

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

Description of Stabilization Practices at the Beginning of Construction:

1. The area between the existing and proposed right-of-way/temporary easement boundaries and limits of the project will be improved and managed for the purposes of controlling erosion within the area, reducing water flow by temporary diversion and minimizing siltation into the construction zone, and establishing vegetative cover which will become permanent vegetation and act as an erosion barrier. Work at the beginning of construction will consist of the following:
 - (a) Areas of existing vegetation (woods and grasslands) outside the proposed construction slope limits shall be identified for preserving and shall be protected from mowing, brush cutting, tree removal and other activities which would be detrimental to their maintenance and development.
 - (b) Dead, diseased, or unsuitable vegetation within the site shall be removed as directed by the Engineer, along with required tree removal.
 - (c) As soon as reasonable access is available (such as trees cleared) to all locations where water drains away from the project, sediment basins, riprap ditch checks, temporary ditch checks, and/or erosion control fence shall be installed as called out in this plan and directed by the Engineer.
 - (d) Bare and sparsely vegetated ground in highly erodible areas as determined by the Engineer shall be temporarily seeded at the beginning of construction where no construction activities are immediately expected as stated in the special provision "Temporary Erosion Control Seeding".
 - (e) Immediately after tree removal is completed in certain areas which are highly erodible areas as determined by the Engineer, the areas shall be temporarily seeded where no construction activities are immediately expected as stated in the special provision "Temporary Erosion Control Seeding".
 - (f) At locations where a significant amount of water drains into the construction zone from outside areas (adjacent landowners), erosion control fence, temporary ditch checks, or riprap ditch checks will be utilized to locally divert water, reduce flow rates, and collect outside siltation inside the right-of-way line. Erosion control items will not be allowed to be installed to cause flooding to upstream private property which could cause crop damages or other undesirable conditions.
2. Establishment of these temporary erosion control measures will have additional benefits to the project. Desirable grass seed will become established in these areas and will spread seeds onto the construction site until permanent seeding/mowing and overseeding can be complete.
3. A third benefit of these filter areas is that they will begin to provide a screen and buffer. They will help protect the construction site from winds and excess sun and mitigate construction noise and dust.

Description of Stabilization Practices During Construction:

1. During roadway construction, areas outside the construction slope limits as outlined previous herein shall be protected from damaging effects of construction. The Contractor shall not use this area for staging (except as designated on the plans or directed by the Engineer), parking of vehicles or construction equipment, storage of materials, or other construction related activities.
 - (a) Within the construction zone, critical areas which have high flows of water as determined by the Engineer shall remain undisturbed until full scale construction is underway to prevent unnecessary soil erosion.
 - (b) Top soil and earth stockpiles shall be temporarily seeded if they are to remain unused for more than fourteen days.
 - (c) As the Contractor constructs a portion of roadway in a fill section, he/she shall follow the following steps as directed by the Engineer:
 - i. Place temporary erosion control systems at locations where water leaves and enters the construction zone
 - ii. Temporary seed highly erodible areas outside the construction slope limits
 - iii. Construct roadside ditches and provide temporary erosion control systems
 - iv. Temporary divert water around proposed culvert locations
 - v. Build necessary embankment at culvert locations and then excavate and place culvert
 - vi. Continue building up the embankment to the proposed grade while at the same time place permanent erosion control such as riprap ditch lining and conduct final shaping to the slopes
 - (d) The Contractor shall immediately follow major earth moving operations with final grading equipment. After the major earth spread operation has moved to a new location, final grading shall be completed within fourteen days. If grading is not completed within fourteen days, all major earth moving operations will be stopped, as directed by the Engineer, until disturbed areas are final graded and seeded.
 - (e) Excavated areas and embankments shall be permanently seeded when final graded. If not, they shall be temporarily seeded as stated in the special provision "Temporary Erosion Control Seeding".

- (f) Construction equipment shall be stored and fueled only at designated locations. All necessary measures shall be taken to contain any fuel or pollution run-off in compliance with EPA water quality regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site.
- (g) The Resident Engineer shall inspect the project daily during activities and weekly or after large rains during the winter shutdown period. The project shall additionally be inspected by the Construction Field Engineer on a bi-weekly basis to determine that erosion control efforts are in place and effective and if other control work is necessary.
- (h) Sediment collected during construction by the various temporary erosion control systems shall be disposed of on the site on a regular basis as directed by the Engineer. The cost of this maintenance will be paid for in accordance with Article 109.04 of the Standard Specifications.
- (i) The temporary erosion control systems shall be removed as directed by the Engineer after use is no longer needed or no longer functioning. The costs of this removal shall be included in the unit bid price for the temporary erosion control system. No additional compensation will be allowed.

Description of Structural Practices After Final Grading:

1. Temporary erosion control systems shall be left in place with proper maintenance until permanent erosion control is in place and working properly and all proposed turf areas seeded and established with a proper stand.
2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up, and disturbed turf reseeded. Temporary riprap ditch checks will be allowed to remain in place where approved by the Engineer.

Maintenance after Construction:

1. Construction is complete after acceptance is received at the final inspection.
2. Areas will be inspected on a regular basis by IDOT District 6 Bureau of Operations.
3. Maintenance crews will perform regular mowings to aid in keeping weeds down and establishing a good roadside seed stand.
4. Maintenance crews will also aid in any ditch lining maintenance or in any drainage problems.
5. All maintenance will be conducted at times when weather conditions will not cause site damage.

DOCUMENTATION

1. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with Section 4.b. shall be made and retained as part of the plan for at least three years after the date of inspection. The report shall be signed in accordance with part VI.G of the general permit.
2. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incident of Noncompliance (ION)" report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI.G. of the general permit. The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 2200 Churchill Road, P.O. Box 19276
 Springfield, IL 62794-9276
 Attn: Compliance Assurance Section

FILE NAME = e:\pwork\pwork\LAUGHLIN\LAUGHLIN\0178829\0672899-shr-erosion1.dgn	USER NAME = laughlinr1	DESIGNED -	REVISED - AUG 2007 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STORM WATER POLLUTION PREVENTION PLAN				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 40.000' / IN.	CHECKED - JCN	REVISIED -	REVISIED -						662	(2-1-2, 2-2) RS, TS-6	SANGAMON	244	157
PLOT DATE = Oct-29-2009 11:54:49AM	DATE - APRIL 5, 1999	REVISIED -	REVISIED -		CONTRACT NO. 72B99				FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
					SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.				