

**KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2007 EDITION**

Delete SECTION 901 and replace with the following:

SECTION 901

TEMPORARY EROSION AND POLLUTION CONTROL

901.1 DESCRIPTION

Install, maintain and remove temporary erosion and pollution control devices as required during the construction of the project.

BID ITEMS

Temporary Berm (Set Price)
Temporary Slope Drain
Silt Fence
Biodegradable Log (****)
Synthetic Sediment Barrier
Filter Sock (****)
Temporary Ditch Check (Rock)
Temporary Inlet Sediment Barrier
Temporary Sediment Basin
Temporary Stream Crossing
Sediment Removal (Set Price)
Temporary Fertilizer (**)
Temporary Seed (***)
Soil Erosion Mix
Temporary Seeding
Erosion Control (*)
Mulching (Temporary)
Water (Erosion Control) (Set Price)
Geotextile (Erosion Control)
SWPPP Design
SWPPP Inspection
Water Pollution Control Manager
* Class & Type
** Type of Fertilizer
*** Type
**** Size

UNITS

Linear Foot
Linear Foot
Linear Foot
Linear Foot
Linear Foot
Linear Foot
Cubic Yard
Each
Cubic Yard
Each
Cubic Yard
Pound
Pound
Pound
Lump Sum
Square Yard
Ton
M Gallon
Square Yard
Lump Sum
Each
Each

901.2 MATERIALS

a. Provide erosion control devices, sediment barriers, fertilizers, seeds, soil erosion mix, erosion control materials and mulch that comply with **DIVISION 2100**.

Provide aggregate that complies with aggregate ditch lining, $D_{50} = 6$ inches, **DIVISION 1100**. Existing aggregate from the project may be used under this specification, provided all applicable physical requirements are met.

Provide water for erosion control that complies with **DIVISION 2400**.

Provide geotextile (erosion control) that complies with **SECTION 1710** (Special Provision 07-17004, latest revision) for separation geotextile.

b. Temporary Slope Drain. Provide metal pipe, plastic pipe or flexible rubber pipe for temporary slope drains.

The Engineer will accept the material for temporary slope drain based on the condition of the pipe and visual inspection of the installed drain.

c. Biodegradable Logs. Provide commercially available biodegradable logs manufactured from straw, excelsior wood fiber, coconut fiber, jute or other biodegradable material bound with an open mesh fabric of jute or light-weight plastic.

Do not use biodegradable logs manufactured from straw for ditch checks or inlet sediment barriers.

The Engineer will accept the biodegradable logs based on compliance with dimensional and other requirements shown in the Contract Documents, and visual inspection of the installed material.

d. Synthetic Sediment Barriers. Provide synthetic sediment barrier materials such as Geo-Ridge Permeable Berm™, Triangular Silt Dike™ or equivalent. The Stormwater Compliance Engineer will consider an equivalent of the brand names specified. Provide the Engineer with a complete description, literature, test reports, etc. on the proposed equivalent.

The Engineer will accept the synthetic sediment barrier based on brand name and visual inspection of the installed material.

e. Filter Sock. Provide burlap or synthetic mesh bags, coarse aggregate, wood chips, compost or other permeable filler material to slow and filter stormwater runoff. Use only coarse aggregate filler for curb inlet protection.

The Engineer will accept filter socks and filler material based on visual inspection and compliance with requirements in the SWPPP.

901.3 CONSTRUCTION REQUIREMENTS

a. General. Take all measures necessary to prevent erosion and pollution on 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 BMPs from the Area Engineer. Maintenance or removal of BMPs not installed by the Contractor may be considered Extra Work (**subsection 104.6**) unless addressed by other items of the contract (e.g. sediment removal).

If the contract does not include temporary erosion and pollution control bid items, and such work is required, items will be added as provided for in **subsection 104.8**.

Use KDOT's Temporary Erosion Control Manual and standard plan sheets or approved alternate reference documents as a guide for the design, installation and maintenance of temporary erosion control best management practices (BMPs.).

Alternate BMP references include:

- EPA – Stormwater Menu of BMPs (<http://cfpub.epa.gov/npdes/stormwater/menuofbmps>)
- Mn/DOT – Erosion and Sediment Control Pocketbook Guide (<http://www.dot.state.mn.us/environment/pdf/erosion-sediment-control-handbook.pdf>)
- NDOR – Construction Stormwater Pocket Guide (<http://www.transportation.nebraska.gov/environment/guides/Const-Strmwtr-Pocket%20Guide.pdf>)
- Additional reference material available on KDOT's internet website (<http://www.ksdot.org/burconsmain/Connections/swppp.asp>).

Include all relevant portions of referenced documents (whether KDOT or other) and the referenced standard plan sheets with the project SWPPP. Install erosion control devices according to the approved erosion control site plan, prior to, or simultaneously with the clearing and grubbing operations. Install devices to establish a perimeter control of the project in areas where it is anticipated that storm water runoff will leave the project. Do not perform grading until erosion control devices are in place and approved by the Engineer.

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 erosion control devices that have been installed or removed.

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 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;
- Seed, mulch, etc. according to **DIVISION 900**; 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
- Seed, mulch, etc. according to **DIVISION 900**.

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 storm water runoff from entering the excavated area.

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. When no longer required, promptly remove all falsework, piling, temporary crossings and other obstructions caused by the construction.

Where practical, 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 Engineer's written approval and include in the project SWPPP appropriate best management practices for the storage area.

Do not ford live streams with construction equipment.

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

Implement temporary erosion and pollution control with best management practices (BMPs) as described in the SWPPP. As a minimum, perform the following erosion control actions:

- Use temporary erosion and pollution control actions to control erosion resulting from the construction of the project;
- Use temporary erosion and pollution control measures to prevent contamination of adjacent streams or other watercourses, lakes, ponds or other areas of water impoundment;
- Coordinate temporary erosion and pollution control measures with the construction of permanent erosion control features to provide continuous erosion control;
- Schedule construction of drainage structures and permanent erosion control features as soon as practical; and
- 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.
- 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. This stabilization must be completed within 21 calendar days.

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 the approved SWPPP, this specification 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; **subsection 105.16**, until all necessary maintenance, corrective actions, removal of unnecessary devices and temporary stabilization is completed for the project. Failure to complete this work could result in liquidated damages, **subsection 108.8**.

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.

b. Permits.

(1) Projects with 1 acre or more of erodible surface. KDOT (or 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. KDOT's authorization does not cover Contractor plant sites and Contractor-Furnished borrow and waste sites adjacent to, or in the near vicinity of the project.

When Contractor-furnished borrow or plant sites are outside the project limits, obtain all required permits and clearances required for compliance, **subsection 107.2**. Provide copies of all such permits to the Engineer.

(2) Projects with less than 1 acre of erodible surface. Neither a NPDES permit nor a Storm Water Pollution Prevention Plan (SWPPP) in **subsection 901.3c**. will be required.

Even though a Project SWPPP is not required, the Contractor is required to comply with the concepts for erosion and pollution control and utilize appropriate best management practices to minimize stormwater pollution.

The Contractor will not be required to complete Inspection and Maintenance Reports (**subsection 901.3t**). A Water Pollution Control Manager (**subsection 901.3d**.) is not required.

c. Project Storm Water Pollution Prevention Plan (SWPPP). Before the preconstruction conference, submit to the Field Engineer a minimum of 3 original copies of the SWPPP. No contract work may begin until the Field Engineer has approved the SWPPP.

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

- the SWPPP Inspection and Maintenance Report Forms (KDOT Form No. 247);
- The planned sequence of major construction activities;
- the Contractor's Erosion Control Site Plan;
- 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;
- a copy of the Project Notice of Intent Form (NOI) for Stormwater Runoff from Construction Activities. (obtained from KDOT);
- An acknowledgement that State and Local requirements have been included in the SWPPP. All applicable permits (Corps of Engineers, Department of Agriculture, etc.) should be reviewed for special conditions affecting stormwater pollution control;
- Reference Contract Documents pertaining to temporary erosion and water pollution control. KDOT standard specifications, contractual special provisions and the policy on Storm Water Discharges can be found on the KDOT Internet at www.ksdot.org;
- A detailed description of Best Management Practices (BMPs) which will be used one or more times at the site for erosion and sediment control. BMPs shall be designed, installed and maintained to:
 - Control stormwater volume and velocity within the site;
 - Control stormwater discharges;

- Minimize the amount of soil exposed during construction activity;
- Minimize the disturbance of steep slopes (slopes of 40% or greater);
- Minimize sediment discharges from the site;
- 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 sites not fully stabilized or where construction will soon be started;
- Additional BMPs to minimize or eliminate contamination of stormwater runoff shall be designed, installed, implemented and maintained 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.

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 in no instance less than 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 these 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 to order Contractor employees and subcontractors to take appropriate corrective 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;
- 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 and Environmental Manager Training programs within the twelve months prior to beginning construction activities. These certifications shall be maintained 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 practical, perform SWPPP Inspections according to **subsection 901.3t**. 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 twelve months prior to assuming WPCM duties. The notification shall include training certificates and contact information for the replacement WPCM.

e. Temporary Berms. Use temporary berms to divert storm runoff to stabilized slopes or temporary slope drains. Construct temporary berms as shown in the Contract Documents. Compact the berms until no further consolidation is observed, using a dozer track, grader wheel or other equipment.

f. Temporary Slope Drains. Use temporary slope drains to carry storm runoff down fill slopes and cut backslopes. Construct the temporary slope drains as shown in the Contract Documents.

g. Silt Fence. Install silt fence for slope barriers or ditch checks as shown in the SWPPP. When conditions warrant, supplement the temporary silt fence with a support fence. Reduce the post spacing and drive the posts further in the ground in low and soft, swampy areas. Remove and dispose of sediment deposits when the deposit approaches $\frac{1}{3}$ the height of the silt fence.

Dispose of sediment on the project at locations approved by the Engineer. When necessary, stabilize the material as directed by the Engineer.

h. Biodegradable Logs. Install biodegradable for slope barriers or ditch checks as shown in the SWPPP. Remove and dispose of sediment deposits when the deposit approaches $\frac{1}{2}$ the height of the biodegradable log.

Straw logs shall not be used for ditch checks or inlet sediment barriers.

Dispose of sediment on the project at locations approved by the Engineer. When necessary, stabilize the material as directed by the Engineer.

i. Synthetic Sediment Barriers. Install synthetic sediment barriers for slope barriers or ditch checks as shown in the SWPPP. Remove and dispose of sediment deposits when the deposit approaches $\frac{1}{2}$ the height of the barrier.

Dispose of sediment on the project at locations approved by the Engineer. When necessary, stabilize the material as directed by the Engineer.

j. Filter Sock. Install filter socks with approved filler as shown in the SWPPP. Use coarse aggregate filler for protection of curb and gutter inlets.

k. Temporary Ditch Checks Rock. Use rock to construct temporary rock ditch checks as shown in the SWPPP or the Contract Documents. When deposits reach approximately $\frac{1}{2}$ the height of the temporary rock ditch check, remove and dispose of the accumulated sediment.

Dispose of sediment on the project at locations approved by the Engineer. When necessary, stabilize the material as directed by the Engineer.

l. Temporary Inlet Sediment Barrier. Use any of the materials listed in the Contract Documents or the SWPPP to construct temporary inlet sediment barriers. Prefabricated protection devices or alternative systems may be used with the Engineer's approval. Provide the Engineer with a complete description, literature, test reports, etc. on the proposed system. Submit this information with the SWPPP documents for approval under **subsection 901.3.c.**

When temporary silt fence is used, reduce post spacing and drive the posts further into the ground in low and soft, swampy areas. Remove and dispose of the sediment when deposits reach approximately $\frac{1}{3}$ the height of the silt fence.

When synthetic sediment barriers are used, remove and dispose of the sediment when deposits reach approximately $\frac{1}{2}$ the height of the barrier.

Dispose of sediment on the project at locations approved by the Engineer. When necessary, stabilize the material as directed by the Engineer.

m. Temporary Sediment Basins. Before constructing a temporary sediment basin, clear the area of all vegetation. Construct the temporary sediment basin with a wide cross-section and a minimum grade, as shown in the Contract Documents. Dispose of excess excavated material.

Remove and dispose of the accumulated sediment when deposits reach approximately 20% of the basin capacity.

Dispose of sediment on the project at locations approved by the Engineer. When necessary, stabilize the material as directed by the Engineer.

n. Temporary Stream Crossing.

(1) General. When the Contractor's operations require a temporary stream crossing, and one is not shown in the Contract Documents, the Contractor may install the crossing at no cost to KDOT. Comply with all applicable rules and regulations, obtain all required permits and provide copies of all permits to the Field Engineer. An unanticipated stream crossing may require a permit from the Corps of Engineers if work is performed within Waters of the U.S. and/or a stream obstruction permit from the Kansas Department of Agriculture if the crossing is in a designated stream.

Before beginning work in the streambed, record existing stream channel elevations.

Construct temporary stream crossings as shown in the Contract Documents or the SWPPP.

Place 1 pipe buried 6 inches into the stream bottom, in the lowest point of the channel to allow the passage of aquatic organisms, with additional pipes placed along the remainder of the stream channel bottom such that ordinary high water (OHW) flows designated in the Contract Documents shall flow through the pipes without overtopping the crossing. If the OHW is not designated in the Contract Documents, the Engineer will determine the OHW. The OHW means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Submit to the Engineer for review and approval, the design flow calculations to determine the number and diameter of pipes required. A minimum 12 inch diameter pipe is required.

Place pipes parallel to flow.

Cover pipes with a minimum of 12 inches of clean aggregate fill.

Dispose of sediment on the project at locations approved by the Engineer. When necessary, stabilize the material as directed by the Engineer.

(2) Maintenance. At a minimum, perform weekly inspections to verify that drift and debris are not blocking the flow of water through the pipes. Perform additional inspections, as needed. Remove drift and debris when blockage occurs. Repair eroded areas, if necessary, to prevent washout and allow passage of flows.

(3) Removal. Remove the temporary crossing and all materials as soon as no longer needed. Restore the disturbed bed and bank area of the stream channel to its pre-existing elevations.

o. Temporary Fertilizer, Seed and Mulch. Repair any rills, gullies or other erosion damage prior to seeding. Prepare the seedbed, fertilize, seed and mulch according to **DIVISION 900**. Apply the temporary fertilizer, seed and mulch at the rates shown in the Contract Documents. Apply water to seeded and mulched areas when approved by the Stormwater Compliance Engineer or Local Public Authority to promote the establishment of vegetation in critical areas.

p. Soil Erosion Mix. Prepare a smooth, weed-free and debris-free area, and broadcast or hydro-seed the soil erosion mix seed over the prepared area. Lightly hand rake broadcasted seed before placement of the erosion control.

Only use the soil erosion mix under erosion control blankets.

There are no seasonal placement limitations for the soil erosion mix.

q. Temporary Seeding. "Temporary Seeding" is to be used only if the project has less than 1 acre of erodible surface. If this item is used: fertilize, seed, and mulch all exposed erodible earth.

Prepare the seedbed, fertilize, seed and mulch according to **DIVISION 900**. Apply the temporary fertilizer, seed and mulch at the rates shown in the Contract Documents.

r. Erosion Control. After seeding according to **DIVISION 900**, install erosion control according to the manufacturer's requirements for edge and junction overlaps, staple size and staple pattern. Installation areas shall be free of erosion rills, rocks, clods or other debris that may cause "tenting" or otherwise inhibit uniform contact.

When shown in the plans, install erosion control materials within the time allowed for temporary stabilization under **subsection 901.3a**.

Use Erosion Control materials for the stabilization of all steep slopes (2.5:1 or steeper) where construction activities have permanently or temporarily ceased and will not resume for a period exceeding 7 calendar days

(1) Areas with Erosion Control (Class I). Place the Erosion Control (Class I) on slopes according to the SWPPP. Do not mulch over the Erosion Control (Class I).

(2) Areas with Erosion Control (Class II). Place the Erosion Control (Class II) in channels, ditches or areas of concentrated flow according to the SWPPP.

Do not cover erosion control materials with soil or mulch unless recommended by the manufacturer and approved by the Engineer.

Apply water to completed erosion control installations when approved by the Stormwater Compliance Engineer or Local Public Authority to promote the establishment of vegetation in critical areas.

s. Geotextile (Erosion Control). Install geotextile (erosion control) as a temporary measure to protect steep slopes and other areas where timely installation of the permanent (aggregate or concrete) slope protection is impractical. The installation area should be free of rills, rocks, clods or other debris. Secure geotextile to the ground with staples or other similarly effective methods to achieve uniform contact with minimal “tenting.”

Remove geotextile prior to placement of the permanent slope protection.

Install geotextile (erosion control) as a temporary measure to protect temporary slopes, soil stockpiles and other areas where mulching or other means of stabilization is impractical. Preparation of the slopes and the method of securing the fabric shall be as approved by the Area Engineer.

t. SWPPP Inspections. The Contractor’s Environmental Inspector shall have completed KDOT’s Environmental Inspector Training and maintain a current certification while performing SWPPP Inspections.

KDOT’s Inspector and the Contractor’s Environmental Inspector shall perform a joint inspection of the temporary erosion and pollution control devices every 14 days during normal work hours and within 24 hours of a rainfall event of ½ inch or more. Inspections shall continue at this frequency 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.

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

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 corrective actions required to be taken within 7 calendar days of the inspection.

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

u. Maintenance and Removal of Temporary Erosion and Pollution Control Devices. Maintain the effectiveness of the temporary erosion and pollution control devices as long as required to contain sediment runoff. Monitor temporary erosion and pollution control devices daily.

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

Should 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 flooding 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 obligation to conduct formal inspections and complete an associated report every 14 days and within 24 hours of a rainfall event of ½ inch or more does not limit or otherwise modify the Contractor’s obligation to monitor and maintain temporary erosion and pollution control devices daily.

Remove the temporary devices according to the SWPPP or when directed by the Engineer. After removing the temporary erosion and pollution control devices, remove and dispose of the silt accumulation. Grade, fertilize, seed and mulch any bare areas.

When temporary erosion and pollution control devices are installed according to the Contract Documents, SWPPP, or as approved by the Engineer and such devices are no longer effective because of deterioration or functional incapacity, payment will be made for replacement of these devices, as directed by the Engineer. No payment will be made for replacing temporary erosion control devices that become ineffective because of improper installation, lack of maintenance or the Contractor's failure to pursue timely installation of permanent erosion control devices according to the Contract Documents.

v. Stormwater Compliance Disincentive Assessment. If deficiencies noted during SWPPP inspections performed according to **subsection 901.3t** 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.

The Engineer will deduct and withhold from contract funds the Stormwater Compliance Disincentive Assessment under **subsection 901.3v**. The assessments are to be computed in the same manner as damages under **subsection 108.8**, (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 subsection 108.9**.

The disincentive assessments under **subsection 901.3v** 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 901.3w**.

w. 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 to the contract by change order as "Extra Work", **subsection 104.6**.

The Contractor understands 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 901.3v** or for penalties/fines under **subsection 901.3w**.

901.4 MEASUREMENT AND PAYMENT

The Engineer will measure temporary berms, temporary slope drains, silt fence, biodegradable logs, synthetic sediment barriers, and filter sock by the linear foot. The Engineer will measure the top of the device from point to point or each bend/turn in the device, add them together from beginning to end to come up with the total liner feet per device. The length installed up side slopes beyond a point level from the top of the device in the ditch bottom will not be measured for payment.

The Engineer will measure temporary rock ditch checks by the cubic yard.

The Engineer will measure each temporary inlet sediment barrier.

The Engineer will measure each temporary stream crossing when shown as a bid item in the contract.

The Engineer will measure temporary sediment basins by the cubic yard excavated to construct the basin.

The Engineer will measure sediment removal by the cubic yard of sediment removed. If the quantity of sediment removal is approximately 50 cubic yards or greater in one location, the Engineer may pay for sediment removal by force account according to **subsection 109.3** rather than paying the contract set price for the bid item "Sediment Removal". Whether paid as a set price or by force account, the Engineer will not pay for a quantity or cost

that is incurred because of the Contractor's failure to install seed timely or failure to remove sediment timely as **SECTION 109** requires.

The Engineer will measure temporary fertilizer, temporary seed and soil erosion mix by the pound.
The Engineer will measure "Temporary Seeding" as a lump sum; no measurement of area is made.
The Engineer will measure erosion control by the square yard.
The Engineer will measure temporary mulching by the ton.

The Engineer will measure water used for establishment of vegetation by the M Gallon using calibrated tanks or meters.

The Engineer will measure geotextile (erosion control) by the square yard.

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

The Engineer will measure the each Water Pollution Control Manager (WPCM). Each is defined as each calendar week (Sunday-Saturday) that the Contractor provides a WPCM according to **subsection 109.3.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 penalties under the bid item "Stormwater Compliance Disincentive Assessment" by the Lump Sum.

Payment for the various items of temporary erosion and pollution control is full compensation for the specified work. Contract unit prices will govern regardless of overruns or underruns of the estimated quantity unless specifically stated otherwise.

Payment for "Sediment Removal (Set Price)" at the contract set unit prices is full compensation for the specified work.

The Engineer will not measure for separate payment any erosion control devices or seeding installed in Contractor-Furnished borrows and waste locations or plant site locations outside the project limits.

02-06-14 C&M (JVN)
May-14 Letting