

PLAN NARRATIVE

A. Site Description:

Construction activity consists of water main installation.

B. Phasing Of Construction:

The sequence of construction should commence in the following order: Install perimeter sediment barriers/filters at all locations where there is potential for sediment-laden stormwater runoff to flow off the construction area. Install water main. Stabilize and landscape all unvegetated areas. Remove all temporary erosion and sediment control measures and dispose of properly.

C. Existing Site Conditions:

The site is currently typical county roadside.

D. Erosion /Sediment Control Measures:

1. Erosion and Sediment Controls

Clearing and grubbing operations are limited to construction areas shown on the plan. Areas outside of that will be left in their natural state which will provide a physical barrier for any discharges of sediment from the site. A siltation reduction device such as staked hay bales shall be placed at places where runoff could flow off-site or into jurisdictional areas as shown on the plan. Upon completion of construction, sod or permanent seeding will be placed along the edges of pavement and at all unvegetated areas.

2. Temporary Seeding:

Temporary vegetation shall be established for barren areas rough graded but left undisturbed for more than 15 days. Seeding shall be applied according to the following chart depending on the time of year. Fertilizer and mulch are required.

Seed species	Rate/acre	Planting depth	Optimum dates
Wheat or rye	150 lbs.	1 to 1 1/2 in.	9/15 to 10/30
Spring oats	100 lbs.	1 in.	3/1 to 4/15
Annual ryegrass	40 lbs.	1/4 in.	3/1 to 5/1 & 8/1 to 9/1
German millet	40 lbs.	1 to 2 in.	5/1 to 6/1
Sudangrass	35 lbs.	1 to 2 in.	5/1 to 7/30

3. Permanent seeding:

Disturbed areas which are at finish grade shall be permanently seeded within seven (7) days. Use a perennial ryegrass mixtures chosen for slope characteristics from the following list. Fertilizer and mulch are required.

OPEN AND DISTURBED AREAS (REMAINING IDLE MORE THAN 1 YR.)

Seed Species & Mixtures	Rate/Acre	Optimum Soil pH
1. Perennial ryegrass	70 lbs.	5.6 to 7.0
+ white clover*	2 lbs.	
2. Perennial ryegrass**	70 lbs.	5.6 to 7.0
+ tall fescue**	50 lbs.	

STEEP BANKS AND CUTS, LOW MAINTENANCE AREAS (NOT MOWED)

1. Orchardgrass	30 lbs.	5.6 to 7.0
+ red clover*	20 lbs.	
+ white clover*	2 lbs.	
2. Tall fescue**	50 lbs.	5.5 to 7.5
+ red clover*	20 lbs.	

LAWNS AND HIGH MAINTENANCE AREAS

1. Perennial ryegrass (turf-type)**	170 lbs.	5.6 to 7.5
+ bluegrass	30 lbs.	

CHANNELS AND AREAS OF CONCENTRATED FLOW

1. Perennial ryegrass	150 lbs.	5.5 to 7.0
+ white clover*	2 lbs.	
2. Tall fescue**	150 lbs.	5.5 to 7.5
+ Perennial ryegrass	20 lbs.	
+ Kentucky bluegrass	20 lbs.	

* For best results: (a) legume seed should be inoculated; (b) seeding mixtures containing legumes should preferably be spring-seeded, although the grass may be fall-seeded and the legume frost-seeded; and (c) if legumes are fall-seeded, do so in early fall.

** Tall fescue provides little cover for, and may be toxic to, some species of wildlife. The IDNR recognizes the need for additional research on alternatives to tall fescue, such as buffalograss, orchardgrass, smooth brome grass, and switch-grass. This research, in conjunction with demonstration areas, should focus on erosion control characteristics, wildlife toxicity, turf durability, and drought resistance.

NOTES:

1. ALL EROSION CONTROL PRACTICES SHALL CONFORM TO RULE 5 REGULATIONS AND STANDARD SPECIFICATIONS FROM THE INDIANA STORM WATER QUALITY MANUAL.

2. THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING EROSION CONTROL MEASURES OUTLINED IN THESE PLANS AT ANY LOCATION USED TO OBTAIN OR DISPOSE OF FILL MATERIAL. IN THE EVENT THAT FILL FROM OUTSIDE OF THE PROJECT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE APPROPRIATE NPDES PERMITS FOR THE OFFSITE LOCATION. IF A NPDES PERMIT FOR THE OFFSITE LOCATION EXISTS, THE CONTRACTOR SHALL COMPLY WITH ITS REQUIREMENTS.

3. SOIL STOCKPILES SHALL BE KEPT IN VARIOUS LOCATIONS. SILT FENCING SHALL BE INSTALLED COMPLETELY AROUND THE PERIMETER OF ALL STOCKPILES.

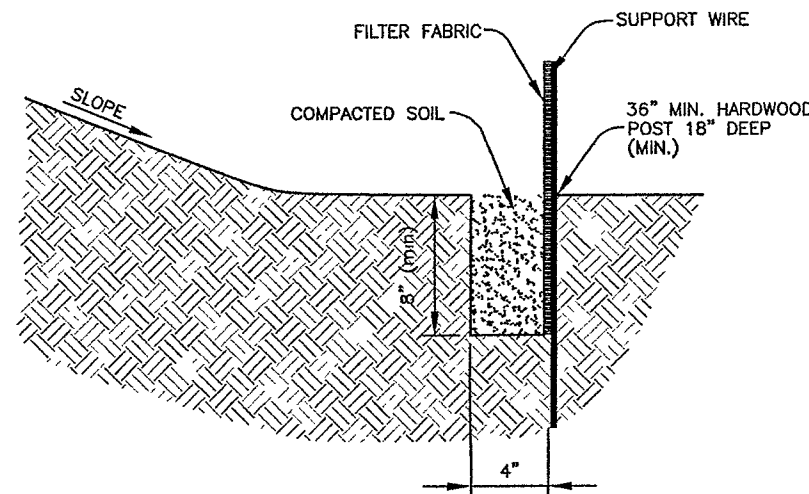
4. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR(S) SHALL TAKE ALL NECESSARY PRECAUTIONS TO MINIMIZE SOIL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY REGULARLY SCHEDULED ON-SITE INSPECTIONS.

5. TEMPORARY SEEDING TO BE PLACED ON DISTURBED AREAS.

6. PER 327 IAC 15-5-5(g)(5), THE PROJECT CONTRACTOR MUST NOTIFY THE APPROPRIATE PLAN REVIEWING AGENCY (PORTER COUNTY SOIL & WATER CONSERVATION DISTRICT AT 219.462.7515) AND IDEM-RULE 5 COORDINATOR (AT 317.233.1864) WITHIN 48 HOURS OF THE INITIATION OF CONSTRUCTION ACTIVITY.

7. IN CASE OF SPILLS PLEASE CALL THE FOLLOWING:
-EMERGENCY 911
-MINOR SPILLS OR TO REPORT A CONCERN PORTER COUNTY HAZMAT 219.465.3593
-ON-SCENE COORDINATOR FOR IDEM 219.757.0285 (MERRILLVILLE)
-IDEM'S 24-HOUR SPILL HOTLINE 1.888.233.7745

8. THE SITE CONTACT INFORMATION AND WHERE PLANS CAN BE REVIEWED MUST BE POSTED AT THE CONSTRUCTION SITE.



SILT FENCE DETAIL

SILT FENCE NOTES:

- 1.) PLAN FOR THE FENCE TO BE AT LEAST 10' FROM THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA.
- 2.) PROVIDE ACCESS TO THE AREA IF SEDIMENT CLEANOUT WILL BE NEEDED.
- 3.) DETERMINE THE APPROPRIATE LOCATION FOR A REINFORCED, STABILIZED BYPASS FLOW OUTLET (UNLESS THE FENCE IS DESIGNED TO RETAIN ALL FROM A 2-YEAR FREQUENCY, 24-HOUR DURATION STORM EVENT).

EROSION CONTROL MAINTENANCE AND REMOVAL PROCEDURES:

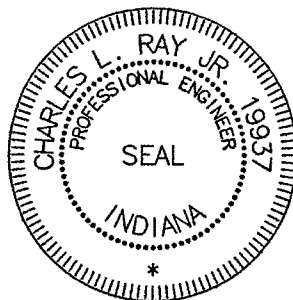
DUST CONTROL

DUST CONTROL MEASURES ARE TO BE USED DURING ALL PHASES OF CONSTRUCTION, WATER MAY BE USED AS A DUST CONTROL AGENT, HOWEVER, IF THIS IS NOT EFFECTIVE ON THE SITE, USE AN ENVIRONMENTALLY FRIENDLY CHEMICAL AGENT SUCH AS A POLYMER EMULSION LIKE DIRT GLUE, (TRADE NAME). DO NOT USE SODIUM CHLORIDE. ALL DUST CONTROL AGENTS MUST BE RATED SAFE TO USE IN WETLAND AREAS REGARDLESS OF THE SITE LOCATION.

PRELIMINARY
DATE

JUL 29 2009

STORM
SANITARY
WATER
ROAD



C.R.900 N. WATER MAIN EXTENSION
EROSION CONTROL NOTES & DETAILS

REVISIONS	BY	DATE
		7/6/09
		1" = 50'
		DESIGN: JWD
		PROJECT: 1778
		SHEET: 6

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