was designated to oversee the storm water management program for the University.

One of the major accomplishments for the 2024-2025 reporting period is the addition of a solar power field on the northeastern portion of the campus. The solar panels provide electricity for the electric transit buses. The system is going to provide power for three dormitories and additional office buildings in the future. This is part of the university's plan to eliminate the use for above-ground storage tanks and fuel.

Solar Panel Field

Alabama Agriculture and Mechanical University only utilizes Proterra electric buses to the campus for the students and neighboring community to utilize to commute around campus with a total of six electric buses. By utilizing the cleaner and more efficient buses, the University is making a positive impact on greenhouse gas emissions with the Bulldog Transit System. All storage tanks that were previously used for diesel fuel can be removed and have been swapped out for a new electric charging facility on campus.

3.2 Overall Program Strengths and Weaknesses

One of the University's strengths is the involvement of the student body and environmental department with the outside community and municipal environmental groups. The joint efforts encourage community involvement and awareness.

The main weakness of the program continues to be staffing. Due to the uncertainty associated with federal funding and possible cuts, projects have been put on hold.

3.3 Future Direction of the Program

During the upcoming year, Alabama Agricultural and Mechanical University plans to implement the following:

- The drainage features that traverse the western campus to the main outfall still require some much needed repair. As discussed, several improvements have occurred relative to the drainage on campus. There are plans to make further improvements in order to stabilize all banks and prevent further erosion.
- The campus has been moving towards removing all above-ground storage tanks since the successful switch to electric public transportation.
- The university plans to provide electricity to three dormitories and additional office buildings utilizing the solar panel field that is located on the northeastern portion of the campus.
- The university's student organizations will have student leaders involved with specific environmental matters to create a greater impact through student involvement and education.
- Utilizing the university's Environmental Department, Alabama A&M continues to offer classes that involve student projects which work to promote and teach the value of environmental topics. They will develop new stormwater education materials when classes resume in the fall of 2025.
- The Environmental Department is also collaborating with a local civil design consulting firm to develop an edible bioswale on the southern edge of the campus near Normal Branch.

4.0 MINIMUM STORMWATER CONTROL MEASURES

4.1 Public Education and Outreach

- Alabama Agricultural and Mechanical University's online publication, Bulldog Bottom Line, has been a major avenue for communication and education for both students and faculty at the university. This online media will continue to be used in the future for encouraging a clean campus.

- Training - The Facilities Department conducts a training course every five years for Spill Prevention Control and Countermeasures for the Maintenance Department virtually. This training includes Standard Operating Procedures in the Maintenance Shed as well as around campus. The trainees reviewed the types of spills, how to identify a spill, how to clean up spills and how to take precautions to avoid them. Additional training will take place for Stormwater Management for the construction projects that are taking place on the campus. The Facilities Department will schedule a meeting with each contractor to review the Erosion Control Plan/Best Management Practices Plan prior to the beginning of construction and again as needed throughout each project.

4.2 Public Involvement and Participation

- Through the Environmental Department at Alabama A&M, led by Dr. Elica Moss, several class projects involving environmental topics and issues present on campus were presented at the Annual Stem Day. These class projects help educate both students, faculty, and the community about the importance of taking care of the environment around us. The department also oversees the water quality on the campus.
- On Earth Day, the Environmental Science Club and the fraternities and sororities collaborated with the National Park Trust for a trail cleanup at Burritt on the Mountain. A total of 15 Alabama Agricultural and Mechanical University students participated in this event. The students were educated on the history of Burritt and its impact on the local community. The students removed invasive undergrowth to better define the trail paths and improve drainage, as well as cleaned up litter.
- In February, the students and faculty at Alabama Agricultural and Mechanical University were involved in the Annual Campus Cleanup. This event allows the students to take part in taking care of their campus by cleaning up litter and clearing out areas to improve drainage.

- On Earth Day, the Environmental Science Club and the fraternities and sororities collaborated with the National Park Trust for a trail cleanup at Burritt on the Mountain. A total of 15 Alabama Agricultural and Mechanical University students participated in this event. The students were educated on the history of Burritt and its impact on the local community. The students removed invasive undergrowth to better define the trail paths and improve drainage, as well as cleaned up litter.

4.3 Illicit Discharge Detection and Elimination

- Aerators - There are two ponds on the Alabama Agricultural and Mechanical University Campus. Both ponds have aerators to increase oxygen saturation.
- Hazardous Materials - Mr. Greg Bryant is the Hazardous Environmental Manger and conducts routine inspections locating and documenting hazardous material on campus.
- SPCC - A Spill Prevention Control and Countermeasures Plan was developed for the Alabama Agricultural and Mechanical University Campus. There are two above-ground storage tanks located at the Maintenance Shed, as well as used oil containers. Several of the buildings on campus have back-up generators. The maintenance staff has received training on the Standard Operating Procedures when there is a spill.
- Standard Operating Procedures for the SPCC Program, Illicit Discharge, Construction and Post Construction were developed and a copy can be found in Appendix C.
- There are numerous buildings with potential for illicit discharges. A list of the buildings and the possible generators can be found in Appendix D.

4.4 Construction Site Storm Runoff Control

- Construction Storm Water Permits - There is currently one Construction Stormwater Permit under the NPDES General Permit. The New Science Building is permitted as ALR10C68E under Stanley Construction.
- When construction is present, monthly and rainfall driven inspections are conducted by Mr. Greg Bryant, Hazardous and Environmental Manager for Alabama Agricultural and Mechanical University as well as a third party inspector. Records are kept in the Facilities Building on campus.

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

- Landscape Management - Aramark Higher Education Services is subcontracted by Alabama Agricultural and Mechanical University to provide landscape services to the campus. They ensure that the drainageways remain unblocked to prevent unnecessary ponding or backing up of storm water. Due to the highly erodible soils located on the campus, Aramark is responsible for stabilizing the bare areas.

4.6 Post-Construction and Good Housekeeping

- Aramark collects and removes all the trash daily around campus. They are also responsible for major maintenance and managing the interior roadways. Approximately twenty-four bags of trash are collected daily around the campus.
- Regular inspections are performed across the campus to monitor trash pick-up and general maintenance.
- Used oil from maintenance vehicles and equipment is removed from the campus and disposed of by a third party.

5.0 CERTIFICATION

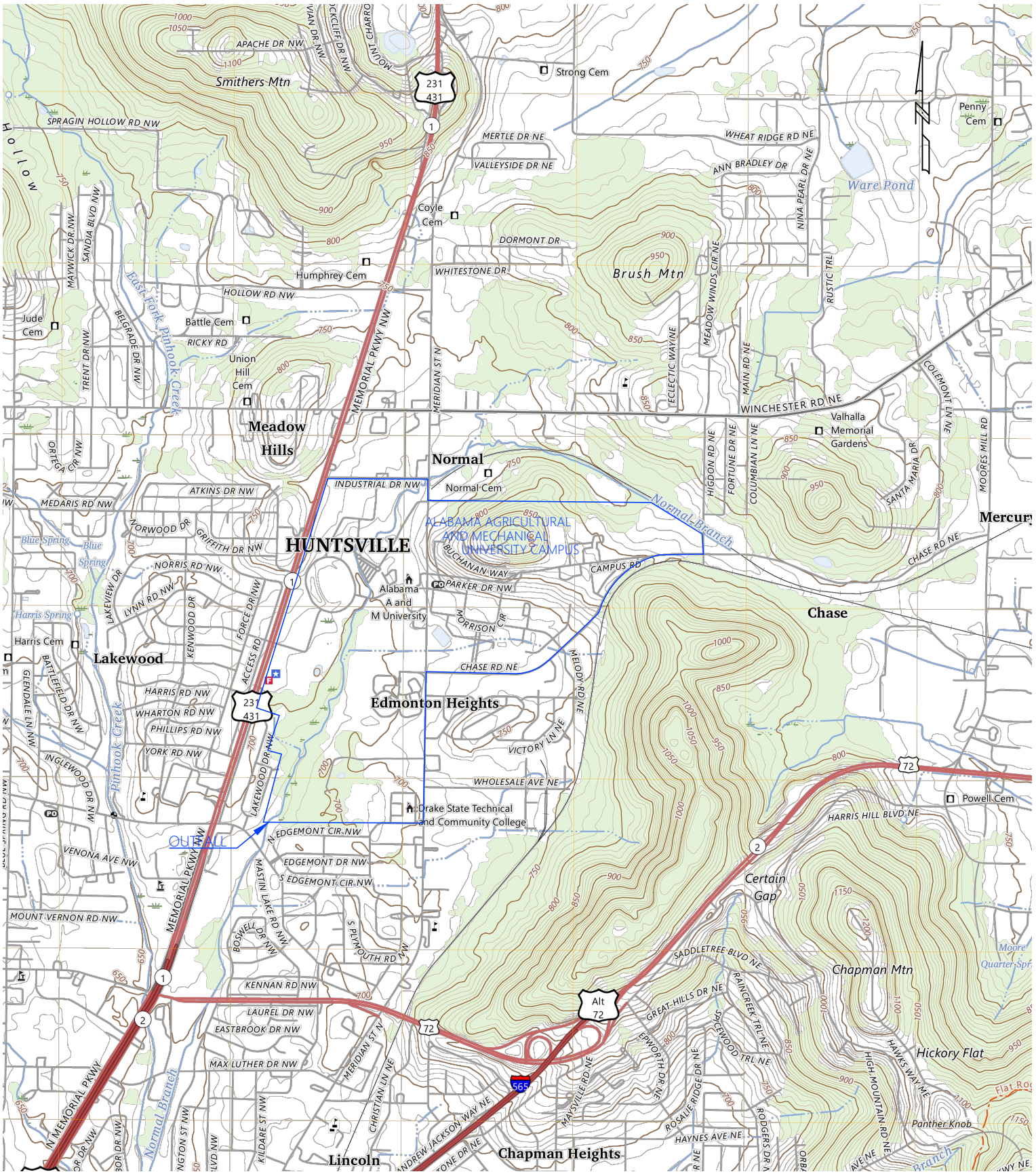
I certify under penalty of law that this Annual Report and all attachments pertaining to the Alabama Agricultural and Mechanical University's Municipal Separate Storm Sewer System were prepared under my direction or supervision. In accordance with a system designed to assure that qualified personnel 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 known violations.

Mr. Brian Shipp, Director

5/22/25
Date

Facilities and Administrative
Alabama Agricultural and Mechanical University

APPENDIX A



JOB NO.	25-149
DATE:	5/26/2025
DRAWN BY:	BRL
CHECKED BY:	JWM

ALABAMA A&M UNIVERSITY

NORMAL, ALABAMA

PREPARED FOR: ALABAMA A&M UNIVERSITY

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SURVEYING, LANDSCAPE ARCHITECTURE
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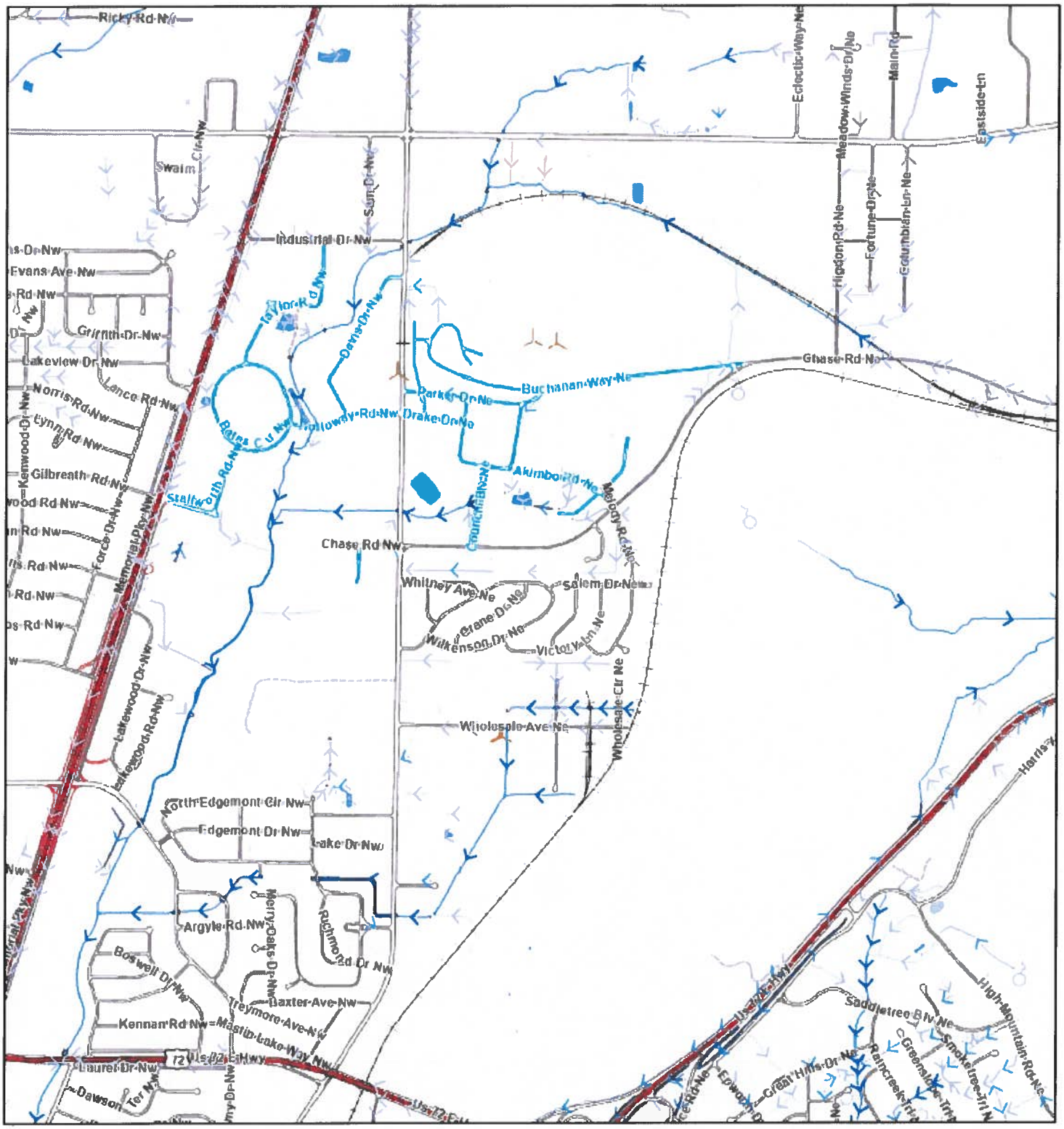
(256) 690-5312

APPENDIX B

Huntsville Web Map



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0 0.28 0.55 1.1 km

Pipes
- Arch
- Circular
- Culverts

Flowlines
- Flume
- Creek
- All other values

Waterbodies
- Waterbody

Underground Detention Facility

Proposed Pipes
- Circular

Proposed Flowlines
- Flume
- All other values

Proposed Waterbodies
- Waterbody

Highways

Bridges, Culverts, and Paved Ditches

Roads

Proposed Roads

Private Roads

Secondary Roads

Railways
- Existing Railroad

General Hydrography

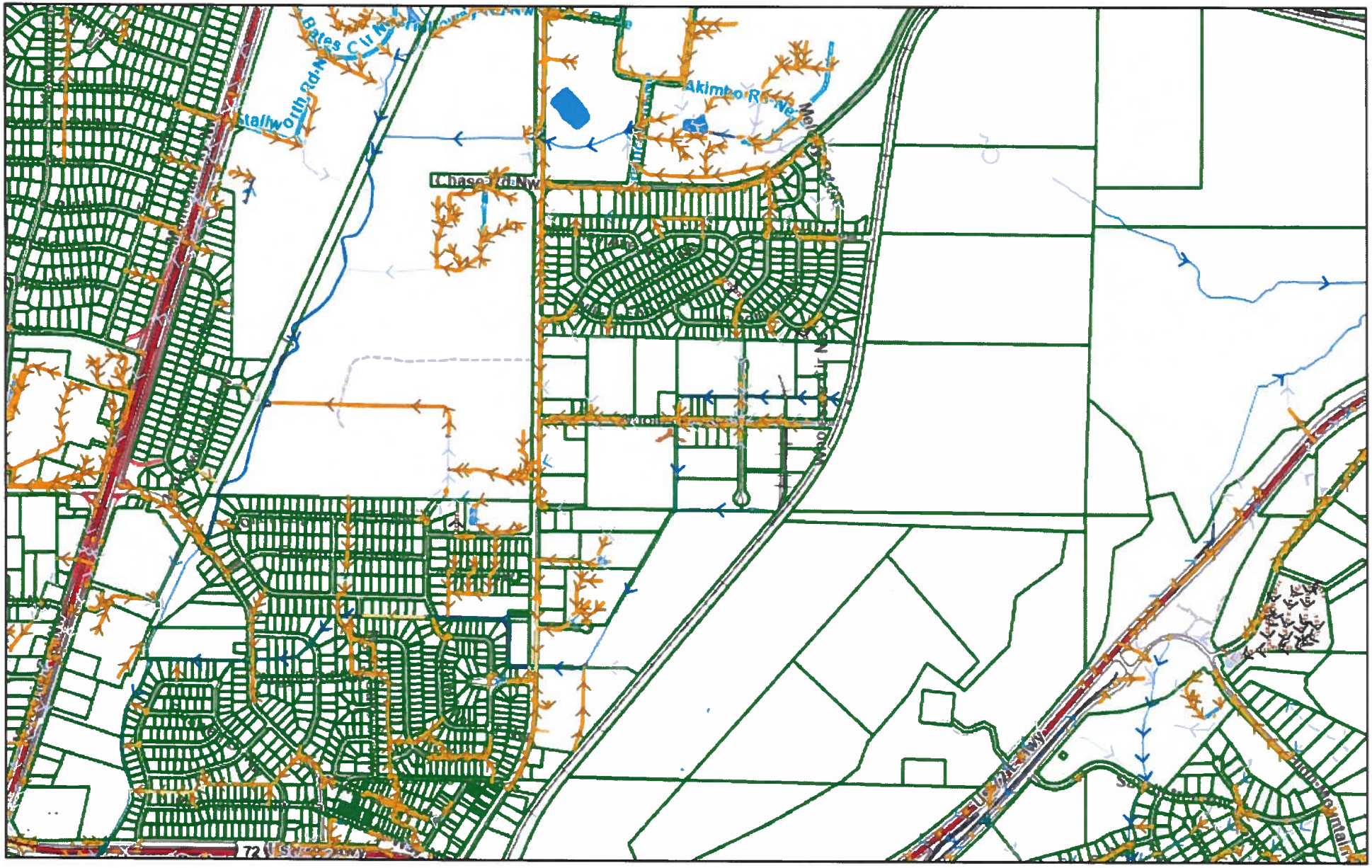
Springs

Retention Ponds

White Canvas

City of Huntsville, Alabama

Huntsville Web Map



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Pipes
Arch
Circular
Culverts
Flowlines
Flume
Creek
All other values
Waterbodies
Waterbody
Underground Detention Facility
Proposed Pipes
Circular
Proposed Flowlines
All other values
Proposed Waterbodies
Waterbody
Madison County Parcels
Cell Sites
Highways
Public Road Labels
Private Road Labels
Bridges, Culverts, and Paved Ditches
Roads
Proposed Roads
Private Roads
Secondary Roads
Railways
Existing Railroad
General Hydrography
Springs
Retention Ponds
White Canvas

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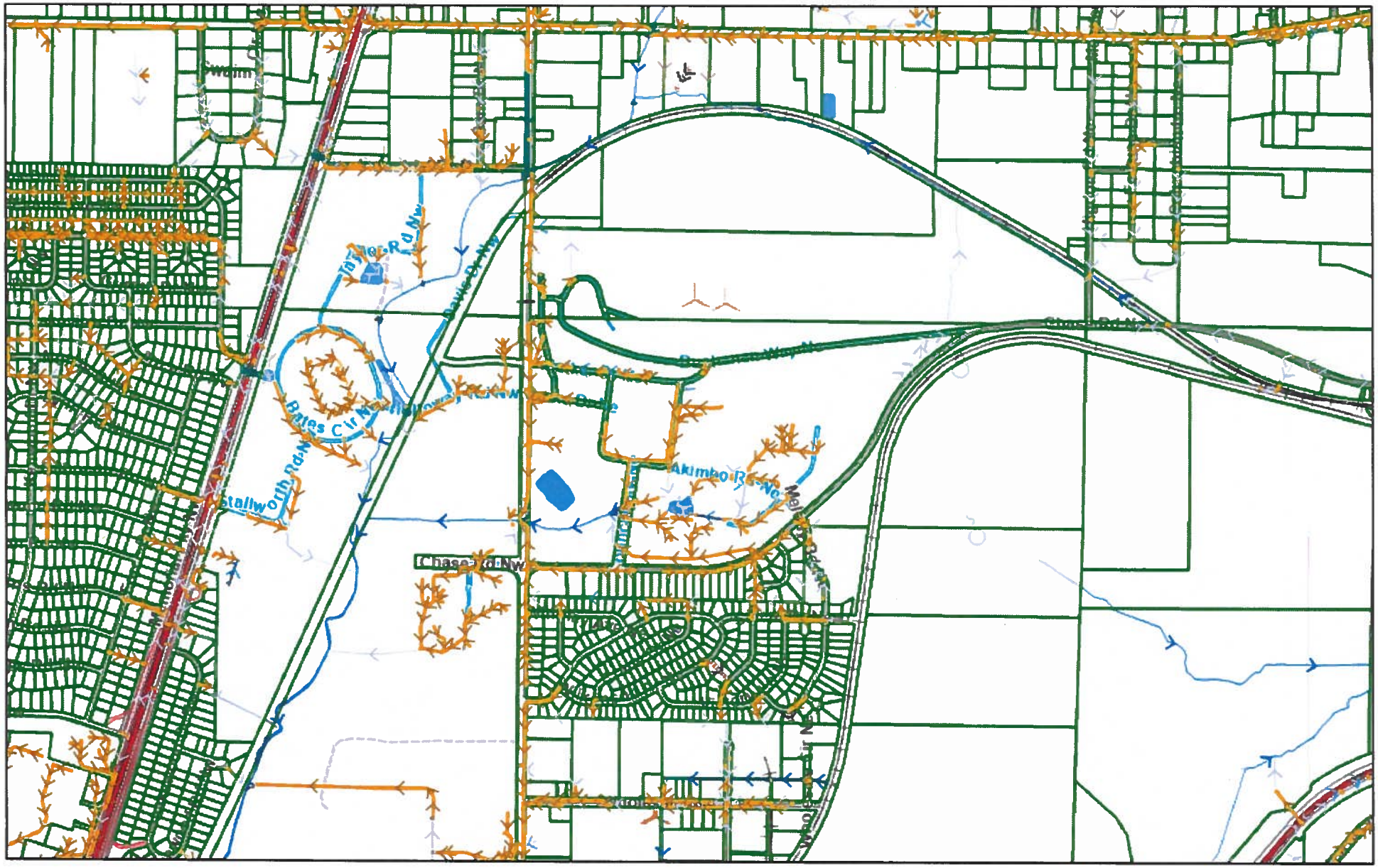
City of Huntsville, Alabama

Huntsville Web Map



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City of Huntsville, Alabama

Pipes
- Arch
- Circular
- Culverts

Flowlines
- Flume
- Creek
- All other values

Waterbodies
- Waterbody

Proposed Pipes
- Circular

Proposed Flowlines
- Flume
- All other values

Proposed Waterbodies
- Waterbody
- Madison County Parcels

- Cell Sites
- Highways
- Public Road Labels
- Private Road Labels
- Bridges, Culverts, and Paved Ditches

Roads
- Proposed Roads
- Private Roads
- Secondary Roads

Railways
- Existing Railroad

- General Hydrography
- Springs
- Retention Ponds
- White Canvas

APPENDIX C

Illicit Discharge Detection and Elimination (IDDE) SOP

Alabama A&M University goal is to develop a plan to identify and eliminate non-storm water discharges that are not acceptable according to the MS4 General Permit. The university has installed a plan in the case of one being discovered as a regulatory means to correct the actions.

1.1 Reporting an IDDE

Illicit Discharges are reported by individuals on campus by calling EHS office number 256-372-4090. IDDE's can be detected through inspections around campus

1.2 Tracing Illicit Discharges

Once an illicit discharge is detected or reported through an inspection, the next step would be to locate the source. Selection of tracing techniques will depend on the type of illicit discharge detected, information collected during the initial discovery period, observation, and the resources/technology available. Tracing techniques may include visual observation, dye testing, sample collection, and televising

Various techniques can be used in combination to identify the source of the illicit discharge.

- **Transitory or intermittent discharges:** These conditions may occur as a result of an inspection or a community complaint. While the initial information may have been collected regarding the potential illicit discharge, a return trip may show that the discharge was either intermittent or transitory. The investigative techniques used will depend on whether a potential source location was identified during the initial observation:

- **Potential source identified** - If a potential source for the illicit discharge was initially identified, steps are taken to investigate the potential source site, such as inspecting the site and storm drain system in the vicinity of the site. If floor drains, sumps, or other suspect discharge locations are observed during this inspection, dye testing, smoke testing, or continuous flow monitoring may be used. These techniques should definitively show whether the suspect site was the source of the illicit discharge.

- **Potential source not identified** - If no source site is suspected, and only the general area of the illicit discharge is known, it may be possible to trace the evidence of the illicit discharge by visual inspection of the storm drain access points. If the catch basin/manhole inspection technique is unsuccessful, some interim steps may be taken to attempt to capture water from an intermittent discharge. For example, sand bagging, damming or block testing of selected storm drain access points, combined with installation can help reveal the source of the discharge. If these techniques have no positive result (lack of water pooling behind the weir or sandbags), the discharge would most likely be transitory (one time only), and it may not be possible to determine its origin. This should be logged tracked for any future incidents.

- **Continuous discharges:** Tracing continuous discharges is typically easier than tracing transitory/intermittent discharges. The primary difference between tracing this type and tracing a continuous discharge is that sandbagging and weirs are not required for a continuous discharge. Visual observation of the system access points should reveal the source of the flow. If visual inspections fail to identify the source and the original report was severe or gross pollution, then televising, smoke testing, or sample collection would be warranted.

1.3 Regulatory Mechanism

If Alabama A&M University discovers a violation of the IDDE SOP, the individuals or companies may require verbal or written notice for non-compliance.

- The performance of monitoring, analysis and reporting
- The termination of the prohibited discharge, practices, or operations
- The abatement or remediation of the storm water pollution, and the restoration of the affected property
- Payment of non-compliance fees or remediation expenses against Alabama A&M University
- Disciplinary action up to and including dismissal of personnel or contractors

Dry Weather Screening SOP

Alabama A&M University shall, at a minimum, visually inspect the outfall annually during dry weather conditions.

- Flows suspected of containing illicit discharges due to the presence of odors, colors or sheens shall be investigated.
- Investigation may include water chemistry field testing and/or bacteriological sampling and will be dependent upon the characteristics of the observed discharge. Investigations will involve Facilities Management Contractor to trace source of suspect illicit discharge.
- Upon source discovery, measures will be implemented to cease discharge immediately as possible.
- Should immediate termination not be practicable, a schedule will be developed.
- Should the source of discharge be determined to originate off campus, the MS4 community having jurisdiction will be notified within 24 hours as well as the Department.
- The physical condition of the outfall shall also be noted during the inspections.

Construction Storm Water Runoff Control SOP

Alabama A&M University's goal to control construction storm water runoff will consist of implementing plan site reviews, control mechanisms, and an inspection.

- **Site Plan Review**

  The Physical Facilities Department is responsible for overseeing all construction projects conducted on campus. The department is responsible for assuring storm water runoff controls are implemented prior to construction. This can involve the review of the architecture's site plans and construction specifications

- **Sites Less than One Acre is Disturbed**

  Construction sites where less than one acre of ground is disturbed will be covered by the AAMU MS4 General Permit and BMP's. The contractor will be responsible for implementing control mechanisms, i.e. silt fences, inlet protection, and street sweeping.

  Alabama A&M University will, at a minimum, perform an inspection of the site every two months to ensure the BMP's and control mechanisms are being implemented and are effective.

  Any deficiencies noted during these inspections will be presented to the construction superintendent or project design engineer or architect for correction.

- **Sites Less than One Acre is Disturbed**

  Construction sites where more than one acre is disturbed or part of a larger development of Alabama A&M University will require the contractor to obtain ADEM Construction Storm Water Permit and follow all applicable requirements of the permit.

  Copies of the permit and inspections will be sent to the EHS department as part of compliance requirements per the permit.

  Alabama A&M University will perform, at a minimum, monthly inspections to ensure control mechanisms and monitoring issues are in place.

  Any deficiencies noted during these inspections will be presented to the construction superintendent or project design engineer or architect for correction.

  Re-inspections may be required until these issues have been corrected.

Post Construction Storm Water Management SOP

The goal of the university's post construction runoff control measure is to ensure that new construction designs do not result in an increase in storm water pollution.

- As part of the site plan review, Alabama A&M University reviews site plans, specifications, and design plans on post construction designs.
- The general contractor for all projects is required to implement post construction design for any undisturbed area. This applies to projects less than and greater than once acre in design.
- Post construction control mechanisms or permanent BMPs are grass seed and straw, sod, and landscaping (i.e. shrubs, trees, mulching). These are some examples that can be implemented to slow down and improve runoff water quality.
- Construction control mechanisms will stay in place until the post construction designs are fully in place.
- This includes significant grass coverage of at least 85% percent. Sod should have begun to root and grow. Control mechanisms will only be removed if the university feels that exposed ground surfaces have been adequately stabilized.
- Once the project is turned over to the university, the Physical Facilities ground's and maintenance contractor is responsible for maintaining the post construction controls.
- The university will ensure the post construction implementations are maintained and report any deficiencies to the contractor.

Housekeeping SOP

The goal of the university is to practice good housekeeping skills to help keep the drainage areas free from debris and trash.

- The Facilities contractor, Aramark, will pick up trash every morning Monday through Friday; primarily while school is in session. Aramark currently spends approximately 2-3 hours picking up trash and disposing of it properly.
- Aramark also works on ensuring that the landscaped areas are covered to prevent storm water runoff and wash-out in prone areas.
- Trash containers prevent trash from getting in drainage culverts and outfall
- Drainage culverts are cleaned out by outside contractors when there are issues with improper drainage.
- **Regulatory Mechanism**

  Records will be kept for any clean out or repairs done to the storm drain culverts.

  Trash pick-up and landscaping are part of the operating procedures and are contract requirements of the Facility's vendor, Aramark.

  Any deficiencies noticed will be pointed out by the contractor and follow-up for other work will be done if needed.

APPENDIX D

Buildings With Potential for Illicit Discharge

	Boilers	Diesel Generators	Water Cooling Towers	Labs	Other*
Ag. Mechanics Crump Building	X				
Agribition Center	X				
Agriculture Research ARC	X			X	
Auther J Bonds School of Engineering	X	X	X	X	
Carter	X	X		X	
Carver	X			X	
Chambers	X	X			
Crump maintenance building	X				
Dawson	X				
Eugene Kendrick Buildings					X
Event Center		X			
Foster Irradiation Center	X				
Gas pump above ground tanks					X
Green House		X			X
Hopkins Hall	X		X		
J.F. Drake Library	X				
Louis Crews Stadium		X			
Mamie Foster Living/Learning	X	X	X		
McCalep Voc Building	X	X			
Morris Hall	X				
Morrison Fine Art	X		X	X	
New Residents Hall	X	X			
Palmer Hall	X				
Patton Hall	X				
Poultry Science	X			X	
Ralph Lee	X				
School of Business	X		X		
Stephens Hall	X				
Student Health & Wellness Center	X		X		
T.M. Elmore Gym	X				
T.R Parker	X				
T.R. Parker Annex	X				
Terry Hall	X				
Thigpen Hall	X				
Thomas Hall	X				
University Service Building					X
Wellness Center		X			
West Campus/ Knight Center	X	X	X		
William Councill	X				
Wilson	X				

* Activities (Garage, Maintenance, Chemical Storage, Fuel Storage)