City of Jonesboro

Land Disturbance & Erosion and Sediment Control Standards

Best Management Practice Guide for Residential Construction

November 2017
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INTRODUCTION

Erosion is a natural process of the loosening and removal of soil and rock. Natural erosion occurs at a very slow rate. When land is disturbed during grading and other construction activities, the erosion rate increases dramatically. When erosion occurs on a construction site, sediment is available for transport by wind or stormwater runoff. The discharge of sediment and other construction site pollutants can negatively affect downstream water quality.

Both erosion and sediment control practices are required on construction sites to prevent sediment from leaving the site.

Erosion control prevents erosion from occurring at construction sites by keeping soil in place. Examples include mulch, erosion blankets, seeding, and site phasing.

Sediment control captures eroding sediments and keeps them on-site and away from surface waters. Examples include settling basins and sediment traps, rock checks, silt fence and straw wattles (fiber rolls).

It is much cheaper to prevent erosion than it is to capture sediment.

Best Management Practices (BMPs) are schedules of activities, prohibitions of practices, maintenance procedures, structural, vegetative and managerial practices, that when used individually and in combination, prevent or reduce the release of pollutants to streams, creeks and waterways.

This guide provides an overview of typical BMPs that may be used for residential building construction within the city limits of Jonesboro.

The BMPs provided herein may not be suitable for all construction sites and other techniques may be necessary in some instances.

The building permit holder is responsible for ensuring that appropriate BMPs are in place and functioning at their construction site until all land disturbance activities are complete and the disturbed area fully stabilized.
PERMIT RESPONSIBILITIES

Permittee

Pre-Construction:
1. Post the Construction Site Notice at the site. Notice must be visible from the street.
2. Install temporary construction entrance.
3. Install erosion and sediment controls per approved plan.

During Construction:
4. Perform weekly site inspections.
5. Keep a copy of the Stormwater Pollution Prevention Plan (SWPPP) and weekly inspections on site.
6. Update SWPPP (installation date of BMPs, changes in BMPs, etc...) as needed.
7. Maintain the construction entrance, erosion and sediment controls.
8. Remove off-site sediment discharge and tracking immediately.

Post Construction:
10. Stabilize the entire disturbed area.
11. Terminate permit.

The City of Jonesboro:
1. Perform routine inspections of each residential construction site.
2. Review all site documents.
3. Notify permittee of violations via “Warning Notice” (verbal or written).
4. Issue “Stop Work Order” if needed.
5. Cite permittee to court if necessary.

The lack of erosion and sediment controls on this site results in polluted water and compliance violations.
CONSTRUCTION SITE NOTICE

SITE WITH AUTOMATIC COVERAGE (LESS THAN 5 ACRES)
CONSTRUCTION SITE NOTICE

FOR THE
Arkansas Department of Environmental Quality (ADEQ)
Storm Water Program
NPDES GENERAL PERMIT NO. ARR150000

The following information is posted in compliance with Part I.B.8.b of the ADEQ General Permit Number ARR150000 for discharges of stormwater runoff from sites with automatic coverage. Additional information regarding the ADEQ stormwater program may be found on the internet at:

www.aedq.state.ar.us/water/branch_npdes/stormwater

<table>
<thead>
<tr>
<th>Permit Number:</th>
<th>ARR150000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Name:</td>
<td></td>
</tr>
<tr>
<td>Phone Number:</td>
<td></td>
</tr>
<tr>
<td>Project Description (Name, Location, etc.):</td>
<td></td>
</tr>
<tr>
<td>Project Start Date:</td>
<td></td>
</tr>
<tr>
<td>Project End Date:</td>
<td></td>
</tr>
<tr>
<td>Total Acres:</td>
<td></td>
</tr>
<tr>
<td>Grading Permit Number:</td>
<td></td>
</tr>
<tr>
<td>Location of Stormwater Pollution Prevention Plan:</td>
<td>Inside Mailbox on Site</td>
</tr>
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</table>

For Construction Sites Authorized under Part I.B.6.b (Automatic Coverage) the following certification must be completed:

I (Typed or Printed Name of Person Completing this Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part I.B.2. of the ADEQ General Permit Number ARR150000. A stormwater pollution prevention plan has been developed and implemented according to the requirements contained in Part II.A.2.II & D of the permit. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title

Date

- LAMINATE AND POST AT JOB SITE
- NOTICE MUST BE VISIBLE FROM STREET

Note:

1. Sites larger than 5 acres, contact the engineering office for requirements.
Notes:

1. Stone Size - One to two-inch stone recommended.
2. Length - As required to prevent trackout, minimum of 25 feet.
3. Thickness - Not less than six inches.
4. Width - 12-foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth – Recommended to place over the entire area prior to stone placement.
6. Surface Water - Flowing over the construction entrance should be piped or bermed to prevent washout.
SILT FENCE

Typical: Install at Right-of-way line (property line), not back of curb.

Notes:
1. The height of the silt fence shall be 16 to 30 inches above the ground surface.
2. Fasten the fence to the upslope side of the posts using a minimum of 1" inch long, heavy-duty wire staples or tie-wires.
3. Back fill the trench with dirt or gravel and compact.
4. Wire mesh backed silt fence recommended.
5. Install along front lot line and along the lot line of adjacent properties located downhill.
6. Install to the back of sidewalks if sidewalks are present.

Maintenance:
Remove any buildup of silt or sediment behind silt fence when it exceeds more than half the originally installed fence height.
FIBER ROLLS / WATTLES

Typical: Install at Right-of-way line (property line), not back of curb.

Notes:
1. On slopes, install fiber rolls along the contour with a slight downward angle at the end of each row to prevent ponding at the midsection.
2. Typically, install rolls along sidewalks and front lot lines to keep sediment from washing onto sidewalks, streets, gutters and storm drains.

Maintenance:
Remove any buildup of silt or sediment behind wattles when it exceeds more than half the originally installed wattle height.
The erosion control blankets are biodegradable materials used to protect disturbed slope and channel areas from wind and water erosion. The blanket materials are natural materials such as straw, wood excelsior, coconut, or are geotextile synthetic woven materials such as polypropylene.

Seed and mulch exposed soil after finish grading has been completed, or areas where no activity has occurred for more than 14 days.

Sodding is a permanent form of erosion control that involves laying a permanent cover of grass sod on exposed soils. In addition to stabilizing soils, sodding can reduce the velocity of storm water runoff. Sodding can provide immediate vegetative cover for critical areas and stabilize areas that cannot be vegetated by seed. It can also steady channels or swales that convey concentrated flows and can reduce flow velocities.
Notes:

1. Sediment controls behind the curb may also be necessary to prevent the discharge of sediment.
Notes:

1. Space stakes evenly around the perimeter of the inlet at a maximum of 3 feet apart and 18 inches deep.
2. Make a frame of 2 x 4 wood strips around the crest of the overflow area at a maximum of 1 1/2 feet above the crest.
3. Fasten fence with staples, or wire it to the stakes and frame.
4. Backfill the bottom of the fence in a trench and compact.
OTHER POLLUTANTS

- **Construction Waste** – must dispose of at a licensed solid waste management site and not be buried or burnt on-site.

- **Concrete Truck Washout** - cannot make contact with storm waters or natural streams. All concrete washout must be contained on-site or a designated area within the common development.

- **Fueling** - Provide secondary containment barriers for fuel stored on-site.

- **Fertilizers** - Follow the manufacturer’s directions and store in a covered area or watertight container.

- **Hazardous Materials** - Store hazardous materials such as oils, greases, paints, fuels, and chemicals in a covered area with secondary containment. Dispose of these items according to state regulations and manufacturer’s recommendations.

- **Petroleum Products** – Store in clearly labeled and tightly sealed containers or tanks. Wastewater from paint, drywall, stucco or masonry cannot enter the stormwater system or be disposed of where it can eventually wash into creeks and streams.

- **Sanitary Waste** – Maintain portable units through a state licensed sanitary waste management contractor.

- **Dewatering** – Pump trenches, foundations or other excavated areas so as not to deposit sediment off-site or cause erosion. Use filter bags, sediment traps or a vegetated area to filter sediment.
## INSPECTION REPORT

### Residential Construction Inspection

- **Site Address:** ___________________________  
- **Date of Inspection:** ______________  
- **Time:** ________ AM / PM
- **Inspector Name:** ___________________________  
- **Inspector Title/Company:** ___________________________

**Type of Inspection:**  
- [ ] Weekly  
- [ ] Pre-storm event  
- [ ] Storm event  
- [ ] Post-storm event  
- [ ] Other

**Any discharges occurred since last inspection?**  
- [ ] Yes  
- [ ] No  
- **If yes:**  
  - [ ] Sediment  
  - [ ] Other Pollutant (describe) ___________________________

**Any discharges during inspection?**  
- [ ] Yes  
- [ ] No  
- **If yes:**  
  - [ ] Sediment  
  - [ ] Other Pollutant (describe) ___________________________

**Site Postcard?**  
- [ ] Yes  
- [ ] No

**Posting Legible?**  
- [ ] Yes  
- [ ] No

**BMP# in Mailbox?**  
- [ ] Yes  
- [ ] No

**All Inspections in Mailbox?**  
- [ ] Yes  
- [ ] No

**If No, Corrective Action:** ___________________________

### BMP’s

<table>
<thead>
<tr>
<th>BMP</th>
<th>Installed?</th>
<th>Require Maintenance?</th>
<th>Corrective Actions and Notes</th>
</tr>
</thead>
</table>
| Silk Fence   | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Concrete Washout | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Damptrapper  | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Porta Potty  | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Inlet Protection | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Construction Entrance | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Soil Stockpile Protection | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| (Other)      | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |

### ACTIVITIES

<table>
<thead>
<tr>
<th>BMP/Activity</th>
<th>Implemented?</th>
<th>Require Maintenance?</th>
<th>Corrective Actions and Notes</th>
</tr>
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| All slopes and disturbed areas not actively being worked properly stabilized? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Perimeter sediment controls (e.g., silt fence, silt basins, etc.) in proper working condition? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Discharge points and receiving waters free of any sediment deposits? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Storm drain inlets clear of sediment and debris and properly protected? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Construction not preventing sediment from being washed into the street? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Trench/Slit fill from work areas collected and placed in containers? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Waste/track facilities (pont, stucco, concrete, etc.) being utilized and maintained? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Materials, potential stormwater contaminants, stored inside or under protective cover? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| Non-storm water discharges (wastewater, silt water, de-watering, etc.) properly controlled? | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |
| (Other)      | [ ] Yes  
- [ ] No  
- [ ] NA | [ ] Yes  
- [ ] No  
- [ ] NA | |

"I certify under penalty of law that this document and all attachments such as inspections forms were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry, the person or persons responsible for gathering this information, to the best of my knowledge and belief, is 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.

Signature of Responsible or Cognizant Official: ___________________________  
Date: ____________
HELPFUL LINKS:

City of Jonesboro Engineering: http://www.jonesboro.org/139/Engineering

City of Jonesboro Planning & Zoning http://www.jonesboro.org/168/Planning-Zoning

City / County Map: http://www.efsedge.com/craighead/

SWPPP Template: http://www.jonesboro.org/DocumentCenter/Home/View/2925

Construction Site Notice: http://www.jonesboro.org/DocumentCenter/Home/View/584

Site Inspection Form: http://www.jonesboro.org/DocumentCenter/Home/View/542
Courtesy of the City of Jonesboro

Created by the Engineering Department – Stormwater Division