

GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES

The management practices, controls and other provisions contained in this storm water pollution prevention plan are at least as protective as the requirements contained in the Illinois Environmental Protection IEPA's Illinois Urban Manual, 2002. Requirements specified in plans or permits for this project approved by local officials that are applicable to protecting surface water resources are, upon submittal of a NOI to be authorized to discharge under ILR10 permit, incorporated by reference and are enforceable under the ILR10 permit even if they are not specifically included in the storm water pollution prevention plan. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for this project.

CONTROL IMPLEMENTATION SCHEDULE

Perimeter controls of the site and stabilized construction entrance shall be installed prior to demolition, clearing and grubbing. Perimeter controls shall be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Existing storm sewer inlets that will function during the construction process should have the sediment control measures installed as indicated prior to land - disturbing activities, including demolition and site clearing. In addition, sediment control measures shall be installed in newly constructed inlets immediately after their installation is complete. Erosion control blanket may be used to stabilize the construction areas where the final grade has been reached but cannot be permanently stabilized due to planting season restrictions. Permanent controls, such as riprap, shall be installed at each storm sewer outfall structure prior to any storm water discharge. Temporary perimeter controls shall only be removed after final stabilization of those portions of the site upward of the perimeter control. Temporary drop in Catch-All sediment bags will be utilized on all inlets to prevent infiltration of sediment-laden ground water into existing and proposed structures. Catch-All bags shall remain in place until placement of base course in paved areas or until vegetation has taken hold. Care shall be taken when removing sediment bags to avoid entry of sediment into the storm sewer.

STORM WATER MANAGEMENT

Storm water management devices installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed may include storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). Velocity dissipation devices shall be located (i.e. riprap) at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to the water course so that the natural physical and biological characteristics and functions are maintained and protected. Structural measures should be placed on upland soils to the degree attainable. The contractor is responsible for the installation and maintenance of storm water management measures until final stabilization of the site.

EROSION AND SEDIMENT CONTROLS

The appropriate soil erosion and sediment controls shall be implemented onsite and shall be modified to reflect the current phase of construction. All damaged or defective temporary sediment and erosion control measures must be repaired or replaced as soon as possible to maintain NPDES compliance.

Unless otherwise indicated, all vegetative and structural erosion and sediment control practices shall be installed according to the Standard Practice. The contractor shall be responsible for the installation of any additional erosion and sediment control measures necessary to prevent erosion and sedimentation as determined by the engineer, owner, or permitting authority.

1. Stabilization Practices

Areas that will not be paved or covered with non-erosive material shall be stabilized as indicated on the erosion control procedures in substantial conformance with the Illinois Urban Manual. Except as provided in paragraphs (a) and (b) below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased as follows:

- a. Where the initiation of stabilization measures by the 7th day after construction activity temporarily or permanently ceases on a portion of the site is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
- b. Where construction activity will resume on a portion of the site within 14 days from when activity ceased (i.e. the total time period that construction activity is temporarily ceased is less than 14 days) then stabilization measures do not have to be initiated on that portion of the site by the 7th day after construction activity temporarily ceased.

2. Structural Practices

Structural practices will be utilized to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include drainage swales, earth dikes, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins, storm water detention basins, concrete washout areas, silt fence, riprap, coir logs and other measures. Structural practices should be placed on upland soils to the degree practicable. Installation of these structural practices should follow Standard Practice as outlined in the Illinois Urban Manual or per the manufacturer.

OFF-SITE VEHICLE TRACKING

A stabilized pad of aggregate underlain with filter fabric shall be located at any point where traffic will be entering or leaving the construction site to or from a public right-of-way, street, alley, sidewalk, or parking area to help reduce vehicle tracking of sediments. Roads shall be swept as needed to reduce excess sediment, dirt or stone tracked from the site. Accumulated sediment and stone shall be removed from the stabilized construction entrance as needed. Water runoff from such washing area shall be periodically inspected and repaired as necessary throughout the life of the project. Vehicles hauling erodible material to and from the construction site should be covered with a tarp. The stabilized construction entrance shall be installed prior to any soil disturbance (including demolition) and removed prior to any paving.

DUST CONTROL

As requested a water truck will be used to limit the amount of dust leaving the site. The following list of control measures may also be implemented on-site to limit the generation of dust as needed:

- Sprinkling/irrigation
- Vegetative cover
- Mulch
- Spray-on soil treatments
- Tillage
- Stone

WASTE MANAGEMENT

No solid materials, including building materials, shall be discharged to protected natural areas, a storm sewer system or Waters of the State (except as authorized by a Section 404 permit). All waste materials shall be collected and stored in approved receptacles. No wastes shall be placed in any location other than in the approved containers appropriate for the materials being discarded. There shall be no liquid wastes deposited into dumpsters or other containers which may leak. Receptacles with deficiencies shall be replaced as soon as possible and the appropriate clean-up procedure shall take place, if necessary. Construction waste material is not to be buried on site. Waste disposal should comply with all local, State and Federal regulations. Hazardous material shall not be stored on site. Any hazardous waste should be disposed of in the manner specified by local or State regulation or by the manufacturer.

MATERIAL STORAGE

Materials and/or contaminants shall be stored in a manner that minimizes the potential to discharge into storm drains or watercourses. An on-site area shall be designated for material delivery and storage. All materials kept on-site shall be stored in their original containers with legible labels, and if possible, under a roof or other enclosure. Labels should be replaced if damaged or difficult to read. Bermed-off storage areas are an acceptable control measure to prevent contamination of storm water. MSD sheets shall be available for referencing cleanup procedures. Any release of chemicals/contaminants shall be immediately cleaned up and disposed of properly. Contractors shall immediately report all spills to the Primary Contact, who shall notify the appropriate agencies, if needed. To reduce the risks associated with hazardous materials on-site, hazardous products shall be kept in original containers unless they are not re-sealable. The original labels and MSD data shall be retained on-site at all times. Hazardous materials and all other materials on-site shall be stored in accordance with manufacturer's MSDS specifications. When disposing of hazardous materials, follow manufacturers' or local and State recommended methods on Local, State and Federal regulations.

DE-WATERING OPERATIONS

During de-watering/pumping operations, only uncontaminated water should be allowed to discharge to protected natural areas, Waters of the State or to a storm sewer system. Inlet hoses should be placed in a stabilized sump pit or floated at the surface of the water with a screen in order to limit the amount of sediment intake. Pumping operations may be discharged to a stabilized area that consists of an energy dissipating device (i.e. stone) on a stabilized surface, sediment filter bag on a stabilized surface or a sediment removal channel. Adequate erosion controls should be used during de-watering operations as necessary. Stabilized conveyance channels should be installed to direct water to the desired location as applicable. Additional erosion control and sediment control measures may be installed at the outlet area at the discretion of the Primary Contact or Engineer.

SANITARY FACILITIES

To the extent practicable, sanitary facilities shall be located at a minimum 8 feet behind the curb and gutter of the internal roads and be located in an area that does not drain to any protected natural area, Waters of the State or storm water structures. Sanitary facilities shall be anchored to the ground to prevent tipping over. Sanitary facilities located on impervious surfaces shall be placed on top of a secondary containment device, or be surrounded by a control device (i.e. gravel-berm).

CONCRETE WASTE MANAGEMENT

Concrete mixer trucks shall only perform washouts in designated areas. Concrete waste or washout is not allowed in the street or allowed to reach a storm water drainage system or watercourse. A sign shall be posted at each location to identify the washout. Concrete washout areas should be located at least 50 feet from a storm water drainage inlets or watercourse. Concrete washout areas shall be located at least 10 feet behind the curb, if the washout area is adjacent to a paved road. A stabilized entrance as detailed on the erosion control plan shall be installed at each washout area. The washout areas shall be of sufficient volume to completely contain all liquid and concrete waste materials including enough capacity for anticipated levels of rainwater. The dried concrete waste material shall be picked up and disposed of properly when 75% of the capacity is reached. Hardened concrete can be properly recycled and reused on-site or hauled off-site to an appropriate facility.

SPILL PREVENTIONS

Discharges of hazardous substances or oil caused by a spill are not authorized by the ILR10 permit. If a spill occurs, notify the Primary Contact immediately. The construction site shall have the capacity to control, contain and remove spills if they occur. Spills shall be cleaned up immediately in accordance with MSD sheets and shall not be buried on-site or washed into storm sewer drainage inlets, drainageways or Waters of the State.

Spills in excess of Federal Reportable Quantities (as established under 40 CFR Parts 110, 117 or 302) shall be reported to the National Response Center by calling (800) 424-8802. MSDS often include information on Federal Reportable Quantities for materials. Spills of toxic or hazardous materials shall be reported to the appropriate State or local government IEPA, regardless of size. When cleaning up a spill, the area shall be kept well ventilated and appropriate personal protective equipment shall be used to minimize injury from contact with a hazardous substance.

In addition to proper Waste Management, Concrete Waste Management, Concrete Cutting, Vehicle Storage and Maintenance, Material Storage and Sanitary Station protection, the following minimum practices shall be followed to reduce the risk of spills:

- Petroleum products shall be stored in tightly sealed and clearly labeled containers.
- All paint containers shall be tightly sealed and stored when not required for use. Excess paint shall be disposed of according to the manufacturer's instructions or State and local regulations, and shall not be discharged to the storm sewer.
- Contractors shall follow manufacturers' recommendations for proper use and disposal of materials.

CONCRETE CUTTING

Concrete waste management should be implemented to contain and dispose of saw-cutting slurries. Concrete cutting shall not take place during or immediately after a rainfall event. Waste generated from concrete cutting should be cleaned up and disposed into the concrete washout facility described above.

VEHICLE STORAGE AND MAINTENANCE

When not in use, vehicles utilized in the development operations of the site shall be stored in a designated upland area away from any natural or created watercourse, pond, drainage-way or storm drain. Whenever possible, vehicle maintenance, fueling, and washing will occur off-site. If allowed on-site, vehicle maintenance (including both routine maintenance as well as on-site repairs) shall be made within the designated area to prevent the migration of mechanical fluids (oil, antifreeze, etc.) into watercourses, wetlands or storm drains. Drip pans or absorbent pads shall be used for all vehicle and equipment maintenance activities that involve grease, oil, solvents or other vehicle fluids. Construction vehicles shall be inspected frequently to identify any leaks. Leaks shall be repaired immediately or the vehicle should be removed from the site. Dispose of all used oil, antifreeze, solvents and other automotive-related chemicals according to manufacturer MSDS instructions. Contractors shall immediately report spills to the Primary Contact.

Allowable Non-Storm Water Discharge Management

Except for flows from fire fighting activities, sources of non-storm water that may be combined with storm water discharges associated with the activity addressed in this SWPPP are as follows:

- Water main flushing
- Fire hydrant flushing
- Watering for Dust Control
- Irrigation drainage for vegetative growth for seeding, etc.
- Uncontaminated groundwater

The pollution prevention measures described below will be implemented for non-storm water components of the discharge:

- The fire hydrant and water main should not be flushed directly on the exposed area or subgrade of the pavement. Hoses should be used to direct the flow onto a stabilized area.
- Erosion due to irrigation of seeding shall be minimized.

Inspections

Qualified personnel (provided by the owner or contractor) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days, and within 24 hours of the end of a rainfall event that is 0.5 inches or greater, or equivalent snowfall.

- Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- Based on the results of the inspection, necessary pollution prevention measures identified in the SWPPP shall be undertaken as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the plan within 7 calendar days following the inspection.
- The contractor shall notify the appropriate Agency Field Operations Section office by email at epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit.
- The contractor shall complete and submit within 5 days an "Incidence of Noncompliance" (IGN) report for any violation of the SWPPP observed during an inspection conducted, including those not required by the SWPPP. Submission shall be on forms provided by the IEPA and include specific information on the cause of 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 inspection reports shall be retained at the construction site.
- All reports of noncompliance shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

RECORDKEEPING

The owner shall retain copies of the SWPPP and all reports and notices required by the ILR10 permit, and records of all data used to complete the Notice of Intent to be covered by the ILR10 permit, for a period of at least three years from the date that the permit coverage expires or is terminated unless extended by request of the IEPA. In addition, the contractor shall retain a copy of the SWPPP required by the ILR10 permit at the construction site from the date of project initiation to the date of final stabilization.

LOG OF CHANGES TO THE SWPPP

The contractor or owner shall amend the SWPPP whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for discharge of pollutants to Waters of the State and which has not otherwise been addressed in the SWPPP or if the SWPPP proves to be ineffective in eliminating or significantly minimizing pollutants, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the SWPPP shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the SWPPP by signing the contractor's certification statement.

LOG OF MAJOR GRADING AND CONSTRUCTION ACTIVITIES

A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in this SWPPP.

FINAL STABILIZATION

Final Stabilization has occurred when all soil disturbing activities at the site have been completed, and either of the two following conditions have been met:

- (i) A uniform (e.g. evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- (ii) Equivalent permanent stabilization measures (such as the use of riprap, gabions or geotextiles) have been employed.

For individual lots in residential construction, final stabilization has occurred when either:

- (i) The homeowner has completed final stabilization as specified above, or
- (ii) The homeowner has established temporary stabilization including perimeter controls for individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need to, and the benefits of, final stabilization.

When the site has been finally stabilized and all storm water discharges from construction sites that are authorized by the ILR10 Permit are eliminated, the permittee of the facility must submit a completed Notice of Termination that is signed in accordance with Part V.6 (Signatory Requirements) of the ILR10 permit. Elimination of storm water discharges associated with industrial activity means that all disturbed soils at the identified facility have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have otherwise been eliminated.

FILE NAME = 8101-055 PR4.DWG	USER NAME = GW3	DESIGNED - DJG	REVISED - 10.14.2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL PLAN	FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 1:1	DRAWN - GW3	REVISED - 10.28.2011			2718	11-00012-00-RS	LAKE	40	22	
	PLOT DATE = 8/24/2011	CHECKED - DJG	REVISED -			CONTRACT #:		63646			
		DATE - 08.24.2011	REVISED -			SCALE:	SHEET NO. 22 OF 40 SHEETS	STA.	TO STA.		
ILLINOIS FED. AID PROJECT											