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Sam Brownback, Governor

March 27, 2015

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-10420

Chief, Water Enforcement Branch
Water, Wetlands & Pesticides Division
U.S. EPA, Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

Kristen Nazar
Assistant Regional Counsel
U.S. EPA, Region 7
11201 Renner Blvd.
Lenexa, KS 66219

Susan Bruce
U.S. EPA
Office for Enforcement and Compliance Assurance
Water Enforcement Division
Ariel Rios Building 1200 Pennsylvania Avenue, N. W.
Washington, DC 20460

RE: Annual Report on Stormwater Compliance
US v. KDOT Consent Decree
13-CV-04069

Enclosed, in accordance with paragraph 27 of the Consent Decree, is KDOT's 2014 Annual Report on Stormwater Compliance.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify KDOT's compliance with paragraphs 12 through 25 of the Consent Decree, except as noted in sections 8.0 and 9.0 of the attached report.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Van Nice".

Jason Van Nice, P.E.
Stormwater Compliance Engineer

Enclosure

March 27, 2015
Kansas Department of Transportation
2014 Annual Report
Regarding United States v. Kansas Department of Transportation Consent Decree
No. 13-CV-04069

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1.0 Introduction

This annual report is prepared in accordance with paragraph 27 of the Consent Decree which requires the Kansas Department of Transportation (KDOT) to submit a report to the Environmental Protection Agency (EPA) by March 30th of each year. This report shall summarize actions taken during the previous year to comply with the terms of the Consent Decree. This report comprises KDOT's annual report for calendar year 2014.

2.0 Personnel Designations

2.1 Designation of Stormwater Compliance Manager

KDOT is required, under paragraph 12 of the Consent Decree, to designate one individual as its Stormwater Compliance Manager. Appointed in 2013, Mr. Jason Van Nice, P.E. continues to serve in this role as the Stormwater Compliance Engineer (SWCE.) The duties of the SWCE include development and maintenance of the training program, quarterly stormwater bulletins, list of projects and annual reports. The SWCE is also responsible for coordinating the Oversight Inspection program and serving as the agency's point of contact for stormwater compliance matters.

The SWCE has the authority to direct additional inspections either at the project level or by an independent oversight inspector. In addition to formal communications such as the quarterly bulletins and training sessions, the SWCE maintains frequent communication with project staff to answer questions and provide uniform guidance to improve statewide permit compliance. The SWCE reviews inspection reports and makes site visits to verify compliance with permit requirements.

2.2 Designation of Area Engineer / Metro Engineer

In accordance with paragraph 13 of the Consent Decree, KDOT Area and Metro Engineers have been assigned additional responsibility as project stormwater compliance managers. The Area/Metro Engineer assigned to each project is required to review and approve the SWPPP prior to the initiation of construction activities. This review process requires them to be familiar with the project and the project SWPPP. The Area/Metro Engineers have authority on their projects to direct KDOT personnel, contractors and subcontractors to comply with stormwater requirements. All inspection reports completed on their assigned projects are submitted to them for review and they are responsible to order or recommend such actions as necessary to meet stormwater requirements. Once the Area / Metro Engineer reviews each inspection report, they are required to sign within three calendar days and transmit the signed report to the Stormwater Compliance Engineer.

All permitted projects have been assigned to a trained Area / Metro Engineer or to a KDOT employee of equivalent or higher responsibility. As Area / Metro Engineer vacancies are filled, the stormwater compliance duties will remain with trained Engineers at equal or higher authority until the required training is completed by the newly employed or appointed Area / Metro Engineer.

Two Metro Engineer vacancies, in Wichita and in Topeka, were filled in 2014. Mr. Glen Scott, Wichita Metro Engineer and Mr. Greg Schieber, Topeka Metro Engineer each completed the required training prior to assuming stormwater related duties. There remains one vacant Area Engineer position in Mankato due to the retirement of Mr. Leland Tice. The related duties for the projects assigned to that office are being fulfilled by the District Construction Engineer, Mr. Shad Lohman who has also completed the required training.

2.3 Designation of Environmental Inspectors

The Area/Metro Engineer is responsible for the assignment of Environmental Inspectors to each Project within their jurisdiction. Although a few projects make use of consultant inspection for this purpose, Environmental Inspectors are primarily KDOT employees in the Engineering Technician classification. Whether a KDOT employee or consultant, all individuals performing compliance inspections on KDOT's behalf are required to have completed the Environmental Inspector Training program described in section 4.0 of this report.

3.0 Active Project / Permit Information

Under paragraph 23 of the Consent Decree, KDOT is required to submit to EPA a list of all Projects every March 15 and September 15.

The submitted lists from March 15 and September 15, 2014 are included with this report as Appendix A.

4.0 Training

4.1 Stormwater Training Program

The training requirements detailed in paragraphs 15 and 16 of the Consent Decree are met with the continuation of the training program developed in 2013.

The classroom portions of the training program were not significantly changed from 2013. Minor modifications were made to incorporate current specifications and standards. The field portion of the course was enhanced with the addition of a ditch section which can be flooded with water. This allows the class to observe directly how various BMPs perform under realistic ditch flow conditions.

As detailed in the certification submitted to EPA on May 6, 2013, the training program meets or exceeds the requirements described in appendices B, C and D of the Consent Decree.

The Environmental Inspector Training (EIT) and the Environmental Manager Training classes were each offered 8 times during 2014. A total of 355 individuals completed the EIT and 179 completed the EMT. At the conclusion of the 2014 training season, 800 individuals were certified as Environmental Inspectors and 401 of those individuals were certified as Environmental Managers.

4.2 Compliance with training requirements

All of KDOT's Area and Metro Engineers have completed the Environmental Inspector and Environmental Manager training courses. All current Environmental and Oversight Inspectors have completed the Environmental Inspector Training. Any new Area/Metro Engineer is required to complete the training requirements prior to assuming those duties related to stormwater compliance. If a trained Area or Metro Engineer is not available, those duties will be assigned to a trained Engineer at an equivalent or higher level of responsibility.

Environmental Inspectors will not be assigned to perform Inspection duties without holding a current Environmental Inspector certification. The Environmental Inspector and Environmental Manager training certificates are valid for a period of two years; all KDOT personnel are required to maintain current certification while performing stormwater compliance related duties.

Current KDOT specifications require the Contractor's designated Water Pollution Control Manager (WPCM) to have completed the Environmental Inspector Training and the Environmental Manager Training within the twelve months prior to beginning work on a project as WPCM. These training requirements have been included in the contracts for all Projects let after March 1, 2013 as well as many Projects let prior to that date.

4.3 Additional Area Engineer Training

In addition to the formal training program, Area Engineer training sessions were conducted in each of the six districts. These sessions were conducted between March and May 2014 at active construction projects within each district.

The objectives of this training were to promote state-wide consistency in the identification and correction of potential permit violations, address frequently asked questions, share successful and unsuccessful implementation strategies, to emphasize the importance of compliance and the potential consequences, both to KDOT and to individual employees, of non-compliance.

These supplemental training sessions were attended by all of the Area Engineers in each district. Also in attendance was senior district staff including the District Engineer and District Construction Engineer or Assistant District Engineer. The training was conducted by headquarters staff including the Stormwater Compliance Engineer, Field Construction Engineer, Assistant Bureau Chief of Construction and Materials, Bureau Chief of Construction and Materials and the Director of the Division of Operations.

The training involved walking the project, identifying potential compliance issues, answering questions, demonstrating effective inspection practices, evaluating BMP performance, and discussions of contract specifications, enforcement and consequences of non-compliance. Effective use of non-structural BMPs including timely stabilization, construction sequencing and good housekeeping practices were emphasized.

4.4 Other Training

KDOT also made efforts during 2014 to educate local public officials, utility owners and others. Coordinating with the Kansas City Metro chapter of APWA, Mr. Van Nice presented a half-day seminar on erosion and sediment control practices for utility owners and contractors. An article published in the September 2014 edition of the KC APWA newsletter describing this seminar is included as Appendix G.

5.0 Compliance Inspections

5.1 Procedures

All Project inspections are required to be completed using the updated form 247 as approved with the Consent Decree. The Instructions for form 247 include the inspection procedures and guidance for KDOT staff as described in paragraph 19 of the Consent Decree. *Inspection Procedures and Form 247 Instructions* was distributed by email to all KDOT field offices, included in the Environmental Inspector Training materials, and is publicly available on the KDOT website. *Inspection Procedures and Form 247 Instructions* are included in this report as Appendix D.

Key elements of the Form 247 Instructions and inspection procedures include requirements for the stormwater erosion control preconstruction conference, inspection frequency, submittal of reports, and procedures to verify correction of identified deficiencies.

In addition to the requirements of the consent decree, KDOT specifications require the contractor to jointly participate in all project inspections. This requirement is intended to ensure that the contractor is immediately aware of all identified deficiencies and to encourage collaboration in the evaluation and decision process.

Although not required by the Consent Decree, Area / Metro Engineers are also required to submit all completed inspection reports to the SWCE at a dedicated email address. This allows the SWCE to provide additional review and oversight of the inspection process. An Engineering Technician Specialist from the Bureau of Construction and Materials was assigned, on a part-time basis, to assist the SWCE with tracking and review of inspection reports.

5.2 Inspection Forms

Inspection form 247 has been distributed to all KDOT field offices, included in the Environmental Inspector Training materials, and is publicly available on the KDOT website. This form is mandatory for use on all KDOT owned projects requiring permit coverage. All contracts awarded by KDOT for projects owned by a city, county or other unit of government (Local Projects) also require the use of this form effective March 2014.

5.3 Headquarters / District / Third-Party Oversight

The oversight inspection program was maintained throughout 2014. Oversight Inspectors were assigned to all projects with a disturbed area of five acres or greater. Oversight

inspections have been completed at a minimum frequency of once every 60 days during active construction periods. The active construction period is considered to be the time from the initiation of ground disturbing activities until the contractor has been given a Notice of Acceptance. Active construction may also be considered complete with a partial Notice of Acceptance provided that all physical work on the project is complete.

Three consultant firms were utilized in 2014 to perform oversight inspections on the KDOT projects which disturb 300 acres or more. All consultant inspectors completed the required Environmental Inspector Training prior to performing oversight inspections.

Ten projects were assigned to headquarters staff for oversight inspection. These projects range in size between 10.0 and 286 acres disturbed. Headquarters staff performing oversight inspections in 2014 included the Stormwater Compliance Engineer, Field Construction Engineer, Assistant Bureau Chief of Construction from the Bureau of Construction and Materials and an Environmental Scientist from the KDOT Environmental Services Section of the Bureau of Right of Way. These individuals completed the required Environmental Inspector Training prior to performing oversight inspections.

The remaining 24 projects disturbing from five to 94 acres were assigned to district staff, primarily Area Engineers. These individuals completed the required Environmental Inspector Training prior to performing oversight inspections.

No waiver of the third party inspection requirement was requested under paragraph 22 of the Consent Decree.

6.0 Specification and Standards

6.1 General

A number of specification changes were made during 2014 to improve permit compliance on KDOT projects. All construction contracts awarded in 2014 for projects requiring KDOT to submit a NOI have included project special provision 07-PS0360-R04 or a subsequent revision. Three revisions were implemented during 2014. Contracts awarded by KDOT for projects owned by local units of government included special provision 07-9002-R06 or a subsequent revision. Although the Consent Decree requirements do not apply to these Local Projects, revisions were made to incorporate most of the changes already made for KDOT-owned projects. This was done in part to provide our contractors and KDOT staff a more uniform set of rules and procedures to follow. This increases the burden on the training program by extending the requirements to cover more projects, but there is a benefit in improved consistency and ease of administration. The contract special provisions utilized in 2014 are included with this report as Appendix E.

Special provisions 07-PS0360-R05 and 07-9002-R8 were implemented in March 2014. This included a minor revision to the PS0360 specification to clarify measurement for various sediment control devices. 07-9002-R8, used on local projects, adds many of the newer

requirements from the PS0360 series. This includes requiring the contractor to designate a WPCM and provide a trained Environmental Inspector to participate in joint site inspections.

Special provisions 07-PS0360-R06 and 07-9002-R9 were implemented in May 2014. Notable changes included a new pay item as well as language changes to resolve some inconsistencies between the two specifications. The pay item for temporary geotextile was added to address a frequent need for temporary stabilization in areas such as steep slopes and stockpiles where vegetation establishment is undesirable or infeasible. This revision also clarifies the Contractor's responsibility for all erosion and sediment control BMPs which may be present within the project limits regardless of the original installer.

07-PS0360-R07 and 07-9002-R10 were implemented in October 2014. These revisions include a major change to KDOT specifications for clearing and grubbing. A contractor who chooses to clear and grub areas where no productive work is immediately scheduled to begin is required to stabilize those areas at no cost to KDOT (or the local government). This is intended to encourage contractors to schedule their operations to more effectively minimize the erodible surface area during construction.

6.2 Water Pollution Control Manager (WPCM)

Language is included in the project special provisions for all contracts awarded in 2014 that requires the contractor to designate a Water Pollution Control Manager (WPCM) for the project. Beginning with the March 2014 letting, all construction contracts awarded by KDOT for Local Projects also require the contractor to designate a WPCM. KDOT field offices have been instructed not to issue the Notice to Proceed until the contractor has designated a WPCM who has documented compliance with the training requirements.

The duties and responsibilities include completion of the training program within the 12 months prior to beginning work on the project, weekly visits to the project, familiarity with the project SWPPP, authority to direct any and all contractor or sub-contractor work, and review of all inspection reports completed for the project.

6.3 Stormwater Preconstruction Conferences

Special provisions included with all applicable contracts awarded in 2014 include requirements for the contractor to participate in a stormwater erosion control conference before the start of construction activities. The requirements for these preconstruction conferences are also included in the document titled *Inspection Procedures and Form 247 Instructions*.

Minutes from each stormwater preconstruction conference are to be recorded and submitted to the SWCE as well as kept with the project SWPPP documentation.

6.4 Standard drawings and Prequalified Materials List

Revisions were made this year to the standard plans related to erosion and sediment control. Notable revisions include:

- Added installation details for class I erosion control blankets at culvert end sections
- Updated standards for erosion control blankets (class I and class II) to better conform with current standard practices
- The Prequalified Materials list was edited to remove hydraulically applied products from the class I list. This was done based on relatively poor field performance of these products compared to erosion control blankets.

6.5 Construction Manual

The KDOT Construction Manual was updated in 2014. The Construction Manual is a guide to uniform methods and procedures used on construction projects. The Construction Manual address both KDOT and Local Projects. Section 4.03 of the 2014 Construction Manual is included with this report as Appendix

7.0 Quarterly stormwater bulletin

Four editions of KDOT's "Stormwater Update" bulletin were published in 2014. Bulletins were distributed on the first business days of March, June, September and December. The bulletin was distributed electronically to all Area / Metro Engineers, Environmental and Oversight Inspectors, and to Contractors. Appendix B contains the bulletins distributed in 2014.

8.0 Kansas General Permit Compliance

Paragraph 24 requires KDOT and its contractors to comply with the Permit at each Project. Permit compliance is monitored by project Environmental Inspectors under the oversight of the responsible Area / Metro Engineer. Any potential instance of non-compliance is reported to the Stormwater Compliance Engineer. A summary table of all such instances is included with this report as Appendix H.

9.0 Consent Decree Compliance

This annual report summarizes KDOT's efforts during 2014 to comply with the Consent Decree paragraphs 12 through 25. All known instances of potential non-compliance are included with this report as Appendix I.

10.0 Outlook for 2015

KDOT recognizes that developing an efficient and effective stormwater compliance program is a complex process. This process requires constant evaluation and adjustment to meet the challenges of implementing new procedures and requirements. In order to improve Permit and Consent Decree compliance in 2015, a number of additional actions are anticipated.

KDOT plans to continue educating critical staff. The two-year certifications issued in 2013 will be expiring so the focus this year is on timely renewal. The course materials have been thoroughly reviewed and updated based on current standards and lessons learned over the last two years. The minimum standards established in the Consent Decree will continue to be met or exceeded by KDOT's training program.

KDOT is also working with the Kansas Contractors Association to certify an alternate training program developed specifically for contractors. The addition of this alternate program will increase the number of training opportunities available and facilitate contractor compliance with the training requirements.

In addition to the training required by the Consent Decree, KDOT is working to develop training for additional personnel. KDOT maintenance forces are increasingly called upon to maintain or replace BMPs, repair eroded areas on the roadside and implement sound pollution prevention practices related to their routine activities. With this in mind, KDOT is in the process of developing a training program for the Equipment Operator Senior advancement program. This training will provide front-line highway maintenance workers with a basic knowledge of regulatory requirements and basic pollution prevention principles but focus primarily on proper installation and maintenance of commonly used stormwater BMPs.

KDOT is updating the 2007 Standard Specifications for State Road and Bridge Construction (Standard Specifications) and the 2015 Standard Specifications are anticipated to be implemented in July 2015. The special provisions currently used for temporary erosion and pollution control will be incorporated into the updated Standard Specifications.

KDOT is in the process of implementing an electronic inspection reporting system. The inspection system is based on that currently used by the Nebraska Department of Roads. It is expected that this system will facilitate communication of inspection findings and provide a more effective means for tracking corrective actions and their completion. Effective implementation of this software will require modification of the inspection form and KDOT anticipates receiving approval for an amended or modified form in accordance with paragraph 20 of the Consent Decree.

It is also expected that work on an updated KDOT Erosion Control Manual will continue in 2015. An updated Erosion Control Manual will provide KDOT inspectors, contractors and others with current information and guidance regarding commonly used BMPs on highway construction projects.

KDOT will continue to evaluate specifications, standard drawings and inspection procedures for effectiveness. Revisions will be made as needed to address performance, compliance and enforcement issues. KDOT will continue to seek opportunities to educate KDOT staff and external partners.

APPENDICES

APPENDIX A

Lists of Projects

**US v. KDOT Consent Decree Project List
March 14, 2014**

Kansas Permit	Fed Permit	Project Number /Name	Route	County Name	Description	Designated Area or Metro Engineer					Responsible Contractor	Construction Activities	
						Office Location	First	Last	Phone	email		Start Date	Completion Date
S-BB04-0006	KSR 107 194	KA-0716-01	U077	MARSHALL	Big Blue River Br (013), 0.5 Miles East of Blue Rapids	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	UNITED CONTRACTORS INC AND SUBSIDIARIES	08/09/12	09/24/13
S-BB03-0003	KSR 107 666	KA-0027-01	U036	MARSHALL	Bridge Replacement; Snipe Creek Bridge (006) 3.36 miles east of K-99	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	06/03/13	11/25/13
S-KS65-0007	KSR 107 727	KA-0747-01	U075	BROWN	0.5 Miles North of NCL Sabetha, No to BR/NM County Line	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	KOSS CONSTRUCTION CO	07/09/12	10/31/13
S-KS65-0008	KSR 107 728	KA-0748-01	U075	NEMAHA	Brown/Nemaha County Line North to Nebraska State Line	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	KOSS CONSTRUCTION CO	07/09/12	10/31/13
S-KS18-0005	KSR 109 420	KA-2054-01	K020	BROWN	Bridge over South Fork Wolf River, 3.95 miles northeast of the east junction with US-73.	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	05/01/14	12/03/14
S-MO19-0023	KSR 109 313	KA-2074-01	K063	NEMAHA	Bridge #022 Located 2.39 Miles North of West Junction US-36 (Wild Cat Creek)	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	REECE CONSTRUCTION COMPANY INC	03/03/14	12/03/14
S-KS88-0002	KSR 104 357	K-7888-01	U059	DOUGLAS	FRANKLIN-DOUGLAS COUNTY LINE, NORTH TO 2L/4L DIVIDED	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	AMES CONSTRUCTION INC	01/26/09	04/13/12
S-KS01-0012	KSR 107 109	KA-0703-01	K099	WABAUNSEE	Tributary to South Fork Mill Cr Bridge (063), at the West Junction of K-4	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	12/21/11	12/06/12
S-MC21-0005	KSR 108 168	KA-0047-01	U075	OSAGE	N of Lyndon:U75 & K31/K268	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	SMOKY HILL, LLC	10/28/13	11/15/14
S-MC04-0026	KSR 108 315	KA-0033-01	U056	DOUGLAS	Bridge Replacement; MF Tauy Creek Dr Br (011) 1.95 Miles East of US-59; MF Tauy Creek Bridge (012) 2.7 Miles East of US-59	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	HAMM INC	04/18/13	12/12/13
S-KS31-0277	KSR 109 572	KA-1826-01	K010	DOUGLAS	K-10 (South Lawrence Trafficway)/Bob Billings Pkwy on West Side of Lawrence	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org		06/30/14	11/02/15
S-MC41-0002	KSR 109 575	KA-2076-01	K170	OSAGE	Bridges located 3.52 miles and 3.62 miles east of Osage/Linn county line	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	BRYAN OHLMEIER CONSTRUCTION CO INC	09/07/13	12/03/14
S-KS89-0001	KSR 108 890	KA-2064-01	U024	JEFFERSON	Bridge #012, Kansas River Drainage in Jefferson County 3.71 miles east of the US-24/US-59 junction.	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	HAMM INC	09/17/13	10/29/14
S-MC58-0003	KSR 109 396	KA-2077-01	K268	OSAGE	Bridge #067 Located 4.77 Miles East of US-75 (Abandoned MOPAC Railroad)	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	08/05/13	12/20/13
S-MC16-0003	KSR 108 022	KA-1806-01	K031	WABAUNSEE	Bridge #075; 4.18 Miles East of Junction K-99/K-31	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	07/06/12	10/24/12
S-KS88-0002	KSR 104 357	K-7888-06	U059	DOUGLAS	FRANKLIN-DOUGLAS COUNTY LINE, NORTH TO 2L/4L DIVIDED	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	BETTIS ASPHALT & CONSTRUCTION INC	01/25/12	11/15/13
S-MC04-0027	KSR 108 317	KA-0032-01	U056	DOUGLAS	Bridge Replacement; EF Tauy Creek Bridge (014) about 4 miles east of US-59	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	HAMM INC	04/18/13	04/18/14
S-KS31-0263	KSR 109 192	K-8392-04	K010	DOUGLAS	K-10 Connection, from South Jct US-59/K-10 East to K-10	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	EMERY SAPP & SONS INC AND SUBSIDIARY	11/11/13	11/20/16
S-KS06-0048	KSR 108 435	KA-1003-08	I070	WYANDOTTE	I-70 and K-7 Interchange	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org		09/16/13	03/11/16
S-KS06-0057	KSR 109 496	KA-2092-01	U073	WYANDOTTE	Bridge Number 068 located 1.77 miles north of US-24 (Piper Creek)	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	PYRAMID CONTRACTORS INC	04/01/14	12/03/14
S-KS06-0051	KSR 108 785	KA-1003-05	I070	WYANDOTTE	I-70 and K-7 Interchange	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	CLARKSON CONSTRUCTION COMPANY	09/03/13	12/23/14
S-KS06-0046	KSR 107 876	KA-1003-06	I070	WYANDOTTE	I-70 and K-7 Interchange	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	PHILLIPS GRADING & CONSTRUCTION INC	02/18/13	05/15/14
S-KS06-0047	KSR 108 362	KA-1003-07	I070	WYANDOTTE	I-70 and K-7 Interchange	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	PHILLIPS GRADING & CONSTRUCTION INC	09/16/13	03/10/15
S-KS84-0006	KSR 108 291	KA-0024-01	K192	JEFFERSON	Bridge Replacement; Indian Creek Bridge (031) 2.5 miles west of the Jefferson/Leavenworth county line	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	04/08/13	11/27/13
S-KS86-0003	KSR 100 000	KA-2404-01	U024	JEFFERSON	1.8 Mi E of SN/JF Co Ln, E to 4-L/2-L Transition; Pavement replacement	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	IDEKER INC	06/18/12	10/29/13
S-KS72-0384	KSR 108 777	KA-0461-01	U024	SHAWNEE	US-24 and Topeka Boulevard in NorthTopeka	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	R A KNAPP CONSTRUCTION INC	05/29/13	04/18/14
S-KS64-0006	KSR 107 455	KA-0710-01	U024	SHAWNEE	Bourbonais Cr Br (069), 3 Miles Northwest of Rossville	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	02/27/12	12/12/12
S-KS58-0008	KSR 108 861	KA-2607-01	U024	JEFFERSON	Perry: U24 & Ferguson and U24 & Linn	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	HAMM INC	07/08/13	04/18/14
S-KS72-0385	KSR 108 786	K-7431-01	U024	SHAWNEE	US-24, from Countryside Road, East to Existing 4-Lane	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	HAMM INC	07/08/13	12/15/14
S-KS72-0412	KSR 109 518	KA-2089-01	K004	SHAWNEE	Bridge #122 in Shawnee County on K-4 Located 8.90 Miles North East of Wabaunsee County Line (Blacksmith Creek)	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	03/10/14	12/03/14
S-KS37-0003	KSR 107 614	KA-0030-01	K099	POTTAWATOMI E	Bridge Replacement; Brush Creek Bridge (036) 7.5 Miles North of Wamego	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	07/12/12	05/28/13

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Kansas Permit	Fed Permit	Project Number /Name	Route	County Name	Description	Designated Area or Metro Engineer					Responsible Contractor	Construction Activities	
						Office Location	First	Last	Phone	email		Start Date	Completion Date
S-KS05-0003	KSR 109 456	KA-2080-01	U024	POTTAWATOMI E	Bridge #014 Located 1.05 Miles East of Broadway(Belvue) (Deep Creek Drainage)	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	03/10/14	12/03/14
S-KS74-0025	KSR 108 079	KA-1799-01	K018	WABAUNSEE	Deep Creek Drainage Bridge (049), 2.96 Miles East of Riley/Wabaunsee County Line; Antelope Creek Bridge (050), 4.82 Miles East of Riley/Wabaunsee County Line; Antelope Creek Drainage, culvert (512), 3.87 Miles East of Riley/Wabaunsee County Line	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/06/12	09/12/13
S-KS38-0133	KSR 106 629	KA-0410-06	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	SEMA CONSTRUCTION INC SUBSIDIARIES & AFFILIATE	04/15/10	06/18/13
S-KS38-0133	KSR 106 629	KA-0410-05	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	KOSS CONSTRUCTION CO	06/09/11	06/13/14
S-KS38-0133	KSR 106 629	KA-0410-04	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	KOSS CONSTRUCTION CO	06/09/11	06/13/14
S-KS38-0133	KSR 106 629	KA-0410-03	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	SEMA CONSTRUCTION INC SUBSIDIARIES & AFFILIATE	04/15/10	06/18/13
S-KS22-0001	KSR 108 233	KA-0023-01	K063	POTTAWATOMI E	Bridge Replacement; Vermillion Creek Bridge (030) 1.2 Miles North of Havensville	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	BRIDGES INC	01/24/13	09/06/13
S-KS38-0239	KSR 109 722	KA-3572-01	U024	RILEY	1 mile northwest of the US-24/K-113 junction	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	J & J CONTRACTORS INC	03/24/14	11/04/14
S-BB03-0007	KSR 109 848	KA-2069-01	K099	MARSHALL	Bridge #040, 4.37 Miles North of the North Junction K-99/K-9	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org		05/29/14	12/01/14
S-MC08-0015	KSR 107 678	KA-1109-02	I035	JOHNSON	SW Johnson County Interchange Project at I-35/Homestead Lane	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	CLARKSON CONSTRUCTION COMPANY	04/30/12	03/31/14
S-MO28-0249	KSR 107 359	K-8251-08	U069	JOHNSON	CORRIDOR:from 119th St, No to I-35 & I-35 No to 75th St	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	CLARKSON CONSTRUCTION COMPANY	07/05/11	05/30/14
S-MO28-0312	KSR 109 495	KA-2100-01	I435	JOHNSON	Bridges 054, 055, 273 and 274 located 1.75, 1.76, 1.74 and 1.765 miles W of state line.	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	CLARKSON CONSTRUCTION COMPANY	11/22/13	12/04/14
S-MC08-0016	KSR 107 690	KA-1109-03		JOHNSON	Homestead Lane from 199th St. North to 191st St.	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	CLARKSON CONSTRUCTION COMPANY	04/20/12	03/31/14
S-KS34-0231	KSR 108 105	KA-1002-02	I035	JOHNSON	I-435 from 95th Street E to Quivira Road, I-35 & K-10	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	APAC KANSAS INC-KS CITY DIV, RENO BRANCH	06/01/12	11/06/13
S-KS68-0227	KSR 105713	K-7925-02	K007	JOHNSON	K-7 and Johnson Dr/55th St in Shawnee	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	MILES EXCAVATING INC	02/08/10	05/11/12
S-KS34-0248	KSR 109 025	KA-1002-04	I435	JOHNSON	I-435 from 87th Street E to Pflumm Road, I-35 & K-10	Olathe	Burt	Morey	(913) 764-4525	bmorey@ksdot.org	GATEWAY INTERCHANGE CONSTRUCTORS JOINT VENTURE	09/11/13	07/17/17
S-SA11-0003	KSR 107 490	K-6779-02	I070	SALINE	0.5 Mile West of RS 1050, East to SA/DK County Line	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	BRIDGES INC	09/09/11	11/08/12
S-BB14-0001	KSR 105 743	K-9655-01	K015	WASHINGTON	BRIDGE 025, MELVIN CREEK, 0.68 MILE N OF WEST JCT US-36	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	REECE CONSTRUCTION COMPANY INC	05/17/10	01/11/11
S-SH08-0001	KSR 107 802	KA-0039-01	K043	DICKINSON	Bridge Replacement; Smoky Hill River Dr Bridge (073)1.5 Miles South of Junction I-70/K-43	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	IDEKER INC	07/26/13	11/21/13
S-LR05-0008	KSR 107 411	KA-0708-01	U024	CLAY	Br (004), Abandoned RR & Huntress Creek in Clay Center	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	A M COHRON & SON INC	09/06/11	05/23/13
S-SH01-0021	KSR 108 422	KA-0732-01	I070	DICKINSON	0.4 Mi W of K-15(Abilene) E to 2.3 M E of E Junct K-43	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	IDEKER INC	05/13/13	11/01/14
S-KS97-0136	KSR 108 587	KA-2402-01	U077	GEARY	U77 & K57, install signal, turn lanes, and int. imp.	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	LEAVENWORTH EXCAVATING & EQUIPMENT COMPANY INC AND AFFILIATE	07/15/13	05/15/14
S-LR20-0002	KSR 109 009	KA-0022-01	K028	JEWELL	Bridge Replacement; Buffalo Creek Drainage Bridge (037) 2.5 Miles West of Jewell/Cloud County Line	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	REECE CONSTRUCTION COMPANY INC	10/09/13	12/01/14
S-LR22-0005	KSR 109 499	KA-2188-01	U036	REPUBLIC	From Jewell/Republic county line east to 0.21 miles east of US-36/US-81 junction.	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	APAC KANSAS INC SHEARS DIVISION	10/09/13	12/24/14
S-LR01-0002	KSR 109 557	KA-2086-01	K148	REPUBLIC	Br #36 (W Fork Elk Creek Drainage) & #37 (W Fork Elk Creek) 12.19 & 12.34 Miles NE of US-81	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	10/09/13	12/02/14
S-SO18-0004	KSR 108 106	KA-1803-01	U024	MITCHELL	Bridge (005); 1.95 Miles East of K-128 (Limestone Creek)	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	L & M CONTRACTORS INC	12/05/12	12/04/13
S-LR09-0002	KSR 109 798	KA-2084-01	U036	REPUBLIC	Bridge Number 001 located 0.78 miles east of K-199 (Beaver Creek)	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org		01/14/14	12/01/14
S-LR08-0020	KSR 109 455	KA-2055-01	K009	CLOUD	Bridge #023, Coal Creek 7 miles southwest of K-28.	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	L & M CONTRACTORS INC	10/09/13	12/03/14
S-SH17-0009	KSR 109 497	KA-2058-01	U077	DICKINSON	Bridge #036, MOPAC Railroad, 0.33 miles north of US-77/US-56	Marion	Joe	Palic	(620) 382-3717	palic@ksdot.org		04/29/14	12/16/14

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S-LA08-0005	KSR 105 006	K-8253-01	K061	MCPHERSON	CORRIDOR: RN-MP COL NE TO BEGIN OF 4-LANE S OF MCPHERSON	Marion	Joe	Palic	(620) 382-3717	palic@ksdot.org	KOSS CONSTRUCTION CO	05/18/09	02/15/13
S-LA08-0006	KSR 105 007	K-8253-02	K061	MCPHERSON	CORRIDOR: RN-MP COL NE TO BEGIN OF 4-LANE S OF MCPHERSON	Marion	Joe	Palic	(620) 382-3717	palic@ksdot.org	KOSS CONSTRUCTION CO	05/18/09	02/15/13
S-SA07-0013	KSR 109 847	KA-2067-01	K018	LINCOLN	Bridge #024, Beaver Creek, 3.7 miles east of the K-18/K-14 junction.	Ellsworth	Karlton	Place	(785) 472-4447	kplace@ksdot.org		02/12/14	03/03/15
S-SA06-0003	KSR 109 568	KA-2072-01	K181	MITCHELL	0.90 mi and 0.88 mi N of Mitchell/Lincoln county line (Bacon Creek and Bacon Creek Drainage)	Ellsworth	Karlton	Place	(785) 472-4447	kplace@ksdot.org		01/13/14	12/01/14
S-SO27-0008	KSR 109 406	KA-2079-01	K106	OTTAWA	Bridge #028 Located 5.23 Miles North of K-18 (Salt Creek Drainage)	Ellsworth	Karlton	Place	(785) 472-4447	kplace@ksdot.org	REECE CONSTRUCTION COMPANY INC	01/13/14	12/04/14
S-SH33-0119	KSR 108 795	KA-0036-01	K143	SALINE	Bridge Replacement;Mulberry Creek Drainage Bridge (100)0.5 Miles North of Junction US-40/K-143	Ellsworth	Karlton	Place	(785) 472-4447	kplace@ksdot.org	REECE CONSTRUCTION COMPANY INC	09/09/13	08/30/14
S-UR16-0015	KSR 107 195	KA-0739-01	U036	NORTON	US-36 in Norton County(East Norton Limits to K-383 Jct)	Phillipsburg	Harold	Schleicher	(785) 543-2163	harolds@ksdot.org	VENTURE CORPORATION	02/27/12	08/06/13
S-SO41-0010	KSR 108 238	KA-0031-01	U024	ROOKS	Bridge Replacement; Ash Creek Bridge (009) 5.2 Miles West of Stockton	Phillipsburg	Harold	Schleicher	(785) 543-2163	harolds@ksdot.org	BRIDGES INC	03/27/13	05/15/14
S-UR09-0014	KSR 107 454	KA-0719-01	I070	SHERMAN	K-253 (Edson) E to 0.5 Mi E of Sherman-Thomas Coun Line	Atwood	Eric	Oelschlagler	(785) 626-3258	erico@ksdot.org	APAC KANSAS INC SHEARS DIVISION	02/13/12	03/06/13
S-UR12-0002	KSR 107 193	KA-0718-01	I070	SHERMAN	Colorado State Line East to 0.5 MI E of RS-1668(Caruso)	Atwood	Eric	Oelschlagler	(785) 626-3258	erico@ksdot.org	KOSS CONSTRUCTION CO	05/26/11	10/31/13
S-SO20-0017	KSR 109 150	KA-0041-01	U024	SHERIDAN	Bridge Replacement; S Fork Solomon River Bridge (005) 7.8 Miles East of Junction K-23/US-24	Hays	Kevin	Zimmer	(785) 625-9718	kevinz@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/30/13	05/15/14
S-SO20-0018	KSR 109 151	KA-0042-01	U024	SHERIDAN	Bridge Replacement; S Fork Solomon River Bridge (007) 9.13 Miles East of Junction K-23/US-24	Hays	Kevin	Zimmer	(785) 625-9718	kevinz@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/30/13	05/15/14
S-SH29-0011	KSR 108 227	KA-0722-01	I070	THOMAS	0.5 Mi SE RS-886(Mingo) Southeast to Thomas-Logan Co Ln	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org		06/15/15	11/15/17
S-SA15-0003	KSR 107 669	KA-0727-01	I070	GOVE	4 M East of K-211(Park) East to Gove-Trego County Line	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org		06/01/15	11/15/17
S-SO20-0019	KSR 109 407	KA-1018-01	K23	SHERIDAN	From just north of the US-24/K-23 junction, north to the US-83/US-383/K-23 junction	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org	VENTURE CORPORATION	03/24/14	10/17/14
S-SH35-0005	KSR 109 408	KA-2091-01	K27	WALLACE	Bridge #009 0.87 Miles North of Wallace/Greeley County Line (Middle Ladder Creek)	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org	L & M CONTRACTORS INC	01/06/14	12/03/14
S-VE26-0003	KSR 108 600	KA-0035-01	K058	GREENWOOD	Bridge Replacement; Halderman Cr Drainage Bridge (015) 4 Miles East of Madison	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	KILLOUGH CONSTRUCTION INC	06/18/13	02/28/14
S-NE60-0001	KSR 109 541	KA-1772-01	U059	ALLEN	Bridge #015, Canville Creek, 2.65 miles north of US-59/K-39 east junction.	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	BRIDGES INC	03/24/14	12/03/14
S-MC12-0004	KSR 109 404	KA-2052-01	K31	BOURBON	Bridge #038, 2.96 Miles East of the East Junction K-31/K-7	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	B & B BRIDGE COMPANY LLC	09/06/13	12/01/14
S-NE34-0001	KSR 109 246	KA-2053-01	K039	BOURBON	Bridge #039, Flat Rock Creek,1.18 Miles East of the Bourbon/Neosho County Line and Bridge #042, Paint Creek, 0.47 Miles East of the East Junction K-39/K-3.	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	02/24/14	12/01/14
S-MC46-0011	KSR 109 613	KA-2114-01	K003	BOURBON	Bridge #026 Located 3.29 Miles North of West Junction K-39 (Hinton Creek)	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org		12/30/14	11/25/15
S-MC19-0002	KSR 108 314	KA-0734-01	U169	FRANKLIN	Anderson/Franklin Co Line NE to Franklin/Miami Co Line.	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	APAC KANSAS INC-KS CITY DIV, RENO BRANCH	07/22/13	11/01/14
S-MC26-0011	KSR 109 477	KA-2068-01	K007	LINN	Bridge #012, Big Sugar Creek Drainage, 6 miles north of the K-7/K-52 junction.	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	KILLOUGH CONSTRUCTION INC	02/07/14	12/03/14
S-MC31-0078	KSR 109 517	KA-2205-01	K068	FRANKLIN	Jct I-35/K-68, East to 1.3 Miles East of I-35. Pavement and shoulder reconstruction. Includes the addition of turn lanes on K-68 at an existing Wal-Mart entrance.	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	EMERY SAPP & SONS INC AND SUBSIDIARY	03/24/14	12/04/14
S-MC30-0014	KSR 108 746	KA-0735-01	U169	MIAMI	Franklin-Miami Co Line NE to 1.2 Miles Southwest of K-7	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	APAC KANSAS INC-KS CITY DIV, RENO BRANCH	07/22/13	11/01/14
S-MC15-0001	KSR 109 405	KA-2049-01	K31	ANDERSON	Bridge #016, 6.91 Miles Southeast of Anderson/Coffey County Line	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	12/09/13	12/03/14
S-VE09-0011	KSR 104 249	K-8241-01	U169	MONTGOMERY	COR: US-169, INCLDNG JCT US-166, N TO APPROX CO RD 3000	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	SHERWOOD CONSTRUCTION CO INC AND SUBSIDIARIES	03/30/09	06/05/12

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K-VE21-0001	KSR 107 511	KA-0705-01	U166	MONTGOMERY	Bridge 031, Bee Creek, 0.2 miles East of CQ/MG Co. Line	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	B & B BRIDGE COMPANY LLC	03/14/12	04/12/13
S-VE14-0002	KSR 109 409	KA-2073-01	U160	MONTGOMERY	Bridge #017 Located 7.09 Miles South East of Elk County Line (Elk River)	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	BRIDGES INC	12/09/13	12/04/14
S-VE01-0001	KSR 107 107	KA-0791-02	K047	WILSON	0.18 Mi E of Jct K-47/US-75 E to Wilson-Neosho Co Line	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	KOSS CONSTRUCTION CO	05/11/11	02/14/13
S-VE35-0005	KSR 107 106	KA-0791-01	K047	NEOSHO	Wilson-Neosho Co Line E to .05 Mi W of Jct K-47/US-169	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	KOSS CONSTRUCTION CO	05/11/11	02/14/13
S-NE62-0001	KSR 108 318	KA-0034-01	K039	NEOSHO	Pecan Creek Bridge (029); 1.2 Miles West of the West Junction US-59/K-39	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org	B & B BRIDGE COMPANY LLC	04/04/13	12/16/13
S-NE65-0004	KSR 108 316	KA-0043-01	U166	CHEROKEE	Four Mile Creek Bridge (032); 7.89 Miles East of Labette/Cherokee County Line	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org	B & B BRIDGE COMPANY LLC	06/24/13	05/23/14
S-NE59-0004	KSR 107 556	KA-0699-01	K047	NEOSHO	Bridge (043), Neosho River, 3 Miles East of US-59	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org	B & B BRIDGE COMPANY LLC	05/31/12	11/27/13
S-NE57-0051	KSR 109 454	KA-2096-01	K126	CRAWFORD	Bridge 6 miles west of K-7 and bridge 1.16 miles west of K-7.	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org	B & B BRIDGE COMPANY LLC	12/22/13	11/27/14
S-NE11-0031	KSR 109 699	KA-2075-01	K039	NEOSHO	Bridge Number 023 located 2.28 miles east of US-169 (Neosho River Drainage)	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org	B & B BRIDGE COMPANY LLC	04/01/14	12/03/14
S-UA22-0004	KSR 107 104	KA-0715-01	U050	EDWARDS	Arkansas River Bridge (004), 1 Mile East of Kinsley	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/06/11	01/09/13
S-AR96-0002	KSR 107 520	K-8244-10	U054	KINGMAN	US54 in Kingman Co. 2.7 mi. W of K-14(11) W Jct.	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	01/24/12	10/03/14
S-AR60-0012	KSR 106 797	KA-0910-01	U160	BARBER	Bridge 160-4 (003), 11.1 mi. east of BA/CM County Line.	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	08/01/11	07/02/12
S-AR96-0002	KSR 107 520	K-8244-08	U054	KINGMAN	US54 in Kingman Co. 5.82 mi. E. of Pr/Km Co. Line	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	01/21/12	10/03/14
S-AR73-0026	KSR 108 588	K-8243-04	U054	PRATT	Jct RS 501, East to 1 Mile East of Cairo Intersection	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	04/15/13	12/12/14
S-AR96-0002	KSR 107 520	K-8244-05	U054	KINGMAN	7 miles E of Pratt/Kingman county line, east to 3.2 miles W of West Junction US-54/K-14	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	01/24/12	10/03/14
S-AR78-0003	KSR 109 422	KA-2082-01	K042	PRATT	Bridge located 3.91 miles east of US-281 (Sand Creek)	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	03/24/14	12/03/14
S-AR49-0045	KSR 105 575	K-7409-02	U050	RENO	West of Junction K-61, East to East of Yoder/Airport Rd	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	DONDLINGER & SONS CONSTRUCTION CO INC	08/16/11	04/18/14
S-AR49-0029	KSR 104 100	K-8252-01	K061	RENO	CORRIDOR: 4L/2L, N OF 17TH IN HUTCH, NE TO RN-MP COL	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	KOSS CONSTRUCTION CO	03/09/09	06/10/13
S-LA13-0059	KSR 107 664	K-9439-01	U050	HARVEY	COR:US-50, 1 Mi W of Anderson Ave, East to Old Main St.	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	04/02/12	06/28/14
S-LA13-0079	KSR 109 220	KA-0052-01	I135	HARVEY	I-135/36th St, 2 miles south of So. Junct I-135/US-50	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org		03/16/15	04/01/16
S-AR72-0003	KSR 106 589	KA-0744-01	U050	RENO	US-50: RS-360 (Plevna) East to Junction US-50/K-14	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	APAC KANSAS INC SHEARS DIVISION	03/26/12	03/25/13
		KA-2212-01	U054	BUTLER	US-54: East city limits of Andover east to west city limits of Augusta	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org		07/01/14	12/14/15
S-AR17-0005	KSR 109 498	KA-2090-01	U081	SUMNER	Bridge Number 041 located 1.58 miles north of Oklahoma state line (Fall Creek)	Winfield	Don	Snyder	(620) 221-3370	dsnyder@ksdot.org		04/29/14	12/01/14
S-AR40-0015	KSR 109 802	KA-3483-01	K002	MULTIPLE	From the North City Limits of Harper, northeast to the Harper/Kingman County Line, northeast to the Kingman/Sumner County Line, northeast to the K-2/K-49 junction	Winfield	Don	Snyder	(620) 221-3370	dsnyder@ksdot.org	APAC KANSAS INC SHEARS DIVISION	03/10/14	10/01/14
S-UA16-0037	KSR 108 292	KA-0038-01	U281	BARTON	Dry Walnut Creek Bridge (015); 1.5 Miles North of Junction US-56/US-281 (Great Bend North City Limits)	Great Bend	Barry	McManaman	(620) 793-5408	barrym@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	05/16/13	03/01/14
S-UA35-0003	KSR 109 630	KA-3479-01		PAWNEE	K-156: Pawnee/Hodgeman County Line, east to West City Limits of Larned;US-183: US-183/K-156 junction, north to the county line	Great Bend	Barry	McManaman	(620) 793-5408	barrym@ksdot.org	VENTURE CORPORATION	03/04/14	11/20/14
S-AR21-0001	KSR 108 293	KA-0040-01	K004	BARTON	Cow Creek Drainage Bridge (045); 0.1 Mile West of Claffin	Great Bend	Barry	McManaman	(620) 793-5408	barrym@ksdot.org	L & M CONTRACTORS INC	05/06/13	12/20/13
S-AR94-1080	KSR 109 647	KA-0733-01	I135	SEDGWICK	From the Junction of I-135/K-96 (37th Street North), North to north city limits of Park City	Wichita	Brent	Terstriep	(316) 744-1271	terstriep@ksdot.org		41792	12/14/14

**US v. KDOT Consent Decree Project List
March 14, 2014**

Kansas Permit	Fed Permit	Project Number /Name	Route	County Name	Description	Designated Area or Metro Engineer					Responsible Contractor	Construction Activities	
						Office Location	First	Last	Phone	email		Start Date	Completion Date
S-AR43-0035	KSR 109 679	KA-3074-01	U081	SEDGWICK	Sedgwick Co.: US-81 and 79th Street	Wichita	Brent	Terstriep	(316) 744-1271	terstriep@ksdot.org		08/06/14	07/22/15
S-LA09-0009	KSR 109 474	KHP TROOP F HQ		SEDGWICK	Proposed Tigua St. (1340 ft West of intersection of K254 and Rock Rd)	Wichita	Brent	Terstriep	(316) 744-1271	terstriep@ksdot.org	N/A	06/15/13	06/06/14
		KA-2065-01	K025	KEARNY	Bridge #012, Mattox Draw, 8.8 miles north of the K-25/US-50 junction.	Syracuse	Gary	Bennett	(620) 384-7822	geraldb@ksdot.org		06/30/14	12/01/14
S-UA10-0004	KSR 107 720	KA-0045-01	K023	FINNEY	Pawnee River Bridge (012); 6.46 Miles North of West Junction K-156/K-23	Syracuse	Gary	Bennett	(620) 384-7822	geraldb@ksdot.org	L & M CONTRACTORS INC	03/24/14	07/31/14
S-UA18-0011	KSR 108 239	K-8246-03		FINNEY	Corridor: From KE/FI Co Line, E to No Jct US-50/US-83	Syracuse	Gary	Bennett	(620) 384-7822	geraldb@ksdot.org	KLAVER CONSTRUCTION COMPANY INC	10/15/12	04/19/13
S-CI12-0008	KSR 107 110	KA-0691-01	K023	MEADE	Cimarron River Bridge #015 on K-23 beginning at KS/OK State Line thence North 1.3 Miles	Ulysses	Chuck	Oldaker	(620) 356-1531	oldaker@ksdot.org	BRIDGES INC	02/15/11	11/08/12
S-CI18-0007	KSR 108 778	KA-1894-01	K051	MORTON	Culvert #510 on K-51 in Morton County; approximately 4.2 miles East of East City Limits of Richfield. Culvert #511 on K-51 in Morton County;	Ulysses	Chuck	Oldaker	(620) 356-1531	oldaker@ksdot.org	J & J CONTRACTORS INC	07/16/13	12/31/13
S-AR13-0006	KSR 109 548	KA-2061-01	K94	FORD	Bridge #054, West Fork Rattlesnake Creek, 2.11 miles south of US-54.	Dodge City	Dale	Luedke	(620) 227-6122	dalel@ksdot.org	KLAVER CONSTRUCTION COMPANY INC	03/24/14	12/03/14
S-UA21-0011	KSR 107 772	KA-0044-01	K156	HODGEMAN	Pawnee River Drainage Bridge (001); 2.89 Miles East of Finney/Hodgeman County Line	Dodge City	Dale	Luedke	(620) 227-6122	dalel@ksdot.org	L & M CONTRACTORS INC	08/06/13	05/02/14

**US v. KDOT Consent Decree Project List
September 15, 2014**

Kansas Permit	Fed Permit	Project Number /Name	Route	County Name	Description	Designated Area or Metro Engineer					Responsible Contractor	Construction Activities	
						Office Location	First	Last	Phone	email		Start Date	Completion Date
S-KS18-0005	KSR 109 420	KA-2054-01	K020	BROWN	Bridge over South Fork Wolf River, 3.95 miles northeast of the east junction with US-73.	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	05/19/14	12/03/14
S-MO19-0023	KSR 109 313	KA-2074-01	K063	NEMAHA	Bridge #022 Located 2.39 Miles North of West Junction US-36 (Wild Cat Creek)	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	REECE CONSTRUCTION COMPANY INC	03/03/14	12/03/14
S-KS65-0008	KSR 107 728	KA-0748-01	U075	NEMAHA	Brown/Nemaha County Line North to Nebraska State Line	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	KOSS CONSTRUCTION CO	07/09/12	10/31/13
S-KS65-0007	KSR 107 727	KA-0747-01	U075	BROWN	0.5 Miles North of NCL Sabetha, No to BR/NM County Line	Horton	Leroy	Koehn	(785) 486-2142	koehn@ksdot.org	KOSS CONSTRUCTION CO	07/09/12	10/31/13
S-KS88-0002	KSR 104 357	K-7888-01	U059	DOUGLAS	FRANKLIN-DOUGLAS COUNTY LINE, NORTH TO 2L/4L DIVIDED	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	AMES CONSTRUCTION INC	01/26/09	04/13/12
S-MC21-0005	KSR 108 168	KA-0047-01	U075	OSAGE	N of Lyndon:U75 & K31/K268	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	SMOKY HILL, LLC	10/28/13	11/15/14
S-MC04-0026	KSR 108 315	KA-0033-01	U056	DOUGLAS	Bridge Replacement, MF Tauy Creek Dr Br (011) 1.95 Miles East of US-59; MF Tauy Creek Bridge (012) 2.7 Miles East of US-59	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	HAMM INC	04/18/13	12/12/13
S-MC04-0027	KSR 108 317	KA-0032-01	U056	DOUGLAS	Bridge Replacement; EF Tauy Creek Bridge (014) about 4 miles east of US-59	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	HAMM INC	04/18/13	05/23/14
S-KS31-0263	KSR 109 192	K-8392-04	K010	DOUGLAS	K-10 Connection, from South Jct US-59/K-10 East to K-10	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	EMERY SAPP & SONS INC AND SUBSIDIARY	11/11/13	11/20/16
S-MC41-0002	KSR 109 575	KA-2076-01	K170	OSAGE	Bridges located 3.52 miles and 3.62 miles east of Osage/Lyon county line	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	BRYAN OHLMEIER CONSTRUCTION CO INC	06/23/14	12/03/14
S-KS31-0277	KSR 109 572	KA-1826-01	K010	DOUGLAS	K-10 (South Lawrence Trafficway)/Bob Billings Pkwy on West Side of Lawrence	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	HAMM INC	07/29/14	12/18/15
S-KS01-0012	KSR 107 109	KA-0703-01	K099	WABAUNSEE	Tributary to South Fork Mill Cr Bridge (063), at the West Junction of K-4	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	12/21/11	12/06/12
S-KS89-0001	KSR 108 890	KA-2064-01	U024	JEFFERSON	Bridge #012, Kansas River Drainage in Jefferson County 3.71 miles east of the US-24/US-59 junction.	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	HAMM INC	04/08/14	10/29/14
S-KS88-0002	KSR 104 357	K-7888-06	U059	DOUGLAS	FRANKLIN-DOUGLAS COUNTY LINE, NORTH TO 2L/4L DIVIDED	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	BETTIS ASPHALT & CONSTRUCTION INC	01/25/12	11/15/13
S-KS01-0014	KSR 110 196	KA-2476-01	K004	WABAUNSEE	culverts on K-4 Located at State Mileposts 283.13 and 283.35 Approximately 0.9 & 0.7 Miles West of K-99	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	08/04/14	05/15/15
S-MC58-0003	KSR 109 396	KA-2077-01	K268	OSAGE	Bridge #067 Located 4.77 Miles East of US-75 (Abandoned MOPAC Railroad)	Osage City	Steve	Baalman	(785) 528-3128	steveb@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	08/05/13	12/20/13
S-KS06-0048	KSR 108 435	KA-1003-08	I070	WYANDOTTE	I-70 and K-7 Interchange	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	CLARKSON CONSTRUCTION COMPANY	01/29/15	03/11/16
S-KS06-0051	KSR 108 785	KA-1003-05	I070	WYANDOTTE	I-70 and K-7 Interchange	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	PHILLIPS GRADING & CONSTRUCTION INC	09/03/13	12/23/14
S-KS06-0047	KSR 108 362	KA-1003-07	I070	WYANDOTTE	I-70 and K-7 Interchange	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	PHILLIPS GRADING & CONSTRUCTION INC	03/10/14	03/10/15
S-KS06-0057	KSR 109 496	KA-2092-01	U073	WYANDOTTE	Bridge Number 068 located 1.77 miles north of US-24 (Piper Creek)	Bonner Springs	Jim	Pickett	(913) 721-2754	pickett@ksdot.org	PYRAMID CONTRACTORS INC	04/29/14	12/03/14
S-KS58-0008	KSR 108 861	KA-2607-01	U024	JEFFERSON	Perry; U24 & Ferguson and U24 & Linn	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	HAMM INC	07/08/13	05/14/14
S-KS72-0385	KSR 108 786	K-7431-01	U024	SHAWNEE	US-24, from Countryside Road, East to Existing 4-Lane	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	HAMM INC	07/08/13	12/15/14
S-KS84-0006	KSR 108 291	KA-0024-01	K192	JEFFERSON	Bridge Replacement; Indian Creek Bridge (031) 2.5 miles west of the Jefferson/Leavenworth county line	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	04/08/13	11/27/13
S-KS72-0412	KSR 109 518	KA-2089-01	K004	SHAWNEE	Bridge #122 in Shawnee County on K-4 Located 8.90 Miles North East of Wabaunsee County Line (Blacksmith Creek)	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	04/28/14	12/03/14
S-KS64-0006	KSR 107 455	KA-0710-01	U024	SHAWNEE	Bourbonais Cr Br (069), 3 Miles Northwest of Rossville	Topeka	Curt	Niehaus	(785) 296-3986	curt@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	02/27/12	12/12/12
S-BB03-0007	KSR 109 848	KA-2069-01	K099	MARSHALL	Bridge #040, 4.37 Miles North of the North Junction K-99/K-9	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	06/16/14	12/01/14
S-KS38-0133	KSR 106 629	KA-0410-05	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	KOSS CONSTRUCTION CO	06/09/11	10/03/14
S-KS38-0133	KSR 106 629	KA-0410-06	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	SEMA CONSTRUCTION INC SUBSIDIARIES & AFFILIATE	04/15/10	06/18/13
S-KS74-0025	KSR 108 079	KA-1799-01	K018	WABAUNSEE	Deep Creek Drainage Bridge (049), 2.96 Miles East of Riley/Wabaunsee County Line; Antelope Creek Bridge (050), 4.82 Miles East of Riley/Wabaunsee County Line; Antelope Creek Drainage, culvert (512), 3.87 Miles East of Riley/Wabaunsee County Line	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/06/12	09/12/13
		KA-2102-01	U077	MARSHALL	Bridge #009 in Marshall County on US-77 Located 0.97 Miles North of Riley County Line (Swede Creek)	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org		10/05/15	02/15/16
S-KS38-0133	KSR 106 629	KA-0410-03	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	SEMA CONSTRUCTION INC SUBSIDIARIES & AFFILIATE	04/15/10	06/18/13
S-KS38-0133	KSR 106 629	KA-0410-04	K018	RILEY	K-18 FROM WALNUT ST.(OGDEN) NE TO 0.3MI W K-113/SETH CH	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	KOSS CONSTRUCTION CO	06/09/11	10/03/14
S-BB03-0008	KSR 110 147	KA-2070-01	K099	MARSHALL	Bridge Number 042 (Wolf Creek) located 2.3 miles northeast of the K-99/US-36 junction	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	BRIDGES INC	10/13/14	12/01/14
		KA-2101-01	K009	MARSHALL	Bridge #021 in Marshall County on K-9 Located 2.30 Miles East of Washington County Line (Coon Creek)	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org		12/30/14	11/25/15

**US v. KDOT Consent Decree Project List
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Kansas Permit	Fed Permit	Project Number /Name	Route	County Name	Description	Designated Area or Metro Engineer					Responsible Contractor	Construction Activities	
						Office Location	First	Last	Phone	email		Start Date	Completion Date
S-KS22-0001	KSR 108 233	KA-0023-01	K063	POTTAWATOMIE	Bridge Replacement; Vermillion Creek Bridge (030) 1.2 Miles North of Havensville	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	BRIDGES INC	01/24/13	09/06/13
S-BB04-0006	KSR 107 194	KA-0716-01	U077	MARSHALL	Big Blue River Br (013), 0.5 Miles East of Blue Rapids	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	UNITED CONTRACTORS INC AND SUBSIDIARIES	08/09/12	09/24/13
S-KS05-0003	KSR 109 456	KA-2080-01	U024	POTTAWATOMIE	Bridge #014 Located 1.05 Miles East of Broadway(Belvue) (Deep Creek Drainage)	Wamego	Mark	Karolevitz	(785) 456-2353	vitz@ksdot.org	EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY	06/30/14	12/03/14
S-MC08-0015	KSR 107 678	KA-1109-02	I035	JOHNSON	SW Johnson County Interchange Project at I-35/Homestead Lane	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	CLARKSON CONSTRUCTION COMPANY	04/30/12	06/16/14
S-MO28-0312	KSR 109 495	KA-2100-01	I435	JOHNSON	Bridges 054, 055, 273 and 274 located 1.75, 1.76, 1.74 and 1.765 miles W of state line.	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	CLARKSON CONSTRUCTION COMPANY	04/21/14	12/04/14
S-MO28-0249	KSR 107 359	K-8251-08	U069	JOHNSON	CORRIDOR:from 119th St, No to I-35 & I-35 No to 75th St	Olathe	Howard	Lubliner	(913) 764-4525	howardl@ksdot.org	CLARKSON CONSTRUCTION COMPANY	07/05/11	06/16/14
S-KS34-0248	KSR 109 025	KA-1002-04	I435	JOHNSON	I-435 from 87th Street E to Pflumm Road, I-35 & K-10	Olathe	Burt	Morey	(913) 764-4525	bmorey@ksdot.org	GATEWAY INTERCHANGE CONSTRUCTORS JOINT VENTURE	06/04/14	07/17/17
S-KS97-0136	KSR 108 587	KA-2402-01	U077	GEARY	U77 & K57, install signal, turn lanes, and int. imp.	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	LEAVENWORTH EXCAVATING & EQUIPMENT COMPANY INC AND AFFILIATE	07/15/13	08/13/14
S-SH01-0021	KSR 108 422	KA-0732-01	I070	DICKINSON	0.4 Mi W of K-15(Abilene) E to 2.3 M E of E Junct K-43	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	IDEKER INC	05/13/13	11/01/14
S-SH08-0001	KSR 107 802	KA-0039-01	K043	DICKINSON	Bridge Replacement; Smoky Hill River Dr Bridge (073)1.5 Miles South of Junction I-70/K-43	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	IDEKER INC	07/26/13	11/21/13
S-SA11-0003	KSR 107 490	K-6779-02	I070	SALINE	0.5 Mile West of RS 1050, East to SA/DK County Line	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	BRIDGES INC	09/09/11	11/08/12
S-LR05-0008	KSR 107 411	KA-0708-01	U024	CLAY	Br (004), Abandoned RR & Huntress Creek in Clay Center	Clay Center	Dale	Hershberger	(785) 632-3108	daleh@ksdot.org	A M COHRON & SON INC	09/06/11	05/23/13
S-LR22-0005	KSR 109 499	KA-2188-01	U036	REPUBLIC	From Jewell/Republic county line east to 0.21 miles east of US-36/US-81 junction.	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	APAC KANSAS INC SHEARS DIVISION	03/12/14	12/24/14
S-LR01-0002	KSR 109 557	KA-2086-01	K148	REPUBLIC	Br #36 (W Fork Elk Creek Drainage) & #37 (W Fork Elk Creek) 12.19 & 12.34 Miles NE of US-81	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	06/02/14	03/31/15
S-LR08-0020	KSR 109 455	KA-2055-01	K009	CLOUD	Bridge #023, Coal Creek 7 miles southwest of K-28.	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	L & M CONTRACTORS INC	03/04/14	12/03/14
S-LR09-0002	KSR 109 798	KA-2084-01	U036	REPUBLIC	Bridge Number 001 located 0.78 miles east of K-199 (Beaver Creek)	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	L & M CONTRACTORS INC	09/22/14	06/16/15
S-LR20-0002	KSR 109 009	KA-0022-01	K028	JEWELL	Bridge Replacement; Buffalo Creek Drainage Bridge (037) 2.5 Miles West of Jewell/Cloud County Line	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	REECE CONSTRUCTION COMPANY INC	07/14/14	12/19/14
		KA-2334-01	U036	REPUBLIC	From 0.24 Miles East of US-36/US-81 Junction, East to 1.1 Miles East of US-36/US-81 Junction	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org		11/28/14	06/02/15
S-SO18-0004	KSR 108 106	KA-1803-01	U024	MITCHELL	Bridge (005; 1.95 Miles East of K-128 (Limestone Creek)	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org	L & M CONTRACTORS INC	12/05/12	12/04/13
		KA-2085-01	U036	REPUBLIC	Bridge #012 in Republic County on US-36 Located 0.22 Miles East of US-81 (Riley Creek)	Mankato	Leland	Tice	(785) 378-3166	leland@ksdot.org		12/01/14	11/30/15
S-SH17-0009	KSR 109 497	KA-2058-01	U077	DICKINSON	Bridge #036, MOPAC Railroad, 0.33 miles north of US-77/US-56	Marion	Joe	Palic	(620) 382-3717	palic@ksdot.org	BOB BERGKAMP CONSTRUCTION COMPANY INC.	07/02/14	11/24/14
S-SA07-0013	KSR 109 847	KA-2067-01	K018	LINCOLN	Bridge #024, Beaver Creek, 3.7 miles east of the K-18/K-14 junction.	Ellsworth	Karlton	Place	(785) 472-4447	kplace@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	04/01/15	09/30/15
S-SA06-0003	KSR 109 568	KA-2072-01	K181	MITCHELL	0.90 mi and 0.88 mi N of Mitchell/Lincoln county line (Bacon Creek and Bacon Creek Drainage)	Ellsworth	Karlton	Place	(785) 472-4447	kplace@ksdot.org		05/19/15	12/01/15
S-SH33-0119	KSR 108 795	KA-0036-01	K143	SALINE	Bridge Replacement;Mulberry Creek Drainage Bridge (100)0.5 Miles North of Junction US-40/K-143	Ellsworth	Karlton	Place	(785) 472-4447	kplace@ksdot.org	REECE CONSTRUCTION COMPANY INC	03/07/14	09/23/14
		KA-0026-01	U036	DECATUR	Bridge located 2 miles east of US-36/US-83 junction	Atwood	Eric	Oelschlagel	(785) 626-3258	erico@ksdot.org		11/03/14	12/04/15
S-UR12-0002	KSR 107 193	KA-0718-01	I070	SHERMAN	Colorado State Line East to 0.5 MI E of RS-1668(Caruso)	Atwood	Eric	Oelschlagel	(785) 626-3258	erico@ksdot.org	KOSS CONSTRUCTION CO	05/26/11	10/31/13
		KA-0026-02	U036	DECATUR	Bridge located 4 miles east of US-36/US-83 junction	Atwood	Eric	Oelschlagel	(785) 626-3258	erico@ksdot.org		11/03/14	12/04/15
S-UR09-0014	KSR 107 454	KA-0719-01	I070	SHERMAN	K-253 (Edson) E to 0.5 Mi E of Sherman-Thomas Coun Line	Atwood	Eric	Oelschlagel	(785) 626-3258	erico@ksdot.org	APAC KANSAS INC SHEARS DIVISION	02/13/12	03/06/13
		KA-0026-03	U036	DECATUR	Bridge located 7 miles east of US-36/US-83 junction	Atwood	Eric	Oelschlagel	(785) 626-3258	erico@ksdot.org		11/03/14	12/04/15
S-SO20-0018	KSR 109 151	KA-0042-01	U024	SHERIDAN	Bridge Replacement; S Fork Solomon River Bridge (007) 9.13 Miles East of Junction K-23/US-24	Hays	Kevin	Zimmer	(785) 625-9718	kevinz@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/30/13	09/30/14
S-SO20-0017	KSR 109 150	KA-0041-01	U024	SHERIDAN	Bridge Replacement; S Fork Solomon River Bridge (005) 7.8 Miles East of Junction K-23/US-24	Hays	Kevin	Zimmer	(785) 625-9718	kevinz@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/30/13	09/30/14
S-SH35-0005	KSR 109 408	KA-2091-01	K27	WALLACE	Bridge #009 0.87 Miles North of Wallace/Greeley County Line (Middle Ladder Creek)	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org	L & M CONTRACTORS INC	01/06/14	12/03/14

**US v. KDOT Consent Decree Project List
September 15, 2014**

Kansas Permit	Fed Permit	Project Number /Name	Route	County Name	Description	Designated Area or Metro Engineer					Responsible Contractor	Construction Activities	
						Office Location	First	Last	Phone	email		Start Date	Completion Date
S-SH29-0011	KSR 108 227	KA-0722-01	I070	THOMAS	0.5 Mi SE RS-886(Mingo) Southeast to Thomas-Logan Co Ln	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org		06/15/15	11/15/17
S-SO20-0019	KSR 109 407	KA-1018-01	K23	SHERIDAN	From just north of the US-24/K-23 junction, north to the US-83/US-383/K-23 junction	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org	VENTURE CORPORATION	03/17/14	10/17/14
S-SA15-0003	KSR 107 669	KA-0727-01	I070	GOVE	4 M East of K-211(Park) East to Gove-Trego County Line	Oakley	Mathew	Withington	(785) 672-3113	matheww@ksdot.org		06/01/15	11/15/17
S-VE26-0003	KSR 108 600	KA-0035-01	K058	GREENWOOD	Bridge Replacement: Halderman Cr Drainage Bridge (015) 4 Miles East of Madison	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	KILLOUGH CONSTRUCTION INC	06/18/13	02/28/14
S-MC46-0011	KSR 109 613	KA-2114-01	K003	BOURBON	Bridge #026 Located 3.29 Miles North of West Junction K-39 (Hinton Creek)	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org		12/30/14	11/25/15
S-MC12-0004	KSR 109 404	KA-2052-01	K31	BOURBON	Bridge #038, 2.96 Miles East of the East Junction K-31/K-7	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	B & B BRIDGE COMPANY LLC	04/14/14	12/01/14
S-NE34-0001	KSR 109 246	KA-2053-01	K039	BOURBON	Bridge #039, Flat Rock Creek, 1.18 Miles East of the Bourbon/Neosho County Line and Bridge #042, Paint Creek, 0.47 Miles East of the East Junction K-39/K-3.	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	02/24/14	12/01/14
S-NE60-0001	KSR 109 541	KA-1772-01	U059	ALLEN	Bridge #015, Canville Creek, 2.65 miles north of US-59/K-39 east junction.	Iola	Darrin	Petrowsky	(620) 365-2161	darrin@ksdot.org	BRIDGES INC	03/31/14	12/03/14
S-MC30-0014	KSR 108 746	KA-0735-01	U169	MIAMI	Franklin-Miami Co Line NE to 1.2 Miles Southwest of K-7	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	APAC KANSAS INC-- RENO DIVISION	07/22/13	11/01/14
S-MC31-0078	KSR 109 517	KA-2205-01	K068	FRANKLIN	Jct I-35/K-68, East to 1.3 Miles East of I-35. Pavement and shoulder reconstruction. Includes the addition of turn lanes on K-68 at an existing Wal-Mart entrance.	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	EMERY SAPP & SONS INC AND SUBSIDIARY	04/07/14	12/04/14
S-MC15-0001	KSR 109 405	KA-2049-01	K31	ANDERSON	Bridge #016, 6.91 Miles Southeast of Anderson/Coffey County Line	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	12/09/13	12/03/14
S-MC26-0011	KSR 109 477	KA-2068-01	K007	LINN	Bridge #012, Big Sugar Creek Drainage, 6 miles north of the K-7/K-52 junction.	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	KILLOUGH CONSTRUCTION INC	04/24/14	12/03/14
S-MC19-0002	KSR 108 314	KA-0734-01	U169	FRANKLIN	Anderson/Franklin Co Line NE to Franklin/Miami Co Line.	Garnett	Hugh	Bogle	(785) 448-5446	hugh@ksdot.org	APAC KANSAS INC-- RENO DIVISION	07/22/13	11/01/14
S-VE09-0011	KSR 104 249	K-8241-01	U169	MONTGOMERY	COR: US-169, INCLDNG JCT US-166, N TO APPROX CO RD 3000	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	SHERWOOD CONSTRUCTION CO INC AND SUBSIDIARIES	03/30/09	06/05/12
K-VE21-0001	KSR 107 511	KA-0705-01	U166	MONTGOMERY	Bridge 031, Bee Creek, 0.2 miles East of CQ/MG Co. Line	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	B & B BRIDGE COMPANY LLC	03/14/12	04/12/13
S-VE14-0002	KSR 109 409	KA-2073-01	U160	MONTGOMERY	Bridge #017 Located 7.09 Miles South East of Elk County Line (Elk River)	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	BRIDGES INC	12/09/13	12/04/14
S-VE01-0001	KSR 107 107	KA-0791-02	K047	WILSON	0.18 Mi E of Jct K-47/US-75 E to Wilson-Neosho Co Line	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	KOSS CONSTRUCTION CO	05/11/11	02/14/13
S-VE35-0005	KSR 107 106	KA-0791-01	K047	NEOSHO	Wilson-Neosho Co Line E to .05 Mi W of Jct K-47/US-169	Independence	Luke	Middleton	(620) 331-3760	luke@ksdot.org	KOSS CONSTRUCTION CO	05/11/11	02/14/13
		KA-3261-01	U059	LABETTE	West junction of US-59/US-160, north to the City of Parsons	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org		03/16/15	10/30/15
S-NE57-0051	KSR 109 454	KA-2096-01	K126	CRAWFORD	Bridge 6 miles west of K-7 and bridge 1.16 miles west of K-7.	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org	B & B BRIDGE COMPANY LLC	03/17/14	11/27/14
S-NE11-0031	KSR 109 699	KA-2075-01	K039	NEOSHO	Bridge Number 023 located 2.28 miles east of US-169 (Neosho River Drainage)	Pittsburg	George	Dockery	(620) 231-7560	georged@ksdot.org	B & B BRIDGE COMPANY LLC	05/19/14	12/03/14
S-AR96-0002	KSR 107 520	K-8244-05	U054	KINGMAN	7 miles E of Pratt/Kingman county line, east to 3.2 miles W of West Junction US-54/K-14	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	01/24/12	10/03/14
		KA-2863-01	U400	KIOWA	Culvert #516, Rattlesnake Creek Drainage, on US-400 in Kiowa County, 1.82 Miles East of Ford County Line	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org		12/31/14	12/30/15
S-AR96-0002	KSR 107 520	K-8244-08	U054	KINGMAN	US54 in Kingman Co. 5.82 mi. E. of Pr/Km Co. Line	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	01/21/12	10/03/14
S-AR78-0003	KSR 109 422	KA-2082-01	K042	PRATT	Bridge located 3.91 miles east of US-281 (Sand Creek)	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	08/04/14	12/03/14
S-AR73-0026	KSR 108 588	K-8243-04	U054	PRATT	Jct RS 501, East to 1 Mile East of Cairo Intersection	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	04/15/13	12/12/14
S-AR96-0002	KSR 107 520	K-8244-10	U054	KINGMAN	US54 in Kingman Co. 2.7 mi. W of K-14(11) W Jct.	Pratt	Scott	Mullen	(620) 672-7494	smullen@ksdot.org	KOSS CONSTRUCTION CO	01/24/12	10/03/14
S-WA03-0042	KSR 109 939	KA-2212-01	U054	BUTLER	US-54: East city limits of Andover east to west city limits of Augusta	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	APAC KANSAS INC SHEARS DIVISION	09/22/14	12/14/15
S-AR82-0017	KSR 110 040	KA-3269-01	U050	RENO	West junction of US-50/K-61, east to west junction of US-50/K-96	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	APAC KANSAS INC SHEARS DIVISION	03/16/15	07/02/15
S-LA13-0059	KSR 107 664	K-9439-01	U050	HARVEY	COR:US-50, 1 Mi W of Anderson Ave, East to Old Main St.	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	04/02/12	09/17/14
S-AR49-0045	KSR 105 575	K-7409-02	U050	RENO	West of Junction K-61, East to East of Yoder/Airport Rd	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	DONDLINGER & SONS CONSTRUCTION CO INC	08/16/11	05/12/14
S-LA13-0079	KSR 109 220	KA-0052-01	I135	HARVEY	I-135/36th St, 2 miles south of So. Junct I-135/US-50	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org		03/16/15	04/01/16
S-AR49-0029	KSR 104 100	K-8252-01	K061	RENO	CORRIDOR: 4L/2L, N OF 17TH IN HUTCH, NE TO RN-MP COL	El Dorado	Scott	Koopman	(316) 321-2880	scott@ksdot.org	KOSS CONSTRUCTION CO	03/09/09	06/10/13
		KA-2095-01	U077	COWLEY	Bridge #010 in Cowley County on US-77 Located 0.74 Miles North of US-160	Winfield	Don	Snyder	(620) 221-3370	dsnyder@ksdot.org		12/30/14	11/25/15

**US v. KDOT Consent Decree Project List
September 15, 2014**

Kansas Permit	Fed Permit	Project Number /Name	Route	County Name	Description	Designated Area or Metro Engineer					Responsible Contractor	Construction Activities	
						Office Location	First	Last	Phone	email		Start Date	Completion Date
S-AR30-0005	KSR 110 127	KA-2057-01	K015	COWLEY	Brs #050, #051 over Little Crabb Creek located 0.55 miles and 1.75 miles north of US-166.	Winfield	Don	Snyder	(620) 221-3370	dsnyder@ksdot.org	KING CONSTRUCTION COMPANY INC AND SUBSIDIARIES	09/11/14	12/05/15
S-AR40-0015	KSR 109 802	KA-3483-01	K002	MULTIPLE	From the North City Limits of Harper, northeast to the Harper/Kingman County Line, northeast to the Kingman/Sumner County Line, northeast to the K-2/K-49 junction	Winfield	Don	Snyder	(620) 221-3370	dsnyder@ksdot.org	APAC KANSAS INC SHEARS DIVISION	05/12/14	10/01/14
S-AR17-0005	KSR 109 498	KA-2090-01	U081	SUMNER	Bridge Number 041 located 1.58 miles north of Oklahoma state line (Fall Creek)	Winfield	Don	Snyder	(620) 221-3370	dsnyder@ksdot.org	BRIDGES INC	05/01/14	12/01/14
S-AR43-0035	KSR 109 679	KA-3074-01	U081	SEDGWICK	Sedgwick Co.: US-81 and 79th Street	Wichita	Brent	Terstriep	(316) 744-1271	terstriep@ksdot.org		02/04/15	01/20/16
S-AR94-1080	KSR 109 647	KA-0733-01	I135	SEDGWICK	From the Junction of I-135/K-96 (37th Street North), North to north city limits of Park City	Wichita	Brent	Terstriep	(316) 744-1271	terstriep@ksdot.org	CORNEJO & SONS LLC	06/23/14	08/29/15
S-LA09-0009	KSR 109 474	KHP TROOP F HQ		SEDGWICK	Proposed Tigua St. (1340 ft West of intersection of K254 and Rock Rd)	Wichita	Brent	Terstriep	(316) 744-1271	terstriep@ksdot.org	N/A	06/15/13	04/28/14
S-UA24-0012	KSR 109 933	KA-2065-01	K025	KEARNY	Bridge #012, Mattox Draw, 8.8 miles north of the K-25/US-50 junction.	Syracuse	Gary	Bennett	(620) 384-7822	geraldb@ksdot.org	KLAVER CONSTRUCTION COMPANY INC	07/14/14	12/01/14
S-UA10-0004	KSR 107 720	KA-0045-01	K023	FINNEY	Pawnee River Bridge (012); 6.46 Miles North of West Junction K-156/K-23	Syracuse	Gary	Bennett	(620) 384-7822	geraldb@ksdot.org	L & M CONTRACTORS INC	03/03/14	10/31/14
S-AR13-0006	KSR 109 548	KA-2061-01	K94	FORD	Bridge #054, West Fork Rattlesnake Creek, 2.11 miles south of US-54.	Dodge City	Dale	Luedke	(620) 227-6122	dalel@ksdot.org	KLAVER CONSTRUCTION COMPANY INC	06/20/14	12/12/14
S-UA21-0011	KSR 107 772	KA-0044-01	K156	HODGEMAN	Pawnee River Drainage Bridge (001); 2.89 Miles East of Finney/Hodgeman County Line	Dodge City	Dale	Luedke	(620) 227-6122	dalel@ksdot.org	L & M CONTRACTORS INC	08/06/13	11/20/14

APPENDIX B

Quarterly Stormwater Bulletins

STORMWATER UPDATE

In This Issue

- ❖ Lessons Learned
- ❖ When to Stabilize
- ❖ ECO Database
- ❖ Spring is in the Air
- ❖ Specifications and Standards

EIT / EMT Training Upcoming Dates

Wichita, KS
April 7-8
April 9-10
May 19-20
May 21-22

<http://citksu.com>

WPCMs are required to have completed the EMT training within the 12 months prior to beginning work on a project.

INSPECTION REPORTING

Remember, all completed inspection reports must be submitted to the responsible Area Engineer and the contractor's WPCM within 24 hours of each inspection. The reports should signed within 3 calendar days by the responsible Area Engineer and submitted to stormwaterinspection@ksdot.org Failure to complete inspection reports and submit them on time will result in penalties

Lessons Learned

Winter is rapidly falling behind us and the new construction season is getting underway. It's not hard to see the difference our new approach to erosion control is already having on projects around the state. The emphasis on "stabilizing as you go" is clearly paying dividends in reducing the amount of erosion occurring on our newly constructed roadsides. As we continue to learn how to best incorporate these new strategies, it is important that we also continue to communicate and share our lessons learned. With that in mind, I'd like to share a few things I've learned from the successes and struggles of the last year.

1. **Playing catch-up is hard.** KDOT invested a significant effort in repair work on older projects with ongoing erosion issues. Repairing and stabilizing all of the eroded slopes and ditches required a tremendous effort on the part of our maintenance forces and also several emergency repair contracts. Much of this repair work could have been avoided with better construction practices and more timely maintenance.

2. **Identify your critical areas.** Our biggest problems occur where we have the most concentration of water. Repairing erosion around wingwalls, removing sediment from inside culverts and from riprap is difficult and costly. Erosion at these areas can very often lead to sediment discharge to water bodies or adjacent property. Investing the extra effort to stabilize the areas around our drainage structures pays off with reduced maintenance costs and increased peace of mind.

3. **Sometimes less is more.** It may seem like a good idea to use more ditch checks, more silt fence, more bio-logs etc., but in some cases these devices can cause more harm than good. These types of devices pond water and trap sediment. While this may be the desired effect for some applications, these devices can also inhibit vegetation establishment and can increase the concentration of flow which contributes to the formation of gullies. The most successful SWPPPs use these devices judiciously and remove them promptly as vegetation stabilizes the site.

4. **Once every 14 days is not enough.** Bi-weekly inspections are an important tool, but if you only think about erosion and sediment control every other week you are falling behind. Every operation on a construction project has a potential impact on the SWPPP. Failure to consider those impacts as work progresses will sooner or later result in permit violations, expensive repairs and costly penalties.



When to Stabilize?

The stabilization requirements in our current specifications come from the KDHE construction general permit. The following direction can be found in special provision 07-PS0360-R5, section 901.3a:

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.

Construction activities have permanently ceased once clearing, excavating, grading etc. is complete. Construction activities have temporarily ceased if clearing, excavating, grading etc. is incomplete, but the land will remain idle for a period of time. If the work is complete, or if the idle period is anticipated to be longer than 14 days then installation of stabilization such as mulch, erosion control blankets or geotextiles must begin **immediately**.

Inactive, disturbed areas should be documented on inspection reports if they have not been stabilized. Corrective action is required if the work is complete or if the idle period is expected to be longer than 14 days. Compliance with this specification and permit requirement requires thinking ahead and scheduling appropriately. This typically requires the WPCM to coordinate with various subcontractors and suppliers to make sure the appropriate personnel, equipment and materials are available on site as the grading work ceases.



ECO Database coming soon

A new way to report inspections and to track compliance issues is right around the corner. Felsburg Holt & Ullevig is putting the finishing touches on the software and testing is underway. Properly used, this package is expected to facilitate transmittal of completed inspection reports, track corrective actions, and provide electronic storage for nearly all SWPPP related documentation.



Spring is in the Air

As the spring growing season is right around the corner, this is an important time of the year to carefully review your projects and identify any areas where additional seeding may be required. No-till drills should be used when sowing permanent seed into areas where temporary or annual grasses have been established. If previously seeded areas have demonstrated minimal to no growth, it may be more effective to till the area according to standard specification 903 and seed the area conventionally. Contact Scott Shields in the Environmental Services Section if you have questions about seed types, seasonal limitations, or suspect poor soil quality.



Specifications and Standards

Beginning with the March letting, all projects will be using updated erosion control specifications. Special Provision 07-9002-R08 will be included in the contracts for Local Projects and also for KDOT projects disturbing less than one acre. This revision incorporates the new bid items and updates many of the practices which were implemented with 07-PS0360-R4.

The standard drawing LA 855 has been revised. This drawing shows details for installation of class I erosion control blankets and now includes details for placement around pipe and box culvert ends. This application is intended to better stabilize these critical areas around our drainage structures.



STORMWATER UPDATE

In This Issue

- ❖ Hydraulic Erosion Control Products
- ❖ Sequencing and Scheduling
- ❖ 2013 Annual Report
- ❖ Stockpile Management

EIT / EMT Training Upcoming Dates

Wichita, KS
June 16-17
June 18-19

<http://citksu.com>

WPCMs are required to have completed both the EIT and the EMT courses within the 12 months prior to beginning work on a project.

INSPECTION REPORTING

Remember, all completed inspection reports must be submitted to the responsible Area Engineer and the contractor's WPCM within 24 hours of each inspection.

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Hydraulic Erosion Control Products

Hydraulic erosion control products (HECPs) are a valuable tool for rapid, short-term stabilization of difficult to access areas. There are a wide variety of products available on the market, each with its own performance characteristics and application requirements. Common types used on KDOT projects include mulch tacking slurry, hydromulch, and bonded fiber matrix (BFM). Once a product has been selected for use, it is imperative to obtain and review the manufacturer's recommended placement procedure. The placement procedures and product information should be included with the SWPPP documentation for easy reference.

The following steps should be followed when a HECP is selected:

1. Site evaluation - The area to be covered should be carefully measured and marked such that the area to be covered by each tank-load can be readily verified. Hydromulches are not suited for channels, ditches or other areas of concentrated flow so those areas should be excluded and alternate measures such as erosion control blankets should be considered.

2. Determine the desired spread rate - Obtaining a uniform spread at the recommended rate is the objective. A light application will not provide the required protection, whereas an overly heavy placement may inhibit vegetation establishment. Application rates may vary based on soil conditions and degree of slope. The manufacturer's recommendations should always be consulted.

3. Determine the application procedure - Hydromulches should be placed in two applications from opposing directions (e.g. from the top and bottom of a slope). This is intended to reduce "shadowing" and obtain 100% coverage. Use of the hose rather than the cannon may be required to accomplish this. The manufacturer may have specific recommendations regarding application angles and equipment.

4. Site preparation - Before applying hydromulch, the ground should be prepped, fertilized and seeded according to KDOT specifications. Combining the seed and fertilizer with the mulch in a one step process is not acceptable on KDOT projects.

5. Application of HECP - As with any mulch or erosion control product, HECPs are required to be placed within 24 hours of seeding.

6. Monitor and Maintain - Treated areas should be monitored for performance. If the material washes away or the slope erodes the areas should be repaired and restabilized. The site should be evaluated to determine if the HECP should be re-applied or an alternative selected. Concerns with product quality or performance should be reported to the Stormwater Compliance Engineer.

Sequencing and Scheduling

Building erosion and sediment control into the construction schedule can be one of our most cost-effective best management practices. Every operation undertaken on a construction project has the potential to impact the SWPPP. A well defined schedule eases communication and helps all of the project partners be prepared to carry out their portion of the work.

Good schedule development can reduce erosion and sediment discharge by facilitating coordination of land disturbing activities with implementation of erosion and sediment controls. Coordination of construction operations and stabilization practices minimizes idle time and reduces the risk of permit compliance failures.

When possible, work in environmentally sensitive or critical areas should be scheduled to take advantage of prevailing weather conditions or to avoid prohibited wildlife impacts.

Incorporating erosion and sediment control practices into every phase of the project minimizes erosion, reduces sediment discharge, facilitates early vegetation establishment and saves money spent on erosion related repairs, maintenance, and penalties.



2013 Annual Report

KDOT's 2013 Annual Report on Stormwater Compliance was published on March 30, 2014. The report details actions taken during the year to improve statewide compliance with the KDHE general permit and the Consent Decree. The report was submitted to the EPA and is currently available on KDOT's Stormwater website (<http://www.ksdot.org/burconsmain/Connections/swppp.asp>).



Stockpile Management

Managing soil stockpiles on construction projects is a frequent area of concern. BMPs for stockpile protection typically include erosion control measures such as mulching, hydromulching or covering with plastic/geotextile and sediment control measures downstream of the pile to capture any sediment runoff. Every situation is unique, but there are some basic items to consider when selecting BMPs for stockpiles in your SWPPP.

1. For how long is the stockpile needed?

For longer durations, practices such as seeding should be used to minimize the need to restabilize stockpiles. For extremely short durations, little or no protection may be required depending on site and weather conditions.

2. Where will the stockpile be located?

Stockpiles should be located at least 50 feet away from water bodies or drainage ways whenever feasible. This space provides additional protection to minimize sediment loss. Locating the pile closer to a discharge location requires additional protective measures.

3. How much area is available for the stockpile?

Taking best advantage of available space can facilitate stabilization. Low, flat piles are generally less erosive than tall, steep piles and are easy to seed and mulch. Steeper piles may need to be protected by covering with plastic, geotextile, erosion control blanket or with a hydraulic product.



STORMWATER UPDATE

In This Issue

- ❖ From the Director
- ❖ One Year and Counting
- ❖ PQL Update
- ❖ Seed Certifications

EIT / EMT Training Upcoming Dates

Wichita, KS
September 29-30
October 1-2

**MORE DATES TO BE
ANNOUNCED SOON**

<http://citksu.com>

WPCMs are required to have completed both the EIT and the EMT courses within the 12 months prior to beginning work on a project or being designated as WPCM for a project.

INSPECTION REPORTING

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From the Director of Operations Catherine Patrick, PE

I had an opportunity to visit all six districts and take a first-hand look at the erosion control issues on our construction projects. Our folks and the contractors are learning these new measures together as we take training and apply what we learn.

The construction projects take on a new dynamic because "business as usual" does not satisfy our erosion control requirements. The operations we used to perform concurrently might now have to be phased differently as we satisfy erosion control requirements. Erosion control is proactive not reactive so devices need to be available and discussed prior to disturbing existing areas.

As we get more comfortable with these new measures, and our contractor and field staff continue working together, we will satisfy the erosion needs on the projects. I know I've learned a lot just in my visits to the field and I appreciate the effort we are taking to meet these new challenges in stabilizing slopes and implementing control erosion measures on our projects.



One Year and Counting

On September 5 the Consent Decree will have been in place for one full year. Over this year we have made a large number of changes to our specifications, standard drawings and our way of thinking about stormwater pollution prevention during construction. It is easy to see the positive effects these changes have had on many of our projects. We are stabilizing more timely and more often, scheduling our operations to minimize disturbed soil, and managing our stockpiled materials and waste more effectively. As we move forward, it is important to maintain focus and continue to improve. Consistently implementing effective dewatering practices, temporary stream crossings and maintenance of drainage during culvert construction are areas still in need of improvement.

Our stabilization practices are much improved, but sometimes we still struggle to finish as we go. This often leads to temporary stabilization of unfinished grading work. By not finishing the grading work and replacing salvaged topsoil, we are often attempting to stabilize subsoils which are more erodible and less likely to support vegetation. The increased erosion due to this lack of vegetation also increases maintenance costs and the risk of permit violations. Furthermore, the temporary stabilization must then be replaced once the grading is complete, again increasing the project cost. Finishing the grading work, including topsoil replacement, and stabilizing immediately improves permit compliance and produces cost savings for both KDOT and the Contractor.

The Consent Decree will remain in effect for at least three more years. We have made great strides this year, but we still have a long journey ahead. In order to achieve our goal of permit compliance it is critical to maintain the continual improvement we have seen so far.



PQL Update

The Prequalified List for Class 1 Erosion Control Materials was updated to remove all hydraulically applied products (hydromulches). These products were removed from the list due to a number of performance issues encountered over the previous year. We have greatly expanded our use of these class 1 materials, typically in areas prone to erosion such as steep slopes and around culvert ends. The typical conditions on our construction projects are not conducive to rapid vegetation establishment and the hydromulch products tend to fail before the grasses can take hold. The exclusive use of blankets for these areas should provide us with longer-lasting protection and allow more time for vegetation establishment.

This change does not mean that hydromulches have been banned from use or that are not effective in any situation. Hydromulches are addressed in the Standard Specification sections 904 and 2110. The bid items Mulching (Hydro) and Mulching (Hydro BFM) remain as before. These items can provide effective, short-term protection against rainfall for stockpiles and slopes without significant concentration of flow.

The current PQL 34B can be found online at <http://ksdot1.ksdot.org/burmatres/pql/default.asp>



Seed Certifications

There are several factors which contribute to the success or failure of a seeding operation. Some of these factors, like the weather, are beyond our ability to control. Because we cannot always create the perfect environment for success it is important that we be mindful of the factors that ARE within our control to increase the probability of success.

Standard Specification section 2103, based on the Kansas Seed Law, addresses the material acceptance requirements for grass and wildflower seed used on KDOT projects. The specifications require, in part, recent germination testing of all seeds accepted for use. If tested in Kansas, the analysis is valid for a period of 9 months. Out of state test results are considered valid for a period of 5 months. All seed containers are required to be labeled to show purity, germination, weed seed content and the date of testing.

As with any construction material accepted for use on our projects, we must be aware of the specification requirements. All materials should be inspected before use and rejected if the requirements are not met.



STORMWATER UPDATE

In This Issue

- ❖ Be Prepared
- ❖ Notice of Acceptance
- ❖ Wildlife
- ❖ Specification Update

EIT / EMT Training Upcoming Dates

Wichita, KS
March 30-31
April 1-2
April 20-21
April 22-23
June 15-16
June 17-18

<http://citksu.com>

WPCMs are required to have completed both the EIT and the EMT courses within the 12 months prior to beginning work on a project or being designated as WPCM for a project.

All completed inspection reports must be submitted to the responsible Area Engineer and the contractor's WPCM within 24 hours of each inspection.

The Area Engineer must sign within 3 calendar days and submit to stormwaterinspection@ksdot.org

Failure to complete and submit inspection reports on time **will** result in penalties

Be Prepared

Winter is upon us. It is important to think about and be prepared for the impact of winter weather on your project and your SWPPP. The permit and the specification requirements are the same all year long, but the challenge of meeting them can be significantly greater during the winter.

Keeping a close eye on the forecast is vital for winter success. Winter storms can put a halt to project work at any time, and for an unknown duration. Failure to plan for predicted winter storms and have the necessary BMPs in place before they hit can lead to costly permit violations. Limiting the work area to that which can be quickly stabilized before a storm hits is an invaluable strategy for winter compliance. Close monitoring of installed BMPs and prompt maintenance is also necessary to avoid having to complete repairs in difficult conditions.

Our obligations to monitor our construction sites does not change with the winter conditions either. In accordance with the Consent Decree, our specifications require that the WPCM continue to visit the project and conduct a thorough review on a weekly basis. Inspections must continue to be completed according to the schedule. Exceeding 14 days between inspections will result in the assessment of penalties every time it occurs.



Notice of Acceptance

As many of our projects are nearing completion I get a number of questions regarding what the Contractor's obligations are and when have they been met. Under our current specifications, the Contractor is responsible for maintenance of the SWPPP and all installed BMPs until the Notice of Acceptance has been given. This responsibility includes participating in the joint SWPPP inspections and providing a WPCM who visits the project on a weekly basis.

The contractor can be relieved of their responsibility with a partial Notice of Acceptance only if all physical work on the project has been completed. For example, the 180-day observation period for pavement markings is not considered to be physical work. The completion of permanent seeding, however is considered to be physical work.

All outstanding maintenance and corrective actions should be completed prior to Acceptance. This should also include removal of unnecessary BMPs.



Wildlife

There are a number of new wildlife-related specifications being implemented across the state. These specifications have been written to minimize the effects of our construction projects on specific threatened or endangered species. Many of the provisions will also have a direct impact on the SWPPP for projects in the affected areas. These specifications should be carefully reviewed and applicable provisions incorporated into each project's SWPPP as necessary.



Specification Update

The following language has been added to the special provisions for temporary erosion control (07-PS0360-R7 and 07-9002-R10) and for clearing and grubbing (07-2008-R1):

DO NOT clear and grub areas unless work 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 finished graded, not part of project phasing and no meaningful work toward the completion of the bid item 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 at these exposed areas according to **SECTION 901** at no cost to KDOT.

The intention of this provision is to limit the disturbed area of the project to that which is necessary to proceed with the work. If the Contractor chooses to clear and grub areas of the project where work is not scheduled to begin immediately then the required stabilization is to be completed at no cost to KDOT. Contractors should be encouraged to schedule their work to minimize such interim stabilization and proceed continuously towards the finished condition.

This language is included in the specifications for all projects beginning with the October, 2014 letting.



APPENDIX C

Training Certification

Dwight D. Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3745

Mike King, Secretary
Sandra L. Tommer, P.E., Chief



Phone: 785-296-3576
Fax: 785-296-6944
Hearing Impaired - 711
publicinfo@ksdot.org
<http://www.ksdot.org>

Sam Brownback, Governor

May 6, 2013

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-1-1-10420

Chief, Water Enforcement Branch
Water, Wetlands & Pesticides Division
U.S. EPA, Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

Kristen Nazar
Assistant Regional Counsel
U.S. EPA, Region 7
11201 Renner Blvd.
Lenexa, KS 66219

Susan Bruce
U.S. EPA
Office for Enforcement and Compliance Assurance
Water Enforcement Division
Ariel Rios Building 1200 Pennsylvania Avenue, N. W. Washington, DC 20460

RE: US v. KDOT Consent Decree
Certification of Compliance

In accordance with paragraph 15 of the Consent Decree, I certify that the Environmental Inspector Training course offered by KDOT's Certified Inspector Training (CIT) program meets the requirements outlined in Appendix C of the Consent Decree. I further certify that the Environmental Manager Training course meets the requirements outlined in Appendices B and D of the Consent Decree.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Van Nice". The signature is fluid and cursive, written over a horizontal line.

Jason Van Nice, P.E.
Stormwater Compliance Engineer

Enclosure

EIT Agenda

Day 1	Session #	Session Title
8:00-8:10	1	Welcome; Purpose of Training
8:10-9:00	2	History and Purpose of Clean Water Act Past issues and violations, construction impacts Why permitting on construction
9:00-9:45	3	Storm Water Discharge Permit Requirements SWPPP requirements, Implementation during construction Stabilization, Perimeter Control,
9:45-10:00		Break
10:00-10:30	4	Role of KDOT, Contractor and Agencies (KDHE, EPA, Others) Related to Projects
10:30-11:00	5	Effects of construction projects on water resources, Common permit compliance issues on projects
11:00-11:30	6	Basic principles of Erosion/Sediment Control Soil erodibility, Rainfall/storms Calculating Soil loss, Universal Soil Loss Equation Comparison of Erosion /
11:30-12:00	7	Selection and Implementation of Erosion Control BMPs
12:00-12:45		Lunch
12:45- 1:15	8	Selections and Implementation of Sediment Control BMPs
1:15-1:45	9	KDOT Storm Water Related Plans, Specs and Procedures
1:45-2:15	10	SWPPP Requirements, Management of Non Storm water Sources of Pollution Storage, concrete washout, fuels, dust
2:15-2:30		Break
2:30-3:00	11	Inspection Requirements and Procedures How to inspect a site, records, documentation, and corrective action
3:30-4:00	12	Stormwater Compliance Program Requirements Designation of personnel, preconstruction conference, inspection forms & procedures, third party
4:00-5:00		EIT Test
Day 2		EIT Agenda
8:00-12:00	13	Field Training - Dust control, Track out from site and BMPs, Storage of materials, Portable toilets, Dewatering BMPS, concrete washout, BMP Installation (BioLogs, Silt Fence, EC Blankets, RCD, inlet protection, mulch), BMP maintenance, Fill out inspection forms.

EMT Agenda		
Day 1	Session #	Session Title
12:45-1:30	1	Compliance Strategy as Project is Built
1:30-2:00	2	Audience Prepares SWPPP Site Plan and Strategy
2:00-2:45	3	SWPPP Design and Content; Discussion, examples
2:45-3:00		Break
3:00-3:30	4	SWPPP Implementation - Inspection, maintenance and repair program for BMPs, Corrective Actions, Timely stabilization
3:30-4:00	5	KDOT Expectations and Compliance Requirements (focus on Area/Metro Engineer and WPCM responsibilities)
4:00-5:00	6	EMT Test

Appendix B - Area/Metro Engineer Training

<p><i>Minimum of 8 hours (classroom). This training module shall contain information on the following:</i></p>	<p>All KDOT Area/Metro Engineers will complete the Environmental Inspector Training (EIT) and the Environmental Manager Training (EMT). Completion of both programs requires 12 hours of classroom time and a 4 hour field component.</p>
<p><i>Each training session shall include a written examination intended to ensure the participants knowledge of the subjects covered.</i></p>	<p>Each certification requires a written examination. All KDOT Area/Metro Engineers will be required to pass the EIT exam and the EMT exam with a score of at least 70% on each one.</p>
<p><i>Each participant who attends the entire session and receives a passing grade on the written examination shall be issued a certification. That certification shall include the participants name, the date and location of the training and the name of the instructor(s). KDOT shall maintain copies of all such certifications.</i></p>	<p>Certificates will be issued to the participants for the completion of each training program. KDOT will maintain copies of such certifications.</p>

Appendix B - Area/Metro Engineer Training

	EIT Session #	EMT Session #
<i>History of Clean Water Act and past violations;</i>	2	
<i>Role of KDOT, KDHE, EPA, and Contractor in storm water management for projects in Kansas</i>	4	
<i>How construction projects can potentially negatively affect water quality</i>	1, 5	
<i>Basic principles of erosion, sediment control, and non-storm water/waste management control</i>	6, 10	
<i>KDOT Storm Water related Standard Plans and Specifications and BMP Manual;</i>	9	
<i>Selection and implementation of erosion control, sediment control, and non-storm water management/waste; management control BMPs;</i>	7, 8, 10	
<i>How to review and approve a SWPPP based on KDOT and EPA requirements and guidance manuals; and</i>		1, 2, 3
<i>BMP inspection and maintenance program.</i>		4
<i>Consent Decree Requirements pertaining to KDOT's Stormwater Compliance Program:</i>	4, 9, 12	5
<i>i. Designation of trained personnel, roles and responsibilities (KDOT Stormwater Compliance Manager, Area/Metro Engineer, Environmental Inspectors, Responsible Contractor, Water Pollution Control Manager)</i>	4, 12	5
<i>ii. Pre-construction Conference</i>	9, 12	
<i>iii. Use of Proper Inspection Form and Corrective Action Log</i>	9, 12	
<i>iv. Role of Third Party Inspections</i>	12	5
<i>v. Inspection Procedures required by Consent Decree</i>	12	

Appendix C - Environmental Inspector Training

<i>Minimum of 8 hours (classroom). This training module shall contain information on the following:</i>	All personnel performing site inspections for permit compliance will be required to have completed the Environmental Inspector Training (EIT) program.
<i>Each training session shall include a written examination intended to ensure the participants knowledge of the subjects covered.</i>	The EIT certification requires a written examination. A score of at least 70% on the exam is required to obtain the certification.
<i>Each participant who attends the entire session and receives a passing grade on the written examination shall be issued a certification. That certification shall include the participants name, the date and location of the training and the name of the instructor(s). KDOT shall maintain copies of all such certifications.</i>	Certificates will be issued to the participants for the completion of the training program. KDOT will maintain copies of such certifications.

Appendix C - Environmental Inspector Training

	EIT Session #	EMT Session #
<i>History of Clean Water Act and past violations;</i>	2	
<i>Role of KDOT, KDHE, EPA, and Contractor in storm water management for projects in Kansas</i>	4	
<i>How construction projects can potentially negatively affect water quality</i>	1, 5	
<i>Basic principles of erosion, sediment control, and non-storm water/waste management control</i>	6, 10	
<i>KDOT Storm Water related Standard Plans and Specifications and BMP Manual;</i>	9	
<i>Selection and implementation of erosion control, sediment control, and non-storm water management/waste; management control BMPs;</i>	7, 8, 10	
<i>How to inspect a construction project to ensure BMPs are properly installed and maintained</i>	11, 12, 14	
<i>Consent Decree Requirements pertaining to KDOT's Stormwater Compliance Program:</i>	4, 9, 12	
<i>i. Designation of trained personnel, roles and responsibilities (KDOT Stormwater Compliance Manager, Area/Metro Engineer, Environmental Inspectors, Responsible Contractor, Water Pollution Control Manager)</i>	4, 12	
<i>ii. Pre-construction Conference</i>	9, 12	
<i>iii. Use of Proper Inspection Form and Corrective Action Log</i>	9, 12	
<i>iv. Role of Third Party Inspections</i>	12	
<i>v. Inspection Procedures required by Consent Decree</i>	12	

Appendix D - Contractor Training

<p><i>Minimum of 16 hours of training (classroom and field). This training module shall contain information on the following:</i></p>	<p>Construction contract specifications (07-P0360-R3) require contractors to designate a Water Pollution Control Manager who has completed the Environmental Inspector and Environmental Manager Training programs within the 12 months prior to beginning construction. Completion of these two programs requires 12 hours of classroom and 4 hours of field training.</p>
<p><i>Each training session shall include a written examination intended to ensure the participants knowledge of the subjects covered.</i></p>	<p>The EIT certification requires a written examination. A score of at least 70% on the exam is required to obtain the certification.</p>
<p><i>Each participant who attends the entire session and receives a passing grade on the written examination shall be issued a certification. That certification shall include the participants name, the date and location of the training and the name of the instructor(s). The Responsible Contractor shall maintain copies of all such certifications.</i></p>	<p>Certificates will be issued to the participants for the completion of the training program. KDOT will maintain copies of such certifications. Contractors are required to submit proof of certification when designating a Water Pollution Control Manager. A copy of the certification is also to be maintained with the SWPPP documents for each project.</p>

Appendix D - Contractor Training

	EIT Session #	EMT Session #
<i>History of Clean Water Act and past violations;</i>	2	
<i>Role of KDOT, KDHE, EPA, and Contractor in storm water management for projects in Kansas</i>	4	
<i>How construction projects can potentially negatively affect water quality</i>	1, 5	
<i>Basic principles of erosion, sediment control, and non-storm water/waste management control</i>	6, 10	
<i>KDOT Storm Water related Standard Plans and Specifications and BMP Manual;</i>	9	
<i>Selection and implementation of erosion control, sediment control, and non-storm water management/waste; management control BMPs;</i>	7, 8, 10	
<i>How to prepare a SWPPP for construction projects in Kansas</i>	10	1, 2, 3
<i>Inspection, maintenance, and repair program for storm water BMPs</i>		4
<i>Field demonstration of BMP implementation and installation (minimum of 4 hours for field portion of class)</i>	14	
<i>Consent Decree Requirements pertaining to KDOT's Stormwater Compliance Program:</i>	4, 9, 12	5
<i>i. Designation of trained personnel, roles and responsibilities (KDOT Stormwater Compliance Manager, Area/Metro Engineer, Environmental Inspectors, Responsible Contractor, Water Pollution Control Manager)</i>	4, 12	5
<i>ii. Pre-construction Conference</i>	9, 12	
<i>iii. Use of Proper Inspection Form and Corrective Action Log</i>	9, 12	
<i>iv. Role of Third Party Inspections</i>	12	5

APPENDIX D

Inspection Procedures and Form 247 Instructions

SWPPP Inspection Procedures and Form 247 Instructions

1. Pre-Construction Conference

- a. A stormwater pollution pre-construction conference shall be held prior to beginning work on each project.
- b. The Stormwater Compliance Engineer shall be notified of the meeting schedule
- c. Attendees shall at a minimum include:
 - i. KDOT Area / Metro Engineer
 - ii. Contractor's Water Pollution Control Manager (WPCM)
 - iii. Environmental Inspectors (KDOT and Contractor)
 - iv. Erosion Control subcontractor(s)
- d. Discussion Items shall include at a minimum:
 - i. Inspection schedule, procedures and contacts
 - ii. Responsibility for installation, inspection and maintenance of devices
 - iii. SWPPP site plan, process for modifying / updating
- e. Minutes shall be kept and maintained with the project SWPPP documentation
- f. A copy of the meeting minutes shall be forwarded to the Stormwater Compliance Engineer

2. General Inspection Requirements

- a. Routine and post-rainfall inspections shall be conducted jointly by Contractor and KDOT.
- b. The Contractor's responsibility to conduct inspections and maintain or correct identified deficiencies shall continue 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.
- c. Most devices and best management practices (BMPs) cannot be effectively inspected except while on foot. A good inspection will require walking and close examination of devices.
- d. The approved SWPPP site map shall be used during each inspection. All devices / BMPs shall be in place as shown. Any required devices which are not installed require Corrective Action. The corrective action required shall be documented on form 247H according to the instructions in this document.
- e. The SWPPP should be modified based on site conditions. Modifications shall be documented on the site maps. A modification log shall also be kept with the project SWPPP documents
- f. All BMPs in use on the project are to be inspected. Multiple inspectors may be required in order to complete the inspections within the required time frame (e.g. within 24 hours of a 0.5" or greater rainfall event).
- g. Take pictures. Photos are an excellent means of documenting conditions on the project. They can also be used to document pre-existing conditions and to assist with the determination of vegetation density for permit termination.

- h. Rainfall should be measured in a rain gauge on the project whenever possible. If no gauge is available, rainfall data from the nearest weather station may be used. Daily rainfall amounts should be logged and kept on file with the project SWPPP documents.
3. Personnel
- a. All persons performing inspections shall have a current KDOT Environmental Inspector Training certificate.
 - b. Contractor's WPCM and KDOT's Area / Metro Engineer shall have a current KDOT Environmental Manager Training certificate.
 - c. The Contractor's WPCM shall have completed the Environmental Manager Training course within the twelve months prior to the Notice to Proceed. If the WPCM is replaced during the course of a project the replacement shall have completed the Environmental Manager Training course within the twelve months prior to being appointed WPCM.
 - d. Area / Metro Engineer Responsibilities:
 - i. Be authorized by KDOT and have the responsibility to supervise all work necessary to meet stormwater requirements on the project, including work performed by contractors and sub-contractors.
 - ii. Be authorized by KDOT and have the responsibility to order employees, contractors and sub-contractors 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 as necessary to meet stormwater requirements.
 - iii. Be familiar with the project SWPPP and have the authority and responsibility to update the project SWPPP or approve updates recommended by others.
 - iv. Be responsible for reviewing and signing all inspection reports within 3 days after receiving such reports
 - v. Be the point of contact for the project for regulatory officials, KDOT employees, contractors, sub-contractors and consultants regarding stormwater requirements
 - e. WPCM Responsibilities:
 - i. Be authorized by the Contractor and have the authority to supervise all work performed by the Contractor and sub-contractors that involves stormwater requirements or affects stormwater compliance.
 - ii. Be authorized by the Contractor and have the responsibility to order Contractor employees and sub-contractors 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.
 - iii. Be familiar with the project SWPPP
 - iv. Recommend SWPPP updates to the Area Engineer
 - v. Be the point of contact for KDOT regarding stormwater compliance
 - vi. Be responsible for reviewing inspection reports within 3 days after receiving such reports, acknowledging awareness of any deficiencies and ensuring the correction of all deficiencies.
 - vii. Maintain SWPPP site maps to track installation and removal of BMPs throughout the project

4. Frequency of Inspections

- a. A regularly scheduled routine inspection is required at least every 14 days.
- b. An additional inspection is required within 24 hours of every rain event of 0.5” or greater.
- c. Only one inspection is necessary if the post-rainfall and routine inspections are required on the same day.
- d. An oversight inspection shall be completed at least once every 60 days during any period where there is active construction at a project and shall be unannounced. If material deficiencies are found, the oversight inspector will conduct a follow-up inspection within 14 days.
- e. Additional inspections should be completed if needed to ensure compliance with the Permit and project specifications. This may be required due to changes in construction sequence, completion of major project milestones or at other times as determined by the project staff.

5. Submittal of Reports

- a. Inspection reports are to be submitted to the Area / Metro Engineer within 24 hours of the inspection.
- b. Inspection reports are to be submitted to the Contractor’s WPCM within 24 hours of the inspection.
- c. Inspection reports shall be electronically submitted to stormwaterinspection@ksdot.org within 3 working days of the inspection.

6. Required forms

- a. Only the approved Form 247 and attachments A – H may be used to document each inspection
- b. Any modification to the form other than adding or deleting blank rows must be approved by the Stormwater Compliance Engineer.

7. Form Instructions

- a. 247 – Cover and certification
 - i. Enter the project number, KDHE permit number, designated Area / Metro Engineer and the contractor’s Water Pollution Control Manager. This information may be saved into the form for use on subsequent inspections.
 - ii. Enter the rainfall information as shown. Rain is to be measured on the project if possible. There are two fields for the recording of rainfall data, one for the last rain greater than 0.5” and one for the last rainfall of any magnitude. Rainfall amounts should also be documented in the project Rainfall Log.
 - iii. Enter the inspection type. This will either be “routine,” “post-rainfall,” “oversight,” or “other.”
 - iv. Enter the inspection date. If this is typed into the form the date will carry forward to all of the attachments.
 - v. The table of contents indicates which form attachments are required. The attachments for stream crossings and sediment basins shall only be included if relevant to the project.
 - vi. The certified environmental inspectors shall sign and date the report.

- vii. The Area / Metro Engineer shall sign and date the report within three days of the inspection.
 - viii. The Contractor's WPCM shall sign and date the report within three days of the inspection.
- b. 247A – Overall Site Issues. This form is a general form for each inspection used to identify “big picture” items as well as general housekeeping issues.
- i. Verify the inspection date is correct at the top of the form.
 - ii. Carefully review each of the questions in the numbered items.
 - iii. Describe any deficiencies noted or reference location of details (e.g. “see 247B for details”)
 - iv. Item 13 – Verify that the SWPPP site maps are complete and updated.
 - v. Item 14 – Review attachment 247 G (Maintenance Summary) from previous inspection. Document if the required maintenance is or is not complete.
 - vi. Item 15 – Review attachment 247 H (Corrective Actions) from previous inspection. Document if required actions have been completed. Verify that corrective actions are documented in the project Corrective Action Log.
 - vii. The remaining space under Item 16 may be used for any other site-specific issues not otherwise addressed.
- c. 247B – Site Erosion. This form is used to document the inspection of open grading areas throughout the project.
- i. Identify areas disturbed by grading or other excavation activities (i.e. structure installation). These can be identified by Station or by numbered reference to SWPP plan sheets.
 - ii. Note the date each area is cleared / grubbed or otherwise disturbed as “Date Area Disturbed.”
 - iii. Note the date the grading activity is complete or otherwise inactive as “Date Construction Activity Ceased.” If the area is actively being worked this field may be blank. If the activity has ceased temporarily this should be noted under Observations/Remarks along with the date grading is expected to resume
 - iv. Note the date stabilization measures were in place. Stabilization measures could include seeding / mulch, erosion control blankets, aggregate slope protection or other measures intended to limit soil erosion. Stabilization measure would not typically include sediment control devices such as ditch checks or slope barriers.
 - v. The following items should be checked for and documented under Observations / Remarks:
 - 1. Presence of rills or gullies on slopes and ditches.
 - 2. Quality / density of vegetation
 - 3. Other visible evidence of erosion (e.g. accumulations of downstream sediment)
- d. 247C – Sediment Control Devices. This form is used to document the inspection of individual sediment control devices such as ditch checks, slope barriers and inlet protection systems. Every device should be closely inspected for condition and functionality.
- i. Identify each device by Location and by device # from the SWPP plan sheets.

- ii. Note installation date for each device
 - iii. Note for each device if it is a perimeter control
 - iv. Note type of device (ditch check, slope barrier, inlet protection etc.) and material (silt fence, bio-log, etc.)
 - v. The following items should be checked for and documented:
 - 1. Condition of device – is repair or maintenance required
 - 2. Visible signs of erosion or sediment accumulation downstream of the device
 - 3. Any potential off-site discharge of sediment or other pollutants.
 - vi. If a device requires maintenance this should be indicated in the last column. The required maintenance should also be detailed on 247G. Maintenance could include removal of accumulated sediment, repair or replacement of devices.
 - vii. Corrective action is required if:
 - 1. A required control device was never installed or was installed incorrectly
 - 2. Installed controls are not effective or inadequate for a particular location
 - 3. Modification of the SWPPP is required
 - viii. Corrective action required should be indicated in the last column and detailed on form 247H.
- e. 247D – Stream Crossings. This form is used to document the inspection of temporary stream crossings on the project.
- f. 247E –Construction Entrances. This form is used to document the inspection of construction entrances on the project.
- i. All construction entrance / exits should be identified.
 - ii. Note location and installation date for each entrance.
 - iii. Note surface type (aggregate, soil, etc. under Observations / Remarks)
 - iv. Any evidence of sediment tracking onto the roadway should be documented.
 - v. Construction entrances should be monitored daily and sediment tracked onto the roadway should be cleaned as necessary.
- g. 247F – Sediment basins
- i. Note location and installation date for each basin
 - ii. The condition of the basin should be carefully checked during each inspection.
 - iii. Estimate the accumulated sediment volume as a percentage of the total capacity
 - iv. Inspect and document the condition of the basin slopes and outlet
 - v. Check for evidence of water overtopping the basin berm
- h. 247G – Maintenance Summary. This form is a summary of required maintenance recorded on forms 247A – F.
- i. This includes repairs, cleanup or other minor work required to maintain devices or other BMPs in use on the project.
 - ii. Any maintenance required should be recorded on this attachment.
 - iii. Copies of this form should be made and distributed to the individuals responsible for the maintenance work.
 - iv. A copy of this form should be included with the subsequent inspection. The Inspector shall verify that the maintenance items are complete and document the date of completion.

- i. 247H – Corrective Action Summary.
 - i. Corrective Actions shall be required if the inspector determines that
 1. A required control device was never installed or was installed incorrectly
 2. Installed controls not effective or inadequate for a particular location
 3. Modification of the SWPPP is required
 - ii. All required corrective actions should be documented on this attachment
 - iii. Copies shall be made and distributed to the individuals responsible for the required actions
 - iv. A copy of this form should be included with the subsequent inspection. The Inspector shall verify that the actions have been completed and document the date of each action
 - v. A copy of the form shall also be kept with the project SWPPP as a corrective action log. This shall be separate from the inspection reports and easily accessible for review.
8. Post-Construction (PC) Inspections
 - a. Project site inspections are to be continued at the same frequency following the Notice of Acceptance or Partial Notice of Acceptance to the Contractor.
 - b. Include a copy of the Notice of Acceptance or Partial Notice of Acceptance with the SWPPP documentation
 - c. The “Inspection Type” on the form 247 cover sheet should be noted as “Routine – PC,” “Post-Rainfall-PC,” or “Other-PC.”
 - d. The WPCM field should be left blank. No signature for the Contractor’s Inspector or the WPCM is required
 - e. The Area Engineer is responsible to ensure that any corrective actions required are completed within seven days of the inspection
9. Permit Termination
 - a. Once the entire project is stabilized with perennial, permanent vegetation the permit may be terminated. Vegetation must have a density of at least 70 percent of the density of undisturbed areas at or near the site. For assistance in making this determination, contact the Stormwater Compliance Engineer or the Environmental Services Section
 - b. All remaining temporary sediment control devices shall be removed from the project prior to termination
 - c. Once the project is fully stabilized and all devices removed, termination may be requested by email to the Stormwater Compliance Engineer.
 - d. The Stormwater Compliance Engineer shall complete the Notice of Termination and provide a copy to the Area Engineer for inclusion with the SWPPP documentation
 - e. All SWPPP documentation shall be maintained at the area office for no less than three years following termination of the Consent Decree. Notify the Stormwater Compliance Engineer if the records will be kept at an alternate location.

APPENDIX E

Contract Special Provisions for Temporary Erosion and Pollution Control

**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)
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
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**.

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.

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**.

b. Permits.

(1) Projects with 1 acre or more of erodible surface. KDOT will obtain a National Pollutant Discharge Elimination System (NPDES) permit for the project. The Contractor shall accept full responsibility, coverage, and liability for the permit, along with KDOT. Within 10 business days after notice of the award of contract or within any time extension the Bureau Chief of Construction and Materials has granted for completion of documents the Bidding Proposal Form requires, complete, sign and return to KDOT the KDHE form "REQUEST FOR JOINT OWNER/OPERATOR". A blank copy of the form is attached. The Secretary will not sign the contract until the Contractor has returned the completed, signed "REQUEST FOR JOINT OWNER/OPERATOR". If the Contractor fails to complete, sign, and return the "REQUEST FOR JOINT OWNER/OPERATOR" within the required time, the Secretary will cancel the award of contract as provided in **subsection 103.5**. KDOT will submit the completed form to KDHE for authorization. After approved by KDHE, copies will be distributed to KDOT and the Contractor. This joint permit 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**.

(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, provide a Water Pollution Control Manager, or participate in a stormwater erosion control pre-construction conference.

c. Project Storm Water Pollution Prevention Plan (SWPPP). Before the preconstruction conference, submit to the Area/Metro Engineer a minimum of 3 original copies of the SWPPP. No contract work 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 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);
- A copy of the "Request for Joint Owner/Operator" form approved by KDHE;
- An acknowledgement that State and Local requirements have been included in the SWPPP;
- Training certificates for designated Water Pollution Control Manager and Environmental Inspectors for the Project;
- 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 ensure 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;
- Attend the stormwater erosion control pre-construction conference and other stormwater erosion control conferences required according to **subsection 901.3e.**;
- 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;
- Be responsible for reviewing 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. 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.

f. 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.

g. 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.

h. 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.

i. 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.

j. 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.

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

l. 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.

m. 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.

n. 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.

o. 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 one 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.

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.

p. 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 to promote the establishment of vegetation in critical areas.

q. 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.

r. 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.

s. 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 to promote the establishment of vegetation in critical areas.

t. SWPPP Inspections. SWPPP Inspections shall be performed by Environmental Inspectors. Environmental Inspectors shall have completed KDOT's Environmental Inspector Training and maintain a current certification while performing SWPPP Inspections.

Where practical, the WPCM may also serve as the Contractor's Environmental Inspector.

Include with the project SWPPP documents proof of certification for Environmental Inspectors who will be performing SWPPP Inspections on the project.

KDOT's Environmental 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 Environmental Inspectors shall each sign the report.

Submit completed copies of KDOT Form 247 to the Area/Metro Engineer and 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.

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 or frozen ground 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 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 the Contractor fails to follow a requirements in this Special Provision, Part 7 of the Kansas General Permit (KGP), titled "Stormwater Pollution Prevention Plan Requirements and Guidelines", Part 10 of the KGP, titled "General Requirements of this Permit", or Part 11 of the

KGP titled “Standard Conditions” (or equivalent provisions in the event section numbers change in any future Permit), the Contractor shall be liable for a disincentive assessment(s). The disincentive assessment(s) charged and owing shall be:

- One thousand five hundred dollars (\$1,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 1-10.
- Two thousand five hundred dollars (\$2,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 11-20.
- Three thousand five hundred dollars (\$3,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 21 and continuing.

The per day disincentive assessment applies to each requirement in this Special Provision, Part 7, Part 10, and Part 11 for which the Contractor fails to comply. Thus, multiple disincentive assessments may be imposed on the same day. The failure to follow a requirement in this Special Provision and the KGP includes, without limitation, the failure to install, operate, or maintain BMP’s in accordance with the SWPPP as well as the improper installation, operation, or maintenance of such BMP’s. Failure to follow a requirement in this Special Provision and the KGP could result in the Engineer determining this as Unacceptable Work according to **subsection 105.5d.**, and cause the Engineer to remedy this unacceptable work according to **subsection 105.5f.**

If the Contractor fails to have a properly trained and certified WPCM assigned to the Project as required under **subsection 901.3d.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each day of construction on which the WPCM has not received KDOT’s Environmental Manager Training, fails to have a current certification, or both.

If the Contractor personnel performing the joint inspection of the temporary erosion and pollution control devices required under **subsection 901.3s.** fails to have completed KDOT’s Environmental Inspector Training, fails to have a current certification, or both, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) for each inspection undertaken by a person that fails to have the required training and current certification, and
- Seven hundred fifty-dollars (\$750.00) per person for each 14 day period that the person fails to have the required training and current certification.

If the Contractor fails to have a WPCM, a Contractor Environmental Inspector, or both at the stormwater erosion control pre-construction conference as required under **subsection 901.3e.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each person not present.

If the Contractor Environmental Inspector on the project fails to provide a copy of the inspection report to the Area/Metro Engineer and the WPCM within 24 hours of each stormwater inspection required under **subsection 901.3s.** and the KGP, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) per day for each day the inspection report has not been provided to the Area/Metro Engineer and the WPCM within 24 hours of the inspection.

If the Contractor Environmental Inspector on the project fails to use the most current SWPPP Inspection and Maintenance Report Forms (KDOT Form No. 247) as required under **subsection 901.3t.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) for each report submitted on a form other than Form No. 247.

If the Contractor fails to notify the Engineer of spills as required under **subsection 901.3a.**, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) the first day the notification is late; and
- Seven hundred fifty-dollars (\$750.00) for each 14 day period that passes without the information being provided

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 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 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.

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.

**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)
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
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**.

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.

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**.

b. Permits.

(1) Projects with 1 acre or more of erodible surface. KDOT will obtain a National Pollutant Discharge Elimination System (NPDES) permit for the project. The Contractor shall accept full responsibility, coverage, and liability for the permit, along with KDOT. Within 10 business days after notice of the award of contract or within any time extension the Bureau Chief of Construction and Materials has granted for completion of documents the Bidding Proposal Form requires, complete, sign and return to KDOT the KDHE form "REQUEST FOR JOINT OWNER/OPERATOR". A blank copy of the form is attached. The Secretary will not sign the contract until the Contractor has returned the completed, signed "REQUEST FOR JOINT OWNER/OPERATOR". If the Contractor fails to complete, sign, and return the "REQUEST FOR JOINT OWNER/OPERATOR" within the required time, the Secretary will cancel the award of contract as provided in **subsection 103.5**. KDOT will submit the completed form to KDHE for authorization. After approved by KDHE, copies will be distributed to KDOT and the Contractor. This joint permit 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**.

(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, provide a Water Pollution Control Manager, or participate in a stormwater erosion control pre-construction conference.

c. Project Storm Water Pollution Prevention Plan (SWPPP). Before the preconstruction conference, submit to the Area/Metro Engineer a minimum of 3 original copies of the SWPPP. No contract work 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 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);
- A copy of the "Request for Joint Owner/Operator" form approved by KDHE;
- An acknowledgement that State and Local requirements have been included in the SWPPP;
- Training certificates for designated Water Pollution Control Manager and Environmental Inspectors for the Project;
- 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 ensure 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;
- Attend the stormwater erosion control pre-construction conference and other stormwater erosion control conferences required according to **subsection 901.3e.**;
- 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;
- Be responsible for reviewing 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. 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.

f. 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.

g. 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.

h. 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.

i. 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.

j. 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.

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

l. 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.

m. 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.

n. 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.

o. 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 one 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.

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.

p. 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 to promote the establishment of vegetation in critical areas.

q. 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.

r. 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.

s. 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 to promote the establishment of vegetation in critical areas.

t. SWPPP Inspections. SWPPP Inspections shall be performed by Environmental Inspectors. Environmental Inspectors shall have completed KDOT's Environmental Inspector Training and maintain a current certification while performing SWPPP Inspections.

Where practical, the WPCM may also serve as the Contractor's Environmental Inspector.

Include with the project SWPPP documents proof of certification for Environmental Inspectors who will be performing SWPPP Inspections on the project.

KDOT's Environmental 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 Environmental Inspectors shall each sign the report.

Submit completed copies of KDOT Form 247 to the Area/Metro Engineer and 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.

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 or frozen ground 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 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 the Contractor fails to follow a requirements in this Special Provision, Part 7 of the Kansas General Permit (KGP), titled "Stormwater Pollution Prevention Plan Requirements and Guidelines", Part 10 of the KGP, titled "General Requirements of this Permit", or Part 11 of the

KGP titled “Standard Conditions” (or equivalent provisions in the event section numbers change in any future Permit), the Contractor shall be liable for a disincentive assessment(s). The disincentive assessment(s) charged and owing shall be:

- One thousand five hundred dollars (\$1,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 1-10.
- Two thousand five hundred dollars (\$2,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 11-20.
- Three thousand five hundred dollars (\$3,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 21 and continuing.

The per day disincentive assessment applies to each requirement in this Special Provision, Part 7, Part 10, and Part 11 for which the Contractor fails to comply. Thus, multiple disincentive assessments may be imposed on the same day. The failure to follow a requirement in this Special Provision and the KGP includes, without limitation, the failure to install, operate, or maintain BMP’s in accordance with the SWPPP as well as the improper installation, operation, or maintenance of such BMP’s. Failure to follow a requirement in this Special Provision and the KGP could result in the Engineer determining this as Unacceptable Work according to **subsection 105.5d.**, and cause the Engineer to remedy this unacceptable work according to **subsection 105.5f.**

If the Contractor fails to have a properly trained and certified WPCM assigned to the Project as required under **subsection 901.3d.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each day of construction on which the WPCM has not received KDOT’s Environmental Manager Training, fails to have a current certification, or both.

If the Contractor personnel performing the joint inspection of the temporary erosion and pollution control devices required under **subsection 901.3s.** fails to have completed KDOT’s Environmental Inspector Training, fails to have a current certification, or both, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) for each inspection undertaken by a person that fails to have the required training and current certification, and
- Seven hundred fifty-dollars (\$750.00) per person for each 14 day period that the person fails to have the required training and current certification.

If the Contractor fails to have a WPCM, a Contractor Environmental Inspector, or both at the stormwater erosion control pre-construction conference as required under **subsection 901.3e.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each person not present.

If the Contractor Environmental Inspector on the project fails to provide a copy of the inspection report to the Area/Metro Engineer and the WPCM within 24 hours of each stormwater inspection required under **subsection 901.3s.** and the KGP, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) per day for each day the inspection report has not been provided to the Area/Metro Engineer and the WPCM within 24 hours of the inspection.

If the Contractor Environmental Inspector on the project fails to use the most current SWPPP Inspection and Maintenance Report Forms (KDOT Form No. 247) as required under **subsection 901.3t.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) for each report submitted on a form other than Form No. 247.

If the Contractor fails to notify the Engineer of spills as required under **subsection 901.3a.**, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) the first day the notification is late; and
- Seven hundred fifty-dollars (\$750.00) for each 14 day period that passes without the information being provided

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 linear 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 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.

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.

12-10-13 C&M
Mar-14 Letting



REQUEST FOR JOINT OWNER/OPERATOR

For Authorization to Discharge Stormwater Runoff from Construction Activity
In accordance with Kansas Water Pollution Control General Permit No. S-MCST-0312-1
Under the National Pollutant Discharge Elimination System

Use this form only when stormwater discharge and control responsibility for the entire permitted area will be jointly held by adding an owner/operator to an existing Kansas Department of Transportation (KDOT) authorized permit.

Submission of this RJOO to KDHE does not relinquish the KDOT's authorization to discharge stormwater runoff from construction activity at the site described herein.

TO BE COMPLETED BY THE ADDED OWNER/OPERATOR:
I hereby confirm that the Added Owner/Operator identified below shares joint stormwater discharge and operational control responsibility with KDOT and accepts being added to the below identified authorization under the Kansas Stormwater Runoff from Construction Activities General Permit.
The ADDED OWNER/OPERATOR is:
Owner or Operator's Name: Contact Name:
Company Name: Company Name:
Owner or Operator's Phone: Contact Phone:
Mailing Address: Mailing Address:
City: State: Zip Code: City: State: Zip Code:
I certify that I have personally examined and am familiar with the information described herein.
Added Owner/Operator's Signature: Date:
Name (typed or printed): Title:
TO BE COMPLETED BY KDOT
As original Owner/Operator for the authorized project indicated below, I hereby certify the above Added Owner/Operator meets the General Permit definition of Owner/Operator and agree to the shared responsibilities with the Added Owner/Operator under the General Permit and continuance of my responsibilities thereunder.
Name of Project:
Address: City: County: State: KS Zip Code:
Kansas Permit No. Federal Permit No.
Permittee Signature: Date:
Permittee Name: Title: Phone Number:

Submit the RJOO with original signatures to:
Kansas Department of Health and Environment
Bureau of Water, Industrial Programs Section
1000 SW Jackson, Suite 420
Topeka, KS 66612 - 1367

Authorized: [] Y; [] N
Reviewer Date

**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

UNITS

Temporary Berm (Set Price)	Linear Foot
Temporary Slope Drain	Linear Foot
Silt Fence	Linear Foot
Biodegradable Log (****)	Linear Foot
Synthetic Sediment Barrier	Linear Foot
Filter Sock (****)	Linear Foot
Temporary Ditch Check (Rock)	Cubic Yard
Temporary Inlet Sediment Barrier	Each
Temporary Sediment Basin	Cubic Yard
Temporary Stream Crossing	Each
Sediment Removal (Set Price)	Cubic Yard
Temporary Fertilizer (**)	Pound
Temporary Seed (***)	Pound
Soil Erosion Mix	Pound
Temporary Seeding	Lump Sum
Erosion Control (*)	Square Yard
Mulching (Temporary)	Ton
Water (Erosion Control) (Set Price)	M Gallon
Geotextile (Erosion Control)	Square Yard
SWPPP Design	Lump Sum
SWPPP Inspection	Each
Water Pollution Control Manager	Each
* Class & Type	
** Type of Fertilizer	
*** Type	
**** Size	

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 will obtain a National Pollutant Discharge Elimination System (NPDES) permit for the project. The Contractor shall accept full responsibility, coverage, and liability for the permit, along with KDOT. Within 10 business days after notice of the award of contract or within any time extension the Bureau Chief of Construction and Materials has granted for completion of documents the Bidding Proposal Form requires, complete, sign and return to KDOT the KDHE form "REQUEST FOR JOINT OWNER/OPERATOR". A blank copy of the form is attached. The Secretary will not sign the contract until the Contractor has returned the completed, signed "REQUEST FOR JOINT OWNER/OPERATOR". If the Contractor fails to complete, sign, and return the "REQUEST FOR JOINT OWNER/OPERATOR" within the required time, the Secretary will cancel the award of contract as provided in **subsection 103.5**. KDOT will submit the completed form to KDHE for authorization. After approved by KDHE, copies will be distributed to KDOT and the Contractor. This joint permit 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, provide a Water Pollution Control Manager, or participate in a stormwater erosion control pre-construction conference.

c. Project Storm Water Pollution Prevention Plan (SWPPP). Before the preconstruction conference, submit to the Area/Metro Engineer a minimum of 3 original copies of the SWPPP. No contract work 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 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);
- A copy of the "Request for Joint Owner/Operator" form approved by KDHE;
- 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;
- Training certificates for designated Water Pollution Control Manager and Environmental Inspectors for the Project;
- 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;
- Attend the stormwater erosion control pre-construction conference and other stormwater erosion control conferences required according to **subsection 901.3e.**;
- 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. 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.

f. 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.

g. 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.

h. 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 $\frac{1}{2}$ 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.

i. 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.

j. 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.

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

l. 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.

m. 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 ½ 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.

n. 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.

o. 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.

p. 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 to promote the establishment of vegetation in critical areas.

q. 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.

r. 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.

s. 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 to promote the establishment of vegetation in critical areas.

t. 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.

u. SWPPP Inspections. SWPPP Inspections shall be performed by Environmental Inspectors. Environmental Inspectors shall have completed KDOT's Environmental Inspector Training and maintain a current certification while performing SWPPP Inspections.

Where practical, the WPCM may also serve as the Contractor's Environmental Inspector.

Include with the project SWPPP documents proof of certification for Environmental Inspectors who will be performing SWPPP Inspections on the project.

KDOT's Environmental 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 Environmental Inspectors shall each sign the report.

Submit completed copies of KDOT Form 247 to the Area/Metro Engineer and 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.

v. 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 or frozen ground 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 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.

w. Stormwater Compliance Disincentive Assessment. If the Contractor fails to follow a requirements in this Special Provision, Part 7 of the Kansas General Permit (KGP), titled "Stormwater Pollution Prevention Plan Requirements and Guidelines", Part 10 of the KGP, titled "General Requirements of this Permit", or Part 11 of the KGP titled "Standard Conditions" (or equivalent provisions in the event section numbers change in any future Permit), the Contractor shall be liable for a disincentive assessment(s). The disincentive assessment(s) charged and owing shall be:

- One thousand five hundred dollars (\$1,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 1-10.
- Two thousand five hundred dollars (\$2,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 11-20.
- Three thousand five hundred dollars (\$3,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 21 and continuing.

The per day disincentive assessment applies to each requirement in this Special Provision, Part 7, Part 10, and Part 11 for which the Contractor fails to comply. Thus, multiple disincentive assessments may be imposed on the same day. The failure to follow a requirement in this Special Provision and the KGP includes, without limitation, the failure to install, operate, or maintain BMP's in accordance with the SWPPP as well as the improper installation, operation, or maintenance of such BMP's. Failure to follow a requirement in this Special Provision and the KGP could result in the Engineer determining this as Unacceptable Work according to **subsection 105.5d.**, and cause the Engineer to remedy this unacceptable work according to **subsection 105.5f.**

If the Contractor fails to have a properly trained and certified WPCM assigned to the Project as required under **subsection 901.3d.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each day of construction on which the WPCM has not received KDOT's Environmental Manager Training, fails to have a current certification, or both.

If the Contractor personnel performing the joint inspection of the temporary erosion and pollution control devices required under **subsection 901.3u.** fails to have completed KDOT's Environmental Inspector Training, fails to have a current certification, or both, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) for each inspection undertaken by a person that fails to have the required training and current certification, and
- Seven hundred fifty-dollars (\$750.00) per person for each 14 day period that the person fails to have the required training and current certification.

If the Contractor fails to have a WPCM, a Contractor Environmental Inspector, or both at the stormwater erosion control pre-construction conference as required under **subsection 901.3e**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each person not present.

If the Contractor Environmental Inspector on the project fails to provide a copy of the inspection report to the Area/Metro Engineer and the WPCM within 24 hours of each stormwater inspection required under **subsection 901.3u**, and the KGP, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) per day for each day the inspection report has not been provided to the Area/Metro Engineer and the WPCM within 24 hours of the inspection.

If the Contractor Environmental Inspector on the project fails to use the most current SWPPP Inspection and Maintenance Report Forms (KDOT Form No. 247) as required under **subsection 901.3u**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) for each report submitted on a form other than Form No. 247.

If the Contractor fails to notify the Engineer of spills as required under **subsection 901.3a**, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) the first day the notification is late; and
- Seven hundred fifty-dollars (\$750.00) for each 14 day period that passes without the information being provided

The Engineer will deduct and withhold from contract funds the Stormwater Compliance Disincentive Assessment under **subsection 901.3w**. 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 901.3w**, 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 901.3x**.

x. 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 901.3w**, or for penalties/fines under **subsection 901.3x**.

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.



REQUEST FOR JOINT OWNER/OPERATOR

For Authorization to Discharge Stormwater Runoff from Construction Activity
In accordance with Kansas Water Pollution Control General Permit No. S-MCST-0312-1
Under the National Pollutant Discharge Elimination System

Use this form only when stormwater discharge and control responsibility for the entire permitted area will be jointly held by adding an owner/operator to an existing Kansas Department of Transportation (KDOT) authorized permit.

Submission of this RJOO to KDHE does not relinquish the KDOT's authorization to discharge stormwater runoff from construction activity at the site described herein.

TO BE COMPLETED BY THE ADDED OWNER/OPERATOR:
I hereby confirm that the Added Owner/Operator identified below shares joint stormwater discharge and operational control responsibility with KDOT and accepts being added to the below identified authorization under the Kansas Stormwater Runoff from Construction Activities General Permit.
The ADDED OWNER/OPERATOR is:
Owner or Operator's Name: Contact Name:
Company Name: Company Name:
Owner or Operator's Phone: Contact Phone:
Mailing Address: Mailing Address:
City: State: Zip Code: City: State: Zip Code:
I certify that I have personally examined and am familiar with the information described herein.
Added Owner/Operator's Signature: Date:
Name (typed or printed): Title:
TO BE COMPLETED BY KDOT
As original Owner/Operator for the authorized project indicated below, I hereby certify the above Added Owner/Operator meets the General Permit definition of Owner/Operator and agree to the shared responsibilities with the Added Owner/Operator under the General Permit and continuance of my responsibilities thereunder.
Name of Project:
Address: City: County: State: KS Zip Code:
Kansas Permit No. Federal Permit No.
Permittee Signature: Date:
Permittee Name: Title: Phone Number:

Submit the RJOO with original signatures to:
Kansas Department of Health and Environment
Bureau of Water, Industrial Programs Section
1000 SW Jackson, Suite 420
Topeka, KS 66612 - 1367

Authorized: [] Y; [] N
Reviewer Date

**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 (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 901**; 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 901**.

DO NOT clear and grub areas unless work 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 finished graded, not part of project phasing and no meaningful work toward the completion of the bid item 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 at these exposed areas according to **SECTION 901** 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 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 will obtain a National Pollutant Discharge Elimination System (NPDES) permit for the project. The Contractor shall accept full responsibility, coverage, and liability for the permit, along with KDOT. Within 10 business days after notice of the award of contract or within any time extension the Bureau Chief of Construction and Materials has granted for completion of documents the Bidding Proposal Form requires, complete, sign and return to KDOT the KDHE form "REQUEST FOR JOINT OWNER/OPERATOR". A blank copy of the form is attached. The Secretary will not sign the contract until the Contractor has returned the completed, signed "REQUEST FOR JOINT OWNER/OPERATOR". If the Contractor fails to complete, sign, and return the "REQUEST FOR JOINT OWNER/OPERATOR" within the required time, the Secretary will cancel the award of contract as provided in **subsection 103.5**. KDOT will submit the completed form to KDHE for authorization. After approved by KDHE, copies will be distributed to KDOT and the Contractor. This joint permit 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, provide a Water Pollution Control Manager, or participate in a stormwater erosion control pre-construction conference.

c. Project Storm Water Pollution Prevention Plan (SWPPP). Before the preconstruction conference, submit to the Area/Metro Engineer a minimum of 3 original copies of the SWPPP. No contract work 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 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);
- A copy of the "Request for Joint Owner/Operator" form approved by KDHE;

- 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;
- Training certificates for designated Water Pollution Control Manager and Environmental Inspectors for the Project;
- 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;
- Attend the stormwater erosion control pre-construction conference and other stormwater erosion control conferences required according to **subsection 901.3e.**;

- 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. 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.

f. 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.

g. 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.

h. 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.

i. 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.

j. 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.

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

l. 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.

m. 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.

n. 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.

o. 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.

p. 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 to promote the establishment of vegetation in critical areas.

q. 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.

r. 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.

s. 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 to promote the establishment of vegetation in critical areas.

t. 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.

u. SWPPP Inspections. SWPPP Inspections shall be performed by Environmental Inspectors. Environmental Inspectors shall have completed KDOT's Environmental Inspector Training and maintain a current certification while performing SWPPP Inspections.

Where practical, the WPCM may also serve as the Contractor's Environmental Inspector.

Include with the project SWPPP documents proof of certification for Environmental Inspectors who will be performing SWPPP Inspections on the project.

KDOT's Environmental 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 Environmental Inspectors shall each sign the report.

Submit completed copies of KDOT Form 247 to the Area/Metro Engineer and 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.

v. 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 or frozen ground 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 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.

w. Stormwater Compliance Disincentive Assessment. If the Contractor fails to follow a requirements in this Special Provision, Part 7 of the Kansas General Permit (KGP), titled "Stormwater Pollution Prevention Plan Requirements and Guidelines", Part 10 of the KGP, titled "General Requirements of this Permit", or Part 11 of the KGP titled "Standard Conditions" (or equivalent provisions in the event section numbers change in any future Permit), the Contractor shall be liable for a disincentive assessment(s). The disincentive assessment(s) charged and owing shall be:

- One thousand five hundred dollars (\$1,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 1-10.
- Two thousand five hundred dollars (\$2,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 11-20.
- Three thousand five hundred dollars (\$3,500.00) per violation per day for each calendar day, or part thereof, that the Contractor fails to follow each requirement for days 21 and continuing.

The per day disincentive assessment applies to each requirement in this Special Provision, Part 7, Part 10, and Part 11 for which the Contractor fails to comply. Thus, multiple disincentive assessments may be imposed on the same day. The failure to follow a requirement in this Special Provision and the KGP includes, without limitation, the failure to install, operate, or maintain BMP's in accordance with the SWPPP as well as the improper installation, operation, or maintenance of such BMP's. Failure to follow a requirement in this Special Provision and the KGP could result in the Engineer determining this as Unacceptable Work according to **subsection 105.5d.**, and cause the Engineer to remedy this unacceptable work according to **subsection 105.5f.**

If the Contractor fails to have a properly trained and certified WPCM assigned to the Project as required under **subsection 901.3d.**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each day of construction on which the WPCM has not received KDOT's Environmental Manager Training, fails to have a current certification, or both.

If the Contractor personnel performing the joint inspection of the temporary erosion and pollution control devices required under **subsection 901.3u**, fails to have completed KDOT's Environmental Inspector Training, fails to have a current certification, or both, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) for each inspection undertaken by a person that fails to have the required training and current certification, and
- Seven hundred fifty-dollars (\$750.00) per person for each 14 day period that the person fails to have the required training and current certification.

If the Contractor fails to have a WPCM, a Contractor Environmental Inspector, or both at the stormwater erosion control pre-construction conference as required under **subsection 901.3e**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty-dollars (\$750.00) for each person not present.

If the Contractor Environmental Inspector on the project fails to provide a copy of the inspection report to the Area/Metro Engineer and the WPCM within 24 hours of each stormwater inspection required under **subsection 901.3u**, and the KGP, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) per day for each day the inspection report has not been provided to the Area/Metro Engineer and the WPCM within 24 hours of the inspection.

If the Contractor Environmental Inspector on the project fails to use the most current SWPPP Inspection and Maintenance Report Forms (KDOT Form No. 247) as required under **subsection 901.3u**, the Contractor shall be liable for a disincentive assessment of Seven hundred fifty dollars (\$750.00) for each report submitted on a form other than Form No. 247.

If the Contractor fails to notify the Engineer of spills as required under **subsection 901.3a**, the Contractor shall be liable for a disincentive assessment of:

- Seven hundred fifty-dollars (\$750.00) the first day the notification is late; and
- Seven hundred fifty-dollars (\$750.00) for each 14 day period that passes without the information being provided

The Engineer will deduct and withhold from contract funds the Stormwater Compliance Disincentive Assessment under **subsection 901.3w**. 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 901.3w**, 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 901.3x**.

x. 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 901.3w**, or for penalties/fines under **subsection 901.3x**.

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.



REQUEST FOR JOINT OWNER/OPERATOR

For Authorization to Discharge Stormwater Runoff from Construction Activity
In accordance with Kansas Water Pollution Control General Permit No. S-MCST-0312-1
Under the National Pollutant Discharge Elimination System

Use this form only when stormwater discharge and control responsibility for the entire permitted area will be jointly held by adding an owner/operator to an existing Kansas Department of Transportation (KDOT) authorized permit. Submission of the Request for Joint Owner/Operator (RJO) constitutes notice of a request for joint authorization for coverage with KDOT under the Kansas Water Pollution Control General Permit, or KDHE issued successor permits, issued for discharge of Stormwater Runoff from Construction Activities in the State of Kansas. Completion of this RJO does not provide automatic coverage under the general permit to the added owner/operator. Coverage is provided and discharge permitted for the joint owners/operators when the Kansas Department of Health and Environment (KDHE) authorizes the Request for Joint Owner/Operator. **TO CONTINUE COVERAGE, KDOT AND THE ADDED OWNER/OPERATOR MUST CONTINUE TO IMPLEMENT THE STORMWATER POLLUTION PREVENTION PLAN DEVELOPED FOR THE PERMITTED AREA AND KDOT CONTINUES TO PAY THE ANNUAL PERMIT FEE.**

Submission of this RJO to KDHE does not relinquish the KDOT's authorization to discharge stormwater runoff from construction activity at the site described herein. Completion of this RJO does not automatically relieve KDOT of any civil, criminal and/or administrative penalties. To be considered complete, the RJO must be signed by the added owner/operator and KDOT or a duly authorized representative of the added owner/operator, and must include the permit number assigned to the construction site. KDHE will notify KDOT and the added Owner/Operator when the RJO is incomplete, deficient or denied.

TO BE COMPLETED BY THE ADDED OWNER/OPERATOR:

I hereby confirm that the Added Owner/Operator identified below shares joint stormwater discharge and operational control responsibility with KDOT and accepts being added to the below identified authorization under the Kansas Stormwater Runoff from Construction Activities General Permit. On Added Owner/Operator's behalf, I have reviewed the terms and conditions of the General Permit and accept full responsibility, coverage, and liability with KDOT under the General Permit. This addition will be effective when KDHE authorizes the RJO form. I understand KDHE and other regulatory entities can take action against one or all authorized Owner/Operators for permit violations.

The ADDED OWNER/OPERATOR is:

Owner or Operator's Name: _____ Contact Name: _____
Company Name: _____ Company Name: _____
Owner or Operator's Phone: _____ Contact Phone: _____
Mailing Address: _____ Mailing Address: _____
City: _____ State: ____ Zip Code: _____ City: _____ State: ____ Zip Code: _____

I certify that I have personally examined and am familiar with the information described herein.

Added Owner/Operator's Signature: _____ Date: _____

Name (typed or printed): _____ Title: _____

TO BE COMPLETED BY KDOT

As original Owner/Operator for the authorized project indicated below, I hereby certify the above Added Owner/Operator meets the General Permit definition of Owner/Operator and agree to the shared responsibilities with the Added Owner/Operator under the General Permit and continuance of my responsibilities thereunder. I understand that the addition of the Added Owner/Operator to the permit is effective when KDHE authorizes the RJO form.

Name of Project: _____

Address: _____ City: _____ County: _____ State: KS Zip Code: _____

Kansas Permit No. _____ Federal Permit No. _____

Permittee Signature: _____ Date: _____

Permittee Name: _____ Title: _____ Phone Number: _____

Submit the RJO with original signatures to:

Kansas Department of Health and Environment
Bureau of Water, Industrial Programs Section
1000 SW Jackson, Suite 420
Topeka, KS 66612 - 1367

Authorized: Y; N

Reviewer _____

Date _____

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

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
Temporary Slope Drain
Temporary Slope Barrier (Set Price)
Temporary Ditch Check
Temporary Ditch Check (Rock) (Set Price)
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)
Mobilization (Emergency Erosion Control) (Set Price)
Curb Inlet Protection
* Class & Type
** Type of Fertilizer
*** Type

UNITS

Linear Foot
Linear Foot
Linear Foot
Linear Foot
Cubic Yard
Each
Cubic Yard
Each
Cubic Yard
Pound
Pound
Pound
Lump Sum
Square Yard
Acre
Each
Linear Foot

901.2 MATERIALS

a. Provide 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.

b. Straw or Hay Bales. Provide straw or hay bales that are free of weeds declared noxious by the Kansas Department of Agriculture. Provide bales bound with twine. Do not use bales bound with wire.

The Engineer will accept the straw or hay bales based on **DIVISION 2100**.

c. 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.

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

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.

e. Geo-Ridge Permeable Berm™ or equivalent. The Environmental Scientist (Bureau of Design, Environmental Services Section) will consider an equivalent of the brand name specified. Provide the Engineer with a complete description, literature, test reports, etc. on the proposed equivalent.

The Engineer will accept the Geo-Ridge Permeable Berm™ (or an equivalent approved by the Environmental Scientist) based on brand name and visual inspection of the installed material.

f. Triangular Silt Dike™ or equivalent. The Environmental Scientist (Bureau of Design, Environmental Services Section) will consider an equivalent of the brand name specified. Provide the Engineer with a complete description, literature, test reports, etc. on the proposed equivalent.

The Engineer will accept the Triangular Silt Dike™ (or an equivalent approved by the Environmental Scientist) based on brand name and visual inspection of the installed material.

g. Curb Inlet Protection. Provide burlap bags or synthetic mesh, aggregate, 2 inch by 4 inch board as specified in the Contract Documents. Alternative products may be used with the Engineer's approval. The Engineer will accept the material for curb inlet protection based on condition and visual inspection of the installed material.

901.3 CONSTRUCTION REQUIREMENTS

a. Responsibility. Take all measures necessary to prevent erosion and pollution on the project and project related borrow areas.

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 as a guide for the design, installation and maintenance of temporary erosion control measures.

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

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.

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.

- Initiate temporary erosion and pollution control measures for areas that have been disturbed, within 14 calendar days after construction activities have temporarily or permanently ceased on a portion of the project site. Exceptions are as follows:
 - If implementation of erosion and pollution control measures is precluded by snow cover, undertake such measures as soon as practical.
 - If construction activities will resume on the portion of the project site within 21 calendar days, temporary erosion and pollution control measures do not have to be initiated.
 - In arid regions (average annual rainfall of less than 10 inches), during seasonal arid conditions, implement the erosion and pollution control measures as soon as practical, but not necessarily within 14 calendar days.

b. Permits.

(1) Projects with 1 acre or more of erodible surface. KDOT (or the local governmental agency) will obtain a National Pollutant Discharge Elimination System (NPDES) permit for the project. KDOT's permit does not cover Contractor plant sites and Contractor-Furnished borrow and waste sites adjacent to, or in the near vicinity of the project.

KDOT will not issue the Notice of Acceptance, **subsection 105.16**, until the necessary cleanup and seeding is completed for the project. Failure to complete this work could result in liquidated damages, **subsection 108.8**.

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

(2) Projects with less than 1 acre of erodible surface. The Contractor is required to comply with this specification, which includes completing inspection and maintenance forms according to **subsection 901.3q**, except that neither a NPDES permit, nor a Storm Water Pollution Prevention Plan (SWPPP) in **subsection 901.3d**, 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 presented in **subsection 901.3d**.

c. General. Unless approved in writing by the Engineer, 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.

If on-site or state-furnished off-site borrow areas are to be excavated below the ground water elevation, construct a permanent 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.

Do not ford live streams with construction equipment.

As dictated by weather conditions, actual site conditions and construction procedures, install and maintain temporary erosion and pollution control devices as shown in the Contract Documents, and as directed by the Engineer.

Implement temporary erosion and pollution control with berms, slope drains, ditch checks, slope barriers, sediment basins, inlet sediment barriers, fertilizer, seeding, mulching and erosion control blankets.

If temporary erosion and pollution control is not implemented and maintained according to the approved schedule, all work on the project shall cease until conditions are brought into compliance, as determined by the Engineer.

d. 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.

Include in the project SWPPP:

- the SWPPP Inspection and Maintenance Report Forms;
- 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).
- 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.

As a minimum, include the following information in the Contractor's Erosion Control Site Plan:

- (1) The planned sequence of major construction activities.
- (2) Site maps showing the locations and devices to be used for the initial perimeter controls and for every phase of the project.
- (3) A detailed description of controls to be used including:
 - Stabilization practices for all areas disturbed by construction, including borrow locations;
 - Structural practices for all drainage/discharge locations; and
 - Other controls, including:
 - Waste disposal practices which prevent discharge of solid materials into water in the U.S. also, see **subsection 107.9d.**;
 - Methods of preventing contamination in areas designated for fuel and lubrication storage;
 - Actions to minimize offsite tracking of sediment by construction vehicles;
 - Actions to obtain compliance with state or local waste disposal, sanitary sewer or septic system regulations; and
 - When actions will be implemented, including permanent erosion control items when required in the Contract Documents.
- (4) Acknowledgment that State and Local requirements have been included in the SWPPP.
- (5) Provide a Maintenance and Inspection Report. See **subsection 901.3q.**

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. Temporary Slope Barriers. Use any of the materials listed in the Contract Documents to construct temporary slope barriers.

When temporary biodegradable logs, straw or hay bales are used, remove and dispose of the sediment when deposits reach approximately $\frac{1}{2}$ the height of the log or bale.

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. Temporary Ditch Checks. The option exists to use any materials listed in the Contract Documents, excluding rock, to construct temporary ditch checks. When deposits reach approximately $\frac{1}{2}$ the height of the temporary 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.

i. Temporary Ditch Checks Rock. Use rock to construct temporary rock ditch checks listed in 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.

j. Temporary Inlet Sediment Barrier. Use any of the materials listed in the Contract Documents to construct temporary inlet sediment barriers.

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 temporary triangular silt dike, straw or hay bales are used, remove and dispose of the sediment when deposits reach approximately $\frac{1}{2}$ the height of the silt dike or bales.

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

k. 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 $\frac{1}{3}$ the depth of the structure.

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

l. Temporary Stream Crossing.

(1) General. Before beginning work in the streambed, record existing stream channel elevations.

Use any of the materials shown in the Contract Documents to construct temporary stream crossings.

When the Contractor's operations require a temporary stream crossing, and one is not shown in the Contract Documents, the Contractor may install one 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.

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.

m. Temporary Fertilizer, Seed and Mulch. 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.

n. 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.

o. 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.

p. 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.

(1) Areas with Erosion Control (Class I). Place the Erosion Control (Class I). Do not mulch over the Erosion Control (Class I).

(2) Areas with Erosion Control (Class II). Place the Erosion Control (Class II) as shown in the Contract Documents.

If Pyramat® erosion control (Class II) is used, cover it with ½ inch of pulverized, fine-grained soil. Hand rake the soil into the erosion control material; then mulch the area according to **SECTION 904**.

q. 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. Inspect the temporary erosion and pollution control devices and complete the inspection and maintenance reports every 7 days and within 24 hours of a rainfall event of ½ inch or more. Monitor temporary erosion and pollution control devices at least daily during prolonged rainfall. Within 48 hours, begin corrective action of any deficiencies found in the perimeter controls, and complete corrective actions within 7 calendar days. Correct all other devices as soon as conditions allow access to their location without causing additional damage to the slopes.

Submit copies of inspection and maintenance reports to the Field Engineer within 3 working days after an inspection has been made. Use either KDOT-furnished maintenance report forms or approved Contractor's maintenance forms.

Remove the temporary devices 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, 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.

r. Mobilization for Emergency Erosion Control and Erosion Control Mobilization Delay Damages.

(1) Mobilize sufficient personnel, equipment, materials and incidentals to the job site within 24 hours after receiving the Engineer's written order to conduct temporary erosion control work on an emergency basis (24-hour period), unless extended by the conditions of **subsection 901.3r.(5)**. Note: "sufficient personnel, equipment, materials and incidentals" is considered to be enough to complete all emergency erosion control within the 7 days from date of notice.

(2) An emergency is a sudden occurrence of a serious nature that causes perimeter erosion control devices to fail (in whole or in part) allowing sediment to be deposited onto adjacent property or streams, or creating a risk that sediment will be deposited onto adjacent property or streams. The work is beyond normal maintenance of erosion control items and requires immediate movement of necessary personnel, equipment, materials and incidentals to the project site. The emergency may require immediate corrective work, installation of erosion control measures or both.

(3) If the Contractor mobilizes to the project within the 24-hour period or an approved extension under **subsection 901.3r.(5)**, the Engineer will pay Mobilization (Emergency Erosion Control) (Set Price).

(4) If the Contractor fails to mobilize to the project within the 24-hour period or approved extension under **subsection 901.3r.(5)**, the Contractor is liable for Erosion Control Mobilization Delay Damages. The Erosion

Control Mobilization Delay Damages charged and owing are \$500.00 per calendar day for each calendar day (including Sundays, Holidays and the Winter Holiday Period) that the Contractor fails to mobilize to the project after the 24-hour period or approved extension expires. See **subsection 901.3r.(1)**.

(5) The Engineer may extend the mobilization time beyond the 24-hour period for unusually severe weather or Acts of God that prevent the Contractor from mobilizing to the project site.

s. Erosion Control Disincentive Assessment. If the Contractor fails to complete corrective actions of the perimeter controls within the 7 calendar days required under **subsection 901.3q.**, the Contractor is liable for an Erosion Control Disincentive Assessment. The Erosion Control Disincentive Assessment charged and owing is \$250.00 for each erosion control device deficiency and for each calendar day (including Sundays, Holidays and the Winter Holiday Period) the deficiency remains uncorrected.

t. Computing Mobilization Delay Damages and Erosion Control Disincentive Assessment. The Engineer will deduct and withhold the Erosion Control Mobilization Delay Damages under **subsection 901.3r.(4)** and Erosion Control Disincentive Assessment under **subsection 901.3s.** to either or both concurrently, as applicable. The assessments are to be computed in the same manner as damages under **subsection 108.8,** (Liquidated Damages) except calendar days include Sundays, Holidays and the Winter Holiday Period.

u. Indemnify KDOT, local government authorities or any other NPDES permit holders from fines that KDHE or EPA impose because of the Contractor's failure to comply with applicable laws, regulations, ordinances and permits.

v. Curb Inlet Protection. Install the curb inlet protection as shown in the Contract Documents.

901.4 MEASUREMENT AND PAYMENT

The Engineer will measure temporary berms, temporary slope drains, temporary slope barriers and temporary ditch checks by the linear foot.

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

The Engineer will measure each temporary inlet sediment barrier and temporary stream crossing as a unit.

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 acre.

The Engineer will measure Mobilization, Emergency Erosion Control per each mobilization ordered by the Engineer.

The Engineer will measure any disincentive assessment on an each device per day basis.

The Engineer will measure any erosion control mobilization delay damages by the lump sum.

The Engineer will measure curb inlet protection by the linear foot.

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.

Payment for "Temporary Slope Barrier (Set Price)", "Temporary Ditch Check Rock (Set Price)", "Sediment Removal (Set Price)" and "Mobilization, Emergency Erosion Control (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 borrow and waste locations or plant site locations outside the project limits.

**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)
SWPPP Design
SWPPP Inspection

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
Lump Sum
Each

* Class & Type

** Type of Fertilizer

*** Type

**** Size

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**.

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.

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**.

b. Permits.

(1) Projects with 1 acre or more of erodible surface. KDOT (or the local governmental agency) will obtain a National Pollutant Discharge Elimination System (NPDES) permit for the project. KDOT's permit 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**.

(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.

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);
- A copy of the "Request for Joint Owner/Operator" form approved by KDHE;
- An acknowledgement that State and Local requirements have been included in the SWPPP;
- 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. 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.

e. 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.

f. 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 $\frac{1}{5}$ 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.

g. 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.

h. 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.

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

j. 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.

k. 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.

l. 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 $\frac{1}{3}$ the depth of the structure.

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

m. 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 one 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.

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.

n. 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 to promote the establishment of vegetation in critical areas.

o. 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.

p. 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.

q. 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 to promote the establishment of vegetation in critical areas.

r. SWPPP Inspections.

KDOT's Inspector and the Contractor's Inspector shall perform a joint inspection of the temporary erosion and pollution control devices every 14 days and within 24 hours of a rainfall event of ½ inch or more.

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 within 24 hours after an inspection has been made.

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.

s. 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.

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

u. 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 901.3t** or for penalties/fines under **subsection 901.3u**.

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 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 each SWPPP inspection performed in compliance with this specification.

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.

04-17-13 C&M (JVN)
Jul-13 Letting

**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)
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
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**.

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.

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 901.3s**).

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 901.3s**. 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. 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.

t. 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.

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

v. 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 901.3u** or for penalties/fines under **subsection 901.3v**.

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 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.

12-11-13 C&M (JVN)
Mar-14 Letting

**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 linear 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

**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 (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 901**; 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 901**.

DO NOT clear and grub areas unless work 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 finished graded, not part of project phasing** and no meaningful work toward the completion of the bid item 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 at these exposed areas according to **SECTION 901** 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 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.

APPENDIX F

Section 4.03 of the 2014 KDOT Construction Manual

Economic considerations usually make it impractical to trim rock slopes to the exact cross-section; however, any dangerous or objectionable appearing projections should be removed. The finished slope should have a uniform appearance.

4.02.14 GRADING RECORDS

Give particular attention to the keeping of accurate, up-to-date records of all the work. Some of the more important items which should be documented and made a part of the project records are:

- Locations of actual balance points and notes concerning cross-haul that may have occurred, including reasons for the cross-hauling and the quantities involved.
- Measurements and notes made to substantiate the classification and quantity of the various materials encountered in the excavation. Reporting earthwork quantities will require thoughtful preparation. Vehicle measure and load count should generally be avoided. However, if other methods are impractical, it may be used within the limits of the plan quantities for the separate balances to make intermediate payments. In no case will the final quantities be adjusted based on load counts.
- Design quantities can be off, particularly if building demolition work has been done in these areas, as initial cross-sections do not take into consideration the basement excavations. Estimates should reflect any known changes in conditions.
- Records of dimensions, weights and calibrations which may be required by the Standard Specifications for water distribution and rolling equipment.
- Measurements of excavation below grade necessary for the removal of unstable or other undesirable materials.
- Daily record of events, including limits in which work was performed during the day, type and number of pieces of equipment used, number and classifications of labor used, and notes regarding discussions of any unusual nature with the Contractor's representative and which may lead to the issuance of specific recommendations or instructions to the Contractor. Weather conditions, for the purpose of determining a working day. List all District, Headquarters or FHWA visitors.
- A complete record of all density tests made to determine the acceptability of embankment, with remarks included which explain the corrective action taken at locations where failing test results were obtained and reasons for not making the required tests at other locations. The results of proof rolling should also be recorded.
- Notes regarding damage to private property caused by the Contractor's equipment and/or operations should be noted and action taken recorded.
- Record of final disposition of salvageable materials.
- Document grade checks in the field book.

4.03 TEMPORARY EROSION AND POLLUTION CONTROL

4.03.01 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REVIEW

On KDOT projects with one acre or more of disturbed area, the Contractor shall submit copies of the project Storm Water Pollution Prevention Plan (SWPPP) to the Area/Metro Engineer for approval. The Engineer shall review the SWPPP for completeness, compliance with the requirements of the NPDES permit, and following the points in KDOT form 248 (KDOT's checklist for Contractor's Storm Water Pollution Prevention Plan). The SWPPP must be approved by the Area/Metro Engineer before any construction activities other than surveying

may begin. Document approval on KDOT form 219. The Area/Metro Engineer shall submit the approved SWPPP to KDHE according to the instructions on KDOT form 219.

4.03.02 STORM WATER PRECONSTRUCTION CONFERENCE

Hold a Storm Water Erosion Control preconstruction conference before beginning construction activities. This conference is separate from the project preconstruction conference and must be attended by the Area/Metro Engineer, the Contractor's Water Pollution Control Manager, Certified Environmental Inspectors for the project from both KDOT and the Contractor, and any erosion control subcontractors for the project. Attendance and minutes will be kept and added to the SWPPP notebook, and a copy sent to KDOT's Storm Water Compliance Engineer. The conference should at a minimum cover the following: inspection schedule, procedures, contact information, discussion of responsibility for installation, inspection, and maintenance of devices, how the erosion and sediment control will progress with the project schedule, and the SWPPP site plan and process for updating and modifying it.

4.03.03 CONSTRUCTION/INSTALLATION INSPECTION

At a minimum, perimeter control devices to protect water sources and prevent sediment from leaving the project should be in place for an area before any type of soil disturbance is allowed in that area. As devices are being installed, the Inspector should check that the devices are installed in accordance with the information provided in the Contractor's SWPPP, regarding both location and installation practice. The as-built site map for the project should also be updated daily as devices are installed and removed. As the project progresses, the Inspectors should look at the performance of devices and other practices to make sure the desired results are being achieved. Inspectors should also see that areas are stabilized as soon as possible and that sediment control devices are removed when they are no longer necessary, as leaving them in longer than needed can be detrimental to the project.

4.03.04 STORM WATER INSPECTIONS AND REPORTS

Storm water inspections are required to be conducted from the beginning of the project until the notice of termination is issued for the permit, once 70% permanent vegetation coverage is attained. Inspections are to be conducted jointly by both KDOT and Contractor certified environmental inspectors from the beginning of the project until the Notice of Acceptance. Once the NOA for the project has been issued, the Contractor is relieved of the responsibilities and the inspections will be conducted by KDOT's certified environmental inspector until the notice of termination is received. Reports are required to be submitted after each inspection. The inspections and reports should be conducted according to and meet the requirements laid out in KDOT's SWPPP Inspection Procedures and Form 247 Instructions.

4.03.05 PROJECT MAINTENANCE

The Contractor is responsible for installing and maintaining the erosion and sediment control for the project from the beginning of construction until the notice of acceptance at which point the maintenance of the project falls on KDOT's maintenance crews until the permit is terminated. Thus, it is very important that project is in the best shape possible in regards to erosion and sediment control before the NOA is issued. Shortly before the final walk through to develop the final punch list, conduct a storm water inspection to develop a list of items that need to be addressed before the project is accepted. Make sure that all unnecessary devices are

removed, all remaining devices are in good working order and that all open areas have been properly stabilized.

4.03.06 PERMIT TERMINATION

Permit termination requires that all vegetated areas on the entire project are stabilized with perennial, permanent vegetation with a density of at least 70% of the density of undisturbed areas at or near the site. Taking pictures of the area prior to construction is a good practice and can be helpful in making this determination. Additional assistance may be requested by contacting the Stormwater Compliance Engineer or the Environmental Services Section. Any remaining temporary sediment control devices shall be removed from the project prior to termination. Once the project is fully stabilized and all devices removed, termination may be requested by email to the Stormwater Compliance Engineer. The Stormwater Compliance Engineer shall complete the Notice of Termination and provide a copy to the Area Engineer for inclusion with the SWPPP documentation. All SWPPP related documents are to be retained in accordance with the storm water permit or as otherwise directed by the Stormwater Compliance Engineer.

4.03.07 PROJECTS WITH LESS THAN 1 ACRE DISTURBED

On projects with less than one acre of disturbed ground a NPDES permit, formal SWPPP and SWPPP inspections are not required. The Contractor should still follow best management practices as described in the specifications to prevent storm water pollution. The Inspector should help make sure we are good neighbors to adjacent landowners and stewards of the environment. In addition to good erosion and sediment control practices such as proper perimeter control and prompt stabilization of inactive work areas, particular attention should be paid to material storage areas (including soil stockpiles), construction entrances, stream crossings and other potential sources of storm water pollution.

4.03.08 LOCAL PROJECTS

On city and county projects the Local Public Authority is the responsible party and submits the Notice of Intent on projects with one acre or more of disturbed area. While the LPA is ultimately responsible, the SWPPP must be approved by KDOT's Area/Metro Engineer. As on KDOT projects, the Contractor shall submit copies of the project Storm Water Pollution Prevention Plan (SWPPP) to the Area/Metro Engineer for approval. The Engineer shall review the SWPPP for completeness, compliance with the requirements of the NPDES permit, and following the points in KDOT form 248 (KDOT's checklist for Contractor's Storm Water Pollution Prevention Plan). The SWPPP must be approved by the Area/Metro Engineer before any construction activities other than surveying may begin. Document approval on KDOT form 219. The Area/Metro Engineer shall submit the approved SWPPP to KDHE according to the instructions on KDOT Form 219.

The LPA's Inspector has the same responsibilities as the KDOT Inspector does on KDOT projects. They are responsible for conducting environmental inspections and verifying that the SWPPP is implemented and the requirements of the permit are being met. They must conduct the environmental inspections jointly with the Contractor, verify devices are being installed and maintained correctly, and verify that stabilization measures are promptly implemented as portions of the work are completed.

The role of the KDOT Inspector is oversight just like any other aspect of LPA projects. If a KDOT Inspector sees an issue they should bring it to the attention of the Project Inspector and possibly the Area/Metro Engineer so that it can be corrected.

4.04 BASE COURSES AND SUB-BASES

4.04.01 GENERAL

Base Courses and Sub-bases are primarily the foundations or subgrade for the various types of surfaces. They may include subgrade modification, treated subgrade, all types of aggregate binder base courses, portland cement treated base courses, road mix asphalt base course or plant mix asphalt base course. The specific type shall be constructed as specified in the Contract Documents. The construction procedures are common to most types of bases and the following instructions apply in general to the various types of base courses and sub-bases.

The Project Manager should study the available soil investigation reports. These reports describe the various soils, and contain moisture-density curves.

If the material is paid for by the cubic yard, the volume can be determined by the method described above, or by developing a conversion factor from weight to volume and weighing each load. Whenever the quantity is based upon a weight, the loads are to be weighed by a bonded scale operator according to the Contract Documents. Care should be exercised to account for material that is produced but is not paid for.

4.04.02 EQUIPMENT

The equipment for the specific type of base course is listed in the Standard Specifications. Prior to starting the work, check each piece of equipment for compliance with the Standard Specifications, and record the check in the project records. Measure the material according to the Standard Specifications. When the material is paid for by the cubic yard, accurately measure each truck, and compute the level volume. Record these measurements and computations to the nearest 0.25 cubic yard in the project records. Be alert for any changes in sideboards or other conditions that would affect the volume of the vehicle load.

When windrow eveners are required, they will be capable of shaping separate windrows of material to a uniform cross-section. If material is paid for by the ton, the weighing equipment shall be in accordance with the Standard Specifications. The Contractor shall have the scales checked, adjusted and certified by an approved testing firm prior to use. The calibration report is to be issued to the Construction Office, prior to weighing any material.

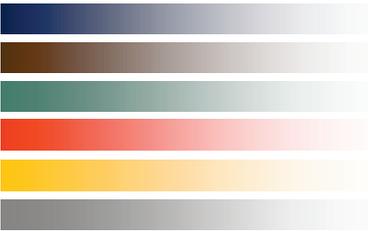
4.04.03 SUBGRADE PREPARATION

The subgrade shall be prepared as shown in the Contract Documents for the different type bases or sub-bases. If the plans do not indicate any specific preparation of subgrade, the Standard Specifications require that the Contractor prepare the roadbed by sprinkling, blading, rolling and lightly scarifying, if necessary, to eliminate ruts and minor irregularities and to provide proper crown.

Regardless of the procedure used in preparing the subgrade, the Inspector should carefully check the subgrade at frequent intervals for crown grade and alignment. Also, check subgrade density, if definite density requirements are specified. In all types of subgrade preparation, the surface should be hard and firm, with a minimum amount of loose material remaining on the surface. If, in the opinion of the Inspector, the condition of the subgrade, after the work specified is completed, will produce an unsatisfactory surface on which to place the base or subbase, the

APPENDIX G

Excerpt from KC APWA Newsletter



PUB NEWS

Volume 38, Number 5

September 2014

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ATTENTION: New Pub News Editor!!!

The Communications and Publicity Committee would like to welcome Caitlin Gard, City of Shawnee, as Pub News Editor! Caitlin will take over as Pub News Editor with the November issue. If you have articles or upcoming events to publish in the Pub News submit them to:
Caitlin at cgard@ci.shawnee.ks.us.

Save the Date for these Upcoming Events:

- September 9th - Chapter Meeting, see page 10
- September 17th - Annual Steak Fry, see page 11
- September 23rd - Annual Golf Tournament, see page 13
- October 6th to 10th - Snow and Equipment Expo, see page 16
- October 14th - Winter Maintenance Supervisor Certificate Workshop, see page 20
- October 14th - Leadership and Management Breakfast, see page 21
- October 21st to 23rd - Public Works Institute Module II, see page 21
- October 22nd - Transportation Committee Orange Barrel Report, see page 22
- October 29th - Chapter Planning Retreat, see page 2

2014 PACE AWARD RECIPIENT

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UPROW Erosion Control Seminar - from Ted Ingalls

UPROW Committee Organizes Seminar on Erosion Control Guidelines Specific to Utilities

On July 17, 2014, the Utilities and Public Right of Way committee of the Kansas City Metro Chapter of APWA and the Kansas Department of Transportation (KDOT) teamed up to conduct a seminar titled "Erosion Control Guidelines for Utilities." The need for this seminar was brought about by a void in the available training and education on erosion and sediment control applied to utility construction.

Utility construction generally results in smaller areas of disturbance (under 1 acre), so it oftentimes does not require a Notice of Intent (NOI) under the National Pollution Discharge Elimination System (NPDES) permit or a Stormwater Pollution Prevention Plan (SWPPP). This absolves the contractor and owner from performing inspection reports bi-weekly or after half-inch or greater rain events but does NOT eliminate the need for using Best Management Practices (BMPs). There are an endless number of BMPs out there with more innovative options being created all the time.

Some of the questions being asked by utility owners:

- Which BMPs should be used in certain scenarios?
- When are they *required* to be used?
- Is there any flexibility in the guidelines?
- What are the potential penalties if caught out of compliance?
- Do the rules differ from town to town or state to state?
- What are the odds of being inspected by KDHE or EPA?
- If we're relocating a utility before the start of road construction, what condition can we leave the site in when we're finished?



Jason Van Nice, PE, KDOT Stormwater Compliance Engineer, addressed these questions with an informative, concise three-part presentation and Q&A session. Jason is one of the most knowledgeable experts on erosion and sediment control standards in Kansas. He did a great job of highlighting the key elements of the regulations and included many pictures as examples of correct and incorrect erosion and sediment control device installations. KDOT hosted the meeting at its Olathe office and had several of its utility coordinators from the district in attendance.

The audience was cautioned that this would be the first seminar to try to address this topic and although the content would be relevant, their questions would likely lead to discussions that would prove even more beneficial. Interpretation of the guidelines can be subjective, but Jason was able to address many of the questions that were posed about these issues, thanks to his close coordination with the Kansas Department of Health and Environment (KDHE) during the past two years.

KDOT recently learned the hard way that its existing erosion control program was not up to par. Following visits by the EPA to three of KDOT's larger highway construction projects across the state, KDOT entered into a consent decree with the EPA and paid a hefty fine after being cited for multiple violations of its NPDES permit and the Clean Water Act.

The federal regulations that address sediment and erosion control stem from the passage of the Clean Water Act in 1972 and subsequently, the NPDES permit program, which began in 1992. Unfortunately, the specifics of these programs are not well known to many of us. However, a lack of knowledge or poor enforcement of these guidelines does not protect a contractor from citations and fines when the government shows up to the project to conduct an inspection.

To address this, KDOT created a new specification that placed additional emphasis on erosion and sediment control and also created a certification training program that is mandatory for contractors, field inspectors, and project administrators. While this training is open to anyone, its focus is on the expectations for the highway construction contractors and not the utility owners.

The July seminar aimed to bridge the gap.

Jason addressed the Clean Water Act and the NPDES permitting requirements and then detailed how and when these affect the typical utility construction or relocation project. He showed why it is important to have erosion and sediment control measures in place and then listed the top ten reported non-compliance issues and pointed out that he could probably find examples of each of these nearby. The top issue cited was "not stabilizing portions of the site in a timely manner."

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UPROW Erosion Control Seminar, Continued from Page 7

Multiple examples of erosion control BMPs were discussed — tracking, compaction, tillage, seeding, various types of mulching, blankets, turf reinforcement mats (TRMs). Following that were some examples of sediment control BMPs — silt fence, topsoil berms, slash mulch, bio-logs, compost logs, wattles, silt shield, silt curtain, steel sheeting, sediment traps, sediment ponds, inlet protection. Because many are unaware of the difference between erosion control and sediment control, Jason made sure to clarify that erosion control is using practices that keep the soil in place, while sediment control is keeping the sediment that is caused by erosion from flowing off the site. KDOT has found that focusing on the erosion control efforts is more effective than relying primarily on sediment control measures.

The next section gave examples of non-stormwater pollution sources that need to be considered. These include dust control, fuel storage and delivery, temporary bathroom facilities, off-tracking of mud, dewatering, and concrete washout.

Jason finished off his presentation with a summary of KDOT's updated compliance program and the consent decree requirements. While much of this information will not affect utilities directly, it is a great example of a quality erosion control program and the potential impacts of an inspection that results in multiple violations. Jason cautioned the crowd that while KDHE or EPA inspections are rare, it's much safer and cost effective to implement a program that keeps you compliant with the regulations than to risk the steep fines that are likely to result if caught without appropriate measures in place.

Seventy-six people attended the KDOT seminar, including utility owners, contractors, consultants, DOT employees and City/County representatives. Such a diverse group proved valuable when discussing erosion control issues from different viewpoints. While about 30 percent of the attendees were members of APWA, this was an excellent opportunity to showcase the value that APWA provides to its members and the benefit to our community. We are hopeful that some of the attendees will become members.

Based on the positive feedback — the group gave the seminar an average score of 4.2 on a 1 to 5 scale — the UPROW committee plans to debrief at our next meeting and start planning for more seminars similar to this one. One possibility that we plan to explore is encouraging MoDOT to host a presentation on their side of the state line that will address the Missouri perspective. In addition, we may consider additional seminars on the Kansas side.

No matter which state you reside in, erosion and sediment control is a key element to any construction project, regardless of the size. If there is an opportunity to bridge the knowledge gap and help improve the current practices, try to find a way to make it happen. In the long run, everyone benefits.



APPENDIX H

Instances of potential non-compliance with the Kansas General Permit

2014 Annual Report
Known Instances of Potential Violation of the Kansas General Permit

Route	County Number	Project Number	County Name	Area Office Location	Dates of Potential Violation		Days	Permit Section	Description of Potential Violation
					From	To			
I070	21	KA-0732-01	DICKINSON	Clay Center	01/29/14	01/29/14	1	KGP 7.2.10	2 Deficiencies not corrected within 7 days of inspection dated 1/21/14
U024	44	KA-2404-01	JEFFERSON	Topeka	02/14/14	02/14/14	1	KGP 7.2.10	Regularly scheduled inspection completed late
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	02/25/14	02/25/14	1	KGP 7.2.10	Regularly scheduled inspection completed late
K061	59	K-8253-02	MCPHERSON	Marion	02/25/14	02/25/14	1	KGP 7.2.10	Corrective Action not completed within 7 days of 2/17 inspection
U036	79	KA-2188-01	REPUBLIC	Mankato	03/26/14	03/26/14	1	KGP 7.2.10	Regularly scheduled inspection completed late
U069	46	K-8251-08	JOHNSON	Olathe	04/16/14	04/16/14	1	KGP 7.2.10	corrective Action not completed within 7 days of 4/8 inspection
I035	46	KA-1109-02	JOHNSON	Olathe	04/16/14	04/22/14	7	KGP 7.2.10	2 Corrective Actions not completed within 7 days of 4/8 inspection
U069	46	K-8251-08	JOHNSON	Olathe	04/27/14	04/29/14	3	KGP 7.2.10	Inspection report not completed within 24 hours of inspection
K099	99	KA-0703-01	WABAUNSEE	Osage City	04/29/14	04/29/14	1	KGP 7.2.10	Deficiency not corrected within 7 days of inspection dated 4/21/14
I035	46	KA-1109-02	JOHNSON	Olathe	06/08/14	06/10/14	3	KGP 7.2.10	Inspection report not completed within 24 hours of inspection
	46	KA-1109-03	JOHNSON	Olathe	06/08/14	06/10/14	3	KGP 7.2.10	Inspection report not completed within 24 hours of inspection
I035	46	KA-1109-02	JOHNSON	Olathe	06/10/14	06/10/14	1	KGP 7.2.10	Inspection report not completed within 24 hours of inspection
	46	KA-1109-03	JOHNSON	Olathe	06/10/14	06/10/14	1	KGP 7.2.10	Inspection report not completed within 24 hours of inspection
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	06/17/14	06/17/14	1	KGP 7.2.9	Improper washout of concrete mixing truck
U166	63	KA-0705-01	MONTGOMERY	Independence	07/15/14	07/15/14	1	KGP 7.2.10	Regularly scheduled inspection completed late
K047	67	KA-0791-01	NEOSHO	Independence	07/16/14	07/17/14	2	KGP 7.2.10	Regularly scheduled inspection completed late
K047	103	KA-0791-02	WILSON	Independence	07/16/14	07/17/14	2	KGP 7.2.10	Regularly scheduled inspection completed late
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	07/22/14	07/22/14	1	KGP 7.2.10	5 Deficiencies not corrected within 7 days of inspection dated 7/14/14
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	07/22/14	07/23/14	2	KGP 7.2.10	5 Deficiencies not corrected within 7 days of inspection dated 7/14/14

2014 Annual Report
Known Instances of Potential Violation of the Kansas General Permit

Route	County Number	Project Number	County Name	Area Office Location	Dates of Potential Violation		Days	Permit Section	Description of Potential Violation
					From	To			
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	09/10/14	09/11/14	2	KGP 7.2.10	Deficiency not corrected within 7 days of inspection dated 9/2/14
K002	106	KA-3483-01	MULTIPLE	Winfield	09/25/14	09/25/14	1	KGP 7.2.10	Regularly scheduled inspection completed late
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	09/29/14	09/29/14	1	KGP 7.2.9	Improper washout of concrete mixing truck
K148	79	KA-2086-01	REPUBLIC	Mankato	10/02/14	10/06/14	5	KGP 7.2.10	Deficiency not corrected within 7 days of inspection dated 9/24/14
K148	79	KA-2086-01	REPUBLIC	Mankato	10/02/14	10/07/14	6	KGP 7.2.10	3 Deficiencies not corrected within 7 days of inspection dated 9/24/14
K002	106	KA-3483-01	MULTIPLE	Winfield	10/10/14	10/10/14	1	KGP 7.2.10	Regularly scheduled inspection completed late
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	10/19/14	10/20/14	2	KGP 7.2.10	5 Deficiencies not corrected within 7 days of inspection dated 10/11/14
I135	87	KA-0733-01	SEDGWICK	Wichita	10/22/14	10/22/14	1	KGP 7.2.10	3 Deficiencies not corrected within 7 days of inspection dated 10/14/14
I070	85	K-6779-02	SALINE	Clay Center	10/22/14	10/23/14	2	KGP 7.2.10	Deficiency not corrected within 7 days of inspection dated 10/14/14
K002	106	KA-3483-01	MULTIPLE	Winfield	10/25/14	11/03/14	10	KGP 7.2.10	Regularly scheduled inspection completed late (days 1-10 of 13)
K002	106	KA-3483-01	MULTIPLE	Winfield	11/04/14	11/06/14	3	KGP 7.2.10	Regularly scheduled inspection completed late (days 11-13 of 13)
U036	79	KA-2084-01	REPUBLIC	Mankato	11/07/14	11/07/14	1	KGP 7.2.10	Regularly scheduled inspection completed late
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	11/19/14	11/19/14	1	KGP 7.2.10	2 Deficiencies not corrected within 7 days of inspection dated 11/11/14
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	12/14/14	12/15/14	2	KGP 7.2.10	Deficiency not corrected within 7 days of inspection dated 12/6/14
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	12/31/14	01/02/15	3	KGP 7.2.10	2 deficiencies not corrected within 7 days of inspection dated 12/23/14
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	12/31/14	12/31/14	1	KGP 7.2.10	5 Deficiencies not corrected within 7 days of inspection dated 12/23/14

APPENDIX I

Instances of potential non-compliance with the Consent Decree

2014 Annual Report
Known Instances of Potential Violation of the Consent Decree

Route	County Number	Project Number	County Name	Area Office Location	Dates of Potential Violation		Days	Consent Decree Paragraph	Description of Potential Violation
					From	To			
U024	44	KA-2404-01	JEFFERSON	Topeka	02/13/14	02/13/14	1	CD 19.b	Inspection not completed according to permit
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	02/24/14	02/24/14	1	CD 19.b	Inspection not completed according to permit
U036	79	KA-2188-01	REPUBLIC	Mankato	03/25/14	03/25/14	1	CD 19.b	Inspection not completed according to permit
U069	46	K-8251-08	JOHNSON	Olathe	04/29/14	04/29/14	1	CD 19.c	Inspection report not submitted to WPCM within 24 hours
U069	46	K-8251-08	JOHNSON	Olathe	04/29/14	04/29/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
U050	78	KA-0744-01	RENO	El Dorado	06/04/14	06/04/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
I035	46	KA-1109-02	JOHNSON	Olathe	06/07/14	06/07/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
I035	46	KA-1109-02	JOHNSON	Olathe	06/07/14	06/07/14	1	CD 19.c	Inspection report not submitted to WPCM within 24 hours
	46	KA-1109-03	JOHNSON	Olathe	06/07/14	06/07/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
	46	KA-1109-03	JOHNSON	Olathe	06/07/14	06/07/14	1	CD 19.c	Inspection report not submitted to WPCM within 24 hours
I035	46	KA-1109-02	JOHNSON	Olathe	06/09/14	06/09/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
I035	46	KA-1109-02	JOHNSON	Olathe	06/09/14	06/09/14	1	CD 19.c	Inspection report not submitted to WPCM within 24 hours
	46	KA-1109-03	JOHNSON	Olathe	06/09/14	06/09/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
	46	KA-1109-03	JOHNSON	Olathe	06/09/14	06/09/14	1	CD 19.c	Inspection report not submitted to WPCM within 24 hours
K015	101	K-9655-01	WASHINGTON	Clay Center	06/11/14	06/11/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
U024	14	KA-0708-01	CLAY	Clay Center	06/11/14	06/11/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
K010	23	K-8392-04	DOUGLAS	Osage City	06/13/14	06/13/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
I070	105	KA-1003-05	WYANDOTTE	Bonner Springs	06/14/14	06/14/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
U036	79	KA-2084-01	REPUBLIC	Mankato	07/01/14	07/01/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours

**2014 Annual Report
Known Instances of Potential Violation of the Consent Decree**

Route	County Number	Project Number	County Name	Area Office Location	Dates of Potential Violation		Days	Consent Decree Paragraph	Description of Potential Violation
					From	To			
U166	63	KA-0705-01	MONTGOMERY	Independence	07/14/14	07/14/14	1	CD 19.b	Inspection not completed according to permit
K047	67	KA-0791-01	NEOSHO	Independence	07/15/14	07/15/14	1	CD 19.b	Inspection not completed according to permit
K047	103	KA-0791-02	WILSON	Independence	07/15/14	07/15/14	1	CD 19.b	Inspection not completed according to permit
I435	46	KA-1002-04	JOHNSON	Olathe - Gateway	07/15/14	07/15/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
U059	23	K-7888-08	DOUGLAS	Osage City	09/08/14	09/12/14	5	CD 18	WPCM not designated prior to start of construction
U059	23	K-7888-08	DOUGLAS	Osage City	09/08/14	09/08/14	1	CD 19.a	Stormwater erosion control preconstruction conference not held
K002	106	KA-3483-01	MULTIPLE	Winfield	09/24/14	09/24/14	1	CD 19.b	Inspection not completed according to permit
K002	106	KA-3483-01	MULTIPLE	Winfield	10/09/14	10/09/14	1	CD 19.b	Inspection not completed according to permit
K002	106	KA-3483-01	MULTIPLE	Winfield	10/24/14	10/24/14	1	CD 19.b	Inspection not completed according to permit
I070	105	KA-1003-05	WYANDOTTE	Bonner Springs	11/04/14	11/04/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
U036	79	KA-2084-01	REPUBLIC	Mankato	11/06/14	11/06/14	1	CD 19.b	Inspection not completed according to permit
U050	40	K-9439-01	HARVEY	El Dorado	12/04/14	12/04/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours
K010	23	K-8392-04	DOUGLAS	Osage City	12/30/14	12/30/14	1	CD 19.c	Inspection report not submitted to AE within 24 hours