

**KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2015 EDITION**

Delete SECTION 901 and replace with the following:

SECTION 901

STORMWATER POLLUTION MANAGEMENT

901.1 DESCRIPTION

Design, implement, inspect and maintain appropriate best management practices to minimize or eliminate erosion, sediment and other pollutants in stormwater runoff from the project.

BID ITEMS

SWPPP Design
SWPPP Inspection
Water Pollution Control Manager
Stormwater Compliance Disincentive Assessment

UNITS

Lump Sum
Each
Each
Lump Sum

901.2 MATERIALS

None Required.

901.3 CONSTRUCTION REQUIREMENTS

a. Permits.

(1) Projects requiring permit coverage:

(a) KDOT with 1.0 acre or more of erodible surface: Adhere to 15-PS0360 – Stormwater Pollution Management (latest revision).

(b) Local Public Authority with 1.0 acre or more of erodible surface: The local governmental agency will submit the Notice of Intent (NOI) for authorization to discharge stormwater runoff from construction activities in accordance with the Kansas Water Pollution Control General Permit. This authorization does not cover Contractor plant sites and Contractor-Furnished borrow and waste sites outside the project limits.

(2) Projects not requiring permit coverage: Kansas General Permit coverage is not required. The Contractor is required to comply with **subsection 901.3b.** and use appropriate Best Management Practices (BMPs) to minimize stormwater pollution.

Select Contractor-furnished borrow or plant sites from which runoff will not significantly impact the same surface waters and stream segments that receive runoff from the project site. Selecting a site which does significantly impact the same surface waters may result in the project requiring permit coverage.

A Storm Water Pollution Prevention Plan (SWPPP) (**subsection 901.3c.**) is not required.

A Water Pollution Control Manager (**subsection 901.3d.**) is not required.

Inspection and Maintenance Reports (**subsection 901.3e.**) are not required.

Stormwater Erosion Control Conferences (**subsection 901.3f.**) are not required.

b. General. When Contractor-furnished borrow or plant sites are outside the project limits, obtain all required permits and clearances required for compliance, **SECTION 107.** Provide copies of all such permits and clearances to the Engineer.

Take all measures necessary to minimize or eliminate erosion, sediment and other pollutants in stormwater runoff from the project and project related borrow areas.

Assume responsibility for inspection and maintenance of all erosion and sediment control measures within the project limits, whether originally implemented by the Contractor, KDOT or a third party. Obtain information regarding the SWPPP and active Best Management Practices (BMPs) from the Area Engineer. Maintenance or removal of BMPs not installed by the Contractor may be considered Extra Work, **SECTION 104**, unless addressed by other items of the contract (e.g. sediment removal).

Install devices to establish a perimeter control of the project in areas where it is anticipated that stormwater runoff will leave the project. Install perimeter control devices prior to or simultaneously with the clearing and grubbing operations. Do not perform grading until perimeter control devices are in place and approved by the Engineer.

Unless requested in writing from the Contractor, and approved in writing by the Engineer, or specified otherwise in the Contract Documents, do not exceed 750,000 square feet of surface area of erodible earth material per equipment spread at one time. The Engineer will limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow (within right-of-way) and embankment operations. Limit the exposed erodible earth material according to the capability and progress, and in keeping with the approved schedule.

Areas will not count toward the 750,000 square feet limit, when the following conditions are met:

For areas that will not be disturbed again due to project phasing:

- Finish grade the completed area;
- Stabilize and maintain stabilization according to **SECTION 902**; and
- Do not disturb the area again without a written request from the Contractor and written approval from the Engineer;

For areas that will be disturbed again due to project phasing:

- Rough grade; and
- Stabilize and maintain stabilization according to **SECTION 902**.

DO NOT clear and grub areas unless meaningful work toward the completion of the project will actively be performed in the exposed area (or portions of the exposed area) within 7 calendar days on exposed steep slope areas (40% or greater) or within 14 calendar days for all other exposed areas.

If areas are cleared and grubbed and not finish graded, not part of project phasing and no meaningful work toward the completion of the project is performed within the exposed area (or portions of the exposed area) for 7 calendar days on exposed steep slope areas (40% or greater) or 14 calendar days for all other exposed areas, stabilize and maintain stabilization of the exposed areas according to **SECTION 902** at no cost to KDOT.

If on-site or state-furnished off-site borrow areas are to be excavated below the ground water elevation, construct a temporary berm around the borrow area to prevent stormwater runoff from entering the excavated area.

Do not ford live streams with construction equipment.

Restrict construction operations in rivers, streams and other water impoundments to those areas that must be entered for the construction of temporary or permanent structures. Only use clean aggregate fill for temporary crossing, work platforms, etc. When no longer required, promptly remove all falsework, piling, temporary crossings and other obstructions caused by the construction.

Do not store equipment or materials (including soil stockpiles) within 50 feet of rivers, streams or other surface waters. Avoid storing equipment or materials (including soil stockpiles) in flowlines of ditches or other drainage courses. Where such storage is necessary, obtain the Area or Metro Engineer's written approval and include in the project SWPPP appropriate best management practices for the storage area.

Immediately initiate placement of appropriate erosion control Best Management Practices (BMPs) in any exposed steep slope areas (40% or greater) where construction activities have permanently or temporarily ceased, and will not resume for a period exceeding 7 calendar days. For vegetative cover areas, in addition to seeding, watering, mulching, and any other required activities related to the planting and establishment of vegetation, utilize other appropriate erosion control practices such as geotextiles or erosion control mats. Divert stormwater flows around steep slopes or install slope drains where feasible.

Immediately initiate temporary stabilization on areas that have been disturbed after construction activities have permanently ceased on that portion of the project site. Immediately initiate temporary stabilization measures on areas that have been disturbed after construction activities have temporarily ceased on that portion of the project site if construction activities will not resume for a period exceeding 14 calendar days. Temporary stabilization may include temporary seeding, geotextiles, mulches or other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb the area.

Stabilization is initiated when physical work on the project to install stabilizing BMPs has begun. "Immediately" in the context of the above provisions is defined to mean as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Prosecute stabilization work continuously and diligently until completed.

Install and maintain temporary erosion and pollution control devices as shown in the Contract Documents, **SECTION 902**, the SWPPP and as directed by the Engineer.

Provide and implement Best Management Practices (BMPs) that, at a minimum, are designed, installed and maintained to:

- Control stormwater volume and velocity within the site to minimize soil erosion;
- Control stormwater discharges to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
- Minimize sediment discharges from the site;
- Provide and maintain natural buffers around Waters of the United States, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges where feasible;
- Prevent contamination of adjacent streams or other watercourses, lakes, ponds or other areas of water impoundment;
- Coordinate temporary BMPs with the construction of permanent erosion control features to provide continuous erosion control;
- Schedule the construction of drainage structures as soon as practicable; and
- Schedule construction of permanent erosion control features as soon as practicable;

Notify the Engineer in writing within 24 hours of any chemical, sewage or other material spill which is required to be reported to the KDHE under part 10 of the NPDES permit. The notification shall include at a minimum the material spilled, location of the spill, and a description of containment or remediation actions taken. This notice to the Engineer does not relieve the Contractor of responsibility to report to the KDHE or to any other agency.

If temporary erosion and pollution control is not implemented and maintained according to this specification, the approved SWPPP, or the NPDES permit, the Area/Metro Engineer may suspend all or part of the work on the project until conditions are brought into compliance, as determined by the Area/Metro Engineer.

KDOT will not issue the Notice of Acceptance, **SECTION 105**, until all necessary maintenance, corrective actions, removal of unnecessary devices and temporary stabilization is completed for the project. Failure to complete this work within the contract time may result in liquidated damages, **SECTION 108**.

All SWPPP related documentation including the original SWPPP, all revisions/amendments, and inspection reports shall be retained by the Engineer upon Acceptance of the project.

c. SWPPP Design. Before the preconstruction conference, submit to the Field Engineer a minimum of 3 original copies of the SWPPP. No physical work on the project may begin until the Area/Metro Engineer has approved the SWPPP.

Design the SWPPP to comply with the NPDES permit for the project. At a minimum, the submittal shall include:

- A copy of the Project Notice of Intent Form (NOI) for Stormwater Runoff from Construction Activities. (obtained from KDOT);
- A copy of the "Request for Joint Owner/Operator" form signed by the Contractor and the Area/Metro Engineer (if applicable);
- The planned sequence of major construction activities;
- The Contractor's Erosion Control Site Plan or Plans accounting for project phasing;
- Current training certification(s) for the designated WPCM (**subsection 901.3d.**);
- Current training certification(s) for Contractor's Environmental Inspector (**subsection 901.3e.**);
- The SWPPP Contractor Certification Form 246. The Contractor and all subcontractors are required to certify that they understand the terms and conditions of the general NPDES permit. The Engineer will provide the SWPPP Certification Form (Form No. 246), or it can be found on the KDOT Internet;
- An acknowledgement that State and Local requirements have been included in the SWPPP. Review all applicable permits (Corps of Engineers, Department of Agriculture, etc.) for special conditions affecting stormwater pollution control. Include relevant permit documents with the SWPPP;

- A detailed description of Best Management Practices (BMPs) which will be used one or more times at the site for erosion and sediment control. In addition to the requirements of **subsection 901.3.b**, design, install and maintain BMPs to:
 - Minimize the amount of soil exposed during construction activity;
 - Minimize the disturbance of steep slopes (slopes of 40% or greater);
 - Control discharges from sediment or soil stockpiles;
 - Minimize the generation of dust;
 - Minimize off-site tracking of soils;
 - Provide storm drain inlet protection for inlets down gradient of disturbed project areas not fully stabilized or where construction will soon be started;
 - Include site management BMPs which minimize or eliminate contamination of stormwater runoff. Design, install and maintain such BMPs to:
 - Minimize discharge of pollutants from equipment and vehicle washing;
 - Minimize the exposure of construction waste, trash, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater;
 - Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures;
 - BMPs in this category include but are not limited to:
 - Waste management including trash containers and regular site cleanup for proper disposal of solid waste such as scrap material, product/material shipping waste, food containers and cups;
 - Containers and proper disposal for waste paints, solvents, and cleaning compounds;
 - Portable toilets for proper disposal of sanitary waste;
 - Storage for construction materials away from drainage courses and low areas;
 - Procedures and practices to eliminate the potential to discharge wash and/or rinse waters from concrete mixing equipment including ready-mix concrete trucks.

Update the erosion control site plan as work progresses to show changes due to revisions in work schedules or sequence of construction, or as directed by the Engineer. Update the site map to reflect BMPs that have been installed or removed.

Maintain a complete and updated copy of the project SWPPP on the project site or at the location approved by the Area/Metro Engineer. At a minimum, the complete project SWPPP shall include:

- The approved Contractor's submittal as detailed above;
- KDOT forms 219 and 248 completed by the Area or Metro Engineer;
- Current training certifications for KDOT, LPA or Consultant inspectors;
- SWPPP Inspection and Maintenance Report Form 247;
- Complete copy of the NPDES permit for the project;
- Reference Contract Documents pertaining to temporary erosion and water pollution control.

d. Water Pollution Control Manager. Designate a Water Pollution Control Manager (WPCM) who shall visit the project during normal work hours on a frequent basis and at least once per week until all physical work is complete and the Engineer issues the Notice of Acceptance or a partial Notice of Acceptance. The required 180 day observation period for pavement markings is not considered to be physical work. The WPCM shall thoroughly review the project and SWPPP documentation during the weekly site visits to verify the Contractor's compliance with this specification and with the NPDES permit. In addition, the WPCM shall:

- Have the authority to supervise all work performed by the Contractor and subcontractors that involves stormwater requirements or affects stormwater compliance;
- Have the responsibility and authority to order Contractor employees and subcontractors to take appropriate action to comply with stormwater requirements, including requiring any such person to cease or correct a violation of stormwater requirements and to order or recommend such other actions or sanctions as necessary to meet stormwater requirements;
- Be familiar with the Project SWPPP;
- Ensure BMPs are properly installed and maintained as necessary to maintain compliance;
- Be responsible for updating the Project SWPPP and site maps to accurately reflect the BMPs in use on the project;

- Be the point of contact for KDOT regarding stormwater compliance;
- Have completed KDOT's Environmental Inspector Training (EIT) and Environmental Manager Training (EMT) programs within the 12 months prior to beginning construction activities. Maintain these certifications for the duration of the project;
- Review and sign SWPPP inspection reports within 3 days after receiving such reports, acknowledging awareness of any deficiencies and ensuring the correction of all deficiencies.
- Maintain and monitor an active email account capable of receiving electronic communications including inspection reports, photos and other documents relevant to stormwater compliance.

The WPCM may, when approved by the Engineer, perform SWPPP Inspections according to **subsection 901.3e**.

Immediately notify the Engineer in writing if the designated WPCM is replaced. The replacement WPCM shall comply with the above requirements, except that they shall have completed the training requirements within the 12 months prior to assuming WPCM duties. The notification shall include training certificates and contact information for the replacement WPCM.

e. SWPPP Inspections. The Contractor's Environmental Inspector shall have completed KDOT's Environmental Inspector Training (EIT) and maintain a current certification while performing SWPPP Inspections.

KDOT's Inspector and the Contractor's Environmental Inspector shall perform joint inspections of the project in compliance with the NPDES permit. Continue inspections as required until all physical work is complete and the Engineer issues the Notice of Acceptance or a partial Notice of Acceptance. The required 180 day observation period for pavement markings is not considered to be physical work.

Inspect the entire construction site and all BMPs according to the requirements in part 7.2.10 of the permit.

Complete post-rainfall SWPPP Inspections no later than the end of the next business day following the occurrence of a qualifying rainfall event. Determine the need for a post-rainfall SWPPP Inspection according to the following:

- Determine rainfall totals from local weather station reports of daily rainfall totals or from regularly scheduled on-site rain gauge monitoring.
- Observe and record rainfall totals on each business day at a minimum. Rainfall occurring on non-business days may be collected and measured on the subsequent business day.
- A SWPPP inspection is required whenever a rainfall total of 0.5 inches or greater is recorded for a single observation.
- A SWPPP inspection is required whenever a rainfall total of 0.5 inches or greater is recorded over two consecutive observations if the first is less than 0.5 inches.

Schedule routine SWPPP Inspections such that a minimum of one Inspection (either routine or post-rainfall) is performed within every 14 day period.

Perform additional SWPPP inspections if directed by the Engineer.

Document the SWPPP inspections on KDOT Form 247, (SWPPP Inspection and Maintenance Report). KDOT and Contractor Inspectors shall each sign the report.

Include in the inspection report any maintenance or corrective action necessary to correct deficiencies in maintenance, operation, effectiveness, adequacy or coverage extent of all BMPs installed or required to be installed on the project. Deficiencies to be documented include any required maintenance, corrective action, documentation updates, or any other item requiring action necessary to maintain permit compliance.

Remedy any deficiencies noted during a SWPPP Inspection within 7 days of the inspection despite weather conditions that make it difficult (but not impossible) to perform corrections. No additional time shall be granted to remedy deficiencies on the basis of weather unless it is physically impossible due to flooding or frozen ground conditions for the Contractor to complete the remedy within the 7 days allowed. No additional time will be granted to remedy deficiencies unless approved by the Stormwater Compliance Engineer.

Submit completed copies of KDOT Form 247 to the Area/Metro Engineer and the Contractor's WPCM within 24 hours after an inspection has been made.

The WPCM shall review and sign the report within 3 calendar days of receiving the completed inspection report. The WPCM's signature acknowledges awareness of all reported deficiencies and actions required to be taken within 7 calendar days of the inspection.

The Contractor Inspector's signature acknowledges awareness of all reported deficiencies and actions required to be taken within 7 calendar days of the inspection.

The obligation to conduct formal inspections and complete an associated report does not limit or otherwise modify the Contractor's obligation to monitor and maintain temporary erosion and pollution control devices daily.

f. Stormwater Erosion Control Conferences. Each project shall have a stormwater erosion control pre-construction conference before the start of construction activities.

KDOT and the Contractor shall also hold stormwater erosion control conferences before the start of each major phase of construction and before the winter shutdown period begins.

These conferences shall be attended by the KDOT Area/Metro Engineer, the WPCM, and Environmental Inspector(s) for the Project, and any erosion control subcontractor(s). The attendance sheet and minutes of the conference will be kept in the SWPPP notebook.

g. Stormwater Compliance Disincentive Assessment. If the Contractor's Environmental Inspector fails to perform a SWPPP Inspection as required according to **subsection 901.3e**, the Contractor shall be liable for a disincentive assessment. The disincentive assessment charged and owing shall be \$250 for each inspection not performed. Failure to participate in the joint inspection does not relieve the Contractor of the responsibility to correct deficiencies noted by KDOT's Inspector.

If deficiencies noted during SWPPP inspections performed according to **subsection 901.3e**, are not corrected within 7 calendar days of the inspection, the Contractor shall be liable for a disincentive assessment. The disincentive assessment charged and owing shall be fifty dollars (\$50) per day for each deficiency not corrected.

Should an event causing flooding or frozen ground conditions make it impossible to perform corrections within the allowed time, notify the Area/Metro Engineer and the Stormwater Compliance Engineer within 48 hours of the event. Within 3 days of the notification, submit in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; and a schedule for implementation of any measures to be taken to prevent or mitigate the delay. Include with the submittal any relevant documentation supporting the claim that the delay is due to impossible conditions and that best efforts were made to complete the required corrections and to minimize any delay to the extent possible. No additional time will be granted to submit the required information unless approved in writing by the Stormwater Compliance Engineer.

The Engineer will deduct and withhold from contract funds the Stormwater Compliance Disincentive Assessment under **subsection 901.3g**. The assessments are to be computed in the same manner as damages under **SECTION 108** (Liquidated Damages and Disincentive Assessments) except calendar days include Sundays, Holidays and the Winter Holiday Period. If contract funds are insufficient, the Contractor shall pay KDOT the balance owed. If the Contractor fails to pay KDOT the amount owed within 10 days after demand from KDOT, the Contractor shall be considered in breach of contract under **SECTION 108**.

The disincentive assessments under **subsection 901.3g**, are in addition to federal and state statutory penalties and fines that are allowed against the Contractor under the Clean Water Act and other environmental laws for violations of those laws. See also **subsection 901.3h**.

h. Penalties and Fines. Nothing in **SECTION 901** prevents KDHE, EPA or both from assessing penalties and fines against the Contractor because of the Contractor's failure to comply with applicable laws, regulations, ordinances, NPDES permit, other permits, the SWPPP, governmental administrative compliance orders or corrective orders for the Project, or a combination thereof.

Nothing in this **SECTION 901** prevents KDHE, EPA, or both from assessing penalties and fines against the Contractor because of the Contractor's failure to comply with an administrative claims settlement or consent decree that governs KDOT projects and that is included in the Proposal Form or that is added "Extra Work", **SECTION 104**.

Understand that penalties/fines may be imposed against KDOT, the Contractor, or both because of "shared" responsibility/liability under applicable environmental law, regulations, ordinances; the NPDES permit, other permits, the SWPPP, administrative corrective action orders, administrative claims settlements, consent decrees, legal judgments or a combination thereof. The Contractor shall have no claim that such shared responsibility/liability voids the Contractor's liability for disincentive assessments under **subsection 901.3g**, or for penalties/fines under **subsection 901.3h**.

901.4 MEASUREMENT AND PAYMENT

The Engineer will measure each SWPPP inspection performed in compliance with this specification.

The Engineer will measure each Water Pollution Control Manager (WPCM). Each is defined as each calendar week (Sunday-Saturday) that the Contractor provides a WPCM according to **subsection 901.3.d**. Each week will be measured only once, regardless of the number of site visits or time spent performing WPCM duties for that week.

The Engineer will measure SWPPP design for payment as a lump sum upon the Area Engineer's approval. All revisions or updates to the SWPPP shall be subsidiary.

The Engineer will assess disincentives under the bid item "Stormwater Compliance Disincentive Assessment" by the Lump Sum.

09-28-17 (C&M) (JVN)
Nov-17 Letting