

**UNIVERSITY OF ARKANSAS AT LITTLE ROCK
(UALR)
STORMWATER
MANAGEMENT PROGRAM
(SWMP)**

To fulfill requirements in the
Small Municipal Separate Storm Sewer System (MS4)
General Permit (ARR040000)
Individual Permit (ARR 040020)

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Attachment 1 - Campus Map

INTRODUCTION

The purpose of this Stormwater Management Program (SWMP) is to comply with Arkansas Department of Environmental Quality's (ADEQ) General Permit (ARR040000) for the discharges of stormwater from the Municipal Separate Storm Sewer Systems (MS4s) of the University of Arkansas at Little Rock (UALR). UALR desires to discharge under that permit and thus has completed the Notice of Intent (NOI) and this SWMP in accordance with Part III and Part V of the permit

STORMWATER MANAGEMENT PROGRAM

UALR has evaluated the permit requirements for the six minimum control measures specified in Part V.B. of the general permit. Based on that review, UALR has selected Best Management Practices (BMP's) for each control measures that UALR believes will accomplish the goal of reducing pollution from stormwater runoff to the maximum extent practicable (MEP).

The action plan is itemized separately by control measures.

QUALIFYING STATE OR LOCAL PROGRAM

UALR has developed new Best Management Practices in response to the need to apply for a municipal stormwater discharge permit. UALR is not aware of any qualifying local or state programs that would adequately address the requirements of the Small MS4 General Permit.

SHARING RESPONSIBILITY

UALR will have the responsibility to implement all measures within this SWMP.

REVIEWING AND UPDATING THE SWMP

UALR will review the SWMP in April of each year starting in 2009 and evaluate the implementation status of the SWMP components as well as the effectiveness of each component or combination of components. UALR will determine how the SWMP needs to be revised, if at all. If the SWMP needs to be revised, UALR will notify ADEQ of any additions. If components of the SWMP need to be replaced, UALR will submit to ADEQ the proposed revisions with an explanation of why the practice is ineffective and why the replacement is expected to achieve the goals of the management practice.

MONITORING

UALR will evaluate program compliance, the appropriateness of identified BMP's, and progress towards achieving identified measurable goals. UALR campus has retention areas for stormwater that eventually drain to the Coleman Creek, which runs into the Fourche Creek Wetlands, which runs into the Arkansas River, which runs into the Mississippi River to the Gulf of Mexico. For UALR at this time, a Total Maximum Daily Load (TMDL) has not been established for the receiving waters. Also, none of these areas are listed on Arkansas's 303(d)

list. Therefore, UALR will not sample and analyze the discharge from the small MS4 at this time.

ANNUAL REPORTS

UALR will submit an annual report to ADEQ by May 1st for the period. Starting in 2005, UALR will submit additional annual reports by May 1, of each year for the preceding period of twelve months. UALR will report on the information required in Part V.G. of the permit.

CONSTRUCTION SITE INSPECTION PROCEDURES

UALR to control sediments, erosion and waste (particularly concrete wastes) will at the time of inspection, if there are any stormwater infractions, UALR will refer these non-compliance activities to ADEQ.

Procedures for site inspection

Inspections will begin in the office with a review of maps and familiarization with area roads, land uses and natural features. Inspectors will then review any documents pertaining to the construction of the area such as SWPPPs, site plan maps, other permits granted to the contractor, records of previous compliance, or NOIs. Inspections will be conducted according to the contract documents. The inspection will be conducted as described below:

1. Introduce himself as the UALR inspector and communicate with the contractor on the types of things the inspector is looking for while on the inspection.
2. Locate the on-site copy of the SWPPP and become familiar with any changes that have been made to the SWPPP.
3. Walk (or slowly drive) the perimeter of the site and note outfalls to water and/or drainage channels.
4. Inspect outfalls for signs of wastes and sediment. Document any waste or sediment.
5. Inspect active and inactive portions of the construction areas for properly installed BMP's and material storage.
6. Communicate with the contractor the status of compliance and if the site will be referred to ADEQ for further investigation.

1. PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

Permit Condition	BMP's	Measurable Goal(s)
<i>Part V.B.1.a.</i>	<p>Establish a web page for the Stormwater Management Program.</p> <p>Collect information from EPA, ADEQ and industry.</p>	<p>UALR is currently finalizing a Stormwater web page to distribute information concerning UALR's stormwater activities including the SWMP itself. Links to applicable sites will be provided and the site will be updated as necessary to include pertinent information on on-going projects.</p> <p>Complete. Information concerning stormwater management is routinely collected and reviewed to ensure BMPs are observed and current.</p>

1. PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS (continued)

TABLE 1.2 Public Education and Outreach: Additional Information	
Permit Citation	Plan
<i>Part V.B.1.b.i.</i>	UALR consists of approximately 13,360 students, staff and faculty. The UALR Hazardous Waste Management Program works in confluence with the SWMP to mitigate the release of chemical pollutants that could subsequently be discharged into MS4 outlets. The UALR campus community is made aware of the hazards and costs of improper disposal of chemicals and products such as, but not limited to, motor oil, paints, solvents, and pesticides. Faculty, staff and students are routinely trained on the handling of such materials.
<i>Part V.B.1.b.iv.</i>	Documents related to the SWMP and NOI are made available on file at the Physical Plant.
<i>Part V.B.1.b.vii.</i>	The UALR Physical Plant Director has ultimate responsibility for implementing and coordinating the education activities. The director may delegate this authority to other UALR Physical Plant staff.

2. PUBLIC INVOLVEMENT/PARTICIPATION

Permit Condition	BMP's	Measurable Goal(s)
<i>Parts V.B.2.a.</i>	UALR Physical Plant developed the SWMP and the Stormwater Management website (under construction).	Physical Plant is responsible for developing the SWMP, BMPs, measurable goals, and advising the UALR campus on stormwater related issues. UALR will continue to encourage feedback from the campus community on the SWMP through the website.
<i>Parts V.B.2.a.</i>	Create activities for students, faculty, and staff to clean-up campus through activities such as the UALR Coleman Creek Clean-up Event & the Earth Day Celebration.	UALR staff encourages students and staff to participate in activities such as UALR Coleman Creek Clean-up Event & the Earth Day Celebration. . ** At various times of the semester*****
<i>Parts V.B.2.a.</i>	Respond to verbal or written inquiries, comments, or concerns about illicit disposal of wastes, etc., and/or requests for information.	UALR will utilize the website as principal contact and devise the best method for handling the inquiries. The UALR contact will review the information and determine the best response. Response may be given over the phone, email or regular mail. The information will be referred to UALR site inspectors for follow-up. Currently, responses are coordinated through the Physical Plant main office and are responded to by assigned staff.
<i>Parts V.B.2.b.</i>	Make the SWMP and Notice of Intent available to students and employees on campus.	The SWMP and Notice of Intent are available to the public and are on file at the Physical Plant and will be available on the Stormwater Management webpage upon completion.

2. PUBLIC INVOLVEMENT/PARTICIPATION (continued)

TABLE 2.2
Public Involvement/Participation: Additional Information

Permit Citation	Plan
<i>Part V.B.2.c.i.</i>	UALR has procedures for making students and employees aware of involvement and participation opportunities within the campus. These opportunities are published in posted notices throughout campus, newspapers, and/or listed on the UALR webpage. Generally, the meetings are open to students and UALR employees to voice comments on the proceedings. All relevant comments are considered. In some instances, students and employees are invited to apply to a committee or commission so that their ideas and voices can be provided to the elected officials. Interested applicants may apply in writing or via electronic applications. Applicants are interviewed by appropriate UALR staff and selected based on specific criteria.
<i>Part V.B.2.c.ii.</i>	UALR provides opportunities for students, faculty, and staff involvement through programs such as, but not limited to, UALR Coleman Creek Clean-up Event & the Earth Day Celebration.
<i>Part V.B.2.c.iii.</i>	The UALR EHS/Stormwater Management website will have a contact/comment option. The extent of review and response will be determined by the volume and subject matter of comments.
<i>Part V.B.2.c.iv.</i>	Notices of meetings and important documents (SWMP, NOI) will be available at the UALR Physical Plant.
<i>Part V.B.2.c.vii.</i>	UALR Designee will be responsible for implementing and coordinating public involvement/participation activities. They may delegate this authority to other UALR staff personnel.

3. ILLICIT DISCHARGE DETENTION AND ELIMINATION

Permit Citation	BMP's	Measurable Goal(s)
<i>Part V.B.3.a.</i>	Encourage cleaning of UALR parking areas.	Prior to onset of the rainy and winter seasons, UALR staff encourages people to clean impervious areas for the purpose of reducing contaminated runoff.
<i>Part. V.B.3.b.</i>	Stormwater drains into Colman Creek retention	UALR utilizes internal and external resources to map the storm drainage system and identify discharge points.
<i>Part V.B.3.c.</i>	The environmental Health and Safety Office has developed programs that address the release of illicit discharges of materials. They are as follows: Hazardous Waste Management, Chemical Hygiene Plan, Chemical Hazardous Communication, and Fluorescent Light Recycling.	UALR will monitor and update these policies as needed. UALR staff will incorporate illicit discharge inspections into regular inspection duties and take reports on illicit discharge sightings and complaints. Enforcement action will be taken on those who violate the policy in accordance with the University's policies and procedures manual.

Permit Citation	BMP's	Measurable Goal(s)
<i>Part V.B.3.d.</i>	UALR trains employees in the detection, collection, and identification of illicit discharges. If discharges or dumping are discovered, appropriately trained staff will determine if illicit discharging has occurred and, if necessary, will be collect samples and send the samples to appropriate facilities for analyses. Sampling will be performed using “in-the-field” test kits. When samples will be taken to a laboratory for analysis, the collection, preservation and analytical method will comply with the appropriate methods specified in the Arkansas Department of Health Services rules.	UALR systematically reviews streets utilizing appropriate UALR staff. The UALR Physical Plant assigns various tasks to inspect streets and grounds and identify possible discharge areas. UALR staff assesses street conditions and prioritizes areas that appear more heavily impacted by illicit discharge activity. If offenders can be identified, UALR staff will notify offenders and hold offenders responsible for clean up.
<i>Part V.B.3.e.</i>	Notify UALR students, employees, and individuals of the hazards and costs of illicit discharges and improper disposal of waste through seminars and/or published and distributed information.	UALR staff will be trained on the hazards of improper waste disposal and dumping. UALR staff will identify what areas are most likely to contribute illicit discharges to the storm sewer system. UALR staff will notify the people responsible in the identified areas that there is (or will soon be) a section in the Physical Plant Policy prohibiting illicit discharges within the UALR and provide literature identifying costs and hazards.
<i>Part V.B.3.f.</i>	UALR staff conducts dry weather field screening on a continual basis. When screening identifies the potential for an illicit discharge, trained UALR staff will perform a follow-up investigation within 15 days of receiving the information to study the information, to determine the source, and to take appropriate action to remedy the situation.	N/A

3. ILLICIT DISCHARGE DETENTION AND ELIMINATION (continued)

TABLE 3.2
Illicit Discharge Detection and Elimination: Additional Information

Permit Citation	Plan
<i>Part V.B.3.g.i.</i>	UALR utilizes dry weather field screening by students and UALR staff and other periodic inspections/screening by UALR staff to identify illicit discharges.
<i>Part V.B.3.g.ii.</i>	UALR has policies and procedures to prohibit illicit discharges through Physical Plant. Physical Plant places restrictions on illicit discharges, construction site waste/runoff, and post-construction design and long-term maintenance.
<i>Part V.B.3.g.iii.</i>	UALR enforces against illicit discharges that occur within the UALR boundaries. UALR has jurisdiction over the land within the UALR boundaries. A map depicting the jurisdictional boundary for inspection and enforcement purposes is attached.
<i>Part V.B.3.g.iv.</i>	UALR considers the discharges listed in Part I.C.2 of the permit to be allowable non-stormwater discharges. These discharges will be allowed to the small MS4 unless the UALR identifies them as a significant contributor of pollutants to the MS4.
<i>Part V.B.3.g.v.</i>	UALR considers non-commercial or charitable events such as charity car washes to be insignificant contributors of pollutants and therefore, these discharges are not prohibited.
<i>Part V.B.3.g.vi.</i>	UALR trains appropriate UALR employees that involve class and field work. UALR staff is informed about the proper channels for relaying information about illicit discharges.
<i>Part V.B.3.g.vii.</i>	UALR will place information on prohibited discharges on the UALR website.
<i>Part V.B.3.g.x.</i>	The UALR Physical Plant Director is responsible for overseeing, implementing, and coordinating illicit discharge detection and elimination activities. The director may delegate this authority to other UALR staff personnel.

4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Permit Citation	BMP's	Measurable Goal(s)
<i>Part V.B.4.a.</i>	UALR requires construction site contractors to submit a Stormwater Pollution Prevention Plan (SWPPP) that includes BMP's for management of the construction site prior to beginning construction. The SWPPP must include a combination of structural and/or non-structural BMP's appropriate to the site. The requirements are for one or more acres. UALR uses a checklist to assess the contractor's plans. Upon proof that the applicant submitted their NOI to EPA and/or ADEQ, UALR will grant approval of the SWPPP.	UALR staff informs operators in pre-construction meetings that a SWPPP will be required for 1 acre and larger sites.
<i>Part V.B.4.b.</i>	UALR follows State requirements that address discharge violations that occur during construction activities and provisions for authority to inspect construction sites.	Stormwater discharge is monitored and mitigated according to BMP's. UALR Physical Plant Staff will incorporate construction site inspections into regular inspection duties and take reports on illicit discharge sightings and complaints. Enforcement action will be taken on those who violate the UALR SWMP.

Permit Citation	BMP's	Measurable Goal(s)
<i>Part V.B.4.c.</i>	UALR will consider the “site plan” to be the SWPPP created by the contractor. UALR will hold pre-construction meetings to describe elements that must be included in the SWPPP (which the contractor will provide) to address UALR’s SWMP. UALR uses a checklist to verify completeness of SWPPPs, calls the contractor to confirm that the SWPPP complies with the UALR’s SWMP, and then send a form letter to the contractor to confirm the telephone contact.	Contractors will use ADEQ’s checklist for completeness of the SWPPP prepared for the ADEQ Construction General Permit.
<i>Part V.B.4.d.</i>	The SWMP addresses discharge violations that occur during construction activities, including discharges of trash oil, and grease. The SWMP provides for an authority to inspect construction sites. Site inspections are performed per contract documents. Inspections will be extended to include sites larger than 1 acre.	A pre-construction stormwater retention plan will be implemented for new construction over 1 acre.

4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (continued)

TABLE 4.2
Construction Site Stormwater Run-off Control: Additional Information

Permit Citation	Plan
<i>Part V.B.4.e.i.</i>	UALR ensures proper management of wastewater on construction sites per State regulations under their General Permit. (See BMP's under Table 4.1) UALR has restrictions to mitigate runoff, particularly for concrete truck washout and trash on the construction site.
<i>Part V.B.4.e.ii.</i>	The State requirements provide UALR with the authority to identify items that do not comply with the SWPPP and notify the contractor to correct them. The SWMP places restrictions on illicit discharges, construction site waste/runoff, and post-construction design and long-term maintenance.
<i>Part V.B.4.e.iii.</i>	UALR follows procedures for Site Inspections and site plan review along with enforcement of control measures.
<i>Part V.B.4.e.iv.</i>	BMP's for <i>Public Information and Outreach on Stormwater Impacts</i> and for <i>Public Involvement/Participation</i> address methods by which the students, staff, and faculty can report on construction site activities to UALR.
<i>Part V.B.4.e.vii.</i>	The Physical Plant Director is responsible for overseeing construction site activities. The idrector may delegate this authority to other UALR staff personnel.

5. POST CONSTRUCTION STORMWATER MANAGEMENT

Permit Citation	BMP's	Measurable Goal(s)
Part V.B.5.a.	UALR is in the process of updating the Master Drainage Plan. Recent rains have shown several drainage problem areas. The Master Plan can be used to develop other relevant stormwater run-off and drainage ordinances that may not yet be written or approved. UALR plans to incorporate the findings of the Master Drainage Study into the SWMP. Inspectors are trained to look for compliance with the stormwater drainage design criteria.	UALR staff will review all current information related to long-term drainage control. Enforcement action will be taken on those who violate the Policy in accordance with the UALR's enforcement code. Future construction projects require pre-construction stormwater retention design.
<i>Part V.B.5.b.</i>	The UALR EHS Committee meets bimonthly to discuss EHS topics to include management of water quality and water quantity.	UALR staff will attend continuing education opportunities for water management issues, when available. The EHS Committee will update policies and provide technical input for the SWMP and revisions to the stormwater drainage design criteria on an annual basis.

Permit Citation	BMP's	Measurable Goal(s)
Part V.B.5.c.	UALR will use SWMP design criteria to address stormwater quality and quantity considering the impact downstream. The SWMP includes maintenance requirements for structural or non-structural BMP's, i.e., detention basins, sediment run-off controls, landscaping or vegetation restoration, etc.	UALR staff reviews all information related to long-term drainage control. Action will be taken on those who violate the SWMP in accordance with the UALR's enforcement code.
Part V.B.5.d	The SWMP requires that contractors institute long-term operation and maintenance BMP's.	UALR educates contractors about the SWMP's long-term maintenance requirements during pre-construction meetings. When UALR receives the Notice of Termination (by checking the ADEQ Smart NOI database), UALR will send the operator a letter to remind them of the requirement to sign a statement that BMP's will be maintained at the site.

5. POST CONSTRUCTION STORMWATER MANAGEMENT (continued)

TABLE 5.2 Post Construction Stormwater Management: Additional Information	
Permit Citation	Plan
<i>Part V.B.5.e.i.</i>	UALR includes post-construction stormwater management measures in its SWMP. UALR established a technical committee of water quantity and quality staff for integrating requirements of programs. The committee will use the Master Drainage Plan as a basis for evaluating appropriate recommendations for the SWMP.
<i>Part V.B.5.e.ii.</i>	UALR has policies and procedures to control post-construction runoff through its SWMP. The Policy places restrictions on illicit discharges, construction site waste/runoff, and post-construction design and long-term maintenance.
<i>Part V.B.5.e.iii.</i>	Compliance procedures are specified in the Site Inspection Procedures. These procedures apply to current and new construction, and may change depending conditions and developments.
<i>Part V.B.5.e.iv.</i>	BMP's for <i>Public Information and Outreach on Stormwater Impacts</i> and for <i>Public Involvement/Participation</i> address methods by which the contractor may learn about project designs that minimize water quality impacts. SWMP requirements will be explained initially during the construction review stage, during preconstruction conferences, and as required thereafter based on contractor needs, problems uncovered during site inspections, or SWMP modification.
<i>Part V.B.5.e.vii.</i>	The UALR Physical Plant Director is responsible for overseeing post construction stormwater management. The director may delegate this authority to other UALR staff personnel.

6. POLLUTION PREVENTION/GOOD HOUSEKEEPING

Permit Citation	BMP's	Measurable Goal(s)
<i>Part V.B.6.a.i.</i>	Continuous updating of UALR policies and documents related to pollution prevention that includes maintenance activities, schedules, and inspection procedures for structural and non-structural controls to reduce floatable and other pollutants dumped into streets, etc. Physical Plant will oversee the development of a UALR Pollution Prevention Plan. The revised UALR Pollution Prevention Plan addresses storage of materials, proper materials handling, drainage, and drywell cleaning procedures and in-house safety /environmental inspections.	Physical Plant reviews current applicable documents and procedures. UALR appoints a knowledgeable staff member as a trainer. An initial training will be scheduled upon completion of a revised UALR Pollution Prevention Plan. Refresher training will occur on an annual basis. New employees will be trained along with training on safety and other aspects of the UALR Pollution Prevention Plan.
<i>Part V.B.6.a.ii.</i>	UALR identifies streets needing drainage repair and incorporates water quality improvements into new drainage designs per the Master Drainage Plan.	The UALR Physical Plant department assesses drainage system for oil, grease, odor, algae growth and trash and provides the pollution prevention coordinator with information on problematic areas.

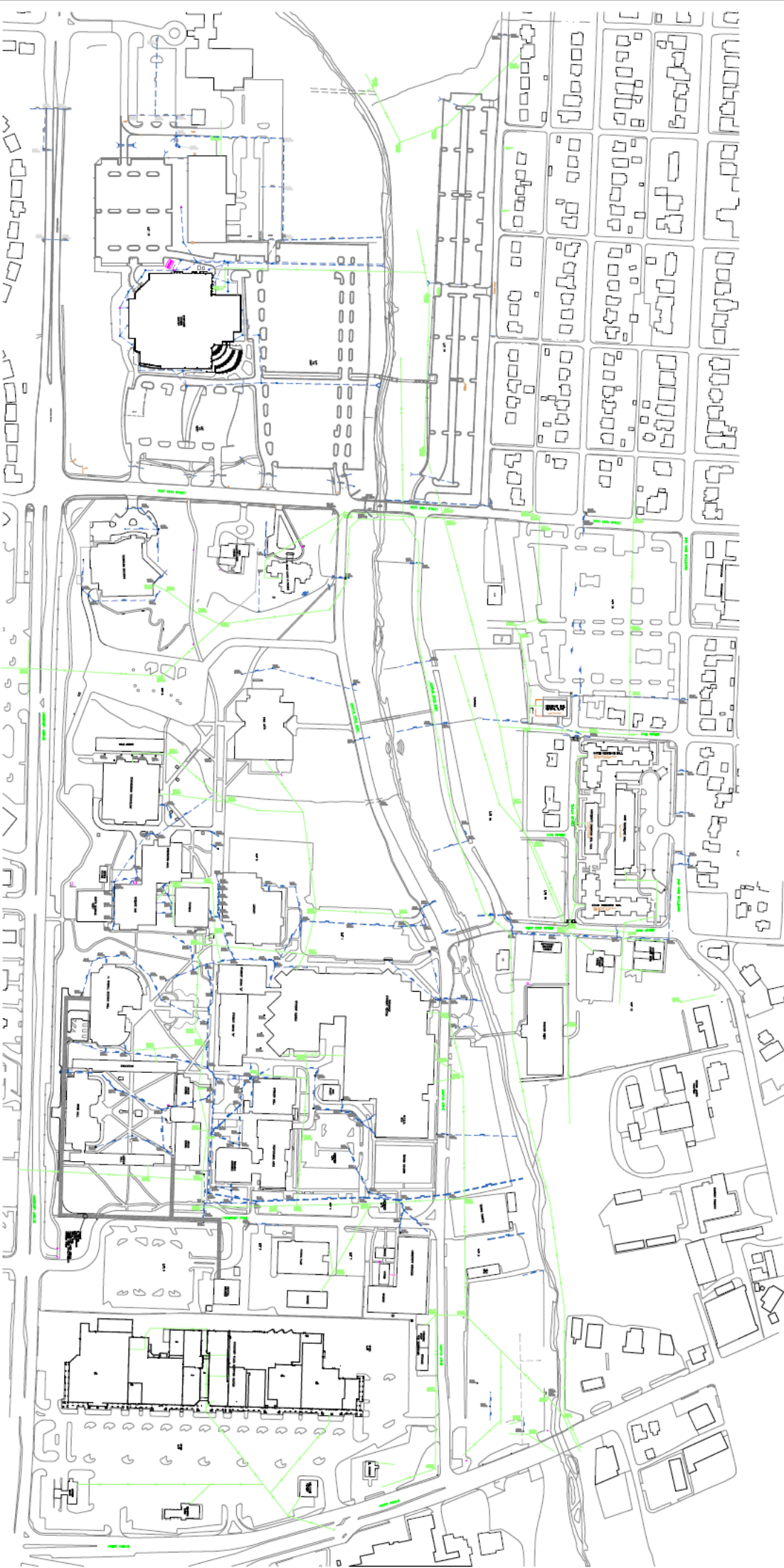
Permit Citation	BMP's	Measurable Goal(s)
<i>Part V.B.6.a.ii.</i>	Campus parking lots, storage yards and fleet maintenance facilities are monitored for oil and grease runoff. UALR may consider adding oil/water separators to some facilities.	<p>UALR staff is asked to qualitatively monitor for oil and grease sheens leaving the parking lot, storage yards and fleet maintenance yards. Staff is asked to make recommendations to the Physical Plant Director concerning possible installation of oil/water separators.</p> <p>The Physical Plant Director investigates potential for installation of oil/water separators. If oil/water separators are to be installed, UALR addresses the schedule to do so in future annual reports and/or revisions to the SWMP.</p> <p>The UALR staff member selected as the trainer incorporates any BMPs for road maintenance into the Pollution Prevention Plan and associated training.</p>
<i>Part V.B.6.a.iii.</i>	UALR uses existing waste disposal services to remove waste. Floatables and other debris collected on site and as part of drainage clean-up efforts are taken to dumpsters that are served by the UALR's waste disposal services.	<p>As part of the illicit discharge detection efforts, maintenance staff removes floatables. These persons are educated in proper methods for disposal of floatable and other waste materials. Floatables are removed in conjunction with dry weather field screenings.</p>

6. POLLUTION PREVENTION/GOOD HOUSEKEEPING (continued)

TABLE 6.2
Pollution Prevention/Good Housekeeping: Additional Information

Permit Citation	Plan
<i>Part V.B.6.b.i.</i>	The following operations impacted by this operation and maintenance program are: <ul style="list-style-type: none"> • The UALR Physical Plant
<i>Part V.B.6.b.ii.</i>	Employee training includes aspects of the UALR Pollution Prevention Plan that is to be developed by Physical Plant.
<i>Part V.B.6.b.v.</i>	The UALR Physical Plant Director is responsible for implementing and coordinating employee training and pollution prevention activities. The director may delegate this authority to other UALR staff personnel

UNIVERSITY OF ARKANSAS AT LITTLE ROCK



LEGEND	
	STORM DRAIN
	SEWER
	WATER
	TELEPHONE
	CABLE TELEVISION
	UTILITY UNKNOWN
	NEW STORM DRAIN
	NEW SEWER
	NEW WATER
	NEW TELEPHONE
	NEW CABLE TELEVISION
	NEW UTILITY UNKNOWN
	EXISTING STORM DRAIN
	EXISTING SEWER
	EXISTING WATER
	EXISTING TELEPHONE
	EXISTING CABLE TELEVISION
	EXISTING UTILITY UNKNOWN

UNIVERSITY OF ARKANSAS AT LITTLE ROCK

UP-3 SITE MAP	UNIVERSITY OF ARKANSAS LITTLE ROCK, ARKANSAS SEWER & STORM DRAINS UTILITY PLAN	UPDATE OF 2004 SURVEY PLAN TO INCLUDE SEC. 1083MS & PLAZA 7/27/09
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