



**Stormwater Management Program for:
MS4 Permit AL040061
Alabama Agricultural and Mechanical University**

Operator:

Alabama Agricultural and Mechanical University
Normal, Alabama

BMPP Contact(s) / QCP:

GEO Solutions, LLC
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STORM WATER APPENDICES

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1.0 Site Information

Alabama Agricultural and Mechanical University (AAMU) encompasses 2,300 acres. The campus includes roadways with underground storm sewer systems as well as open fields with drainage swales and ditches. The entire campus outfalls at one location at the southwest portion of the property. See Appendix A for the General Location Map.

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.

Project/Site Name: Alabama Agricultural and Mechanical University

Latitude/Longitude of Facility Front Gate: 34.784190, 86.572255

Receiving Water: UT to Pinhook Creek (Normal Branch) 34.771011, -86.582422

The MS4 Permit was obtained July 7, 2017 and is filed under Alabama Agricultural and Mechanical University. The permit number is ALR040061.

Responsible Official: Mr. Brian Shipp, Facilities and Administrative

Responsible Official Phone Number: 256-382-4276

Onsite Contact: Mr. Greg Bryant

Phone Number : 256-372-4090

BMPP Contact:

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2.0 Storm Water Conveyance

The Alabama A&M Campus is constantly growing. In addition to the existing stormwater flow through the campus, there may also be active construction projects within the property boundaries. The construction will typically consist of the demolition of an existing building, clearing of debris, grading and construction of a new building and associated parking areas.

The existing storm sewer system includes curb inlets on paved roadways that lead to an underground storm sewer. The storm sewer system discharges into Normal Branch which traverses the property from north to south. In addition to the underground system, there are several drainage swales and ditches across the property that also lead to Normal Branch. See Appendix B for the Stormwater System Map.

During active construction and water testing, the underground lines may require flushing. These will be conducted in a controlled manner so as not to discharge sediment off site.

3.0 Construction Activity

The Alabama Department of Environmental Management (ADEM) currently requires a General National Pollutant Discharged Elimination System (NPDES) permit for land disturbance/construction activities one (1) acre or greater in size. This permit requires an Erosion Control Plan and a minimum of monthly inspections and reporting. In addition, the reports associated with NPDES compliance are to be submitted to ADEM with a Request for Termination at the close of the project. Prior to construction and land disturbance on the Alabama A&M Campus, a General Permit will be obtained. The inspections will be conducted by a representative of Alabama A&M to ensure that these sites remain compliant under the MS4 permit as well. The site locations and stages of construction will vary.

Final stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site. Temporary stabilization of disturbed areas must be initiated immediately whenever work toward project completion and final stabilization of any portion of the site has temporarily ceased on any portion of the site and will not resume for a period exceeding thirteen calendar days.

4.0 Construction Storm Water Runoff Control SOP

4.1 Site Plan Review

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

4.2 Sites Less than One Acre Disturbed

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

Alabama A&M University will, at a minimum, perform an inspection of each site every two months to ensure the BMP's and control mechanisms are being properly implemented. Any deficiencies noted during these inspections will be presented to the construction superintendent or project design engineer or architect.

4.3 Sites Greater than One Acre Disturbed

Construction sites where more than one acre is disturbed or if part of a larger development at Alabama A&M University will require the contractor to obtain an 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 with the requirements of the inspection.

Alabama A&M University will perform, at a minimum, monthly inspections to ensure that the control mechanisms and appropriate BMPs are in place. Any deficiencies noted during these inspections will be presented to the construction superintendent or project engineer or architect. A follow-up inspection will be conducted to ensure that all corrections have been made.

The Best Management Practices (BMPs) for new construction sites will be site specific. They will address controlling stormwater flow onto and through the project, stabilizing soils and slopes, protecting inlets and providing perimeter controls to prevent the migration of sediment offsite. These BMPs will be inspected regularly according to the NPDES permit and repaired as needed.

13 Day Rule – Soil left undisturbed for more than 13 days will be stabilized with mulch for temporary cover and mulch and grass seed for permanent cover. If sediment reaches

50% capacity of the BMP, sediment will be removed. Sediment cleaned from these BMPs will be removed and disposed of properly. A designated sediment disposal location will be identified on the site. A suitable location will be on level ground and situated away from roads, water features including swales and streams, and storm sewer inlets.

5.0 Good Housekeeping SOP

The Campus of Alabama A&M is active during the college semesters in the fall and spring. During holidays and summer, the campus is less active. Everyday activities will require that the roads and inlets are free of sediment and trash that would result in illicit discharges from the property. Measures should be taken to prevent the sediment and trash from entering the roads and drainage swales. All bare soils and unstable slopes should be stabilized with vegetation and proper grading to prevent further erosion. 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-Friday, primarily while classes are in session. Aramark spends approximately 2 to 3 hours picking up trash and disposing of it properly. The trash container areas are to be kept free of trash to prevent trash from migrating to the drainage culverts and outfall.

Aramark will work to keep the landscaping areas covered to prevent storm water runoff and erosion. The drainage culverts are to be cleaned by an outside contractor when they present an issue with improper drainage.

All vehicles kept on the site need to be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage.

Petroleum products will be stored in labeled tightly sealed containers. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.

No fueling, servicing, maintenance, or repair of equipment or machinery will be done within 50 feet of a stream, or within 100 feet of a stream classified for public water supply (PWS) or Outstanding Alabama Water (OAW), or designated as an Outstanding National Resource Water (ONRW) or a sinkhole.

Only designated entrances will be used for construction access to the site. Mud tracked from the site onto streets and roads will be cleaned on a daily basis if needed. Tracked mud and sediment will be removed with shovels, brooms and/or street sweeper. Removed mud and sediment will be disposed of properly.

Concrete trucks will be allowed to wash only in locations where discharge is directed to a sediment basin or an approved sediment barrier. It is not permissible to discharge concrete wash directly to streams or storm drains.

No fuels, oils, lubricants, solvents, or other hazardous materials can be disposed of on the site. All hazardous material must be properly disposed of in accordance with state law. All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure. Products will be kept tightly sealed in their original containers with the original manufacturer's label. Whenever possible, all of a product will be used up before disposing of the container. Manufacturer's recommendations for proper use and disposal must be followed. See Material Safety Data Sheets for product of concern. The site superintendent or a designated employee will inspect daily to ensure proper usage, storage and disposal of materials.

Water for pressure testing sanitary sewers, flushing water lines, etc., may be discharged only in approved areas and to prevent discharging to surface waters. Discharge of hydrostatic test water may require additional permitting, particularly if chlorinated public water is used.

5.1 Record Keeping

Records will be kept for any clean out or repairs done to the storm drainage culverts. The trash pick-up and landscaping are part of the operating procedures and contract requirement of the facilities vendor, Aramark.

5.2 Corrective Actions

Any poorly functioning erosion controls or sediment controls, non-compliant discharges, or any other deficiencies observed during the inspections shall be corrected as soon as possible, but not to exceed five days of the inspection unless prevented by unsafe weather conditions.

In the event of a breach of a sediment basin/pond, temporary containment measures shall be taken within 24 hours after the inspection. Permanent corrective measures shall be implemented within five days of the inspection and documented; however, if permanent corrective measures cannot be implemented within the timeframes provided herein the Permittee shall contact the Department.

The operator shall promptly take all reasonable steps to removed, to the maximum extent practical, pollutants deposited offsite or in any waterbody or stormwater conveyance structure.

6.0 Illicit Discharge Detection and Elimination SOP

Alabama A&M University's 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 developed corrective actions in the case of one being discovered.

6.1 Reporting an Illicit Discharge

Illicit discharges can be reported by individuals on campus by calling the EHS office number 256-372-4090. An illicit discharge can be detected during inspections on and around the campus.

6.2 Tracing Illicit Discharges

If an illicit discharge is detected or reported as a result of an inspection, the source should be identified immediately. The tracing technique utilized will depend on the type of illicit discharge detected, the information collected during the initial discovery and the resources and technology available. These techniques include visual observation, dye testing, sample collecting and televising.

- **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 indicate whether that the discharge was intermittent or transitory. The investigative techniques used will depend on if the potential source location was identified during the initial observation.
- **Potential source identified:** If a potential source for the illicit discharge was initially identified, steps should be taken to investigate the potential source site. This could occur during an inspection of the site and storm drain system. If floor drains, sumps or other suspected discharge locations are observed during the inspection, dye testing, smoke testing or continuous flow monitoring may be used. These techniques should determine if 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 by visual inspection of the storm drain access points. If the catch basin/manhole inspection technique is unsuccessful, interim steps may be necessary to collect the water from an intermittent discharge. For example, sand bagging, damming or block testing of selected storm drain access points, combined with the installation may help reveal the source of the discharge. If the above-mentioned techniques do not have a positive result (no water pools behind the weir or sand bag), the discharge was likely transitory (one time only) and it may not be possible to

determine its origin. The data should be logged and tracked for any future incidents.

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

6.3 Regulatory Mechanism

If Alabama A&M University discovers a violation of the Illicit Discharge Detection SOP, the individuals or companies may be required to provide verbal or written notice regarding the non-compliance as follows:

- 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.

7.0 Dry Weather Screening SOP

Alabama A&M University shall, at a minimum, visually inspect the outfall annually during dry weather conditions. Should the inspection result in a flow suspected on containing illicit discharges due to the presence of odors, colors or sheens, an investigation should follow. The investigation may include water chemistry field testing and/or bacteriological sampling and will be dependent upon the characteristics of the observed discharge. The investigation will involve the Facilities Management Contractor to trace the source of the suspected illicit discharge. Upon source discovery, measures should be implemented to cease discharge immediately, if possible. If immediate termination is not possible, a plan should be developed. If the source is 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 be notified during the inspection.

8.0 Post Construction Storm Water Management SOP

The goal of the University's post construction runoff control measure is designed to ensure that new construction designs do not result in increased storm water pollution. The following steps are to be followed:

- 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 of the projects are required to implement post construction designs for any undisturbed acreage. This applies to projects that are less than and greater than one acre in design.
- Post construction control mechanisms include, but are not limited to, grass seed and straw, sod and landscaping (i.e. shrubs, trees, mulching). There are some of the steps to be implemented to reduce 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 85% at a minimum and sod that has begun to root and grow. Control mechanisms will only be removed if the University determines that exposed ground surfaces have been adequately stabilized.
- Once the project has been turned over to the University, Physical Facilities Ground and Maintenance Contractor is responsible for maintaining the post construction controls.
- The University will ensure that the post construction implementations are maintained and will point out any deficiencies to the contractor.

9.0 Public Participation and Involvement

The Alabama A&M University campus has an Environmental Department that includes faculty as well as students who are involved in activities on and off campus. The student body is also involved with the City of Huntsville's Green Team and their initiatives as they relate to Alabama A&M University's campus.

9.1 Alabama A&M University's Website

The University has developed a webpage about the storm water on the campus of Alabama A&M University. The webpage provides general information regarding the MS4 permit and provides links to storm water resources. The site is designed to target the student body and faculty at Alabama A&M University.

9.2 Adopt-a-Mile

The Adopt-a-Mile Program is a state wide program that the Alabama A&M student body is participating in. The mile that the volunteers have chosen is along Chase Road which traverses on the southern perimeter of the University's campus. The volunteers clean the one-mile stretch once a month. During their routine checks and maintenance, the students clean up trash and litter to aid in the ongoing beautification of the city.

9.3 Operation Green Team – Keep Huntsville Beautiful

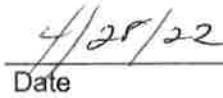
The 2021-2022 Freshman Class of Alabama A&M University participated with the City of Huntsville's Operation Green Team to collect litter at District 1 Cleanup Day. Safety vests, gloves, grabbers and garbage bags were provided to the volunteers to collect litter in the surrounding neighborhoods.

10.0 Certification and Notification

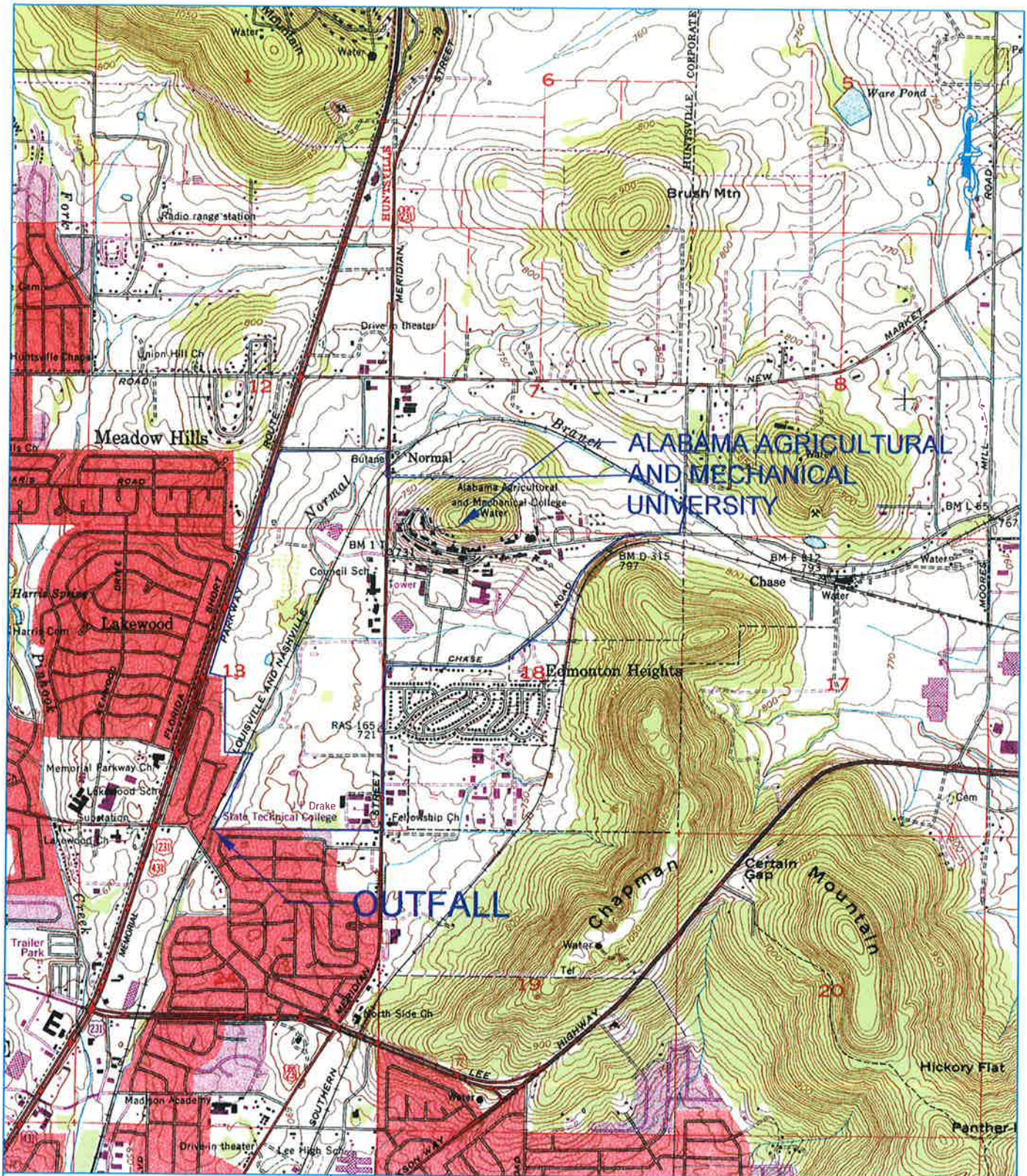
I certify under penalty of law that this Storm Water Management Program and all attachments pertaining to the Alabama A&M University Municipal Separate Storm Sewer System were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered 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 knowing violations.



Mr. Brian Shipp, Facilities and Administrative
Alabama A&M University


Date

Appendix A
General Location Map



ALABAMA AGRICULTURAL
AND MECHANICAL
UNIVERSITY
NORMAL, ALABAMA

FIGURE 1
SITE LOCATION PLAN



7201 Opportunity Boulevard
Huntsville, Alabama 35810
PH (256)837-6708 FX (256)837-6702

SCALE: 1" = 2500'

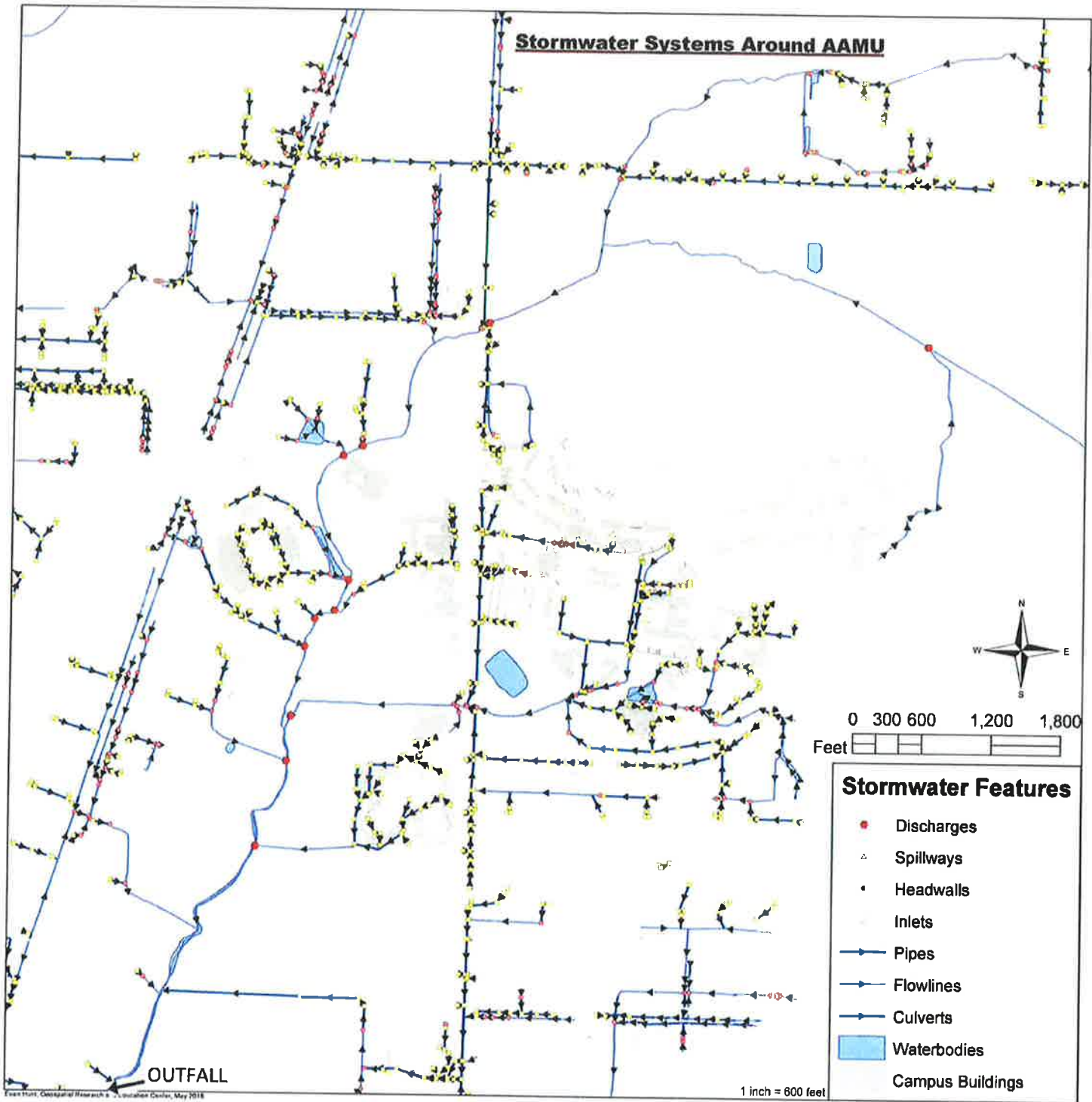
PROJ: 17-0350

DATE: 4/25/2022

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Appendix B
Stormwater System Map

Stormwater Systems Around AAMU



0 300 600 1,200 1,800
Feet

Stormwater Features

- Discharges
- △ Spillways
- Headwalls
- △ Inlets
- Pipes
- Flowlines
- Culverts
- Waterbodies
- Campus Buildings

OUTFALL

1 inch = 600 feet