

STORMWATER POLLUTION PREVENTION PLAN

As required by the

LARGE CONSTRUCTION GENERAL PERMIT

**Grayson Creek
Proposed Residential Subdivision
City of Southaven,
DeSoto County, Mississippi**

Prepared for

**Pinnacle Development, LLC
SOUTHAVEN, MISSISSIPPI**

Prepared by

**WARD ENGINEERING, INC.
CIVIL ENGINEERING & SURVEYING SERVICES
RIPLEY, MISSISSIPPI**

FEBRUARY, 2021

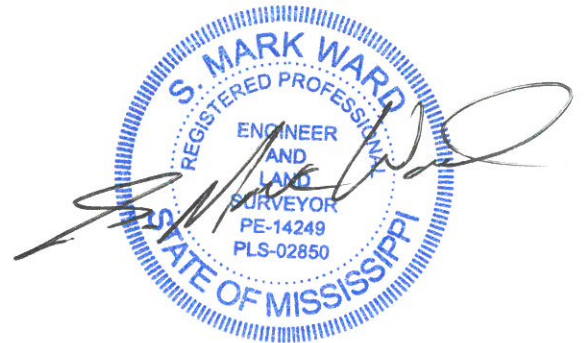


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**STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
GRAYSON CREEK
PROPOSED RESIDENTIAL SUBDIVISION
DESOTO COUNTY, MISSISSIPPI**

SITE INFORMATION

The Grayson Creek project site located on the North side of Star Landing Road East, between Marcia-Louise Drive and Swinnea Road, in Southaven, Mississippi, is a proposed residential subdivision location.

The subject property for the project site is owned by Pinnacle Development, LLC. The proposed project involves general site grading, construction of roads and drainage structures, and the installation of utilities. Construction activities will disturb a total of approximately 26 acres, with approximately 21 acres being developed in conjunction with Phase 1 activities and the remaining 5 acres in the development of Phase 2.

The dominant soil types in this area are Silt Loams. The erosion potential of the native soils is rated as low to moderate. The major soil types identified by the Natural Resources Conservation Service (NRCS) Soil Maps include the following:

- GK – Gullied land, Loring soil material
- Cl – Collins and Falaya silt loams, local alluvium phases
- Lc – Loring silt loam, 2 to 5 percent slopes, moderately eroded, central
- Ga – Grenada silt loam, eroded, very gently sloping phase

The existing soils ratings are described as moderately well drained with a minimum capacity to transmit water rated as moderately low to high (0.00 - 2.00 in/hr).

This Plan has been prepared in accordance with sound engineering practices. It has been developed to assist Pinnacle Development, LLC (Developer) in the management of storm water during construction activities, as required by the LARGE CONSTRUCTION STORM WATER GENERAL PERMIT for land disturbing activities of five (5) or more acres.

A written copy of this Plan and associated documents will remain at the project site until project completion. Upon request, the Plan will be made available for review by authorized state agency, or regional or local storm water management representatives.

Site Drainage

This area of Desoto County, Mississippi has a high rainfall potential. Precipitation ranges from three (3) to six (6) inches per month can be expected. Rain-water falling on the affected property primarily flows by way of sheet flow and drainage ditches and is discharged into a tributary to Horn Lake Creek. Site elevations along with the existing and proposed drainage structures for the project are shown in the attached Figures (Project Drawings).

EROSION CONTROL

Preventive Maintenance

Storm Water Management Devices

The preventive maintenance program applies to the following storm water equipment and systems used on-site to minimize pollutants from entering storm water:

Diversions of upslope waters around disturbed areas; Limiting exposure of disturbed areas to the shortest time possible; disturbing the smallest area possible; preserving existing vegetation where possible; preserving vegetated buffer zones around any creek, drain, lake, pond, or wetland; slow rainfall runoff velocities to prevent erosive flows; filter runoff by using natural vegetation, brush barriers, silt fences, hay bales, etc.

The project site will incorporate **Vegetative, Structural, and Non-Structural** control measures to reduce pollutants in storm water runoff.

Vegetative Storm Water Controls

Vegetative controls refer to a variety of landscaping practices that provide pollutant removal for a site primarily by limiting sediment movement and preventing erosion. Vegetative control can include grassed swales, filter strips (buffer zones), landscaping and cover with trees, shrubs, vines, hay, bark, mulch or straw.

The project site will utilize grass filter strips (buffer zones) as vegetative storm water control. A buffer area of at least fifteen (15) feet shall be in place adjacent to the right-of-way line and at least five (5) feet adjacent to any existing drainage ditches or swales. The buffer area can either be the existing vegetation that is left undisturbed or re-established by planting new vegetation if clearing and grubbing was required. Vegetative controls will be located in all erosion areas.

Exposed soils will be seeded with grass immediately after grading and construction activities have temporarily or permanently ceased on any portion of the site.

Temporary seeding will be utilized by placing fast growing annual grasses. If exposed soils are to be left undisturbed for 14 days or more, those soils will be seeded temporarily with grass and/or mulch immediately (no later than the next work day). Any soil material stock-piled on the site will be protected by silt fence maintained on the lower elevation contours. Temporary mulch-stabilization cover will be applied immediately (no later than the next work day) to any stockpile if it will not be in use for greater than 14 days.

Permanent seeding will be placed in completed areas or areas where no further construction work is expected within 14 days of the conclusion of land disturbing activities, except where permanent structural controls are implemented. These areas will utilize perennial grasses to

stabilize the soil. Decisions may be made to sod some areas where immediate permanent vegetation is needed.

Structural Control Measures

The following provides a brief narrative of structural control measures to be used on-site and their function.

Construction entrances/exits (gravel drives) will be provided for the proposed project **at designated locations**. Graveled construction entrances and exits provide a stable platform for vehicles entering the existing roadway, reduces tracking of soil onto the roadway, and keeps erosion to a minimum. The exact locations will be field determined. The gravel drives will be installed and maintained as shown in the gravel drive details.

Silt fence barriers will be used as the primary perimeter control used to contain sediment down stream from construction or disturbed areas created by sheet flow. Temporary wire-backed silt fencing will be installed to prevent sediment from leaving the construction site. The fence will be installed and maintained in accordance with project drawings as included in the Figures. 20" wattle filter breaks may be used to release water as needed at natural outfall points. All silt fence will be properly maintained and accumulated silt will be removed when it reaches a height of $\frac{1}{3}$ to $\frac{1}{2}$ of the control height. 20" wattles will be utilized to provide additional silt control in areas where silt accumulation is expected to exceed the capacity of a silt fence.

Velocity dissipation devices (Ditch Checks) slow the flow of storm water discharged from the facility to lessen the amount of erosion caused by the discharge. Rock Ditch Checks and Check Dams consist of 200# Rip-Rap, usually limestone, placed in drainage ditches or along swales to slow the velocity of storm water runoff, provide for trapping of sediments and keep erosion to a minimum. Rock Ditch Checks shall be lined with a geo-textile fabric to increase efficiency. Type 5 Geo-textile fabric or equal will be placed and pinned under rock ditch checks and rock berms.

Ditch checks can be removed for maintenance and/or replacement but must remain in place until upslope areas have been permanently stabilized.

Storm Drain Protection utilizes pre-manufactured siltation guards, silt fencing, wattles, sand bags, or other necessary means to surround storm water inlet locations and stop sediment from entering storm water piping or culverts. All existing drainage culverts on the subject site will be protected during the construction phase to prevent sediment from leaving the site.

Sediment Traps (Filter Berms) will be utilized to protect all concrete pipe flared end sections either by encircling the top, wing walls, and flow lines with 20" wattles, or by the use of Rock (rip-rap) check dams at the ends of culverts or channels to reduce the depth velocity and energy of water to minimize downstream erosion.

Temporary Concrete Washouts Facilities will consist of a temporary dug pit or bermed area of sufficient volume to completely contain all liquid and waste concrete materials

generated during washout procedures. They should be located a minimum of 50 feet from storm drain inlets, open drainage facilities, and watercourses. Each facility should be located away from construction traffic or access areas to prevent disturbance or tracking. A sign should be installed adjacent to each facility to inform concrete equipment operators to utilize the proper facilities. Once concrete wastes are washed into the designated area and allowed to harden, the concrete should be broken up, removed, and disposed of offsite in a legal manner. Dispose of hardened concrete on a regular basis. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Housekeeping Practices

Good housekeeping is a non-structural storm water control measure used to minimize potential pollution from on-site sources. Housekeeping measures include preventative maintenance, neat and orderly storage of materials, etc.

The project site follows good housekeeping procedures to reduce the possibility of accidental spills and to minimize safety hazards to facility personnel. Key elements of a good housekeeping program include the following:

- Trash collection bins are to be placed in appropriate locations.
- Chemicals, fertilizers or any other potentially toxic materials will not be stored onsite.
- Portable sanitary facilities (if not easily accessible) will be provided for construction workers.
- Major equipment maintenance and repair operations will be performed offsite as much as possible. In the case of equipment breakdown on site, good housekeeping measures will be performed on an as needed basis to prevent pollutants from entering storm water.
- Permanent fuel stations will not be located on this project site. Fuel will be accessed from an existing fuel supplier located offsite.
- Temporary concrete washout facilities should be maintained to provide adequate holding capacity with a minimum freeboard of 4 inches for above grade facilities and 12 inches for below grade facilities. Maintaining washout facilities should include removing and disposing of hardened concrete and returning the facilities to a functional condition. Washout facilities must be cleaned or new facilities must be constructed and ready for use once the washout is 75% full.

Post Construction Control Measures

For this project, the primary means of post construction control will consist of disturbed areas receiving permanent seeding/sodding and mulch. This will occur to provide post-construction control measures following completion.

IMPLEMENTATION

Before construction activities begin, erosion, sedimentation, and storm water controls will be planned as delineated on project drawings and in this plan. During the construction project, the need for different and/or additional erosion controls may arise due to a failure of a control or a change in the construction activities. The developer is responsible for implementing all necessary erosion controls to minimize impact on receiving waters.

Erosion controls will be implemented during the course of the project. These guidelines and sequences are typical for a project of this nature and allow that several areas of the project area may be under construction at one time. Controls will not be installed on segments where construction has not started. Prior to construction activities in each area, the controls will be installed following the general guidelines and project drawings. The exact controls to be installed are subject to modification during the project. **Developer/contractor must notify the permit Board at least 30 days prior to any planned changes in project operations that may affect storm water discharges.** Implementation of the controls for specific areas of work will proceed according to the implementation sequence as follows:

General Implementation Sequence

Phase I – Perimeter Controls

- Obtain plan approval, and all applicable permits.
- Hold pre-construction meeting with contractor to review schedule and implementation of erosion control procedures.
- Install Flagging of Clearing / Work Limits.
- Install silt fencing for new work areas as indicated on Project Drawings. (Rough clearing and grubbing may be necessary in some areas prior to installation of silt fencing).
- Construct construction entrances and exits to minimize offsite tracking of sediments.
- Clearing & Grubbing of immediate work area.

Phase II – Intermediate Controls

- Excavation, rough grading, construction of stormwater detention basins, pipes, inlets, etc.
- Installation of stormwater drainage inlet / outlet controls.
- Installation of concrete washout structures.
- Installation of silt fences around toe of newly constructed slopes.
- Installation of ditch checks, wattles, check dams, or other controls as necessary to control sediment in newly constructed areas.
- Install temporary seeding (for areas to be left undisturbed for more than fourteen (14) days).

Phase III – Final Controls

- Permanent Seeding, landscaping and matting of finished roadways and ditches.
- Installation of permanent outlet protection of newly constructed culverts.
- Removal of temporary controls once site is completed and stabilized.

Site Specific Implementation

- Gravel Construction Entrances/ Exits will be constructed at each connection of the site to a public road.
- Portable Sanitary Facilities, Material Lay-down Areas, and Employee Parking will be located at a designated area.
- Concrete Washout Locations will be located at a designated area during construction.
- Permanent stormwater detention basins will be placed as earthwork operations progress. See plan drawings for grading details.

Inspection

Check all disturbed areas, erosion and sediment controls:

- At least once per week.
- Prior to any anticipated storm event.
- After each rainfall event that produces a discharge.
- As often as necessary to ensure that appropriate erosion and sediment controls have been properly constructed and maintained and determine if additional or alternative control measures are required.

Documentation of Inspections

All Inspections and significant rainfall events must be documented (See Inspection Form shown in figures).

Documentation must include the day and time the inspection was performed, who performed the inspection, any deficiencies noted, and corrective action needed. Documentation of all inspections must be kept onsite with this plan.

Inspections must continue until such time the planned construction activities have been completed, land disturbing activities have ceased, and disturbed areas have been stabilized with no significant erosion occurring.

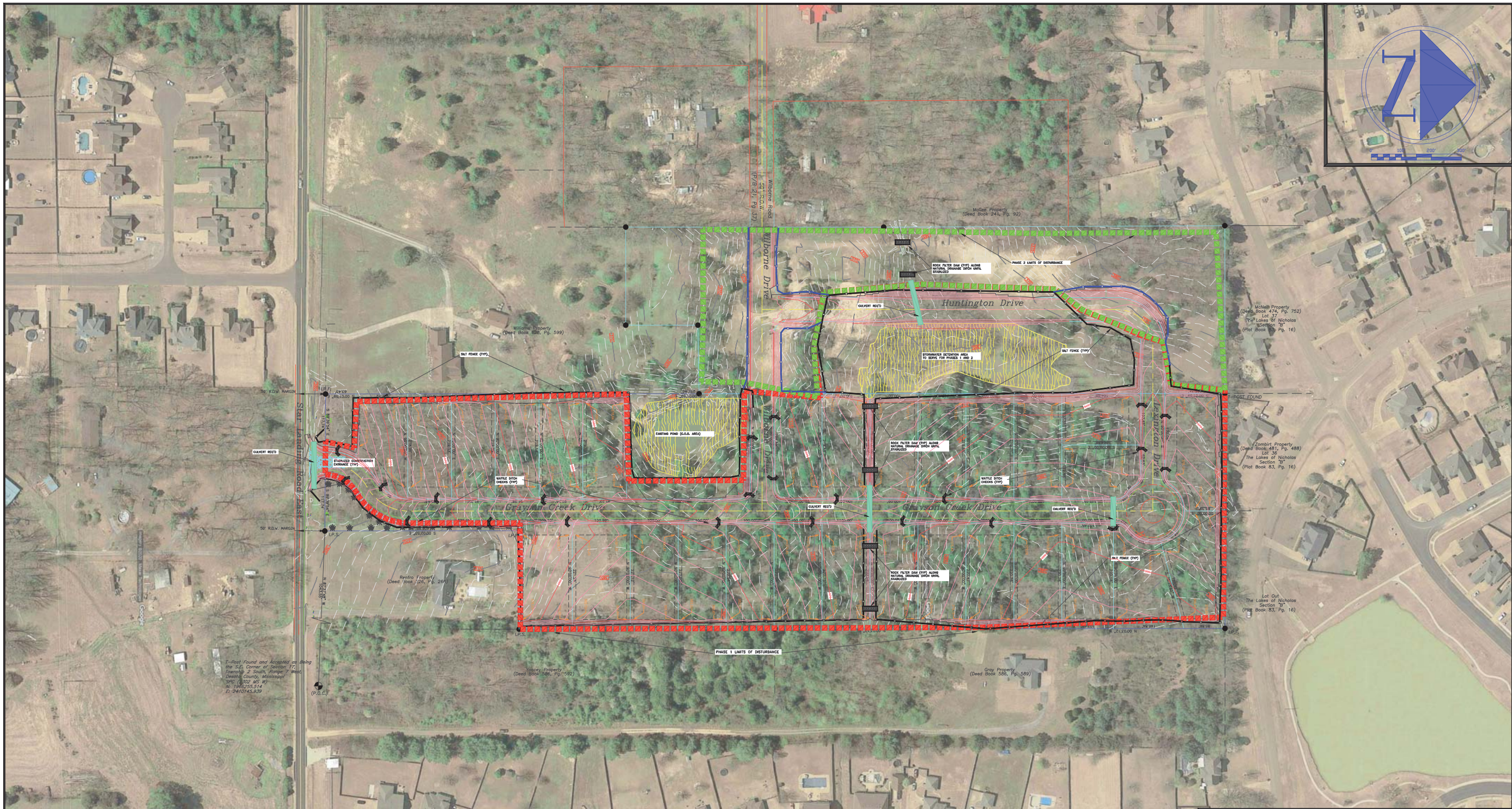
MAINTENANCE PLAN

All BMP controls will be checked for stability and operation following every rainfall but in no case less than once every week. Make needed repairs within 24 hours.

- Remove sediment from silt fences when accumulated sediment has reached $\frac{1}{3}$ to $\frac{1}{2}$ the height of the control and properly disposed.
- Replace non-functioning silt fences or other BMP's.
- Implement the appropriate temporary or permanent vegetative practices immediately when a disturbed area will be left for fourteen days or more.
- Remove temporary concrete washout pits when no longer required.
- Maintain all vegetated areas to provide proper ground cover- reseed, fertilize, and mulch as needed.

FIGURES

PROPOSED PROJECT DRAWINGS / TYPICAL DRAWINGS



SCALE:
1" = 100'
ISSUE DATE:
FEBRUARY 26, 2021

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REVISIONS
IRF 022621

PROJECT TITLE:
PINNACLE DEVELOPMENT, LLC
GRAYSON CREEK SUBDIVISION
SOUTHAVEN, MISSISSIPPI

SHEET TITLE:
EROSION CONTROL PLAN

PROJECT NO.
20-077

SHEET NO.

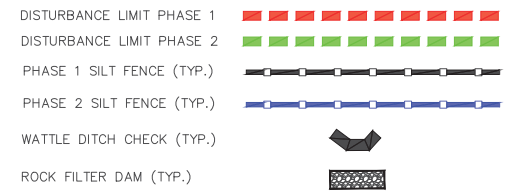
EC-1.0

EROSION CONTROL NOTES:

- CONTRACTOR SHALL INSTALL ALL PERIMETER FILTER FENCES AND SEDIMENT CONTROL BARRIERS PRIOR TO CLEARING OR GRADING.
- CONTRACTOR SHALL INSTALL ADDITIONAL SEDIMENT BARRIERS AS NECESSARY TO CONTAIN ALL CONSTRUCTION SEDIMENT ON SITE.
- CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL BARRIERS DURING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE A TEMPORARY GRAVEL DRIVE FOR ALL CONSTRUCTION ACCESS ONTO EXISTING PAVED ROADS.
- CONTRACTOR SHALL REMOVE ALL SEDIMENT CONTROL BARRIERS AT THE COMPLETION OF CONSTRUCTION.
- EARTH CONTAINMENT BERM TO BE LOCATED ALONG PERIMETER OF ALL AREAS OF FUEL STORAGE AND HANDLING.
- ANY MODIFICATION OF THE STORM WATER POLLUTION PLAN FOR CONSTRUCTION SEQUENCING SHALL REQUIRE ADHERENCE TO THE EPA'S NPDES GENERAL PERMIT GUIDELINE.
- ALL WASH WATER SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT BETWEEN WASH WATER POLLUTANTS AND STORM RUNOFF DISCHARGED FROM THIS SITE.
- OIL AND GREASE ABSORBING MATERIAL SHALL BE READILY AVAILABLE ON-SITE AND SHALL BE PROMPTLY USED TO CONTAIN AND CLEAN UP ALL FUEL AND CHEMICAL SPILLS OR LEAKS.

EROSION CONTROL NOTES (CONT.):

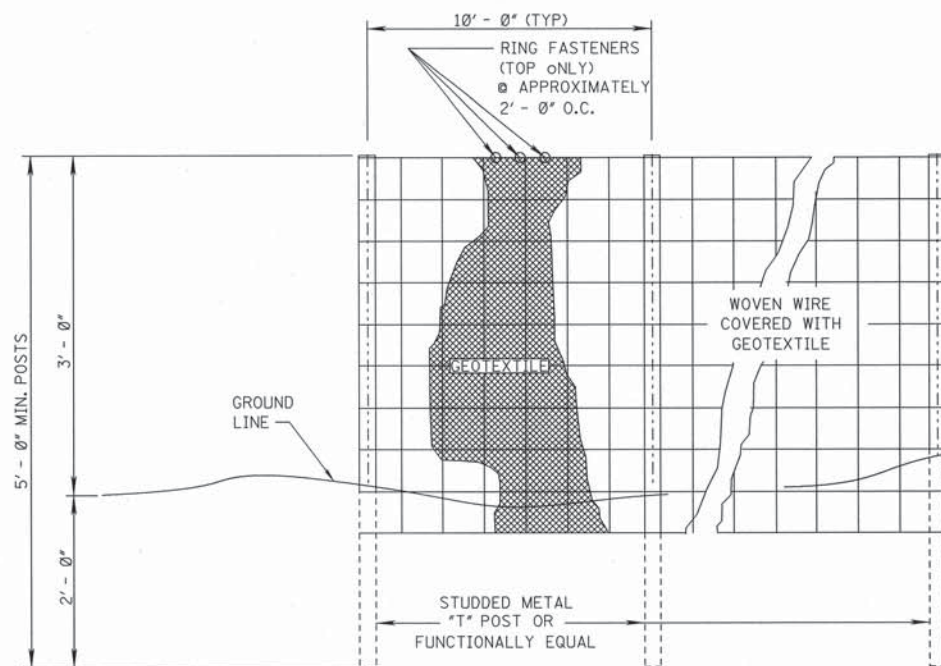
- DUST CONTROL SHALL BE ACCOMPLISHED BY WATERING DRY EXPOSED AREAS ON A REGULAR BASIS.
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY CEASED FOR 14 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED.
- ALL MATERIALS SPILLED, WASHED OR TRACKED ONTO ADJACENT ROADWAYS BY CONSTRUCTION VEHICLES SHALL BE CLEANED OR REMOVED IMMEDIATELY.
- SILT FENCES SHALL BE PLACED AROUND ANY STOCKPILED MATERIALS.
- CONTRACTOR SHALL REMOVE ALL ACCUMULATED SILT IN ANY STORM SEWER INLETS AND PIPES WITHIN 48 HOURS.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE IMPLEMENTED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE WITHIN THIRTY DAYS OF STABILIZATION OF ALL SURFACES.
- THE CONTRACTOR SHALL ASSUME LIABILITY FOR DAMAGE OF ADJACENT PROPERTIES AND ADJACENT RIGHT-OF-WAY RESULTING FROM FAILURE TO FULLY IMPLEMENT AND EXECUTE ALL EROSION CONTROL PROCEDURES SHOWN AND NOTED IN THESE PLANS.
- THE CONTRACTOR SHALL PERFORM ALL REQUIRED INSPECTIONS OF STORM WATER CONTROLS AND PRACTICES AT FREQUENCIES OUTLINED IN THE NPDES GENERAL PERMIT AND SHALL FILL OUT APPROPRIATE INSPECTION FORMS.



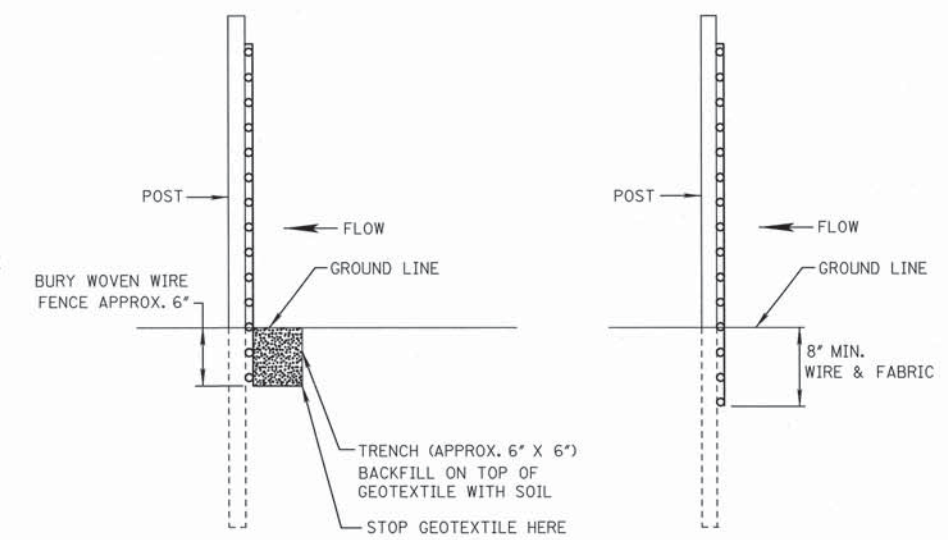
"REVIEW OF THESE PLANS IS LIMITED TO GENERAL COMPLIANCE WITH LOCAL CODES AND REGULATIONS AND DOES NOT WARRANT THE ENGINEER'S DESIGN OR RELIEVE THE DEVELOPER OF ANY REQUIREMENTS, EVEN IF ERRORS, OMISSIONS, OR ANY INADEQUACIES ARE DISCOVERED AFTER PLAN APPROVAL. THE LOCAL CODES SHALL GOVERN, IF ANY CONFLICTS OCCUR WITH THE PLANS OR SPECIFICATIONS. ANY CONDITIONS DETERMINED IN THE FIELD WHICH REQUIRE CHANGES SHALL BE SUBJECT TO FURTHER REVIEW AND CORRECTIVE ACTION."

GENERAL NOTES

- THE LOCATION OF THE EXISTING UTILITIES ARE BASED ON RECORDS FROM SAID UTILITY COMPANIES AND ARE HORIZONTALLY FIELD LOCATED ONLY. THE CONTRACTORS SHALL BE RESPONSIBLE FOR CONTACTING MISSISSIPPI ONE CALL (811 OR 1-800-227-6477) AND DETERMINING THE EXACT LOCATION OF ALL UTILITIES (PUBLIC & PRIVATE) PRIOR TO THE START OF CONSTRUCTION.
- PRIOR TO THE INSTALLATION OF ANY DRAINAGE OR UTILITY LINE, THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS AND INFORM THE ENGINEER OF ANY CONFLICTS PRIOR TO PROCEEDING WITH CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF ANY CONFLICTS THAT MIGHT ARISE.
- CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COST OF REPAIR OR REPLACEMENT OF EXISTING UTILITIES, DAMAGED OR INTERRUPTED AS A RESULT OF THIS CONSTRUCTION PROJECT.
- CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE OWNER OF ANY DAMAGED OR INTERRUPTED UTILITIES IMMEDIATELY.
- CONTRACTOR SHALL NOTIFY PROJECT ENGINEER IN WRITING 48 HOURS PRIOR TO BEGINNING WORK.
- ALL AREAS NOT TO BE PAVED ARE TO RECEIVE A GRAVEL BASE TO PROVIDE EROSION CONTROL IF WORK IS NOT PROGRESSING IN AN ORDERLY MANNER. A RATE OF 1.5 TONS/ACRE IS TO BE APPLIED WITHIN TWO WEEKS OF FINAL GRADING.
- ALL AREAS NOT TO BE PAVED ARE TO RECEIVE LOOSE STRAW TO PROVIDE EROSION CONTROL IF WORK IS NOT PROGRESSING IN AN ORDERLY MANNER. A RATE OF 1.5 TONS/ACRE IS TO BE APPLIED WITHIN TWO WEEKS OF FINAL GRADING.
- AFTER NEW INLETS ARE CONSTRUCTED, STRAW BALES AND GRAVEL FILTER BERMS ARE TO BE PLACED TO ALLOW FLOW THROUGH THE BALES & BERM.
- CONTRACTOR WILL CONTROL AND PREVENT OFF-SITE TRACKING OF CONSTRUCTION RUNOFF AND SEDIMENT TO ADJACENT PROPERTY AND PUBLIC ROADS.
- CONTRACTOR IS TO PROTECT EXISTING AND PROPOSED STORM DRAINAGE SYSTEM.
- ALL SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED 800T, THE CITY OF SOUTHAVEN, AND THE MANUFACTURER'S STANDARD DRAWINGS AND SPECIFICATIONS.
- ALL UTILITIES, SLEEVING, AND STORM DRAIN PIPE UNDER PAVED AREAS SHALL RECEIVE SELECT BACKFILL FULL DEPTH COMPACTED TO 98% MODIFIED PROCTOR.



ELEVATION VIEW

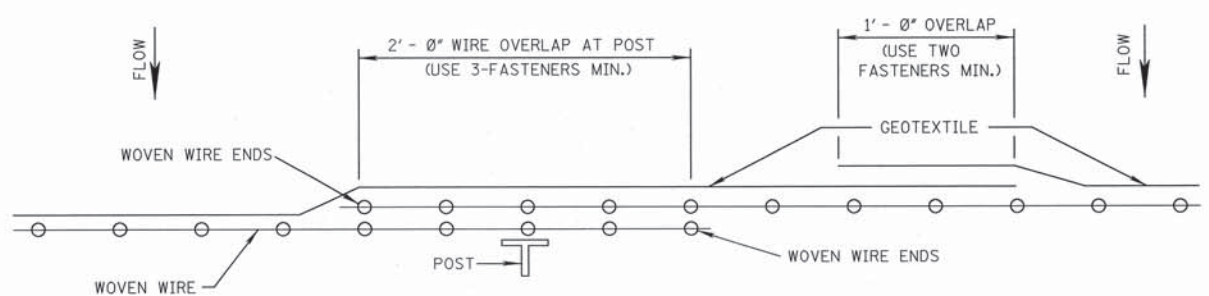


METHOD I

METHOD II
MECHANICAL INSTALLATION

SIDE VIEW

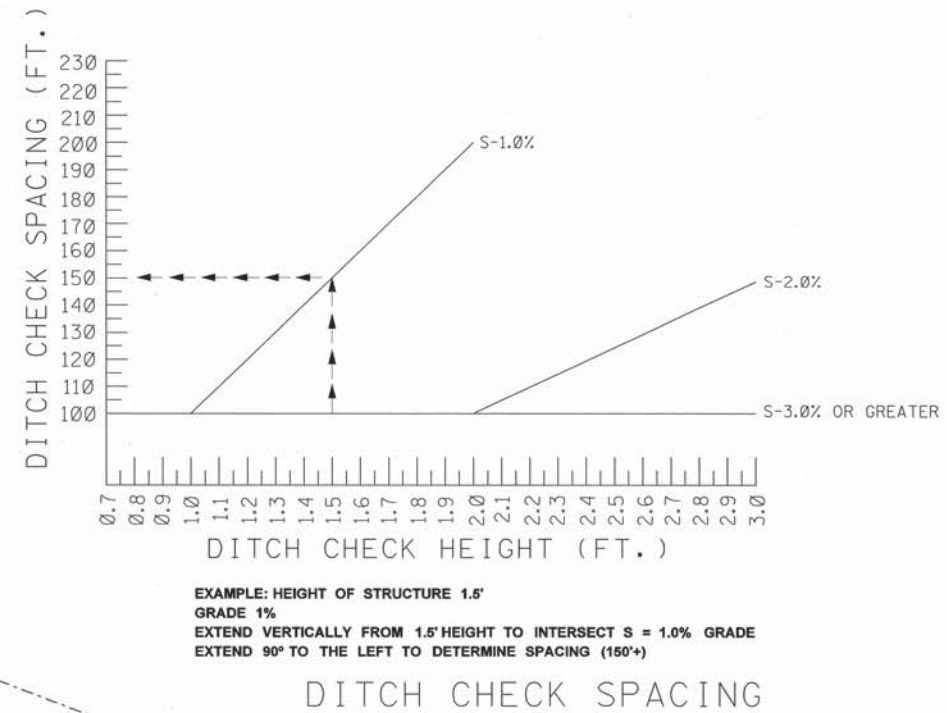
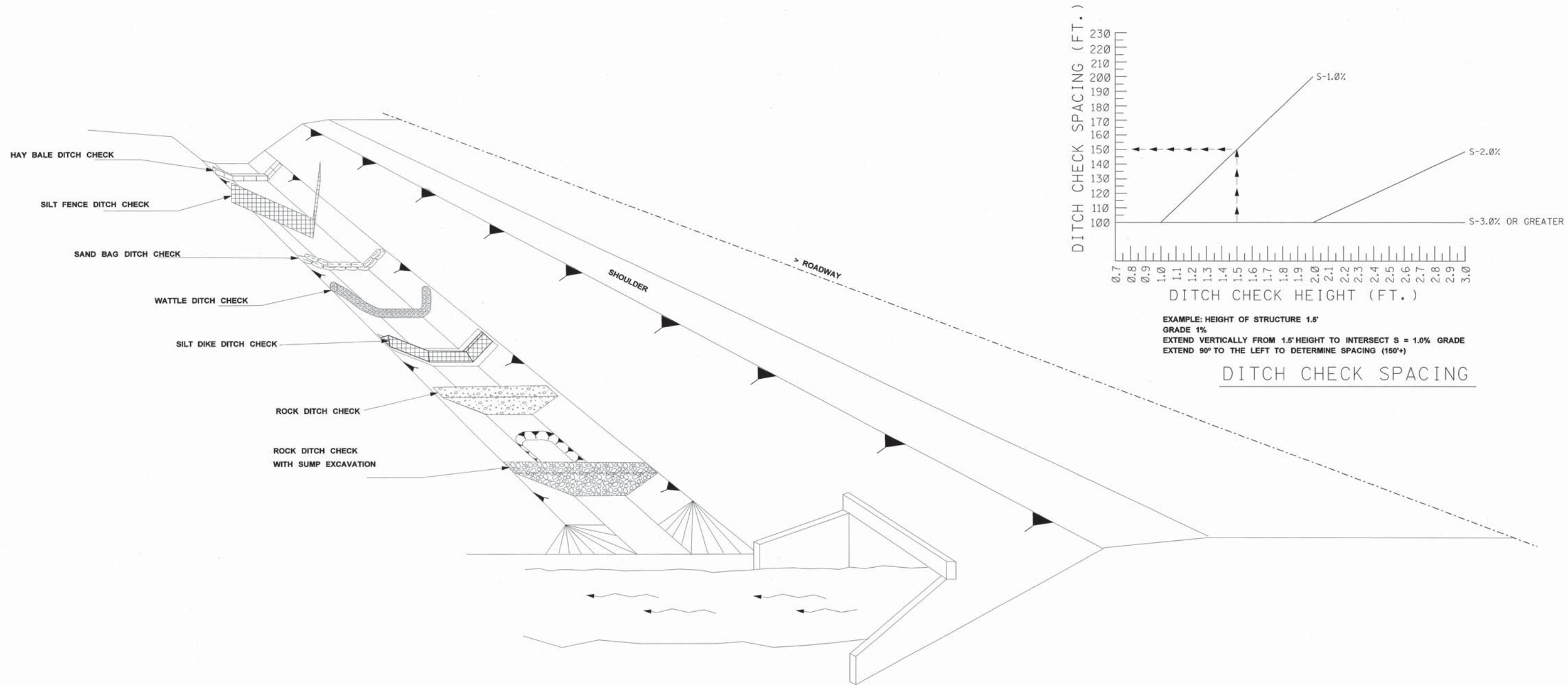
- NOTES:
1. SILT FENCES SHALL BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
 2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHALL BE ERRECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
 3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR A BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
 4. WHEREVER POSSIBLE SILT FENCE SHALL BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AND FACILITATES SEDIMENTATION.
 5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
 6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF THE DETAIL.
 7. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
 8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.



PLAN VIEW
REQUIRED LAPPING

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETAILS OF SILT FENCE INSTALLATION	
DATE	REVISION
DESIGN TEAM	CHECKED
DATE	DATE
WORKING NUMBER	ECD-3
SHEET NUMBER	134
FILENAME: EROSION CONTROL\ECD-3.DGN	

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION 9/29/2012 11:56AM ECD-3.DGN

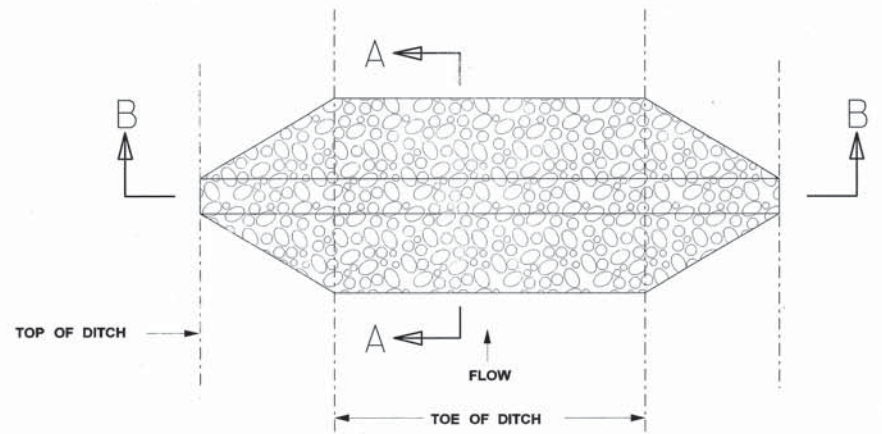


NOTES:

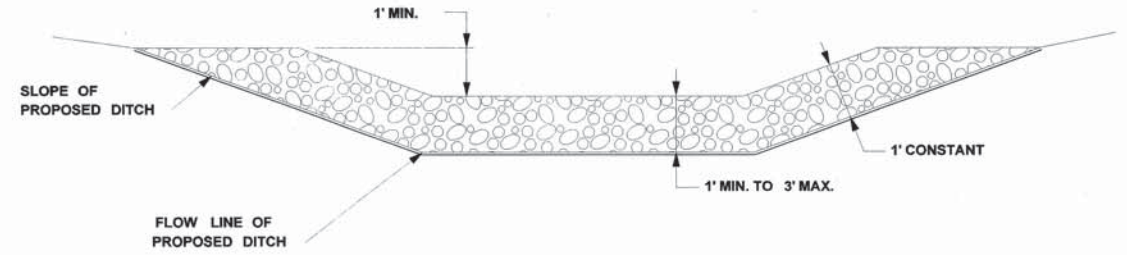
1. THE DITCH CHECK PERSPECTIVE ILLUSTRATES A TOOL BOX OF TEMPORARY PRACTICES THAT MAY BE USED. DITCH CHECKS ARE INSTALLED TO CONTROL RUNOFF VELOCITY AND THUS REDUCE EROSION AND PROVIDE FOR TRAPPING OF SEDIMENTS.
2. SELECTION OF THE APPROPRIATE DITCH CHECK SHOULD BE A FUNCTION OF CONSTRUCTION PHASE, DRAINAGE AREA, DITCH GRADIENT, SOIL TYPE ECONOMY AND SAFETY.
3. DITCH CHECKS CAN BE REMOVED FOR MAINTENANCE AND/OR REPLACEMENT BUT MUST REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. MAINTENANCE INCLUDES REMOVAL OF SEDIMENT BEGINNING WHEN SEDIMENT ACCUMULATION REACHES 1/3 THE CAPACITY OR HEIGHT OF THE STRUCTURE AND NEVER ALLOWING FOR SEDIMENT TO ACCUMULATE MORE THAN 1/2 THE VOLUME OR HEIGHT OF THE DITCH CHECK STRUCTURE.
4. HAY BALES ARE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
5. SILT FENCE DITCH CHECKS ARE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS ARE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
6. SAND BAG DITCH CHECKS ARE USED FOR VELOCITY REDUCTION AND MINIMAL SEDIMENT TRAPPING IN CONCRETE PAVED DITCHES OR IN DITCHES THAT HAVE ROCKY BOTTOMS.
7. WATTLE DITCH CHECKS ARE APPROPRIATE FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
8. SILT DIKES CAN BE USED IN DITCHES WITH CONCENTRATED FLOWS WITHIN THE CLEAR ZONE WHERE RIPRAP CAN NOT BE USED. AS CONSTRUCTION PROGRESSES.
9. ROCK DITCH CHECK WITH SUMP EXCAVATION CAN BE PLACED IN DITCHES TO ASSURE ON-SITE SEDIMENT TRAPPING REQUIREMENTS ARE MET. DITCH CHECK WITH SUMP EXCAVATION IS USED WHEN DITCHES RECEIVE DRAINAGE FROM CUT OR FILL SLOPES OR OTHER CRITICAL AREAS WHERE SOIL EROSION IS EXPECTED. DRAINAGE AREA FOR A TEMPORARY SEDIMENT TRAP SHALL NOT EXCEED 3 ACRES. THEY CAN BE USED IN SERIES TO INCREASE ON-SITE SEDIMENT TRAPPING EFFICIENCY.
10. IN GENERAL, DITCH CHECKS SHOULD NOT BE PLACED IN LIVE STREAMS.
11. CONFIGURATION AND SPACING MAY BE ADJUSTED IF APPROVED BY THE ENGINEER TO ACCOMMODATE TRAVELWAY SAFETY, WATER FLOW, OR SOIL AND INSTALLATION CHALLENGES.

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION 8/29/2012 11:52:04M ECD-4.DGN

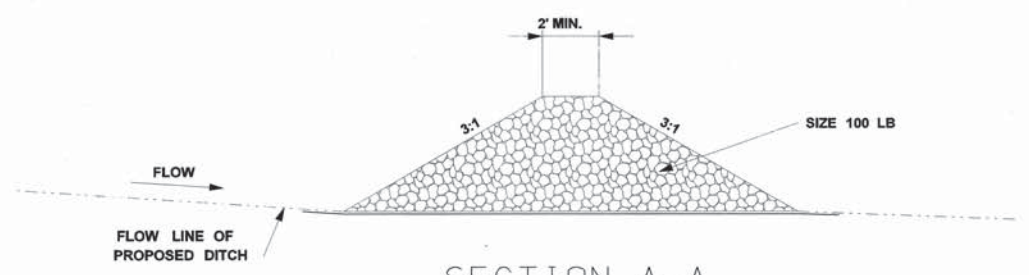
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS	
DATE	BY
DESIGN TEAM	REVISION
FILENAME: EROSION CONTROL/ECD-4.DGN	WORKING NUMBER ECD-4
CHECKED	DATE
	SHEET NUMBER 135



PLAN VIEW
DETAIL FOR TRAPEZOIDAL DITCH

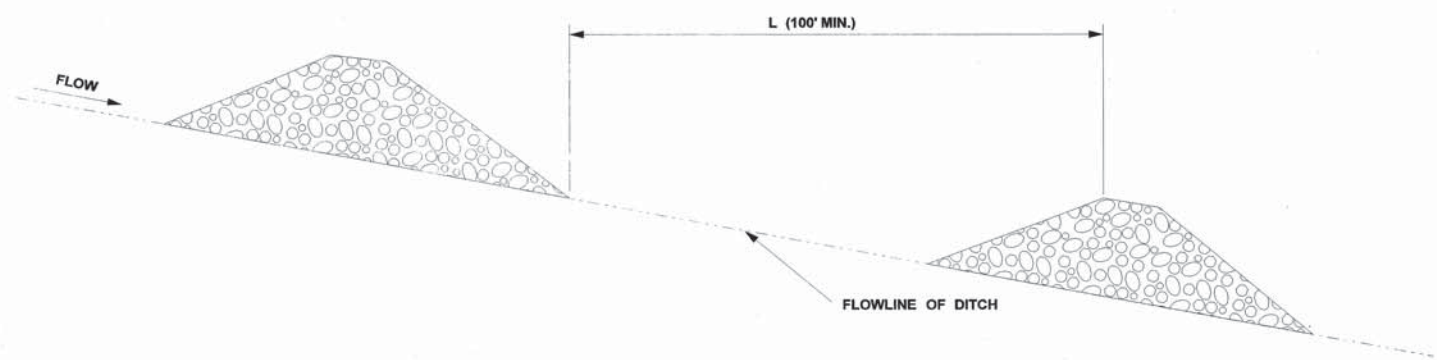


SECTION B-B



SECTION A-A

TEMPORARY ROCK DITCH CHECKS IN ROADSIDE DITCHES

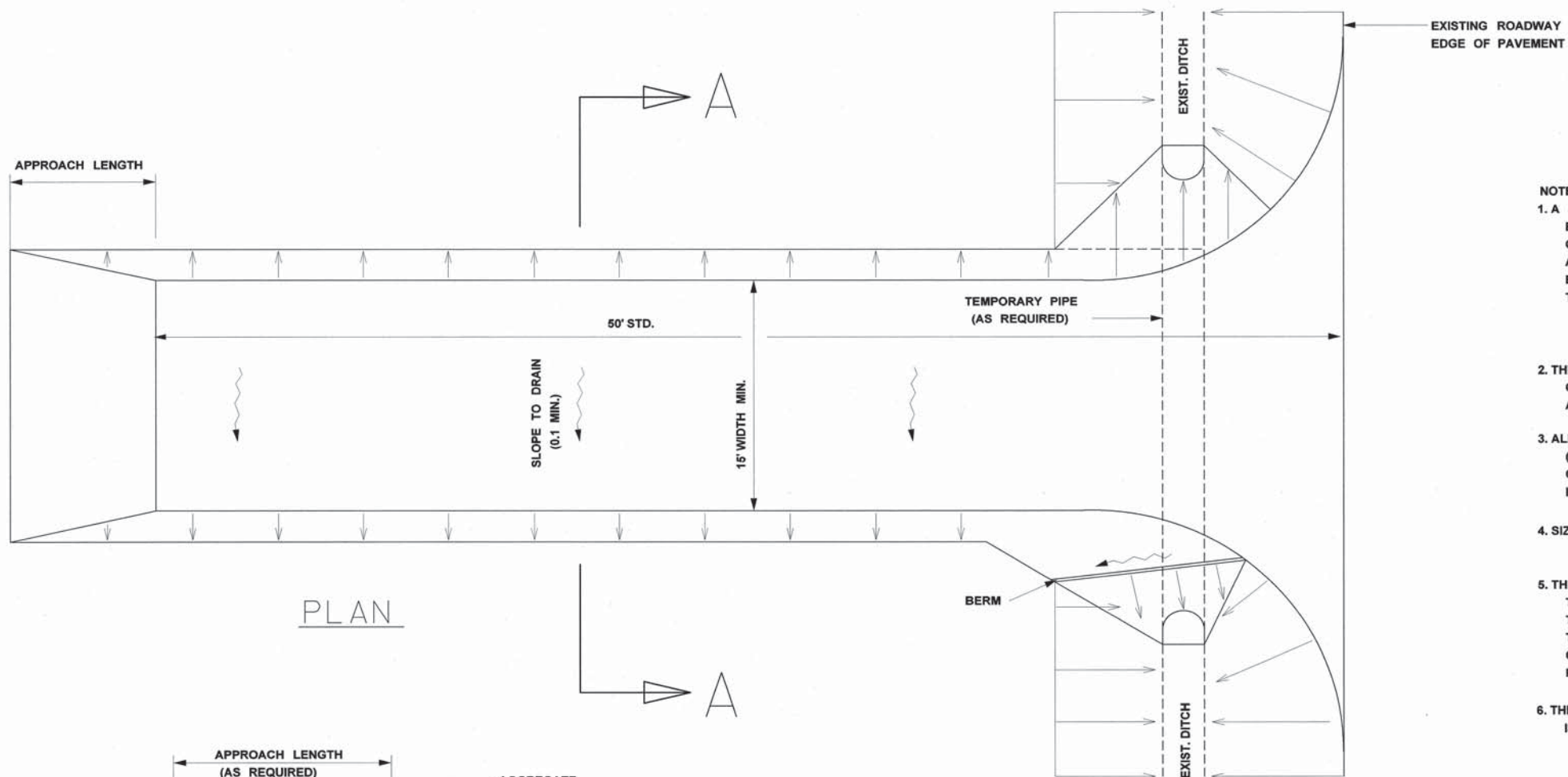


DETAIL FOR SPACING BETWEEN DITCH CHECKS

- NOTES:
1. MINIMUM SPACING FOR ROCK DITCH CHECKS SHALL BE 100 FEET OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON ECD-4
 2. ROCK DITCH CHECKS MAY ALSO BE CHOKED WITH FABRIC.
 3. SIZE 300 LB RIP RAP MAY BE USED FOR SPECIFIED APPLICATIONS AS SHOWN ON EROSION CONTROL PLAN

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION 8/23/2012 11:41 AM ECD-8.DGN

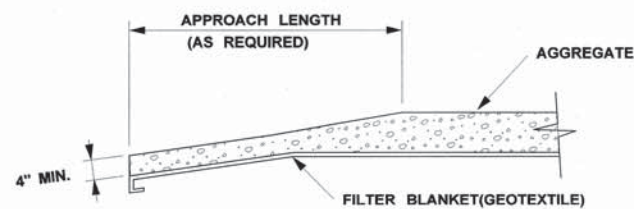
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ROCK DITCH CHECK	
WORKING NUMBER	ECD-8
SHEET NUMBER	139
FILENAME:	EROSION CONTROL/ECD-8.DGN
DATE	CHECKED
DESIGN TEAM	DATE



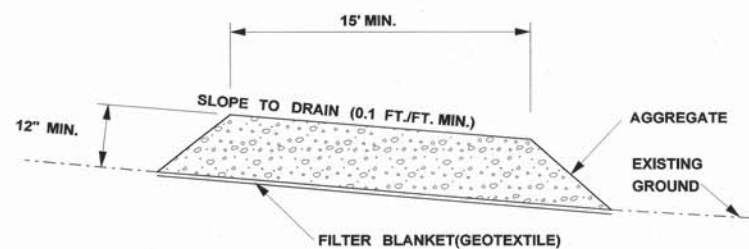
PLAN

NOTES:

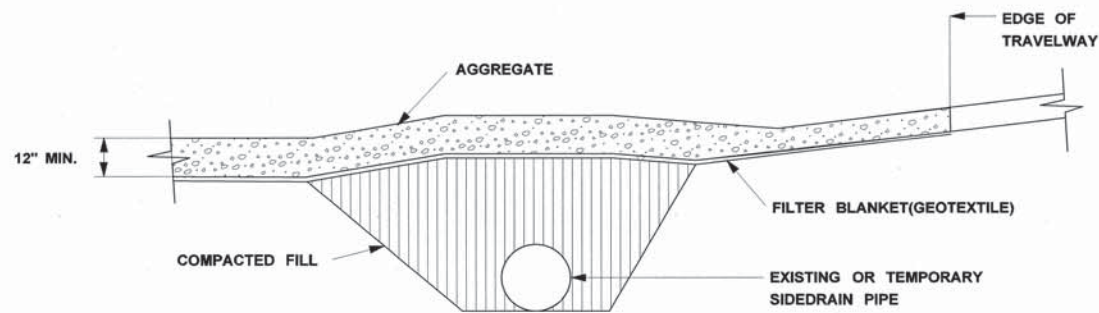
1. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFFSITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE PROJECT SHALL BE DIRECTED THRU THE STABILIZED ENTRANCE. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STABILIZED ENTRANCE.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFFSITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE STABILIZED CONSTRUCTION ENTRANCE AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
4. SIZE 1 STABILIZER AGGREGATE SHALL BE USED
5. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION TO PREVENT OFFSITE TRACKING. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE RINSED WHEN NECESSARY TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STABILIZED ENTRANCE MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
6. THE NOMINAL SIZE OF A STANDARD STABILIZED CONSTRUCTION ENTRANCE IS 15' X 50' UNLESS OTHERWISE SHOWN IN THE EROSION CONTROL PLAN



TRANSITION DETAIL



SECTION A-A

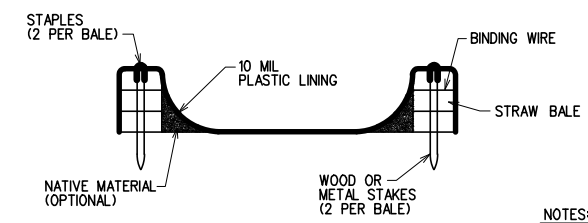
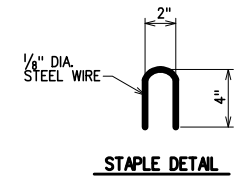
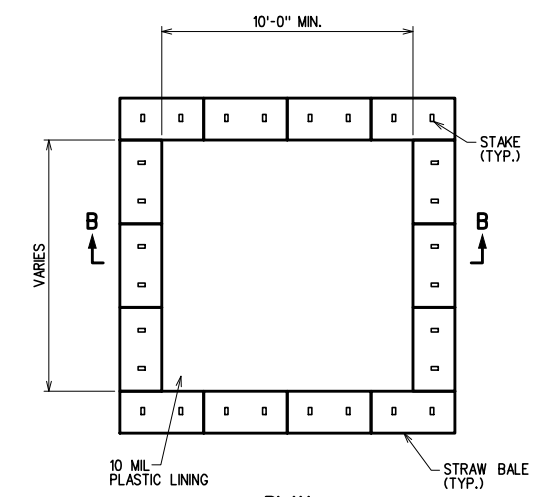


RURAL CONNECTION DETAIL

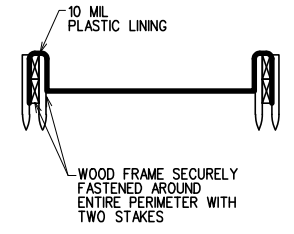
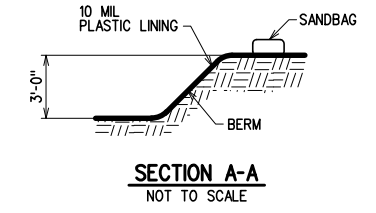
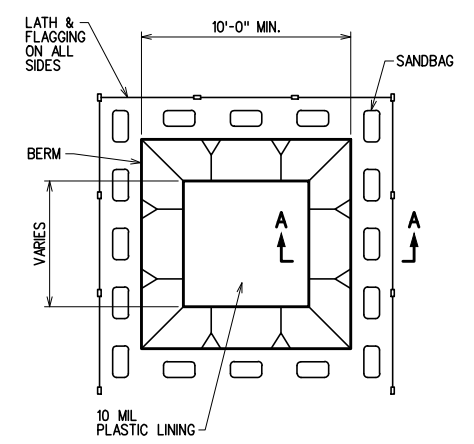
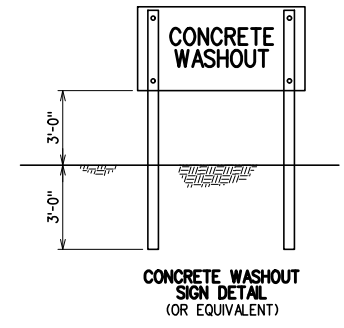
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
STABILIZED CONSTRUCTION ENTRANCE	
DATE	REVISION
DESIGN TEAM	CHECKED
DATE	DATE
FILENAME: EROSION CONTROL/ECD-15.DGN	WORKING NUMBER
	ECD-15
	SHEET NUMBER
	146

**ONSITE TEMPORARY CONCRETE WASHOUT FACILITY,
TRANSIT TRUCK WASHOUT PROCEDURES**

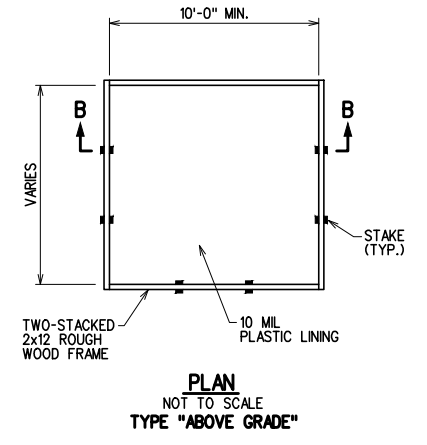
- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FT. FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE OR TRACKING.
- A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.
- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED ABOVE GRADE OR BELOW GRADE AT THE OPTION OF THE CONTRACTOR. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- TEMPORARY WASHOUT FACILITIES SHOULD HAVE A TEMPORARY PIT OR BERMED AREAS OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.
- WASHOUT OF CONCRETE TRUCKS SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY.
- ONLY CONCRETE FROM MIXER TRUCK CHUTES SHOULD BE WASHED INTO CONCRETE WASH OUT.
- CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.
- ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF OFFSITE IN A LEGAL MANNER. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.
- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE)
 - TEMPORARY WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN IN THE DETAILS ON THIS SHEET, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
 - STRAW BALES, WOOD STAKES, AND SANDBAG MATERIALS SHOULD CONFORM TO THE PROVISIONS IN THE EROSION AND SEDIMENT CONTROL PLAN.
 - PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE BELOW GRADE)
 - TEMPORARY WASHOUT FACILITY (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED AS SHOWN IN THE DETAILS ON THIS SHEET, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
 - LATH AND FLAGGING SHOULD BE COMMERCIAL TYPE.
 - PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.



- NOTES:**
- ACTUAL LAYOUT DETERMINED IN FIELD.
 - THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



- NOTES:**
- ACTUAL LAYOUT DETERMINED IN FIELD.
 - THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES

- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

INSPECTION AND MAINTENANCE

- INSPECT AND VERIFY THAT ACTIVITY-BASED BMPs ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHEN ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDER WAY, INSPECT WEEKLY DURING THE RAINY SEASON AND AT TWO WEEK INTERVALS IN THE NON-RAINY SEASON TO VERIFY CONTINUED BMP IMPLEMENTATION.
- TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 4 IN. FOR ABOVE GRADE FACILITIES AND 12 IN. FOR BELOW GRADE FACILITIES. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION. HARDENED CONCRETE MATERIALS SHOULD BE REMOVED AND DISPOSED OF.
- WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.

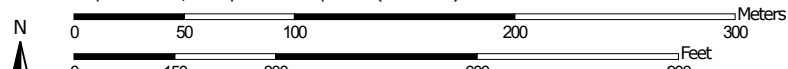
CONCRETE WASHOUT DETAILS
NOT TO SCALE

SOILS MAP

Soil Map—DeSoto County, Mississippi
(Grayson Creek S/D)



Map Scale: 1:3,430 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

2/27/2021
Page 1 of 3


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: DeSoto County, Mississippi

Survey Area Data: Version 19, Jun 3, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

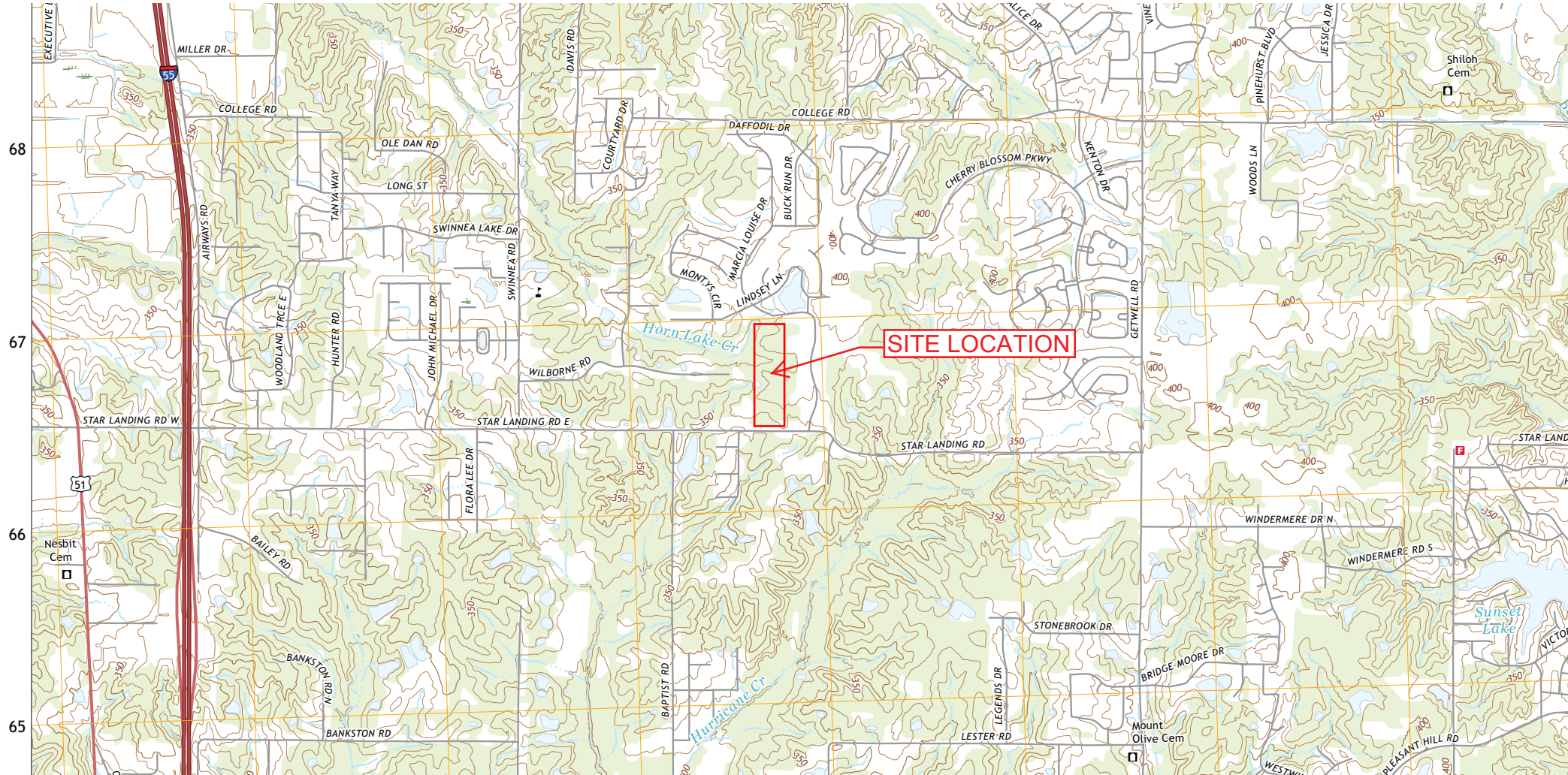
Date(s) aerial images were photographed: May 9, 2020—May 14, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cl	Collins and Falaya silt loams, local alluvium phases	8.0	28.8%
Ga	Grenada silt loam, eroded, very gently sloping phase	0.0	0.1%
Gk	Gullied land, Loring soil material	13.5	48.1%
Lc	Loring silt loam, 2 to 5 percent slopes, moderately eroded, central	6.4	23.0%
Totals for Area of Interest		28.0	100.0%

TOPO MAP



LARGE CONSTRUCTION NOTICE OF INTENT (LCNOI)



MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

LARGE CONSTRUCTION NOTICE OF INTENT (LCNOI) FOR COVERAGE UNDER THE LARGE CONSTRUCTION STORM WATER GENERAL NPDES PERMIT

INSTRUCTIONS

The Large Construction Notice of Intent (LCNOI) is for coverage under the Large Construction General Permit for land disturbing activities of five (5) acres or greater; or for land disturbing activities, which are part of a larger common plan of development or sale that are initially less than five (5) acres but will ultimately disturb five (5) or more acres. Applicant must be the owner or operator. For construction activities, the operator is typically the prime contractor. The owner(s) of the property and the prime contractor associated with regulated construction activity on the property have joint and severable responsibility for compliance with the Large Construction Storm Water General Permit MSR10.

If the company seeking coverage is a corporation, a limited liability company, a partnership, or a business trust, attach proof of its registration with the Mississippi Secretary of State and/or its Certificate of Good Standing. This registration or Certificate of Good Standing must be dated within twelve (12) months of the date of the submittal of this coverage form. Coverage will be issued in the company name as it is registered with the Mississippi Secretary of State.

Completed LCNOIs should be filed at least thirty (30) days prior to the commencement of construction. Discharge of storm water from large construction activities without written notification of coverage is a violation of state law.

Submittals with this LCNOI must include:

- A site-specific Storm Water Pollution Prevention Plan (SWPPP) developed in accordance with ACT5 of the General Permit
- A detailed site-specific scaled drawing showing the property layout and the features outlined in ACT5 of the General Permit
- A United States Geological Survey (USGS) quadrangle map or photocopy, extending at least one-half mile beyond the facility property boundaries with the site location and outfalls outlined or highlighted. The name of the quadrangle map must be shown on all copies. Quadrangle maps can be obtained from the MDEQ, Office of Geology at 601-961-5523.

Additional submittals may include the following, if applicable:

- Appropriate Section 404 documentation from U.S. Army Corps of Engineers
- Appropriate documentation concerning future disposal of sanitary sewage and sewage collection system construction
- Appropriate documentation from the MDEQ Office of Land & Water concerning dam construction and low flow requirements
- Approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties

ALL QUESTIONS MUST BE ANSWERED (Answer "NA" if the question is not applicable)

APPLICANT IS THE: OWNER PRIME CONTRACTOR

OWNER CONTACT INFORMATION

OWNER CONTACT PERSON: _____

OWNER COMPANY LEGAL NAME: _____

OWNER STREET OR P.O. BOX: _____

OWNER CITY: _____ STATE: _____ ZIP: _____

OWNER PHONE #: (____) _____ OWNER EMAIL: _____

PRIME CONTRACTOR CONTACT INFORMATION

PRIME CONTRACTOR CONTACT PERSON: _____

PRIME CONTRACTOR COMPANY LEGAL NAME: _____

PRIME CONTRACTOR STREET OR P.O. BOX: _____

PRIME CONTRACTOR CITY: _____ STATE: _____ ZIP: _____

PRIME CONTRACTOR PHONE #: (____) _____ PRIME CONTRACTOR EMAIL: _____

FACILITY SITE INFORMATION

FACILITY SITE NAME: _____

FACILITY SITE ADDRESS (If the physical address is not available, please indicate the nearest named road. For linear projects indicate the beginning of the project and identify all counties the project traverses.)

STREET: _____

CITY: _____ STATE: _____ COUNTY: _____ ZIP: _____

FACILITY SITE TRIBAL LAND ID (N/A If not applicable): _____

LATITUDE: ____ degrees ____ minutes ____ seconds LONGITUDE: ____ degrees ____ minutes ____ seconds

LAT & LONG DATA SOURCE (GPS (Please GPS Project Entrance/Start Point) or Map Interpolation): _____

TOTAL ACREAGE THAT WILL BE DISTURBED ¹: _____

IS THIS PART OF A LARGER COMMON PLAN OF DEVELOPMENT? YES NO

IF YES, NAME OF LARGER COMMON PLAN OF DEVELOPMENT: _____
AND PERMIT COVERAGE NUMBER: MSR10 _____

ESTIMATED CONSTRUCTION PROJECT START DATE: _____
YYYY-MM-DD

ESTIMATED CONSTRUCTION PROJECT END DATE: _____
YYYY-MM-DD

DESCRIPTION OF CONSTRUCTION ACTIVITY: _____

PROPOSED DESCRIPTION OF PROPERTY USE AFTER CONSTRUCTION HAS BEEN COMPLETED:

SIC Code ____ NAICS Code _____

NEAREST NAMED RECEIVING STREAM: _____

IS RECEIVING STREAM ON MISSISSIPPI'S 303(d) LIST OF IMPAIRED WATER BODIES? (The 303(d) list of impaired waters and TMDL stream segments may be found on MDEQ's web site: http://www.deq.state.ms.us/MDEQ.nsf/page/TWB_Total_Maximum_Daily_Load_Section) YES NO

HAS A TMDL BEEN ESTABLISHED FOR THE RECEIVING STREAM SEGMENT? YES NO

ARE THERE RECREATIONAL STREAMS, PRIVATE/PUBLIC PONDS OR LAKES WITHIN ½ MILE DOWNSTREAM OF PROJECT BOUNDARY THAT MAY BE IMPACTED BY THE CONSTRUCTION ACTIVITY? YES NO

EXISTING DATA DESCRIBING THE SOIL (for linear projects please describe in SWPPP):

WILL FLOCCULANTS BE USED TO TREAT TURBIDITY IN STORM WATER? YES NO

IF YES, INDICATE THE TYPE OF FLOCCULANT. ANIONIC POLYACRYLAMIDE (PAM)
 OTHER _____

IF YES, DOES THE SWPPP DESCRIBE THE METHOD OF INTRODUCTION, THE LOCATION OF INTRODUCTION AND THE LOCATION OF WHERE FLOCCULATED MATERIAL WILL SETTLE? YES NO

¹Acreage for subdivision development includes areas disturbed by construction of roads, utilities and drainage. Additionally, a housesite of at least 10,000 ft² per lot (entire lot, if smaller) shall be included in calculating acreage disturbed.

DOCUMENTATION OF COMPLIANCE WITH OTHER REGULATIONS/REQUIREMENTS
COVERAGE UNDER THIS PERMIT WILL NOT BE GRANTED UNTIL ALL OTHER REQUIRED
MDEQ PERMITS AND APPROVALS ARE SATISFACTORILY ADDRESSED

IS LCNOI FOR A FACILITY THAT WILL REQUIRE OTHER PERMITS? YES NO

IF YES, CHECK ALL THAT APPLY: AIR HAZARDOUS WASTE PRETREATMENT
 WATER STATE OPERATING INDIVIDUAL NPDES OTHER: _____

IS THE PROJECT REROUTING, FILLING OR CROSSING A WATER CONVEYANCE OF ANY KIND? (If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch for permitting requirements.) YES NO

IF THE PROJECT REQUIRES A CORPS OF ENGINEER SECTION 404 PERMIT, PROVIDE APPROPRIATE DOCUMENTATION THAT:

- The project has been approved by individual permit, or
- The work will be covered by a nationwide permit and NO NOTIFICATION to the Corps is required, or
- The work will be covered by a nationwide or general permit and NOTIFICATION to the Corps is required


IS A LAKE REQUIRING THE CONSTRUCTION OF A DAM BEING PROPOSED? YES NO
(If yes, provide appropriate approval documentation from MDEQ Office of Land and Water, Dam Safety.)

IF THE PROJECT IS A SUBDIVISION OR A COMMERCIAL DEVELOPMENT, HOW WILL SANITARY SEWAGE BE DISPOSED? Check one of the following and attach the pertinent documents.

- Existing Municipal or Commercial System. Please attach plans and specifications for the collection system and the associated "Information Regarding Proposed Wastewater Projects" form or approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties. If the plans and specifications can not be provided at the time of LCNOI submittal, MDEQ will accept written acknowledgement from official(s) responsible for wastewater collection and treatment that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow.
- Collection and Treatment System will be Constructed. Please attach a copy of the cover of the NPDES discharge permit from MDEQ or indicate the date the application was submitted to MDEQ (Date: _____.)
- Individual Onsite Wastewater Disposal Systems for Subdivisions Less than 35 Lots. Please attach a copy of the Letter of General Acceptance from the Mississippi State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.
- Individual Onsite Wastewater Disposal Systems for Subdivisions Greater than 35 Lots. A determination of the feasibility of installing a central sewage collection and treatment system must be made by MDEQ. A copy of the response from MDEQ concerning the feasibility study must be attached. If a central collection and wastewater system is not feasible, then please attach a copy of the Letter of General Acceptance from the State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.

INDICATE ANY LOCAL STORM WATER ORDINANCE WITH WHICH THE PROJECT MUST COMPLY:

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, 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.

 MEMBER
Signature of Applicant¹ (owner or prime contractor)

2/27/2021
Date Signed

TIM PAXTON
Printed Name¹

MEMBER - PINNACLE
Title
DEVELOPMENT,
LLC

¹This application shall be signed as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.

For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official

Please submit the LCNOI form to:

Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

PRIME CONTRACTOR CERTIFICATION

LARGE CONSTRUCTION GENERAL PERMIT

Coverage No. MSR10 _____ County _____

(Fill in your Certificate of Coverage Number and County)



By completing and submitting this form to MDEQ, the prime contractor is certifying that (1) they have operational control over the erosion and sediment control specifications (including the ability to make modifications to such specifications) or (2) they have day-to-day operational control of those activities at the site necessary to ensure compliance with the SWPPP and applicable permit conditions.

The owner(s) of the property and the prime contractor associated with regulated construction activity on the property have joint and severable responsibility for compliance with the permit. Notwithstanding any permit condition to the contrary, the coverage recipient and any person who causes pollution of waters of the state or places waste in a location where they are likely to cause pollution of any waters of the state shall remain responsible under applicable federal and state laws and regulations and applicable permits.

PRIME CONTRACTOR INFORMATION

PRIME CONTRACTOR CONTACT PERSON: _____ PHONE NUMBER: (____) _____

PRIME CONTRACTOR COMPANY: _____

PRIME CONTRACTOR STREET (P.O. BOX): _____

PRIME CONTRACTOR CITY: _____ STATE: _____ ZIP: _____

E-MAIL ADDRESS: _____

OWNER INFORMATION

OWNER CONTACT PERSON: _____ PHONE NUMBER: (____) _____

OWNER COMPANY NAME: _____

PROJECT INFORMATION

PROJECT NAME: _____

DESCRIPTION OF CONSTRUCTION ACTIVITY: _____

PHYSICAL SITE ADDRESS (If the physical address is not available indicate the nearest named road. For linear projects, indicate the beginning of the project and identify all counties the project traverses.)

STREET: _____

CITY: _____ COUNTY: _____

I certify that I am the prime contractor for this project and will comply with all the requirements in the above referenced general NPDES permit. I further 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, 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.

Prime Contractor Signature¹

Date Signed

Printed Name¹

Title

¹This application shall be signed as follows:
- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.
- For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official.

This Prime Contractors Certification form shall be submitted to:
Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Keep a Copy at the Construction Site and Also Submit this Page to:
 Chief, Environmental Permits Division
 MS Department of Environmental Quality, Office of Pollution Control
 P.O. Box 2261
 Jackson, Mississippi 39225-2261



Registration Form for Residential Lot Coverage under Mississippi's Large Construction Storm Water General Permit INSTRUCTIONS

Coverage recipients for residential subdivision construction that do not retain responsibility for permit compliance for individual lots are to furnish this Registration to buyers of individual lots at the time of purchase. In addition, the attached Requirements for Individual Lots in Residential Subdivisions, the Site Inspection and Certification Form and the Large Construction Storm Water General Permit shall also be given to buyers of individual lots at the time of purchase. This form is providing notification to buyers of lots in residential developments, that being part of a "larger common plan of development or sale," coverage is required under Mississippi's Large Construction Storm Water General Permit. To comply with the permit, **the Registration Form must be submitted to MDEQ** at the address listed above and a Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented to reduce pollutants in storm water discharges during construction activity. **The SWPPP is not required to be submitted to MDEQ.** A copy of the SWPPP and Registration Form must be kept at the construction site or locally available (i.e., able to be produced within an hour of being requested by a state or local inspector). See the following attachments for information on SWPPP development. In addition, **a copy of the completed Registration Form(s) must be retained by the developer and submitted to the MDEQ when requesting termination of permit coverage.** If the buyer or homebuilder sells the lot before a house is built, they must provide this form to the new owner. All questions must be answered. Answer "NA" if the question is not applicable. For further information, contact MDEQ at 601/961-5171 or access our website address: www.deq.state.ms.us/MDEQ.nsf/page/epd_epdgeneral.

ORIGINAL COVERAGE RECIPIENT NAME: _____ COMPANY NAME: _____ STREET OR P.O. BOX: _____ CITY: _____ STATE: _____ ZIP: _____ PHONE # (INCLUDE AREA CODE): _____	BUYER / HOMEBUILDER: _____ COMPANY NAME (IF APPROPRIATE): _____ STREET OR P.O. BOX: _____ CITY: _____ STATE: _____ ZIP: _____ BUYER PHONE # (INCLUDE AREA CODE): _____
---	---

RESIDENTIAL SUBDIVISION NAME: _____

LARGE CONSTRUCTION STORM WATER PERMIT COVERAGE NUMBER: MSR10: _____

LOT NUMBER(s) (attach an additional sheet if necessary): _____ **LOT SIZE(s):** _____

PHYSICAL SITE ADDRESS (IF NOT AVAILABLE INDICATE THE NEAREST NAMED ROAD):

STREET: _____

CITY: _____ **COUNTY:** _____ **ZIP:** _____

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 persons 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 and imprisonment for knowing violations. As a buyer / homebuilder, I further certify that I have read and understand the terms and conditions of Mississippi's Large Construction Storm Water General Permit and that I am responsible for installing and maintaining the appropriate pollution control measures for the purchased lot(s) identified.

Original Coverage Recipient Signature¹	Date Signed
Printed Name	Title
Buyer / Homebuilder Signature¹	Date Signed
Printed Name	Title

¹This application shall be signed according to ACT11, T-7 of the Large Construction General Permit.

REQUIREMENTS FOR LOTS IN RESIDENTIAL SUBDIVISION WHICH ARE COVERED BY THE LARGE CONSTRUCTION STORM WATER GENERAL PERMIT

As a homebuilder on a lot that is part of a regulated subdivision, you are also regulated under the State's storm water regulations and are required to take steps to keep soil and sediment from leaving the lot. When rain falls on exposed soil it can wash away valuable topsoil. It also carries sediment, nutrients and other pollutants into streets, gutters and ditches, where it then travels to lakes, rivers, streams or wetlands. Polluted runoff can cause excessive growth of aquatic weeds and algae and reduce recreational opportunities such as swimming and fishing. Sediment laden runoff can also destroy fish habitat reducing productive fishing opportunities. In addition, sediment-laden runoff can also clog pipes, ditches, streams and basins resulting in increased flooding and maintenance cost. Therefore, the homebuilder is required to minimize off-site damage from soil erosion, sediment leaving the construction site, and poor "housekeeping" practices. This requirement must be accomplished by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Some examples of individual lot SWPPPs are attached for your convenience. Sketch the controls on a copy of your site plan. Narrative notes on the site plan may also be used in addition to the erosion control symbols.

In developing and implementing the SWPPP, controls must be used from each control group (vegetative, structural, housekeeping) to prevent erosion and sediment and other pollutants from leaving the site. Commonly used controls include:

Vegetative Controls

Temporary vegetation includes annual grasses that sprout quickly such as annual rye, browntop millet, oats, and winter wheat. These grow quickly with little care and can protect the soil from rainfall and act as a filter. They will not provide permanent cover. Permanent cover must be established as indicated below. When a disturbed area will be left undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented immediately.

Mulching is the placement of hay grass, woodchips, straw, or synthetic material on the soil to provide temporary cover to protect the soil from rain. Mulching may be the only option during the winter when seeding or sodding is not possible. Mulch must stay in place to be effective. Netting, stakes or chemical binders are used to anchor some types of mulch. Be sure to reinstall washed-out mulch and anchor if necessary until permanent cover is established.

Permanent stabilization is the establishment of a permanent vegetative cover on disturbed areas using either sod, perennial seed, trees or shrubs. When a disturbed area will be left undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented immediately. Silt fences, and other temporary measures must be removed following permanent stabilization.

Vegetative buffer zones are undisturbed or planted vegetated areas that are between construction activities and water bodies.

Structural Controls

Silt fences are temporary sediment barriers made of filter fabric buried at the bottom, stretched, and supported by stakes. The silt fence slows runoff and allows it to puddle or pond, so soil and sediment can settle out before leaving the site. The bottom eight to twelve inches of fence must either be sliced in or buried in a trench about four to six inches deep by four to six inches wide. **Silt fences that are not buried are improperly installed. They have no useful function, are a waste of money, and may result in enforcement action.** Stakes must be on the downstream side of the fence and spaced about 3 feet apart. Silt fence must not be installed across streams, ditches, waterways, or other concentrated flow areas. Place fences on the contour or perpendicular to the slope of the hill so that water and sediment will pond behind the fence. **Turn ends uphill** to prevent water going around the end. Install on the downslope, downhill, downstream, or low side of your lot. Keep the fence/barrier in place until grass is established.

Slope drains are piping or lined channels that carry storm water downslope without erosion. A good example would be a downspout extender. Extenders may be used to protect temporarily stabilized areas from roof runoff. Extenders can direct water from roof gutters to paved or grassed areas. Remove extenders following permanent stabilization.

Construction entrance/exits are stone stabilized site entrances which reduce sediment tracked onto public roads. Apply gravel or crushed rock to the driveway area and restrict traffic to this one route. Use 3 to 6 inch gravel over a geotextile fabric. At the end of each day sweep or scrape up any soil tracked onto the street. Limit "standard" vehicle access (including workers' vehicles) to only streets and roads, keep vehicles off of future yard areas; limit tracking of mud onto streets by requiring any required vehicles to use designated access drives. Streets are conduits for storm water, it is important to keep mud and sediment off the streets.

Stockpiles of sand or soil should be covered with plastic or tarps at the end of each workday, or surrounded with silt fence or haybales. Do not locate a stockpile near a street, storm drain inlet, or ditch.

Erosion control blankets or mats are machine-produced mats of straw or other fibers held together with netting that provide temporary or permanent stabilization in critical areas, such as slopes or channels, so that vegetation may be established.

Storm Drain Inlets on the lot must be protected by surrounding or covering with a filter material until final stabilization has been achieved.

Additional Controls: The above controls are the more common practices used at small construction sites. There are a number of other controls, techniques and manufactured product available. A few examples include hydro seeding, diversion berms, silt dikes and fiber logs. Even something as simple as a tarp or plastic may provide temporary cover for small exposed areas. You may wish to contact an erosion and sediment control specialist, local building official, or MDEQ for further information. In addition, MDEQ has several guidance manuals that may be of assistance and the internet has abundant guidance on construction BMPs.

Housekeeping Controls: Pollutants that may enter storm water from construction sites because of poor housekeeping include oils, grease, paints, gasoline, solvents, litter, debris, and sanitary waste. Good housekeeping practices include:

- Frequent cleaning of trash and debris, providing waste receptacles at convenient locations and providing regular collection of waste;
- Directing concrete trucks to the subdivision's designated wash-off area(s) or back to the Ready-Mix facility;
- Providing protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials; and
- Providing adequately maintained sanitary facilities.

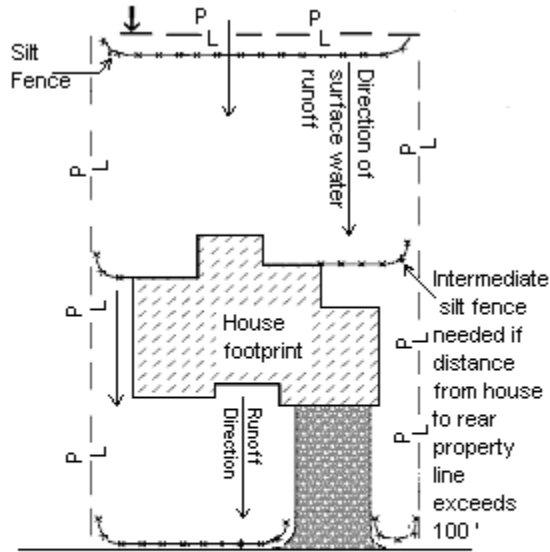
In addition, you should be aware that State air regulations prohibit the open burning of residential solid waste.

Inspection Requirements. Homebuilders shall inspect all erosion controls as often as is necessary, but no less than weekly, to ensure that appropriate erosion and sediment controls have been properly constructed and maintained to prevent erosion and sediment from leaving the site and determine if additional or alternative control measures are required. The inspection results shall be recorded on the Site Inspection and Certification Form contained in the Large Construction Forms Package. MDEQ strongly recommends that homebuilders perform "walk through" inspections daily. It is a responsibility of the homebuilder to install additional and/or alternative erosion and sediment controls when existing controls prove to be ineffective in preventing sediment from leaving the site.

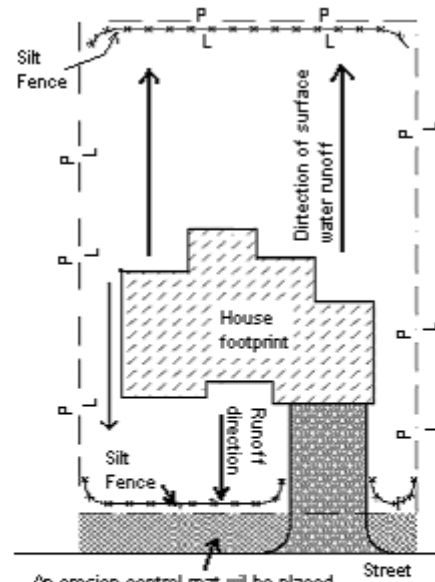
Retention of Records. All records, reports, forms and information resulting from activities required by this permit shall be retained for a period of at least three years from the date of the document origin.

Duty to Comply. Lot owners must comply with the applicable permit conditions. See Activities 3, 5, 6, 7, 10 and 11 in the Large Construction Storm Water General Permit for applicable conditions. Any noncompliance with the applicable permit conditions and aforementioned conditions including sediment leaving the lot constitutes a violation of the Mississippi Water Pollution Control Law and is grounds for enforcement action. It shall not be an acceptable defense that controls were not installed because subsequent activities would require their replacement or cause their destruction.

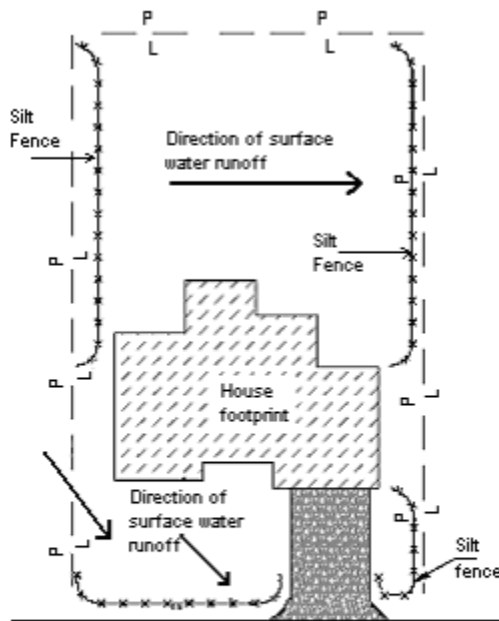
EXAMPLE INDIVIDUAL LOT EROSION AND SEDIMENT CONTROL PLANS



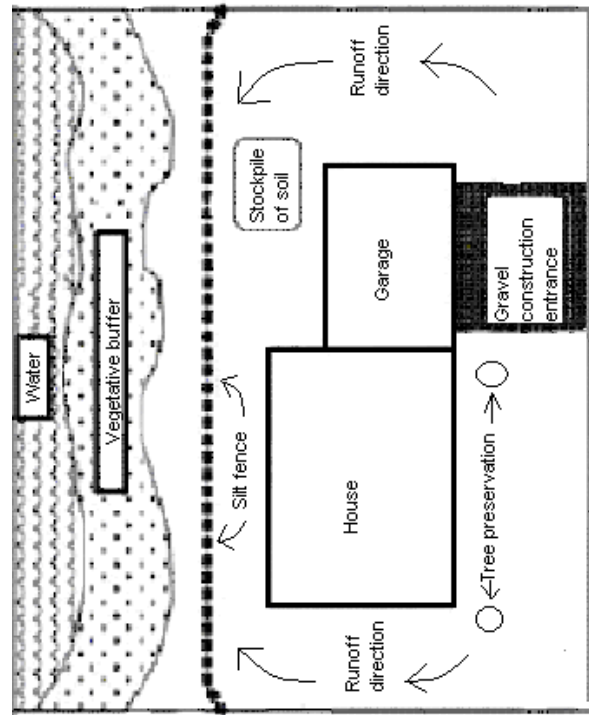
- Street
- Silt Fence
- ▨ Gravel construction entrance
- ← Runoff direction
- P Property Line
- L



- An erosion control mat will be placed at this critical area (steep slope) in order to establish grass
- Silt fence
- ▨ Gravel construction entrance
- ← Direction of surface water runoff
- ▨ Erosion control mat
- P Property Line
- L



- Silt fence
- ▨ Gravel construction entrance
- ← Direction of surface water runoff
- P Property Line
- L



All disturbed areas will be temporarily seeded with ryegrass. After final grade has been reached, all disturbed areas will be sodded with bermuda grass.

INSPECTION FORM & RAINFALL LOG

INSPECTION LOG

SOIL EROSION AND SEDIMENTATION CONTROL

Project Name or Description: _____

Project Location: _____

Permit Coverage Number: _____ Page ____ of ____

Date/Time Inspected	Reason *	Observations	Corrective Actions (Needed or Taken)

CECP Signature: _____

CECP Number: _____

Print Name: _____

Report Date: _____

* Initial, daily walk-around, weekly (in or near State water), monthly (other sites, after 0.75-inch or greater rainfall (all sites), non-compliance notification, termination of registration, other.

