

May 2022
Kansas Department of Transportation
Annual Construction Stormwater Report
Calendar Year 2021

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1.0 Introduction

This is the fifth annual report prepared following the January 30, 2018 termination of the 2013 Consent Decree. This report shall summarize actions taken during calendar year 2021 to comply with the KDHE NPDES General Permit.

2.0 Personnel Designations

2.1 Designation of Stormwater Compliance Manager

After the termination of the Consent Decree, KDOT chose to continue having a Stormwater Compliance Engineer. Mervin Lare, P.E., is the current 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

KDOT Area and Metro Engineers were assigned responsibility as Project Stormwater Compliance Managers. Vacancies in Area/Metro Engineer positions have been addressed by assigning stormwater related duties to an adjacent Area Engineer or to another KDOT employee of equivalent or higher level of authority.

All Area and Metro Engineers are required to complete the training program described in section 4.0 of this report prior to assuming stormwater related duties and to recertify on a 4-year basis. If an Area/Metro Engineer's certifications expire the stormwater duties are temporarily assigned to an alternate as in the case of a vacancy.

Area/Metro Engineers have the authority and the responsibility to direct work on KDOT projects and to direct KDOT employees, contractors, and sub-contractors to take action as necessary to cease, correct or avoid violation of stormwater requirements.

KDOT ensures the Area/Metro Engineer's familiarity with the project SWPPP by requiring their review and approval of the project SWPPP be documented prior to the contractor beginning work on a project.

All inspection reports completed on their assigned projects are submitted for their review. Once the Area / Metro Engineer reviews each inspection report, they are required to sign within three business days and transmit the signed report to the Stormwater Compliance Engineer at a dedicated email address. This process serves to engage the Area / Metro Engineer in the inspection process and facilitate their oversight and management of the project.

2.3 Designation of Environmental Inspectors

The Area/Metro Engineer is responsible for the assignment of Environmental Inspectors to each project within their jurisdiction. Environmental Inspectors are primarily KDOT employees in the Engineering Technician classification, but more consultant inspectors are being utilized. Whether a KDOT employee or consultant, all individuals performing compliance inspections on KDOT's behalf in 2021 were required to have completed the Construction Stormwater program described in section 4.0 of this report.

3.0 Active Project / Permit Information

Included in this report is the active project list for 2021. This list is continuously maintained by the SWCE as projects are added, removed, or modified.

The active project list is included in Appendix A.

4.0 Training

4.1 Stormwater Training Program

After termination of the Consent Decree KDOT's Environmental Inspector Training (EIT) and Environmental Manager Training (EMT) were combined into a single certification, Construction Stormwater (CSW). CSW training continues to cover requirements set forth in Appendices B, C, and D of the Consent Decree.

For 2021 the CSW class was split into two parts: online and field training. The online portion consists of 12 sections for over 9 hours of material. The field portion is a 3-hour lab covering device installations, soil stabilization techniques, specifications, and inspection requirements. The lab is offered in the morning and afternoon. Test is online, 45 question, and 60 minutes long. Students must watch all the online material, attend the field session, and pass the test to become certified. The online videos are available throughout the year while in person sessions were offered in March, April, May, and October. In person sessions were limited to 15 people due to COVID-19 restrictions. 169 people enrolled in 2021 with a total of 766 certified in CSW.

4.2 Other Training

No additional trainings were offered due to COVID-19.

5.0 Compliance Inspections

5.1 Procedures

All Project inspections are required to be completed using the KDOT form 247. The instructions for form 247 include the inspection procedures and guidance for KDOT staff. *Inspection Procedures and Form 247 Instructions* was initially distributed August 7, 2013 by email to all KDOT field offices, made publicly available on the KDOT website, and included in the Environmental Inspector Training materials. This document was revised in March 2018 to clarify some of the initial language and to address some frequently asked questions. No revisions were made in 2021.

Key elements of the 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 meeting the requirements of the Specifications, the procedures require that the contractor 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.

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 is assigned, on a part-time basis, to assist the SWCE with tracking and review of inspection reports.

The March 2018 version of *Inspection Procedures and Form 247 Instructions* is included with this report as Appendix C.

5.2 Inspection Forms

Inspection form 247 has been distributed to all KDOT field offices, included in the Construction Stormwater 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 administered by KDOT for projects owned by a city, county, or other unit of government (Local Projects) also require the use of this form.

5.3 Oversight Inspections

The oversight inspection program was expanded during 2020. The expansion was due to several District not having a full staff of Area Engineers and adding projects that are less than 5 acres that have a permit. Oversight inspectors were assigned as follows:

- i. 1-5 Acres: No fulltime oversight inspector needed, but at least 1 oversight done during the life of the project. District Mentors, Construction Engineers/Managers (CE/CM) and SWCE will be assigned to these projects.
- ii. ii. 5.01 to 24.99 Acres: Oversight inspections every 90 days. Mentors, CE/CM and Field Engineering Administrators will be assigned to these projects.
- iii. iii. 25 to 99.99 Acres: Oversight inspections every 90 days. Area Engineers, District Construction Engineers, and District Maintenance Engineers would handle these projects.
- iv. iv. 100 and Above: Oversight inspections every 90 days. Headquarter personnel would handle these projects.

Adjustments to these assignments are allowed based on public visibility, complexity, and environmental concerns.

The active construction period is typically considered to be the time from the Notice to Proceed 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.

Thirty-three projects were assigned to headquarters staff for oversight inspection. These projects range in size between 2.6 and 297.2 acres disturbed. Headquarters staff performing oversight inspections in 2021 included the Stormwater Compliance Engineer. This individual maintained the required CSW certification during the performance of these oversight inspections.

The remaining 43 projects were assigned to district staff. These individuals maintained the required Construction Stormwater Training certification during the performance of these oversight inspections.

5.4 Stormwater Compliance Plan

No updates to the Stormwater Compliance plan in 2021. The plan is included in Appendix E.

6.0 Specification and Standards

6.1 General

Revisions were made to 15-09004-R01 to reflect changes to LA852B & G. KDOT continues to operate under 15-09002-R3. Special provision 15-09002-R3 is still included in all projects owned by local units of government and KDOT-owned projects. Special provision 15-09002-R03 and 15-09004-R01 are included in Appendix D.

6.2 Water Pollution Control Manager (WPCM)

Language is included in the project special provisions for all contracts awarded in 2021 that requires the contractor to designate a Water Pollution Control Manager (WPCM) for the project. 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 of the WPCM include completion of the training program every 4 years, 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 2021 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

The rock check standard was updated on LA852B by adding a filler rock to the upstream side of the check. The stream crossing standard on LA852G was updated by adding a 50ft rock entrance and exit to the crossing. Both standard sheets are included in appendix D.

Prequalified list #34 “Materials for Roadside Improvements” was split in two: PQL 34.1 Erosion Control Products and PQL 34.2 Hydraulic Erosion Control Products. Both are included in appendix D.

7.0 Quarterly Stormwater Bulletin

Four editions of KDOT’s “Stormwater Update” bulletin were published in 2021. Bulletins were distributed during March, June, September, and October. The bulletin was distributed electronically to all Area / Metro Engineers, Environmental and Oversight Inspectors, and to Contractors. Appendix B contains the bulletins distributed in 2021.

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.

9.0 Outlook for 2022

Special Provision 15-09002-R04 will be implemented in the Spring of 2022. This implementation will require updating the CSW class for the fall 2022/Spring 2023 season.

KDHE’s current NPDES General Permit is set to expire in August 2022. A new Special Provision may be needed to address any changes implemented in the new permit.

KDOT will continue making modifications as needed to the specification and the Stormwater Compliance Plan and strive for 100% compliance with the KDHE NPDES General Permit.

APPENDICES

APPENDIX A

Lists of Projects

| Route | Co Num | Project | District - Area | Disturbed ± Kansas Permit | Fed Permit | Contractor | Contract . | Letting Date | NOTPR | NOTAC | Permit Rec | |
|-------|--------|------------|-----------------|---------------------------|--------------|-------------|---|--------------|------------|------------|------------|------------|
| 235 | 87 | KA-3110-01 | 55 | 81.1 | S-LA20-0051 | KSR 114 219 | BERGKAMP KING, A JOINT VENTURE, LLC | 519012595 | 1/23/2019 | 3/11/2019 | 10/28/2022 | 10/24/2018 |
| 177 | 9 | KA-3943-01 | 23 | 4.5 | S-NE63-0018 | KSR114754 | BRIDGES INC | 519082252 | 8/21/2019 | 10/21/2019 | 6/22/2022 | 6/5/2019 |
| K 177 | 9 | KA-4430-01 | 23 | 4.1 | S-NE63-0017 | KSR 114 750 | BRIDGES INC | 519082262 | 8/21/2019 | 8/21/2019 | 7/21/2022 | 6/11/2019 |
| K177 | 9 | KA-4431-01 | 23 | 4.4 | S-NE63-0016 | KSR 114 739 | BRIDGES INC | 519082272 | 8/21/2019 | 8/21/2019 | 5/27/2021 | 6/11/2019 |
| 69 | 19 | KA-1554-03 | 44 | 83.18 | S-NE03-0008 | KSR114853 | KOSS CONSTRUCTION CO | 519092424 | 9/16/2019 | 2/10/2020 | 8/12/2021 | 7/11/2019 |
| 235 | 87 | KA-3895-01 | 55 | 19 | S-AR94-1570 | KSR 114 878 | WILDCAT CONSTRUCTION CO INC & SUBSIDIARIES | 519102645 | 10/15/2019 | 1/6/2020 | 2/18/2022 | 8/13/2019 |
| 177 | 64 | KA-4285-01 | 23 | 9.55 | S-NE17-0017 | KSR 114 912 | BRIDGES INC | 519112292 | 11/15/2019 | 1/15/2020 | 8/27/2021 | 8/13/2019 |
| 83 | 28 | KA-1008-06 | 61 | 108 | S-UA14-0152 | KSR114898 | VENTURE CORPORATION | 519112626 | 11/15/2019 | 1/20/2020 | 12/18/2021 | 7/26/2019 |
| 83 | 41 | KA-1008-03 | 62 | 164 | S-CI21-0029 | KSR 112 239 | VENTURE CORPORATION | 519112636 | 11/15/2019 | 1/29/2020 | 12/18/2021 | 8/19/2016 |
| 54 | 88 | KA-2385-03 | 62 | 147.2 | S-CI09-0003 | KSR 114 911 | KOSS CONSTRUCTION CO | 519112656 | 11/15/2019 | 1/13/2020 | 1/1/2022 | 8/8/2019 |
| U73 | 7 | KA-3874-01 | 11 | 6.37 | S-M007-0002 | KSR 114 995 | KING CONSTRUCTION COMPANY, INC. | 519122131 | 12/18/2019 | 4/27/2020 | 6/21/2021 | 10/2/2019 |
| K99 | 99 | KA-3358-01 | 15 | 1.5 | S-KS01-0019 | KSR 114 998 | EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY | 519122161 | 12/18/2019 | 2/18/2020 | 12/3/2020 | 10/2/2019 |
| 281 | 84 | KA-2370-02 | 33 | 96.8 | S-SH31-0023 | KSR115044 | Sporer Land Development Inc | 520012353 | 1/15/2020 | 3/1/2020 | 12/3/2021 | 10/11/2019 |
| K126 | 19 | KA-3103-01 | 44 | 5.9 | S-NE57-0100 | KSR114832 | B & B BRIDGE COMPANY LLC | 520012414 | 1/15/2020 | 3/16/2020 | 6/25/2021 | 7/5/2019 |
| I35 | 46 | KA-3929-01 | 12 | 15.6 | S-MC08-0079 | KSR115094 | PYRAMID CONTRACTORS INC | 520022101 | 2/14/2020 | 7/15/2020 | 9/1/2021 | 10/30/2019 |
| 18 | 81 | KA-3080-01 | 15 | 8.1 | S-KS38-0396 | KSR115080 | EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY | 520032151 | 2/14/2020 | 5/11/2020 | 12/3/2021 | 10/22/2019 |
| K10 | 23 | KA-3634-08 | 14 | 3.6 | S-KS31-0463 | KSR115615 | HAMM INC | 520042121 | 4/15/2020 | 7/6/2020 | 5/15/2021 | 5/13/2020 |
| K04 | 99 | KA-3357-01 | 15 | 4.71 | S-KS001-0020 | KSR115017 | AMINO BROS CO INC | 520042201 | 4/22/2020 | 6/8/2020 | 11/22/2021 | 10/11/2019 |
| U50 | 56 | KA-2364-01 | 14 | 14.19 | S-NE24-0094 | KSR115261 | KOSS CONSTRUCTION CO | 520052171 | 5/22/2020 | 6/1/2020 | 1/1/2022 | 1/16/2020 |
| 135 | 59 | KA-5277-01 | 23 | 2.98 | S-SH21-0015 | KSR115404 | BOB BERGKAMP CONSTRUCTION COMPANY INC. | 520062252 | 6/15/2020 | 4/12/2021 | 6/28/2021 | 4/16/2020 |
| I70 | 21 | KA-3954-01 | 21 | 2.2 | S-SH04-0025 | KSR115469 | REECE CONSTRUCTION COMPANY INC | 520072262 | 7/15/2020 | 9/1/2020 | 6/1/2022 | 4/24/2020 |
| 33 | 30 | KA-3951-01 | 42 | 8.1 | S-MC48-0022 | KSR 114 877 | PYRAMID CONTRACTORS INC | 520082454 | 8/19/2020 | 3/29/2021 | 6/1/2022 | 8/13/2019 |
| K18 | 84 | KA-3931-01 | 33 | 2.9 | S-SA18-0004 | KSR115700 | L & M CONTRACTORS INC | 520092363 | 9/16/2020 | 11/16/2020 | 12/2/2021 | 6/17/2020 |
| U69 | 106 | KA-1554-02 | 44 | 151.6 | S-NE03-0009 | KSR 115 619 | BOB BERGKAMP CONSTRUCTION COMPANY INC. | 520092484 | 9/16/2020 | 11/2/2020 | 6/1/2022 | 5/22/2020 |
| K-11 | 78 | KA-3882-01 | 51 | 2.78 | S-AR07-0005 | KSR 115 636 | KING CONSTRUCTION COMPANY, INC. | 520092545 | 9/16/2020 | 11/16/2020 | 11/19/2021 | 6/5/2020 |
| 99 | 99 | KA-2603-04 | 15 | 135 | S-KS74-0048 | KSR115707 | EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY | 520102181 | 10/15/2020 | 12/14/2020 | 7/1/2022 | 7/14/2020 |
| U056 | 64 | KA-3941-01 | 23 | 3 | S-NE17-0020 | KSR115720 | A M COHRON & SON INC | 520102282 | 10/21/2020 | 3/3/2021 | 1/4/2022 | 6/25/2020 |
| U24 | 62 | KA-3950-01 | 22 | 3.39 | S-S005-0029 | KSR115748 | KING CONSTRUCTION COMPANY, INC. | 520112252 | 11/18/2020 | 6/7/2021 | 4/22/2022 | 7/30/2020 |
| 24 | 62 | KA-3963-01 | 22 | 3.61 | S-S005-0030 | KSR115749 | KING CONSTRUCTION COMPANY, INC. | 520112262 | 11/18/2020 | 5/24/2021 | 5/24/2022 | 7/21/2020 |
| U054 | 1 | KA-3913-01 | 41 | 12.4 | S-MC25-0004 | KSR115735 | A M COHRON & SON INC | 520112474 | 11/18/2020 | 3/1/2021 | 6/8/2022 | 7/29/2020 |
| U24 | 15 | KA-3239-02 | 22 | 73 | S-SH27-0007 | KSR 115 755 | EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY | 520122282 | 12/16/2020 | 3/1/2021 | 12/13/2021 | 7/21/2020 |
| 31 | 2 | KA-3907-01 | 42 | 7.19 | S-MC17-0003 | KSR115844 | WCI, Inc | 520122414 | 12/17/2020 | 3/29/2021 | 11/15/2021 | 9/8/2020 |
| 99 | 37 | KA-3911-01 | 41 | 12.7 | S-Ve16-0010 | KSR 115 917 | BRIDGES INC | 521012474 | 1/15/2021 | 5/1/2021 | 3/26/2022 | 10/7/2020 |
| 39 | 6 | KA-3910-01 | 41 | 1.9 | S-NE34-003 | KSR115916 | B & B BRIDGE COMPANY LLC | 521012414 | 1/15/2021 | 4/1/2021 | 11/30/2021 | 10/7/2020 |
| 166 | 11 | KA-3905-01 | 44 | 31.1 | S-NE13-0013 | KSR115948 | BRIDGES INC | 521012444 | 1/15/2021 | 3/4/2021 | 11/18/2022 | 10/26/2020 |
| 27 | 38 | KA-3271-01 | 61 | 10.2 | S-UA39-0011 | KSR115922 | VENTURE CORPORATION | 521012626 | 1/15/2021 | 3/22/2021 | 2/14/2022 | 10/19/2020 |
| 116 | 3 | KA-3883-01 | 11 | 3.9 | S-KS15-0010 | KSR115919 | PFEFFERKORN & DRURY CONSTRUCTION LLC | 521012011 | 1/18/2021 | 4/6/2021 | 10/7/2021 | 10/19/2020 |
| K32 | 52 | KA-5176-01 | 13 | 4.6 | S-KS36-0008 | KSR115580 | AMINO BROS CO INC | 521012071 | 1/20/2021 | 5/17/2021 | 12/1/2021 | 5/12/2020 |
| U24 | 75 | KA-3921-01 | 15 | 2.59 | S-KS66-0034 | KSR 115 808 | KING CONSTRUCTION COMPANY, INC. | 521012121 | 1/20/2021 | 3/24/2021 | 2/4/2022 | 8/24/2020 |
| 169 | 106 | KA-3255-01 | 41 | 152.7 | S-NE11-0047 | KSR115721 | EMERY SAPP & SONS INC AND SUBSIDIARY | 521012504 | 1/20/2021 | 3/9/2021 | 11/18/2022 | 7/14/2020 |
| K-99 | 10 | KA-5411-01 | 43 | 72.82 | S-VE33-0016 | KSR116036 | CORNEJO & SONS LLC | 521012424 | 1/20/2021 | 3/8/2021 | 1/21/2022 | 11/6/2020 |
| 160 | 11 | KA-3904-01 | 44 | 4.48 | S-NE75-0013 | KSR115918 | B & B BRIDGE COMPANY LLC | 521012434 | 1/21/2021 | 4/9/2021 | 12/13/2021 | 10/19/2020 |
| 99 | 58 | KA-3925-01 | 15 | 4.64 | S-BB07-0010 | KSR115968 | L & M CONTRACTORS INC | 521022131 | 2/15/2021 | 3/22/2021 | 12/22/2021 | 11/6/2020 |
| 148 | 101 | KA-3956-01 | 21 | 8.3 | S-LR14-0003 | KSR115979 | KING CONSTRUCTION COMPANY, INC. | 521022272 | 2/15/2021 | 4/15/2021 | 1/5/2022 | 11/6/2020 |
| 14 | 78 | KA-1007-02 | 52 | 297.2 | S-AR66-0008 | KSR 116 102 | BOB BERGKAMP CONSTRUCTION COMPANY INC. | 521022535 | 2/15/2021 | 3/9/2021 | 6/16/2023 | 12/2/2020 |
| 14 | 80 | KA-1007-03 | 54 | 229.7 | S-AR85-0017 | KSR116101 | BOB BERGKAMP CONSTRUCTION COMPANY INC. | 521022565 | 2/15/2021 | 3/9/2021 | 6/16/2023 | 12/2/2020 |
| 235 | 87 | KA-3232-03 | 55 | 78.5 | S-LA20-0068 | KSR 116 020 | DONDLINGER & SONS CONSTRUCTION CO INC | 521022575 | 2/15/2021 | 4/15/2021 | 8/25/2023 | 11/19/2020 |
| 75 | 7 | KA-4798-03 | 11 | 44.9 | S-KS60-0004 | KSR115998 | HAMM INC | 521022021 | 2/17/2021 | 6/7/2022 | 4/4/2022 | 11/12/2020 |
| U75 | 43 | KA-4798-02 | 11 | 30.2 | S-KS49-0005 | KSR115954 | HAMM INC | 521022031 | 2/17/2021 | 5/17/2021 | 4/4/2022 | 11/6/2020 |

| | | | | | | | | | | | | |
|------|-----|------------|----|-------|-------------|-------------|---|-----------|------------|------------|------------|------------|
| 80 | 14 | KA-3957-01 | 21 | 4.78 | S-LR18-0007 | KSR115846 | L & M CONTRACTORS INC | 521022232 | 2/17/2021 | 10/4/2021 | 8/20/2022 | 9/9/2020 |
| 80 | 14 | KA-3965-01 | 21 | 3.03 | S-LR18-0006 | KSR115845 | L & M CONTRACTORS INC | 521022242 | 2/17/2021 | 10/4/2021 | 8/20/2022 | 9/9/2020 |
| 24 | 81 | KA-3926-01 | 15 | 1.4 | S-KS62-0011 | KSR 116 023 | KLAVER CONSTRUCTION COMPANY INC | 521032171 | 3/15/2021 | 5/7/2021 | 9/29/2021 | 11/19/2020 |
| K31 | 70 | KA-2365-01 | 14 | 129 | S-MC29-0020 | KSR 116 089 | BETTIS ASPHALT & CONSTRUCTION INC | 521032151 | 3/17/2021 | 4/1/2021 | 12/1/2022 | 11/25/2020 |
| 56 | 73 | KA-3265-02 | 54 | 9.2 | S-UA15-0004 | KSR115970 | VENTURE CORPORATION | 521032525 | 3/17/2021 | 8/2/2021 | 6/30/2022 | 11/9/2020 |
| 170 | 70 | KA-3918-01 | 14 | 3.5 | S-MC41-0005 | KSR 116 132 | A M COHRON & SON INC | 521042131 | 4/15/2021 | 6/1/2021 | 12/7/2022 | 12/31/2020 |
| 177 | 9 | KA-5439-01 | 52 | 26.65 | S-NE46-0009 | KSR 116 186 | Kings Construction | 521052252 | 5/14/2021 | 7/5/2021 | 8/1/2022 | 2/3/2021 |
| 383 | 74 | KA-2372-03 | 31 | 90 | S-UR13-0008 | KSR 116 030 | VENTURE CORPORATION | 521062383 | 6/16/2021 | 11/1/2021 | 10/28/2022 | 11/20/2020 |
| U054 | 8 | KA-5799-01 | 52 | 7.2 | S-WA19-0001 | KSR 116 393 | BETTIS ASPHALT & CONSTRUCTION INC | 521062565 | 6/16/2021 | 11/1/2021 | 3/5/2022 | 4/8/2021 |
| 177 | 64 | KA-2368-01 | 23 | 153.1 | S-NE17-0022 | KSR116452 | WILDCAT CONSTRUCTION CO INC & SUBSIDIARIES | 521072272 | 7/14/2021 | 9/14/2021 | 5/17/2024 | 5/13/2021 |
| 177 | 31 | KA-2369-01 | 23 | 219 | S-KS02-0005 | KSR-116451 | WILDCAT CONSTRUCTION CO INC & SUBSIDIARIES | 521072282 | 7/14/2021 | 3/7/2022 | 5/12/2024 | 5/13/2021 |
| U281 | 5 | KA-3891-01 | 54 | 1.2 | S-AR45-0013 | KSR116685 | VENTURE CORPORATION | 521072515 | 7/21/2021 | 9/27/2021 | 3/4/2022 | 7/22/2021 |
| 54 | 88 | KA-2385-01 | 62 | 165.2 | S-CI10-0078 | KSR 116 518 | KOSS CONSTRUCTION CO | 521082616 | 8/16/2021 | 3/1/2022 | 12/16/2022 | 6/3/2021 |
| U166 | 11 | KA-1005-02 | 44 | 248 | S-NE06-0013 | KSR116450 | EMERY SAPP & SONS INC AND SUBSIDIARY | 521092464 | 9/15/2021 | 9/6/2021 | 5/24/2024 | 5/11/2021 |
| 77 | 31 | KA-4638-02 | 21 | 12 | S-LR17-0009 | KSR116561 | EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY | 521102252 | 10/20/2021 | 11/20/2021 | 12/9/2022 | 6/18/2021 |
| 36 | 101 | KA-3244-01 | 21 | 6.4 | S-BB21-0014 | KSR116546 | SMOKY HILL, LLC | 521102272 | 10/20/2021 | 11/21/2021 | 12/19/2022 | 6/11/2021 |
| 77 | 31 | KA-2367-05 | 21 | 66.7 | S-LR17-0008 | KSR116531 | EBERT CONSTRUCTION COMPANY INC & SUBSIDIARY | 521102242 | 10/20/2021 | 11/21/2021 | 12/8/2023 | 6/11/2021 |
| 24 | 33 | KA-3961-01 | 33 | 3.862 | S-S019-0019 | KSR116576 | KING CONSTRUCTION COMPANY, INC. | 521102353 | 10/20/2021 | 11/21/2021 | 4/20/2023 | 6/25/2021 |
| 24 | 33 | KA-3960-01 | 33 | 4.159 | S-S019-0020 | KSR116577 | KING CONSTRUCTION COMPANY, INC. | 521102343 | 10/20/2021 | 11/1/2022 | 4/20/2023 | 6/25/2021 |
| 24 | 33 | KA-3930-01 | 33 | 3.491 | S-S028-0001 | KSR116570 | KING CONSTRUCTION COMPANY, INC. | 521102323 | 10/20/2021 | 11/21/2021 | 4/20/2023 | 6/24/2021 |
| 59 | 50 | KA-3903-01 | 44 | 3.67 | S-NE53-0017 | KSR116569 | A M COHRON & SON INC | 521102494 | 10/20/2021 | 11/21/2021 | 4/20/2023 | 6/24/2021 |
| 83 | 88 | KA-5600-01 | 62 | 8.8 | S-CI10-0080 | KSR 116 665 | J & R SAND COMPANY INC | 521116696 | 11/15/2021 | 1/1/2022 | 12/5/2022 | 7/9/2021 |
| 83 | 88 | KA-2220-01 | 62 | 22.46 | S-CI10-0079 | KSR116620 | J & R SAND COMPANY INC | 521112686 | 11/15/2021 | 1/1/2022 | 12/5/2022 | 7/27/2021 |
| 123 | 90 | KA-5568-01 | 32 | 7.4 | S-UR07-0004 | KSR116742 | MCCORMICK EXCAVATION & PAVING LLC | 521116353 | 11/17/2021 | 1/17/2022 | 6/9/2023 | 9/9/2021 |
| 123 | 20 | KA-5569-01 | 32 | 11.8 | S-UR07-0003 | KSR116741 | MCCORMICK EXCAVATION & PAVING LLC | 521116313 | 11/17/2021 | 1/17/2022 | 6/9/2023 | 9/9/2021 |
| 160 | 4 | KA-6139-01 | 51 | 35.99 | S-AR60-0026 | KSR116553 | PRADO CONSTRUCTION LLC | 521116515 | 11/17/2021 | 12/17/2021 | 8/18/2022 | 6/18/2021 |
| 183 | 24 | KA-3266-01 | 51 | 5.99 | S-UA22-0016 | KSR120322 | Vogts-Parga Construction | 521116525 | 11/17/2021 | 2/21/2022 | 12/23/2023 | 2/8/2022 |
| U50 | 29 | KA-5175-01 | 63 | 8.2 | S-WA38-0022 | KSR115635 | ApAC KANSAS INC-- Shears DIVISION | 521112646 | 11/17/2021 | 1/3/2022 | 6/1/2022 | 6/17/2020 |
| 187 | 66 | KA-3876-01 | 11 | 4.99 | S-MO19-0030 | KSR116708 | REECE CONSTRUCTION COMPANY INC | 521122161 | 12/15/2021 | 2/15/2021 | 5/15/2023 | 8/27/2021 |
| U75 | 7 | KA-5284-01 | 11 | 15.7 | S-KS65-0026 | KSR 116 699 | HERZOG CONTRACTING CORP | 521122131 | 12/15/2021 | 1/15/2022 | 6/23/2023 | 8/2/2021 |
| 187 | 66 | KA-3875-01 | 11 | 3.48 | S-BB05-0003 | KSR116716 | REECE CONSTRUCTION COMPANY INC | 521122151 | 12/15/2021 | 2/15/2022 | 6/15/2023 | 8/27/2021 |
| 128 | 45 | KA-3947-01 | 22 | 3.8 | S-LR04-0001 | KSR116717 | KING CONSTRUCTION COMPANY, INC. | 521122262 | 12/15/2021 | 2/15/2021 | 6/7/2023 | 8/27/2021 |
| 27 | 12 | KA-3933-01 | 32 | 4.29 | S-UR18-0018 | KSR116752 | KING CONSTRUCTION COMPANY, INC. | 521122313 | 12/15/2021 | 2/15/2022 | 6/15/2023 | 9/9/2021 |
| 39 | 6 | KA-3912-01 | 41 | 2.72 | S-NE78-0002 | KSR116751 | KILLOUGH CONSTRUCTION INC | 521122404 | 12/15/2021 | 2/15/2022 | 6/15/2023 | 9/9/2021 |
| 68 | 61 | KA-2373-02 | 42 | 13.3 | S-MC20-0059 | KSR116709 | SUPERIOR BOWEN ASPHALT COMPANY LLC | 521122454 | 12/15/2021 | 2/15/2022 | 12/3/2024 | 8/27/2021 |
| 68 | 61 | KA-2373-03 | 42 | 70.5 | S-MC20-0060 | KSR116718 | SUPERIOR BOWEN ASPHALT COMPANY LLC | 521122464 | 12/15/2021 | 2/15/2022 | 12/3/2024 | 8/27/2021 |
| 50 | 35 | KA-2383-01 | 63 | 232.2 | S-UA07-0017 | KSR116720 | KOSS CONSTRUCTION CO | 521122636 | 12/15/2021 | 2/15/2022 | 6/8/2023 | 9/2/2021 |
| 50 | 29 | KA-2384-01 | 63 | 162.5 | S-UA11-0172 | KSR120026 | KOSS CONSTRUCTION CO | 521122646 | 12/15/2021 | 2/15/2022 | 6/8/2023 | 9/29/2021 |
| 14 | 80 | KA-3893-01 | 54 | 16.6 | S-AR56-0044 | KSR120029 | KING CONSTRUCTION COMPANY, INC. | 522012565 | 1/14/2022 | 4/4/2022 | 4/4/2023 | 10/15/2021 |
| 15 | 101 | KA-3959-01 | 21 | 6.08 | S-BB01-0015 | KSR120037 | KING CONSTRUCTION COMPANY, INC. | 522012252 | 1/19/2022 | 4/4/2022 | 4/4/2023 | 10/20/2021 |
| 40 | 55 | KA-3915-01 | 34 | 8.11 | S-SH29-0022 | KSR120035 | Sporer Land Development Inc | 522012373 | 1/19/2022 | 4/4/2022 | 4/4/2023 | 10/20/2021 |
| 254 | 8 | KA-5556-01 | 52 | 1.63 | S-WA14-0012 | KSR116145 | Pearson Construction LLC | 522016525 | 1/19/2022 | 6/7/2021 | 12/18/2021 | 1/13/2021 |
| 254 | 87 | KA-5554-01 | 55 | 3.66 | S-LA09-0023 | KSR 116 223 | Pearson Construction LLC | 522016595 | 1/19/2022 | 8/1/2021 | 6/20/2022 | 2/19/2021 |
| K156 | 27 | KA-5553-01 | 24 | 6.9 | S-SH07-0032 | KSR 116 700 | VENTURE CORPORATION | 522026232 | 2/16/2022 | 3/16/2022 | 6/13/2023 | 8/2/2021 |
| 281 | 84 | KA-2370-03 | 33 | 234.8 | S-SH31-0026 | KSR120201 | Sporer Land Development Inc | 522032373 | 3/15/2022 | 5/15/2022 | 6/6/2023 | 1/7/2022 |
| 70 | 89 | KA-1266-06 | 14 | 10.15 | S-KS72-0708 | KSR120214 | BETTIS ASPHALT & CONSTRUCTION INC | 522032121 | 3/16/2022 | 5/2/2022 | 5/2/2023 | 12/16/2021 |
| 40B | 31 | KA-3952-01 | 21 | 10.41 | S-SH45-0071 | KSR120051 | KING CONSTRUCTION COMPANY, INC. | 522032242 | 3/16/2022 | 4/16/2022 | 6/8/2023 | 10/12/2021 |
| 143 | 85 | KA-3940-01 | 24 | 1 | S-SH33-0209 | KSR120200 | L & M CONTRACTORS INC | 522032272 | 3/16/2022 | 5/1/2022 | 8/1/2023 | 1/7/2022 |
| 181 | 71 | KA-3938-01 | 31 | 1.7 | S-S012-0012 | KSR116554 | BRIDGES INC | 522032343 | 3/16/2022 | 4/16/2022 | 3/20/2023 | 6/18/2021 |
| U069 | 6 | KA-5563-01 | 41 | 1.35 | S-MC11-0064 | KSR 116 227 | Laforge & Budd Construction Company | 522032414 | 3/16/2022 | 5/1/2022 | | 2/24/2021 |

| | | | | | | | | | |
|------|----------------|----|------------------|-------------|-----------|-----------|-----------|------------|------------|
| 77 | 58 KA-3924-01 | 15 | 2.35 S-BB17-0006 | KSR116614 | 522042141 | 4/20/2022 | 1/1/2022 | 12/5/2022 | 7/27/2021 |
| U073 | 105 KA-5241-01 | 13 | 23.2 S-KS04-0100 | KSR 116 311 | | 5/18/2022 | 10/1/2021 | 10/19/2022 | 2/23/2021 |
| 55 | 96 KA-3887-01 | 53 | 5.7 S-AR09-0013 | KSR120337 | | 5/18/2022 | | | 2/15/2022 |
| 96 | 102 KA-3274-01 | 61 | 5 S-UA26-0020 | KSR120206 | | 5/18/2022 | | | 1/13/2022 |
| 32 | 105 KA-3079-01 | 13 | 12.9 S-KS27-0329 | KSR 120 090 | | 6/15/2022 | | | 10/25/2021 |
| 383 | 69 KA-2371-02 | 31 | 95 S-UR01-0004 | KSR120202 | | 6/15/2022 | | | 1/7/2022 |
| 42 | 48 KA-3879-01 | 51 | 1.75 S-AR83-0006 | KSR120028 | | 6/15/2022 | 8/1/2022 | 6/19/2023 | 10/15/2021 |
| 96 | 86 KA-3258-01 | 61 | 9.61 S-UA37-0029 | KSR120429 | | 6/15/2022 | | | 4/13/2022 |
| 69 | 46 KA-5700-03 | 12 | 416 S-M039-0600 | KSR120241 | | 8/1/2022 | | | 1/21/2022 |
| 50 | 24 KA-5779-01 | 51 | 15.46 | | | 8/17/2022 | | | |
| 50 | 29 KA-5780-01 | 63 | 36.8 | | | 8/17/2022 | | | |
| 50 | 29 KA-3234-02 | 63 | 25.6 | | | 8/17/2022 | | | |
| 400 | 11 KA-2375-10 | 44 | 22 S-NE67-0003 | KSR120213 | | 2/16/2023 | 4/16/2022 | 6/8/2023 | 12/16/2021 |
| 435 | 46 KA-4275-02 | 12 | 6.41 S-KS68-0418 | KSR115932 | | 9/1/2023 | 11/1/2023 | | 10/22/2020 |

APPENDIX B

Quarterly Stormwater Bulletins

STORMWATER UPDATE

In This Issue

- ❖ Consent Decree Spring Cleaning
- ❖ IECA 2021 Virtual Conference
- ❖ LA852G Update

CSW Training Upcoming Dates

KSU CIT Program

March 23-25 Labs

April 27-29 Labs

May 25-27 Labs

Sign-up for labs and testing becomes available after completing the online portion of the class.

Kansas Contractors Association

<http://www.kansascontractors.org/>

No Classes Scheduled

After March 31, 2021, all extended EIT/EMT certification will expire. All inspection personnel must be certified in CSW at this time.



Close-up of slurry tack applied to hay mulch. This mulch was placed on a hill that eventually was subject to 40 to 50 mph winds. When hay is properly punched and tacked it should not move.

Consent Decree Spring Cleaning

Back in September 2019 I wrote an article about how the final remnants of the consent decree were ending as we shifted from EIT/EMT to CSW certification. I was a bit wrong. The Consent Decree had one piece that finally ended in January 2021.

| | | | | | | | |
|------|----------------|----|-----------|----------|----------|------------|----------|
| K181 | 53 KA-1804-01 | 24 | 512036252 | 06/21/12 | 01/18/13 | 8/16/2013 | 06/14/11 |
| U073 | 3 KA-2145-01 | 11 | | 12/26/12 | 03/20/13 | 8/21/2013 | 11/28/12 |
| I135 | 87 KA-1006-02 | 55 | 509071555 | 09/08/09 | 08/29/12 | 8/22/2013 | 09/10/08 |
| K181 | 53 KA-1805-01 | 24 | 512036272 | 06/28/12 | 09/19/12 | 8/23/2013 | 10/26/11 |
| | 87 C-0297-01 | 55 | 512102555 | 03/11/13 | 06/22/13 | 9/23/2013 | 05/04/12 |
| U050 | 78 KA-0743-01 | 52 | 511122535 | 03/26/12 | 03/25/13 | 9/24/2013 | 01/21/10 |
| K181 | 71 KA-2078-01 | 31 | 513102353 | 03/19/14 | 12/02/14 | 9/30/2013 | 03/27/13 |
| U075 | 43 K-8260-01 | 14 | 505122031 | 11/16/05 | 09/20/07 | 10/3/2013 | 09/20/04 |
| K099 | 56 KA-0858-01 | 14 | 510076081 | 10/21/10 | 08/08/11 | 10/24/2013 | 12/23/08 |
| K010 | 106 KA-2624-01 | 14 | 512062161 | 08/13/12 | 12/03/12 | 10/24/2013 | 08/01/12 |
| U024 | 89 KA-0711-01 | 14 | 511102131 | 03/28/12 | 12/06/12 | 10/31/2013 | 03/14/11 |
| K084 | 33 KA-0701-01 | 33 | 512012353 | 02/27/12 | 12/14/12 | 11/6/2013 | 04/26/11 |

Twelve projects had the NOT issued in 2013. Those files had to be retained for 8 years, 5 years over what the current NPDES permit requires.

Under normal KDHE NPDES requirements once the Notice of Termination (NOT) is issued the permit holder must store SWPPP records for 3 years. The Consent Decree added an additional requirement that any project where the NOT was issued must store the records for 3 years after the decree expired. Some records have been stored for 8 years!

My records indicate KDOT has around 250 projects that can be recycled appropriately. Area Engineers let the spring cleaning begin!

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 KDOT.stormwaterinspection@ks.gov. Failure to complete and submit inspection reports on time may result in disincentive assessment.

International Erosion Control Association and Geosynthetics 2021 Virtual Conference



Proof that I presented at the 2021 virtual conference.

COVID-19 reared its ugly head forcing the 2021 Annual Conference online. Like I said in my presentation, “This is the best and worst week to have a conference. The weather is perfect in Kansas, but I’m stuck in front of my computer.”

The conference began on February 23rd and featured live and pre-recorded presentations through the 25th. Topics included MS4 and Stormwater Management; Erosion and Sediment Control; Business Practices; Waterbody Restoration; and many other great topics. You could also visit a virtual expo hall to learn about and discuss products with the conference sponsors.

No worries if you missed a live presentation or forgot to sign-up for the conference. All live presentations were recorded and posted as on-demand and the conference presentations are still available to view until May 1, 2021.

Visit www.ieca.org for more information about accessing the conference. This is a great opportunity to learn about the different aspects on how to comply with environmental requirements and get needed PDHs.

Landscape Sheet(LA) 852G Update

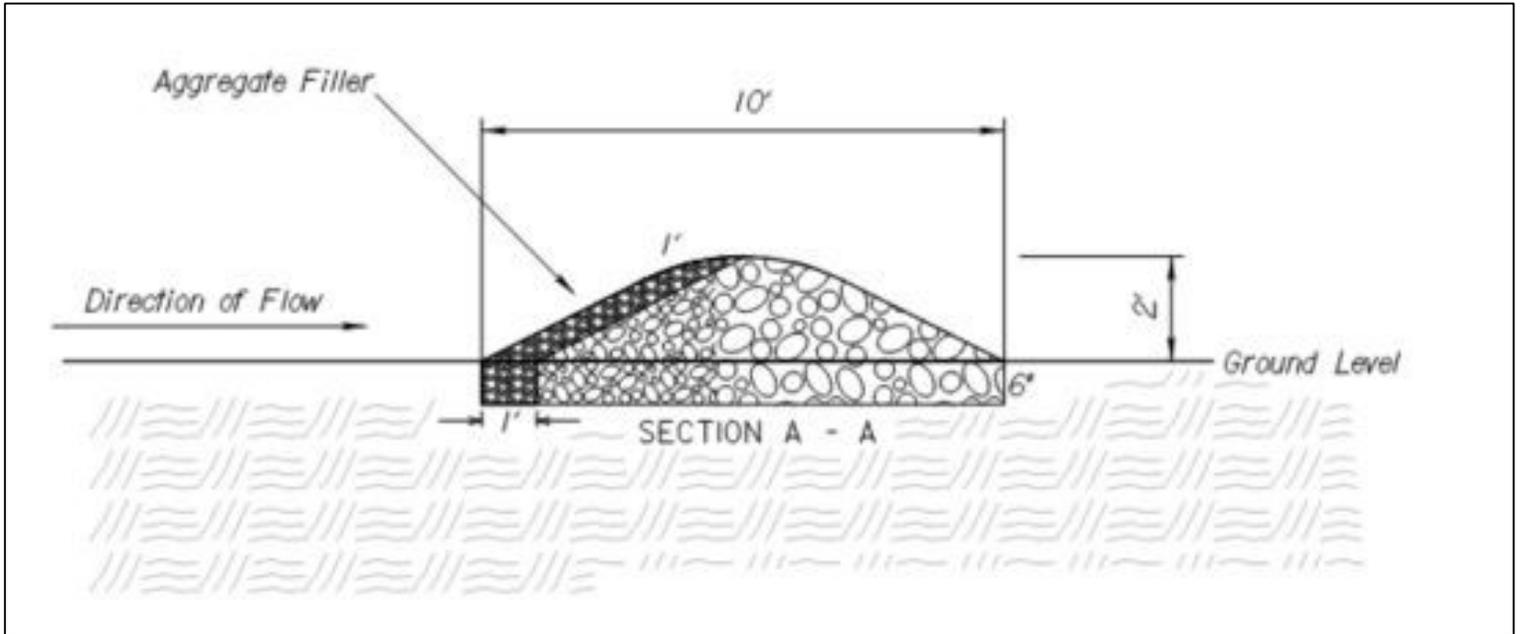
Back in June 2019 an EPA inspector contacted me about some potential issues with KDOT's standard for rock ditch checks. The checks, while resistant to damage from high water flows, allowed too much sediment to flow through. The EPA's critique came from a commercial developer using KDOT standards in their SWPPP.



Different testing installations from the "Evaluation of ALDOT Ditch Check Practices using Large-Scale Testing Techniques" report from Auburn University.

The research process began, and I found a great study from Auburn University titled, Evaluation of ALDOT Ditch Check Practices using Large-scale Testing Techniques. Chapter 3 compares 3 types of rock check installations: standard large aggregate (6"), Large aggregate with a small rock choker, and a filter fabric choker. Both choker materials were installed on the upstream side of the check.

After much thought and internal discussion placing an aggregate filler on the upstream side of the check was the best idea to decrease the amount of sediment passing through the check and mitigate some of the EPA's concerns.



Updated cross-section of the rock ditch check. This is the new standard as of the March 2021 letting.

The new standard (which became effective in the March 2021 letting) requires a Type I, Stone for Filter Course on the upstream side of the check. This material is accepted "based on visual inspection at the point of usage." The entire device is paid for by the combined cubic yards of both the 6" rock and aggregate filler.

Stormwater Update Online

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<http://www.ksdot.org/burconsmain/Connections/swppp.asp>

Contact Mervin Lare (mervin.lare@ks.gov) for questions, comments or suggestions for future content.

STORMWATER UPDATE

In This Issue

- ❖ When to do an Inspection and Payment
- ❖ Correcting a SWPPP Inspection

**CSW Training
Upcoming Dates**
October 25 & 26

KSU CIT Program
<http://citksu.com>

*Registration for class begins 9/15/21.
You must complete the online portion
before signing up for the field lab and
test!*

**Kansas Contractors
Association**
<http://www.kansascontractors.org/>
No Classes Scheduled

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 KDOT.stormwaterinspection@ks.gov. Failure to complete and submit inspection reports on time may result in disincentive assessment.

When to Do a SWPPP Inspection and How to Get Paid

Four years after KDHE released their new Construction Stormwater Permit you would think all CSW certified personnel (including myself) would understand how much rain is needed to trigger a SWPPP inspection. My mind is like a #40 sieve though. A lot of stuff gets through, but at least the catch pan is at the bottom. This newsletter will act as your #100 sieve reminding you when an inspection is due and what is required to get paid for that inspection. The spec book is your catch pan.



Reading from a local rain gauge. Approximately $\frac{3}{4}$ " of rain during this monitoring event. This reading stands on its own and a SWPPP inspection must be completed by the end of the next business day.

First off, the easy one. A routine inspection is due once every 14 days.

Next, when the rain gauge reads a $\frac{1}{2}$ " of rain or more an inspection must be completed by the end of the next business day.

Now the tricky one, an inspection is due when 2 consecutive rain gauge readings are less than a $\frac{1}{2}$ " alone, but when combined they total a $\frac{1}{2}$ " or more. This inspection must be completed by the end of the next business day after the 2nd reading.



A nicely mulched area.

Look at the following example, $\frac{1}{4}$ " rain on Monday and a $\frac{1}{4}$ " rain on Tuesday. An inspection must be completed by the end of the day on Wednesday. Simple right? Now what happens when the rain gauge reads $\frac{1}{4}$ " on Wednesday? Tuesday's reading is combined with Wednesday's and an inspection is due on Thursday. Currently 2 inspections are required this week, one on Wednesday and one on Thursday.

Can the Thursday inspection be combined with Wednesday to help save time? It sure can. Section 901 only requires that the inspection be completed by the end of the next business day. Document on the cover of the 247 form that the inspection covers rain event inspections due on Wednesday and Thursday.

Mervin, but it rained a $\frac{1}{4}$ " on Monday and a $\frac{1}{2}$ " on Tuesday, do I need to combine these events to do an inspection on Wednesday? No, you do not. A $\frac{1}{2}$ " rain stands by itself and does not combine with other events. What about a $\frac{1}{2}$ " on Monday and a $\frac{1}{4}$ " on Tuesday? Again, the $\frac{1}{2}$ " stands alone and does not combine with Tuesday event resulting in an inspection being done on Tuesday. Examples like these can go on and on. If you have a specific example, please send me an email for further explanation.

Let's talk about payment. Using our initial example, if the Wednesday and Thursday inspections are combined into 1 and completed on Wednesday the contractor only gets paid for 1 inspection. But shouldn't I get paid for 2 inspections if I turn in two reports? No. Two full inspections must be done to receive two separate payments. Technically, two inspections could be performed on Wednesday, one in the morning covering Monday and Tuesday and one in the afternoon covering Tuesday and Wednesday. I have never heard of this happening and I highly discourage Area Engineers or WPCMs from allowing this to happen. What if I want to do two separate inspections? One would need to happen on Wednesday and one on Thursday. 99% of the time the Wednesday inspection would exactly match the Thursday inspection. I see this as an inefficient use of time and money, and I discourage this practice also.

Like I said above, I can't cover all scenarios here or in the Stormwater class. Please email me with any questions or comments.

Correcting a SWPPP Inspection



These pictures are from the same location a month apart. The top left shows a properly constructed de-watering area. The contractor decided to remove it and the SWPPP inspectors decided it was not a deficiency. As an Area Engineer, I would consider this a major modification to the report.

Over the last several months I have noticed a lot of reports getting turned in late to the stormwater email. I worried that inspections were missing the deadlines called out in section 901. What I found out is that Area Engineers are asking for corrections on the report that the SWPPP inspectors are missing. I'm pleased, but why are SWPPP inspections not 100% complete and correct when they are turned into the Area Engineer and WPCM?

Several Area Engineers have asked me how much time should be given to correct a report. Technically no changes should need to be made to the report once received by the

Area Engineer and WPCM. The Inspector Certification Statement on the cover of form 247 concisely states "the information submitted is, to the best of my knowledge and belief, true, accurate, and complete." Modifying the report after the inspection was complete could result in disincentive assessment.

Area Engineers and WPCMs, submit the report that needs minor or major modifications as usual. For major modifications immediately schedule an additional inspection to be attended by the Area Engineer and WPCM. Use this as a learning opportunity, so everyone's expectations are understood. This opportunity only happens once per project and disincentive will be assessed for all additional reports that need modifications.



Minor modifications can be fixed on the next report. If they are not fixed disincentive will be assessed. If disincentive is not enough, non-payment and/or decertification for both the Contractor and KDOT is possible.

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STORMWATER UPDATE

In This Issue

- ❖ Construction Stormwater Class 2021-2022
- ❖ What You Can See from a Bird's Eye View

CSW Training Online Exam and Field Dates

10/26/21
03/22/22, 03/23/22
05/17/22, 05/18/22

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You must complete the online portion
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Construction Stormwater Class Fall 2021 and Spring 2022



Aaron Snook and Kevin Palic teaching proper stabilization techniques at the newly dubbed "Endangered Beaver Pond."

With summer ending, now is the time for Engineering Technicians, Environmental inspectors, WPCMs and KDOT Engineers to start signing up for Certified Inspector Training (CIT) classes especially the one that is near and dear to my heart: Construction Stormwater (CSW) training.

Sign-up for all CIT classes began on September 15th. Construction Stormwater continues a hybrid approach of both online and in person teaching. Once signed up, you must complete the online lectures before signing up for an exam and field date.

Make sure you complete the online lectures and sign up for an exam and field day date a minimum of 2 weeks prior to the field date as registration closes 7 business days prior to the date. Failure to meet the sign-up date means you will have to sign up for a later day and if you do not sign up for a field day by May 2nd, 2022 you will have to wait the entire construction season for a chance to sign up again.

The online portion consists of 26 lectures varying from 5 to 25 minutes for a total viewing time of 7 hours. The lectures can be viewed at your convenience.

The field day consists of a 3-hour morning or afternoon class at Seeders Inc, in Wichita, KS. Topics covered include proper device installation and inspection; stockpile management; stabilization practices; seed and equipment; and SWPPP inspection requirements. The field day is the right time to get in-person feedback on any SWPPP related topics. **DO NOT BE LATE FOR THE FIELD DAY!** You will be turned away if you are late by 10 minutes or more and will have to sign up for a different field day.

The online test consists of 40 multiple choice questions. Once started you have 1 hour to complete. The test can be taken either before or after the field day but must be completed by 6:00pm on the 2nd day of classes. Retakes are available but only during the next testing session. This means if you wait until the May class to take the exam and fail you must wait until either the fall or next spring session to retake the test.

Visit [Certified Inspector Training \(k-state.edu\)](https://www.k-state.edu/professional-development/certified-inspector-training) for registration, schedules and course information. If you have registration issues email KSU @ profed@k-state.edu .

What You Can See from a Bird's Eye View

Back in February 2020, I obtained my Remote Pilot license, meaning I get to legally fly a drone on KDOT projects. I've flown a KDOT drone all over the state and I'd like to share some of the photos I've taken.



The picture above shows a large washout in the bottom of a ditch with silt fence perimeter control that needs repaired. The washout is at the bottom of a large fill. This picture has a resolution of 1.6 pixels/inch and was taken at 385 ft.



The top picture is soon after a rock ditch check was cleaned out. The bottom left picture shows a general overview of a project. You can tell where the contractor is working due to the snow and soil contrasts, but no exact details. The right picture is zoomed in on the red circle. An almost legible Adopt a Highway sign is lying upstream of a bio-log. All 3 pictures were taken at 385 feet.





These last pictures are from my latest flight and they come with a bit of a story.

I had completed all my flights and my Visual Observer(VO) had left for the day. This was the 2nd box to inspect on my oversight and I noticed they were de-watering. Since the inlet was sucking up very turbid water, I decided for follow the outlet pipe to see what the discharge looked like.

After walking though 6ft tall grass I found the outlet pipe discharging directly into the waterway. I was still on an easement, so I kept walking to see if any protections were in place downstream. I found 1 rock check “containing” the sediment on our project.

I went back to the car and decided to get the drone in the air. With no certified VO’s I ran the two inspectors accompanying me through a crash course on being a VO.

The left picture is an overall view of the site. The top right picture zooms in on the purple oval. You can see the pump and the sediment in the discharge area. The bottom right picture zooms in on the red circle. The rock check did little to keep sediment on the project. The blue oval shows sediment crossing the easement fence.

This is a small sample showing the potential use of drones on KDOT projects, and I expect their use will only increase as we move forward.



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STORMWATER UPDATE

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15-09002-R04 is Here

Back in issue #26, I announced that the R04 revision is coming. After nearly 2 years of discussions, comments, and revisions the R4 takes effect on 12-15-21, the December letting. I will spend this issue discussing the changes and I will include the revision and other documentation with this newsletter.



Small projects (less than 17 acres) should be broken up by physical features. The above lines show a bridge project broken up into quadrants. Photo credit: Andrew Wilson

The first change is in regard to open areas and listing them on the 247 form. At the SWPPP pre-construction conference all expected disturbed areas are required to be listed on 247B. On large projects (over 17 acres) each equipment spread should be listed. For example, a project with 100 acres of disturbed area would have a minimum of 6 listings on 247B. The listings may be broken down further due to project phasing, box replacement/extensions or other ways as determined by the Area Engineer and WPCM.

If the project is less than 17 acres the Area Engineer and Contractor are required to separate the project by physical features. An example would be a bridge replacement project. This type of project can be broken into quadrants with the waterway and the roadway acting as boundaries. The Area Engineer or WPCM can add or divide areas as needed to comply with the NPDES permit.



On a large project this box area could be listed separately on the 247 form as an active area because sediment can quickly leave the project limits. This area would be listed as a deficiency on an oversight inspection and the contractor would have 10 days to stabilize the area.

Next, the 14 days to stabilize or activate unfinished work has been taken out. The intent of the 14-day window was to, at a minimum, capture inactive areas on the 14-day routine SWPPP inspection. The new language states areas must be stabilized or reactivated within 7 calendar days of being documented on the 247 form i.e. being listed as a deficiency on 247e.

The WPCM with either need to be an employee of the Prime Contractor or have their CPESC certification or be a recognized Kansas Professional Engineer, geologist, Architect or Landscape Architect. Here is a link to the CPESC certification website: [CPESC - EnviroCert](#)

In addition, the WPCM will have to fill out KDOT form 280, Water Pollution Control Manager Weekly Report. This report will help the WPCM document and manage SWPPP related items on projects. I have included it with this newsletter.

SWPPP inspections must begin and end during normal business hours and only 1 inspection will be paid for per day per project.

Penalties will be assessed on deficiencies documented on oversight inspections. The Contractor has 10 calendar days to remedy any deficiencies documented on the oversight inspection instead of the normal 7 days on a joint SWPPP inspection.

That, my friends, are the new requirements of the R4 revision. Please send any questions or comments about the changes to my email listed below.

Stormwater Update Online

This issue and all past issues of this quarterly bulletin are available online at KDOT's Stormwater website: <http://www.ksdot.org/burconsmain/Connections/swppp.asp>

Contact Mervin Lare (mervin.lare@ks.gov) for questions, comments, or suggestions for future content.

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

Delete SECTION 901 and replace with the following:

SECTION 901

STORMWATER POLLUTION MANAGEMENT

901.1 DESCRIPTION

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

BID ITEMS

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

UNITS

Lump Sum
Each
Each
Lump Sum

901.2 MATERIALS

None Required.

901.3 CONSTRUCTION REQUIREMENTS

a. Permits.

(1) Projects requiring permit coverage:

(a) KDOT with 1.0 acre or more of erodible surface:

KDOT will submit the Notice of Intent (NOI) for authorization to discharge stormwater runoff from construction activities in accordance with the Kansas Water Pollution Control General Permit. This authorization does not cover Contractor plant sites and Contractor-Furnished borrow and waste sites outside the project limits.

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 required in the Bidding Proposal Form, complete, sign and return to KDOT the KDHE form "REQUEST FOR JOINT OWNER/OPERATOR" (RJOO). A blank copy of the form is attached. The Secretary will not sign the contract until the Contractor has returned the completed, signed RJOO. If the Contractor fails to complete, sign, and return the RJOO within the required time, the Secretary will cancel the award of contract as provided in **SECTION 103**. KDOT will submit the completed form to KDHE for authorization. After approved by KDHE, copies will be distributed to KDOT and the Contractor.

(b) Local Public Authority with 1.0 acre or more of erodible surface:

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

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

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

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

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

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

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

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

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

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

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

Unless requested in writing from the Contractor, and approved in writing by the Engineer, or specified otherwise in the Contract Documents, do not exceed 750,000 square feet of surface area of erodible earth material per designated disturbed area at one time. Permanently record all designated disturbed areas on KDOT Form 247 - SWPPP Inspection and Maintenance Report at the stormwater erosion control conference. The Engineer will limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow (within right-of-way) and embankment operations. Limit the exposed erodible earth material according to the capability and progress, and in keeping with the approved schedule.

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

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

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

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

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

For permitted projects disturbing less than 750,000 square feet, the Engineer and Contractor will determine disturbed areas based on project phasing and physical separations (roadway, streams etc.). Permanently record these areas on KDOT Form 247 - SWPPP Inspection and Maintenance Report at the stormwater erosion control conference.

Additional areas may be added or divided according to contractors meaningful work by the Engineer or WPCM to reduce the disturbed area remaining during the life of the project.

DO NOT clear and grub areas unless meaningful work toward the completion of the project will actively be performed in the exposed area (or portions of the exposed area) within 7 calendar days.

If areas are cleared and grubbed and not finish graded, not part of project phasing and no meaningful work toward the completion of the project is performed within the exposed area (or portions of the exposed area) for 7 calendar days on exposed steep slope areas (40% or greater) or within 7 calendar days of being documented on KDOT Form 247, stabilize and maintain stabilization of the exposed areas according to **SECTION 902** at no cost to KDOT.

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

Do not ford live streams with construction equipment.

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

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

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

Immediately initiate temporary or permanent 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 documented and undocumented portions of the project site and when meaningful construction activities will not resume for a period exceeding 7 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 meaningful construction activities take place to re-disturb the area.

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

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

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

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

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

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

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

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

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

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

- A copy of the Project Notice of Intent Form (NOI) for Stormwater Runoff from Construction Activities. (obtained from KDOT);
- A copy of the “Request for Joint Owner/Operator” form signed by the Contractor and the Area/Metro Engineer (if applicable);
- The planned sequence of major construction activities;
- The Contractor’s Erosion Control Site Plan or Plans accounting for project phasing;
- Current training certification(s) for the designated WPCM (subsection 901.3d);
- Current training certification(s) for Contractor’s Environmental Inspector (subsection 901.3e);
- The SWPPP Contractor Certification Form 246. The Contractor and all subcontractors are required to certify that they understand the terms and conditions of the general NPDES permit. The Engineer will provide the SWPPP Certification Form (Form No. 246), or it can be found on the KDOT Internet;
- An acknowledgement that State and Local requirements have been included in the SWPPP. Review all applicable permits (Corps of Engineers, Department of Agriculture, etc.) for special conditions affecting stormwater pollution control. Include relevant permit documents with the SWPPP;
- A detailed description of Best Management Practices (BMPs) which will be used one or more times at the site for erosion and sediment control. In addition to the requirements of **subsection 901.3.b**, design, install and maintain BMPs to:
 - Minimize the amount of soil exposed during construction activity;
 - Minimize the disturbance of steep slopes (slopes of 40% or greater);
 - Control discharges from sediment or soil stockpiles;
 - Minimize the generation of dust;
 - Minimize off-site tracking of soils;
 - Provide storm drain inlet protection for inlets down gradient of disturbed project areas not fully stabilized or where construction will soon be started;
- A description of site management BMPs which minimize or eliminate contamination of stormwater runoff. Design, install and maintain such BMPs to:
 - Minimize discharge of pollutants from equipment and vehicle washing;
 - Minimize the exposure of construction waste, trash, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater;
 - Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures;
 - BMPs in this category include but are not limited to:
 - Waste management including trash containers and regular site cleanup for proper disposal of solid waste such as scrap material, product/material shipping waste, food containers and cups;
 - Containers and proper disposal for waste, paints, solvents, and cleaning compounds;
 - Portable toilets for proper disposal of sanitary waste;
 - Storage for construction materials away from drainage courses and low areas;
 - Procedures and practices to eliminate the potential to discharge wash and/or rinse waters from concrete mixing equipment including ready-mix concrete trucks.

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

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

- The approved Contractor’s submittal as detailed above;
- KDOT Form 219, Approval of Storm Water Pollution Prevention Plan (SWPPP) completed by the Area or Metro Engineer;

- KDOT Form 248, Checklist for Contractor's Stormwater Pollution Prevention Plan (SWPPP) completed by the Area or Metro Engineer;
- Current training certifications for KDOT, LPA or Consultant inspectors;
- **KDOT Form 247 - SWPPP Inspection and Maintenance Report;**
- Complete copy of the NPDES permit for the project;
- Reference Contract Documents pertaining to temporary erosion and water pollution control.

d. Water Pollution Control Manager. Designate a Water Pollution Control Manager (WPCM) who is an employee of the Prime Contractor's staff or who has obtained the CPESC certification or who has a recognized Kansas Professional Engineer, Geologist, Architect or Landscape Architect license and who shall visit the project during normal work hours on a frequent basis and at least once per week until all physical work is complete and the Engineer issues the Notice of Acceptance or a partial Notice of Acceptance. The required 180-day observation period for pavement markings is not considered to be physical work. The WPCM shall thoroughly review the project and meet with the project inspector or Engineer during the weekly site visits to discuss, proactively plan, and verify the Contractor's compliance with this specification and with the NPDES permit. In addition, the WPCM shall:

- Have the authority to supervise all work performed by the Contractor and subcontractors that involves stormwater requirements or affects stormwater compliance;
- Have the responsibility and authority to order Contractor employees and subcontractors to take appropriate action to comply with stormwater requirements, including requiring any such person to cease or correct a violation of stormwater requirements and to order or recommend such other actions or sanctions as necessary to meet stormwater requirements;
- Be familiar with the Project SWPPP;
- Ensure BMPs are properly installed and maintained as necessary to maintain compliance;
- Be responsible for updating the Project SWPPP and site maps to accurately reflect the BMPs in use on the project;
- **Complete KDOT Form 280- Water Pollution Control Manager Weekly Report, and place in the project SWPPP.**
- Be the point of contact for KDOT regarding stormwater compliance;
- **Have completed and maintain current certification in KDOT's Certified Inspection and Testing Training (CIT) Program Construction Stormwater (CSW) course.**
- Review and sign SWPPP inspection reports within 3 days after receiving such reports, acknowledging awareness of any deficiencies and ensuring the correction of all deficiencies.
- Maintain and monitor an active email account capable of receiving electronic communications including inspection reports, photos and other documents relevant to stormwater compliance.

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

Immediately notify the Engineer in writing if the designated WPCM is replaced. The replacement WPCM shall comply with the above requirements. The notification shall include training certificates and contact information for the replacement WPCM.

Failure to adequately perform the required duties may result in disqualification of the WPCM in accordance with the procedures outlined in the KDOT Policy and Procedure Manual for The Certified Inspection and Testing Training (CIT) Program.

e. SWPPP Inspections. The Contractor's Environmental Inspector shall have completed KDOT's CIT Construction Stormwater (CSW) training and maintain a current certification while performing SWPPP Inspections.

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

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

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

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

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

Perform additional SWPPP inspections if directed by the Engineer. **Do not perform multiple inspections on the same calendar day.**

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

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

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

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

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

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

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

Failure to adequately perform the required duties may result in disqualification of the Contractor's Environmental Inspector in accordance with the procedures outlined in the KDOT Policy and Procedure Manual for The Certified Inspection and Testing Training (CIT) Program.

f. Oversight Inspections. KDOT will assign oversight inspectors to provide quality assurance on projects with an NPDES permit. Remedy any deficiencies noted during a SWPPP Inspection within 10 days of the inspection despite weather conditions that make it difficult (but not impossible) to perform corrections. No additional time shall be granted to remedy deficiencies on the basis of weather unless it is infeasible due to flooding or frozen ground conditions for the Contractor to complete the remedy within the 10 days allowed. No additional time will be granted to remedy any deficiencies unless approved by the Stormwater Compliance Engineer.

g. 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.

h. Stormwater Compliance Disincentive Assessment. If the Contractor's Environmental Inspector fails to perform a SWPPP Inspection as required according to **subsection 901.3e**, the Contractor shall be liable for a disincentive assessment. The disincentive assessment charged and owing shall be determined using **TABLE 901-1**.

Failure to participate in the joint inspection does not relieve the Contractor of the responsibility to correct deficiencies noted by KDOT’s Inspector.

If deficiencies noted during SWPPP inspections performed according to **subsection 901.3e or f**, are not corrected within 7 calendar days of the inspection, 10 calendar days for oversight findings, or within a time extension approved by the Stormwater Compliance Engineer, the Contractor shall be liable for a disincentive assessment. The disincentive assessment charged and owing shall be determined using **TABLE 901-1**.

Should it be infeasible to perform corrections within the allowed time, notify the Area/Metro Engineer and the Stormwater Compliance Engineer immediately. 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 of infeasibility and that best efforts were made to complete the required corrections and to minimize any delay to the extent possible. No additional time will be granted to submit the required information unless approved in writing by the Stormwater Compliance Engineer.

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

The disincentive assessments under **subsection 901.3h**, 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 901.3i**.

| TABLE 901-1: TABLE OF STORMWATER COMPLIANCE DISINCENTIVES | | | |
|---|---------------|---|---|
| Original Contract Amount Range | | Each SWPPP Inspection not performed according to 901.3e | Each deficiency per day not corrected within allowable time |
| \$0 | \$1,000,000. | \$250.00 | \$250.00 |
| \$1,000,000.01 | \$2,500,000. | \$500.00 | \$500.00 |
| \$2,500,000.01 | \$5,000,000. | \$750.00 | \$500.00 |
| \$5,000,000.01 | \$10,000,000. | \$1,000.0 | \$500.00 |
| Over \$10,000,000.00 | | \$1,500.0 | \$500.00 |

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

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

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

901.4 MEASUREMENT AND PAYMENT

The Engineer will measure each SWPPP inspection performed in compliance with this specification. **SWPPP Inspections may be performed in response to one or more rainfall events or on a routine schedule. No more than one SWPPP Inspection will be measured each calendar day.**

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

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

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

10-17-19 (C&M) (ML)
Dec-21 Letting

Water Pollution Control Manager Weekly Report

Date: _____

Project#: _____

WPCM: _____

WPCM Report #: _____

What updates were made to the SWPPP and site map this week?

What BMP repairs need to be made this week?

Which open areas have changed since last report? Are they still active? If not, are they documented as inactive on the 247?

Based on the project schedule, what BMPs need installed/modified and what open areas need identified for the coming week?

What is the status of any temporary stream crossings on the project?

What de-watering practices are currently being used on the project?

What is the status of temporary/permanent vegetation in stabilized areas?

Additional Comments:

WPCM signature: _____

APPENDIX C

Inspection Procedures and Form 247 Instructions

Kansas Department of Transportation Storm Water Pollution Prevention Plan Inspection and Maintenance Report

Project #: _____

Permit #: _____

Area / Metro Engineer: _____

Water Pollution Control Manager: _____

Date of Last Significant Rain Event: _____

Date of Last Inspection: _____

Inspection Type: _____

Inspection Date: _____

(optional) Report # _____

CONTENTS

| FORM ID # | DESCRIPTION | REQUIRED? |
|-----------|--|-----------|
| 247A | General Issues / Housekeeping | YES |
| 247B | Disturbed Areas / Site Erosion | YES |
| 247C | Sediment Control and Other Structural BMPs | YES |

| FORM ID # | DESCRIPTION | REQUIRED? |
|-----------|------------------|-----------|
| 247D | Rainfall Log | YES |
| 247E | BMP Deficiencies | YES |
| | | |

INSPECTOR CERTIFICATION STATEMENT

" 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 gathered and evaluated 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 known violations."

| TITLE | PRINT NAME | CERT ID # | EXP. DATE | SIGNATURE | DATE |
|-------------|------------|-----------|-----------|-----------|------|
| KDOT INSP. | | | | | |
| CONT. INSP. | | | | | |
| AREA ENG | | | | | |
| WPCM* | | | | | |

*WPCM Signature acknowledges awareness of all deficiencies noted. All documented deficiencies are required to be remedied within 7 days of this inspection unless determined to be infeasible by the Stormwater Compliance Engineer. Failure to do so will result in the assessment of stormwater compliance disincentive.

Kansas Department of Transportation Storm Water Pollution Prevention Plan Inspection and Maintenance Report

INSPECTION DATE:
PROJECT NUMBER:

REPORT #

General Issues / Housekeeping

Carefully review all questions on this form. This is an overview of the project housekeeping and documentation.

| | BMP/Activity | Yes / No / NA | Observations / Remarks | Deficiency (Yes / No) |
|----|--|----------------------|-------------------------------|------------------------------|
| 1 | Are all slopes and disturbed areas not actively being worked properly stabilized? | Yes / No / NA | | |
| 2 | Are natural resource areas (e.g. streams, wetlands, mature trees) protected with barriers or other BMPs? | Yes / No / NA | | |
| 3 | Are perimeter controls and barriers adequately installed (keyed into substrate) and maintained? | Yes / No / NA | | |
| 4 | Are discharge points and receiving waters free of sediment deposits? | Yes / No / NA | | |
| 5 | Are storm drain inlets properly protected? | Yes / No / NA | | |
| 6 | Are construction exits preventing sediment from being tracked into the roadway? | Yes / No / NA | | |
| 7 | Is trash/litter from work areas collected and placed in covered dumpsters? | Yes / No / NA | | |
| 8 | Are portable toilets available for sanitary waste? | Yes / No / NA | | |
| 9 | Are washout facilities (e.g. paint, concrete) available, clearly marked, and maintained? | Yes / No / NA | | |
| 10 | Are equipment fueling, cleaning and maintenance areas free of spills, leaks or other contaminants? | Yes / No / NA | | |
| 11 | Are materials that are potential stormwater contaminants stored inside or under cover? | Yes / No / NA | | |
| 12 | Are non-stormwater discharges (e.g. wash water, dewatering) properly controlled? | Yes / No / NA | | |
| 13 | Are temporary sediment basins (if required) properly constructed and maintained? | Yes / No / NA | | |
| 14 | Are soil stockpiles protected with perimeter barriers and appropriately stabilized? | Yes / No / NA | | |

Kansas Department of Transportation Storm Water Pollution Prevention Plan Inspection and Maintenance Report

INSPECTION DATE:
PROJECT NUMBER:

REPORT #

General Issues / Housekeeping

Carefully review all questions on this form. This is an overview of the project housekeeping and documentation.

| | BMP/Activity | Yes / No / NA | Observations / Remarks | Deficiency (Yes / No) |
|----|---|----------------------|-------------------------------|----------------------------------|
| 15 | Are SWPPP Site Maps complete and up to date? | Yes / No / NA | | |
| 16 | Are there any outstanding deficiencies from previous inspections? | Yes / No / NA | | |
| 17 | Other remarks / observations | | | |
| | | | | |
| | | | | |

Kansas Department of Transportation Storm Water Pollution Prevention Plan Inspection and Maintenance Report

INSPECTION DATE:
PROJECT NUMBER:

REPORT #
PREVIOUS INSPECTION DATE:

Rainfall Log

Use this form to record rainfall observations beginning with the date of the previous inspection.

Observe and record rainfall totals on each business day at a minimum. Rainfall occurring on non-business days may be collected and measured on the subsequent business day.

A SWPPP inspection is required whenever a rainfall total of 0.5 inches or greater is recorded for a single observation.

A SWPPP inspection is required whenever a rainfall total of 0.5 inches or greater is recorded over two consecutive observations if the first is less than 0.5 inches.

| Date | Observed Rainfall Amount | Inspection Required? | Remarks | | Date | Observed Rainfall Amount | Inspection Required? | Remarks |
|------|--------------------------|----------------------|---------|--|------|--------------------------|----------------------|---------|
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KDOT Form 247 Instructions

1. General 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 date of the last significant rain event. A significant rain event is an event that requires a post-rainfall inspection according to the permit. See instructions for 247D for additional information regarding rainfall reporting.
- iii. Enter the date of the last routine or post-rainfall inspection. This should be no more than 14 days prior to the current inspection.
- iv. Enter the inspection type. This will either be "routine," "post-rainfall" or "oversight."
- v. Enter the current inspection date. If this is typed into the form the date will carry forward to all of the attachments.
- vi. If desired, or at the direction of the Area/Metro Engineer, enter the inspection report number.
- vii. The table of contents indicates which form attachments are required and included with the report. Mark "NO" for forms which are not included.
- viii. The certified inspector for KDOT (or the LPA) shall sign and date the report as the KDOT Inspector. Include the inspector ID number and expiration date of the current certification.
- ix. The certified inspector for the Contractor shall sign and date the report as the Contractor Inspector. Include the inspector ID number and expiration date of the current certification.
- x. The report shall be transmitted to the Area / Metro Engineer within 24 hours of completing the inspection.
- xi. The report shall be transmitted to the WPCM within 24 hours of completing the inspection.
- xii. The Area / Metro Engineer shall sign and date the report within three calendar days of receiving the inspection report.
- xiii. The Contractor's WPCM shall sign and date the report within three calendar days of receiving the inspection report.

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 numbered questions.
- iii. Describe any deficiencies noted or reference location of details (e.g. "see 247B for details")
- iv. Item 15 – Verify that the SWPPP site maps are complete and updated.
- v. Item 16 – Review attachment 247 E (Deficiencies) from previous inspection. Document if the required remedies are or are not complete.
- vi. The remaining space under Item 17 may be used for any other site-specific issues not otherwise addressed.

KDOT Form 247 Instructions

- c. 247B – Site Erosion. This form is used to document the inspection of disturbed areas throughout the project.
 - i. Identify areas disturbed by grading or other excavation activities (i.e. structure installation). These can be described by Station or by numbered reference to SWPP plan sheets.
 - 1. Note that there is no minimum size for an “area.” Areas are generally limited by specification to no more than 750,000 sqft per equipment spread without KDOT approval.
 - 2. Areas should generally be defined by physical proximity and/or by work activity.
 - 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. Other visible evidence of erosion (e.g. accumulations of downstream sediment)
 - 3. Quality / density of vegetation
 - vi. Special conditions relevant to the stabilization of a disturbed area shall be documented under Observations / Remarks
 - 1. The 2017 General Permit allows frozen or snow-covered ground to be considered as temporarily stabilized under certain conditions.
 - 2. The 2017 General Permit allows certain exceptions to the stabilization requirements based on the intended function.
 - vii. The Deficiency column shall be marked “Yes” for any area which requires maintenance or corrective action. Details of the required remedy shall be documented on 247E
- d. 247C – Sediment Control and Other Structural BMPs. This form is used to document the inspection of individual structural BMPs such as ditch checks, slope barriers, inlet protection systems, construction entrances and sediment basins. Every BMP should be closely inspected for condition and functionality.
 - i. Identify each BMP by Location and by BMP # from the SWPP plan sheets.
 - ii. Note installation date for each BMP
 - iii. Note for each device if it is a perimeter control
 - iv. Note type of BMP (ditch check, inlet protection, sediment basin etc.) and material (silt fence, bio-log, etc.)

KDOT Form 247 Instructions

- v. The following items should be inspected and documented:
 - 1. Correct installation
 - 2. Functionality – is the BMP performing as intended
 - 3. Condition of device – is repair or cleanout required
 - 4. Visible signs of erosion or sediment accumulation downstream of the device
 - 5. Any potential off-site discharge of sediment or other pollutants.
- vi. Construction Entrances. All construction entrance / exits should be identified.
 - 1. Note location and installation date for each entrance.
 - 2. Note surface type (aggregate, soil, etc. under Observations / Remarks)
 - 3. Any evidence of sediment tracking onto the roadway should be documented.
 - 4. Construction entrances should be monitored daily and sediment tracked onto the roadway should be cleaned as necessary.
- vii. Sediment basins. Note location and installation date for each basin
 - 1. The condition of the basin should be carefully checked during each inspection.
 - 2. Estimate the accumulated sediment volume as a percentage of the total capacity
 - 3. Inspect and document the condition of the basin slopes and outlet
 - 4. Check for evidence of water overtopping the basin berm
- viii. Any deficiencies observed should be indicated with a “Yes” in the last column. The required remedy should be detailed on 247E.
- e. 247D – Rainfall Log. This form is for documentation of rainfall amounts occurring on the project since the previous inspection.
 - i. The 2017 General Permit requires that rainfall amounts be recorded, at a minimum, for every business day.
 - ii. Record each day’s observed rainfall in the appropriate column.
 - 1. If no measurement is made (i.e. on a weekend or holiday) record “n/a”
 - 2. If no rainfall is received document 0.0”
 - iii. If a rainfall event which requires an inspection occurs, then indicate “yes” in the inspection required column and perform an inspection no later than the next business day.
 - iv. An inspection is required whenever 0.5” or more is measured in a single observation; or
 - v. Whenever 0.5” or more is measured in two consecutive observations when the first observation is less than 0.5”
 - 1. “n/a” as directed above is not considered to be an observation
 - 2. A measurement of 0.0” is considered to be an observation
- f. 247E – BMP Deficiencies. This form is a summary of observed deficiencies and remedies required.
 - i. This includes repairs, cleanup or other minor work required to maintain BMPs in use on the project.
 - ii. Any maintenance required should be detailed on this attachment.

KDOT Form 247 Instructions

- iii. 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
 - iv. All required corrective actions should be detailed on this attachment
 - v. Copies shall be made and distributed to the individuals responsible for the required actions
 - vi. 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
 - vii. 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.
2. Post-Construction (PC) Inspections
- a. Project inspections shall be performed and documented as detailed above except as described in this section.
 - b. Project site inspections are to be continued at the frequency required by the Permit following the Notice of Acceptance or Partial Notice of Acceptance to the Contractor.
 - i. The 2017 General Permit does not typically require post-rainfall inspections once all construction activities are completed and all stabilization BMPs have been installed.
 - c. Include a copy of the Notice of Acceptance or Partial Notice of Acceptance with the SWPPP documentation
 - 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 direct KDOT maintenance forces or coordinate other resources as necessary to remedy all deficiencies within seven calendar days of the inspection
3. 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 is required to be retained for a minimum of three years following the Notice of Termination.
 - f. All SWPPP documentation shall be maintained at the area office for no less than three years following the Notice of Termination. Records relevant to the EPA Consent Decree (from September 5, 2013 through January 30, 2018) shall be retained until at least

KDOT Form 247 Instructions

January 30, 2021. Notify the Stormwater Compliance Engineer if the records will be kept at an alternate location.

APPENDIX D

Contract Special Provisions for Temporary Erosion and Pollution Control

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

Delete SECTION 901 and replace with the following:

SECTION 901

STORMWATER POLLUTION MANAGEMENT

901.1 DESCRIPTION

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

BID ITEMS

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

UNITS

Lump Sum
Each
Each
Lump Sum

901.2 MATERIALS

None Required.

901.3 CONSTRUCTION REQUIREMENTS

a. Permits.

(1) Projects requiring permit coverage:

(a) KDOT with 1.0 acre or more of erodible surface:

KDOT will submit the Notice of Intent (NOI) for authorization to discharge stormwater runoff from construction activities in accordance with the Kansas Water Pollution Control General Permit. This authorization does not cover Contractor plant sites and Contractor-Furnished borrow and waste sites outside the project limits.

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 required in the Bidding Proposal Form, complete, sign and return to KDOT the KDHE form "REQUEST FOR JOINT OWNER/OPERATOR" (RJOO). A blank copy of the form is attached. The Secretary will not sign the contract until the Contractor has returned the completed, signed RJOO. If the Contractor fails to complete, sign, and return the RJOO within the required time, the Secretary will cancel the award of contract as provided in **SECTION 103**. KDOT will submit the completed form to KDHE for authorization. After approved by KDHE, copies will be distributed to KDOT and the Contractor.

(b) Local Public Authority with 1.0 acre or more of erodible surface:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Do not ford live streams with construction equipment.

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

Do not store equipment or materials (including soil stockpiles) within 50 feet of rivers, streams or other surface waters. Avoid storing equipment or materials (including soil stockpiles) in flowlines of ditches or other

drainage courses. Where such storage is necessary, obtain the Area or Metro Engineer's written approval and include in the project SWPPP appropriate best management practices for the storage area.

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

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

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

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

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

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

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

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

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

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

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

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

- A copy of the Project Notice of Intent Form (NOI) for Stormwater Runoff from Construction Activities. (obtained from KDOT);

- A copy of the “Request for Joint Owner/Operator” form signed by the Contractor and the Area/Metro Engineer (if applicable);
- The planned sequence of major construction activities;
- The Contractor’s Erosion Control Site Plan or Plans accounting for project phasing;
- Current training certification(s) for the designated WPCM (subsection 901.3d);
- Current training certification(s) for Contractor’s Environmental Inspector (subsection 901.3e);
- The SWPPP Contractor Certification Form 246. The Contractor and all subcontractors are required to certify that they understand the terms and conditions of the general NPDES permit. The Engineer will provide the SWPPP Certification Form (Form No. 246), or it can be found on the KDOT Internet;
- An acknowledgement that State and Local requirements have been included in the SWPPP. Review all applicable permits (Corps of Engineers, Department of Agriculture, etc.) for special conditions affecting stormwater pollution control. Include relevant permit documents with the SWPPP;
- A detailed description of Best Management Practices (BMPs) which will be used one or more times at the site for erosion and sediment control. In addition to the requirements of **subsection 901.3.b**, design, install and maintain BMPs to:
 - Minimize the amount of soil exposed during construction activity;
 - Minimize the disturbance of steep slopes (slopes of 40% or greater);
 - Control discharges from sediment or soil stockpiles;
 - Minimize the generation of dust;
 - Minimize off-site tracking of soils;
 - Provide storm drain inlet protection for inlets down gradient of disturbed project areas not fully stabilized or where construction will soon be started;
- A description of site management BMPs which minimize or eliminate contamination of stormwater runoff. Design, install and maintain such BMPs to:
 - Minimize discharge of pollutants from equipment and vehicle washing;
 - Minimize the exposure of construction waste, trash, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater;
 - Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures;
 - BMPs in this category include but are not limited to:
 - Waste management including trash containers and regular site cleanup for proper disposal of solid waste such as scrap material, product/material shipping waste, food containers and cups;
 - Containers and proper disposal for waste paints, solvents, and cleaning compounds;
 - Portable toilets for proper disposal of sanitary waste;
 - Storage for construction materials away from drainage courses and low areas;
 - Procedures and practices to eliminate the potential to discharge wash and/or rinse waters from concrete mixing equipment including ready-mix concrete trucks.

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

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

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

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

- Have the authority to supervise all work performed by the Contractor and subcontractors that involves stormwater requirements or affects stormwater compliance;
- Have the responsibility and authority to order Contractor employees and subcontractors to take appropriate action to comply with stormwater requirements, including requiring any such person to cease or correct a violation of stormwater requirements and to order or recommend such other actions or sanctions as necessary to meet stormwater requirements;
- Be familiar with the Project SWPPP;
- Ensure BMPs are properly installed and maintained as necessary to maintain compliance;
- Be responsible for updating the Project SWPPP and site maps to accurately reflect the BMPs in use on the project;
- Be the point of contact for KDOT regarding stormwater compliance;
- Have completed and maintain current certification in either:
 - KDOT's Environmental Inspector Training (EIT) and Environmental Manager Training (EMT) programs or
 - KDOT's Construction Stormwater (CSW) training.
- Review and sign SWPPP inspection reports within 3 days after receiving such reports, acknowledging awareness of any deficiencies and ensuring the correction of all deficiencies.
- Maintain and monitor an active email account capable of receiving electronic communications including inspection reports, photos and other documents relevant to stormwater compliance.

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

Immediately notify the Engineer in writing if the designated WPCM is replaced. The replacement WPCM shall comply with the above requirements. The notification shall include training certificates and contact information for the replacement WPCM.

Failure to adequately perform the required duties may result in disqualification of the WPCM in accordance with the procedures outlined in the KDOT Policy and Procedure Manual for The Certified Inspection and Testing Training (CIT) Program.

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

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

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

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

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

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

Perform additional SWPPP inspections if directed by the Engineer.

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

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

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

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

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

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

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

Failure to adequately perform the required duties may result in disqualification of the Contractor's Environmental Inspector in accordance with the procedures outlined in the KDOT Policy and Procedure Manual for The Certified Inspection and Testing Training (CIT) Program.

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

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

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

g. Stormwater Compliance Disincentive Assessment. If the Contractor's Environmental Inspector fails to perform a SWPPP Inspection as required according to **subsection 901.3e**, the Contractor shall be liable for a disincentive assessment. The disincentive assessment charged and owing shall be determined using **TABLE 901-1**. Failure to participate in the joint inspection does not relieve the Contractor of the responsibility to correct deficiencies noted by KDOT's Inspector.

If deficiencies noted during SWPPP inspections performed according to **subsection 901.3e**, are not corrected within 7 calendar days of the inspection, or within a time extension approved by the Stormwater Compliance Engineer, the Contractor shall be liable for a disincentive assessment. The disincentive assessment charged and owing shall be determined using **TABLE 901-1**.

Should it be infeasible to perform corrections within the allowed time, notify the Area/Metro Engineer and the Stormwater Compliance Engineer immediately. 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 of infeasibility and that best efforts were made to complete the required corrections and to minimize any delay to the extent possible. No additional time will be granted to submit the required information unless approved in writing by the Stormwater Compliance Engineer.

The Engineer will deduct and withhold from contract funds the Stormwater Compliance Disincentive Assessment under **subsection 901.3g**. The assessments are to be computed in the same manner as damages under **SECTION 108** (Liquidated Damages and Disincentive Assessments) except calendar days include Sundays, Holidays

and the Winter Holiday Period. If contract funds are insufficient, the Contractor shall pay KDOT the balance owed. If the Contractor fails to pay KDOT the amount owed within 10 days after demand from KDOT, the Contractor shall be considered in breach of contract under **SECTION 108**.

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

| TABLE 901-1: TABLE OF STORMWATER COMPLIANCE DISINCENTIVES | | | |
|--|---------------|--|--|
| Original Contract Amount Range | | Each SWPPP Inspection not performed according to 901.3e | Each deficiency per day not corrected within allowable time |
| \$0 | \$1,000,000. | \$250.00 | \$250.00 |
| \$1,000,000.01 | \$2,500,000. | \$500.00 | \$500.00 |
| \$2,500,000.01 | \$5,000,000. | \$750.00 | \$500.00 |
| \$5,000,000.01 | \$10,000,000. | \$1,000.0 | \$500.00 |
| Over \$10,000,000.00 | | \$1,500.0 | \$500.00 |

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

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

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

901.4 MEASUREMENT AND PAYMENT

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

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

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

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



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-1703-1
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.

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, EDITION 2015**

Delete SECTION 902 and replace with the following:

**SECTION 902
TEMPORARY EROSION AND SEDIMENT CONTROL**

902.1 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
Erosion Control (*)(**)
Mulching
Water (Erosion Control) (Set Price)
Geotextile (Erosion Control)

UNITS

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

* Class
** Type
*** Size

902.2 MATERIALS

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 **DIVISION 1700** for separation geotextile.

Provide aggregate filler that complies with Filter Course Type I, **DIVISION 1114**. The Engineer will accept this material on the basis of visual inspection at the point of usage.

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.

902.3 CONSTRUCTION REQUIREMENTS

a. General. If the contract does not include temporary erosion and sediment control bid items, and such work is required, items will be added as provided for in **SECTION 104**.

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 and sediment control best management practices (BMPs.).

Alternate BMP references include:

- EPA – Stormwater Menu of BMP:
(<http://water.epa.gov/polwaste/npdes/swbmp/Construction-Site-Stormwater-Run-Off-Control.cfm>)
- Mn/DOT – Erosion and Sediment Control Pocketbook Guide:
(<http://www.dot.state.mn.us/environment/erosion/pdf/2006mndotecfieldhandbook.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/bureaus/burconsmain/Connections/swppp.asp>).

b. 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.

c. 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.

d. 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.

e. Biodegradable Logs. Install biodegradable logs 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.

Do not use straw logs 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.

f. 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.

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

h. Temporary Ditch Check (Rock). Use rock and aggregate filler 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. Aggregate filler may be part of an aggregate ditch lining.

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

i. 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.

j. 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.

k. 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.

l. 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.

m. Soil Erosion Mix. Prepare the seedbed, fertilize and seed according to **DIVISION 900**. Lightly hand rake broadcasted seed before placement of the erosion control.

Only use the soil erosion mix under Erosion Control (Class 1) or Erosion Control (Class 2).

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

o. Erosion Control. After seeding and fertilizing 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 901.3b**.

Use Erosion Control materials for the stabilization of all steep slopes (2 ½:1 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 1). Place the Erosion Control (Class 1) on slopes according to the SWPPP. Do not mulch over the Erosion Control (Class 1).

(2) Areas with Erosion Control (Class 2). Place the Erosion Control (Class 2) 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.

p. 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 Engineer.

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. Monitor 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.

902.4 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 (**SECTION 109**) 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 901** requires.

The Engineer will measure temporary fertilizer, temporary seed and soil erosion mix by the pound.

The Engineer will measure erosion control by the square yard.

The Engineer will measure 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.

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.

SECTION 904 SEEDING

Page 900-13, delete subsection 904.3a and replace with the following:

a. Seeding Seasons.

(1) Projects less than 1 acre (bid item "Seeding" per lump sum). Seed the area anytime of the year with the seed specified in the Contract Documents.

(2) Projects 1 acre or greater (bid item "Seed (*)" or "(Hydro)(*)" per pound). Determine the seeding season using **TABLE 904-1**.

| Type | Season |
|--|--|
| Cool Season Grasses | February 15 thru April 20 August 15 thru September 30 |
| Warm Season Grasses and Wildflowers | November 15 thru June 1 |

If cool season grasses are mixed with warm season grasses, seed the area during the seeding season for warm season grasses.

Seed the project during the proper seeding season to protect the finished grading. This may require seeding different parts of the project at different times or seasons. Complete permanent seeding during the first season after the grading work is finished. Complete the area once the seeding operations begin in an area.

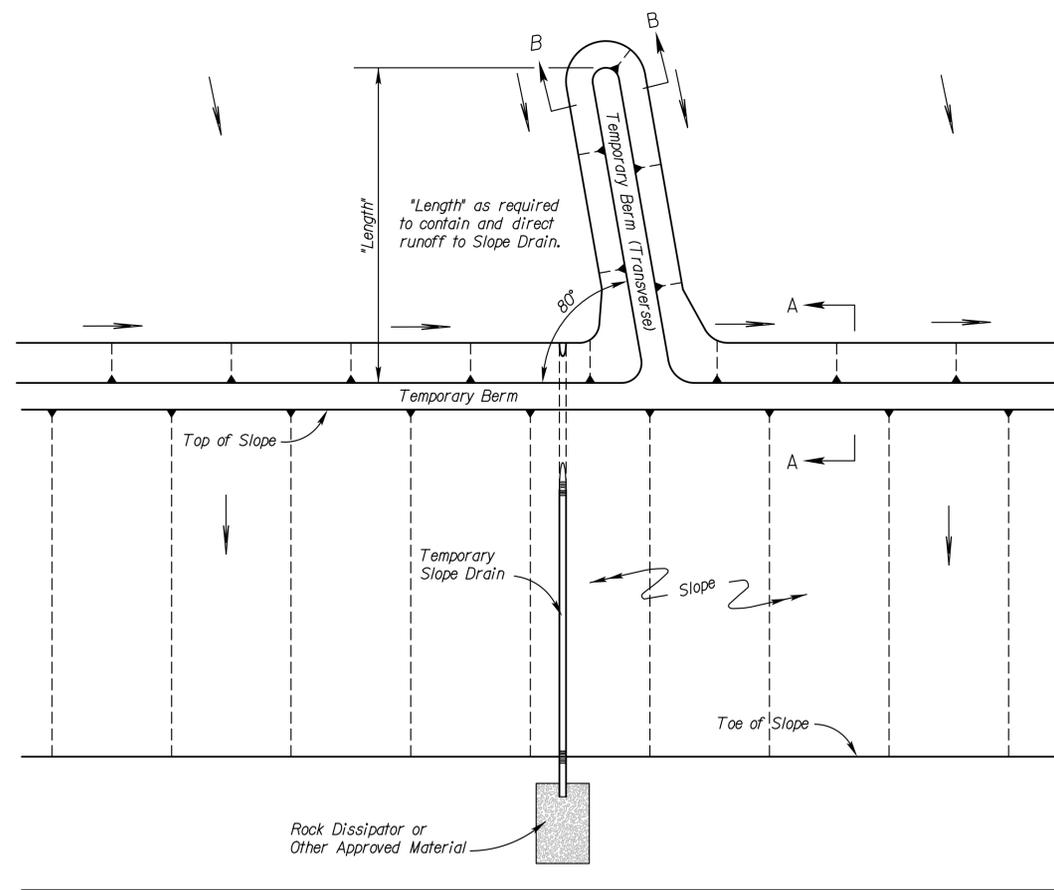
The Environmental Scientist or Stormwater Compliance Engineer may extend the seeding season a few days in special situations depending on area and weather conditions.

Page 900-14, delete subsection 904.3e and replace with the following:

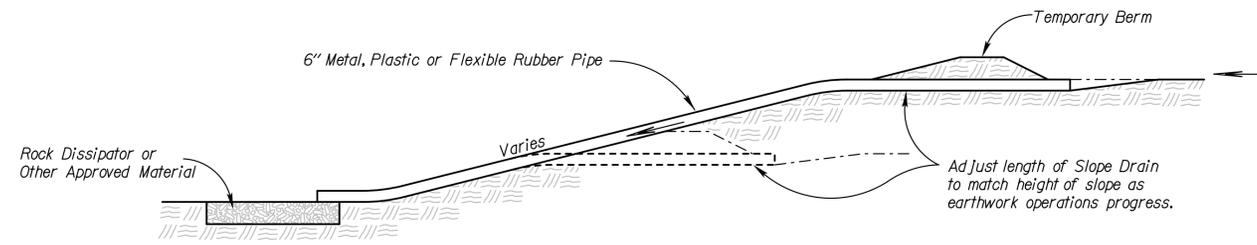
e. Seeding/Lump Sum. This item is only used on projects with less than 1 acre of seeding.

Prepare the seedbed, fertilize, seed and mulch all disturbed or cultivated areas within the right-of-way and construction easements according to **DIVISION 900**. This item includes all seeding and mulching necessary to meet stabilization requirements in **SECTION 901**, and includes both temporary and final surfaces. Multiple mobilizations may be required depending on how the Contractor pursues the work.

| | | | | |
|--------|-------------|------|-----------|--------------|
| STATE | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
| KANSAS | | 0 | | |

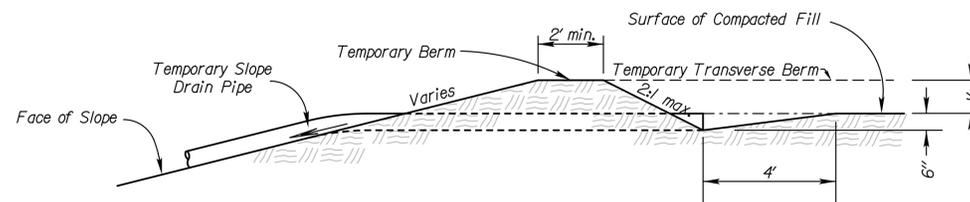


TYPICAL PLAN VIEW OF
TEMPORARY BERM AND
TEMPORARY SLOPE DRAIN
NO SCALE

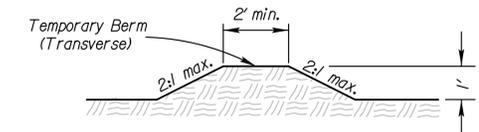


TYPICAL PROFILE OF TEMPORARY SLOPE DRAIN
NO SCALE

- NOTES:
- 1) Temporary Slope Drain and Temporary Berm may be used on either project foreslopes or project backslopes.
 - 2) Discharge of Slope Drains shall be into stabilized ditch or area, or into Sediment Basin.
 - 3) Pipe shall be secured in place as approved by Engineer.
 - 4) Temporary Berms under 2,000 feet shall be bid by Set Price.



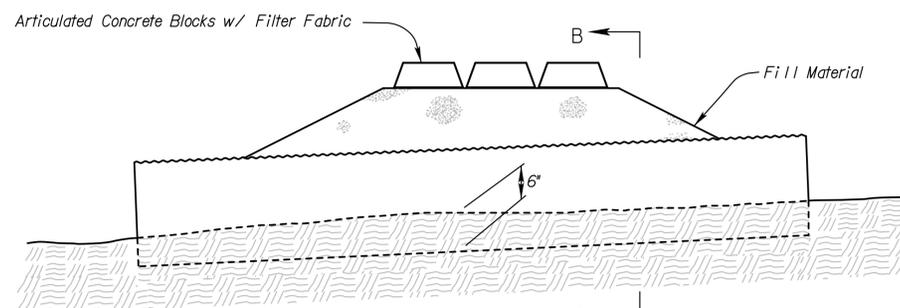
SECTION A-A
NO SCALE



SECTION B-B
NO SCALE

TYPICAL PROFILE OF TEMPORARY BERM
NO SCALE

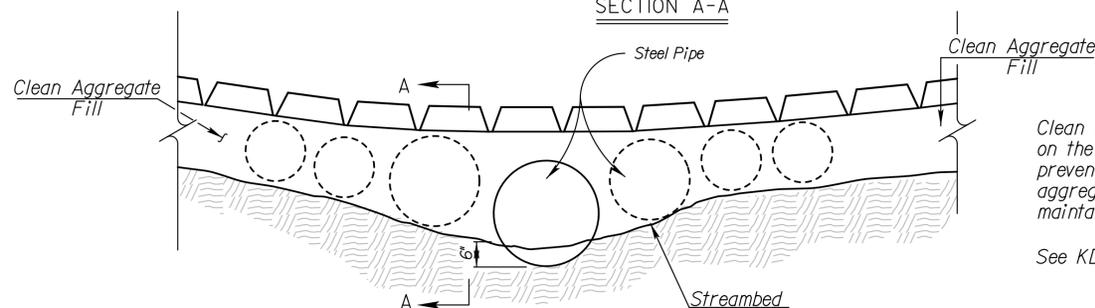
Std. Base File:
Plot+text: KDOT\CADD\Support\teks\plot Location:
File: ta852b.dgn
Plot Date: 26-JAN-2022 08:00



SECTION A-A

Pipe size may vary.

Place 1 pipe buried 6" into 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.

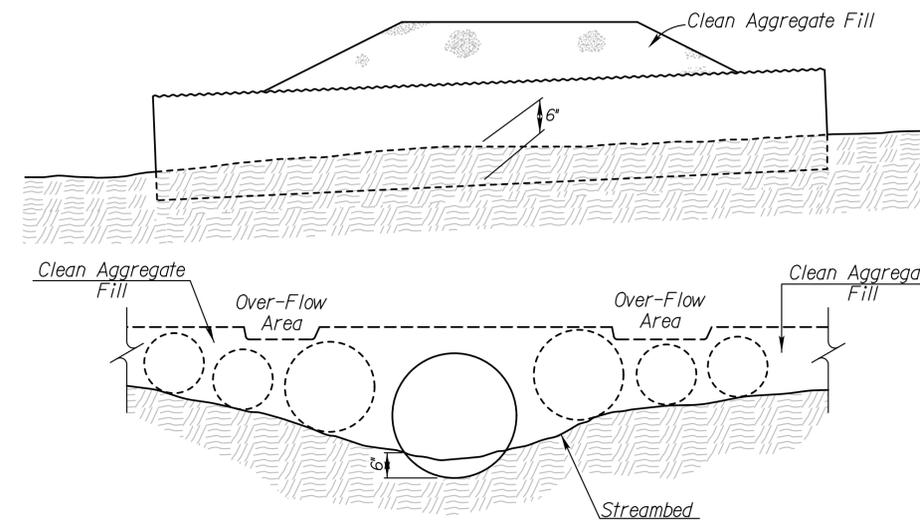


SECTION B-B

TEMPORARY STREAM CROSSING (ARTICULATED CONCRETE BLOCKS)
NO SCALE

Clean aggregate fill will extend a minimum of 50' on the entrance and exit side of the crossing to prevent tracking. The aggregate shall be clean aggregate and a minimum of 6" thick and will be maintained through the use of the crossing.

See KDOT Specifications for more information.



SECTION B-B

TEMPORARY STREAM CROSSING (AGGREGATE)
NO SCALE

Pipe size may vary.

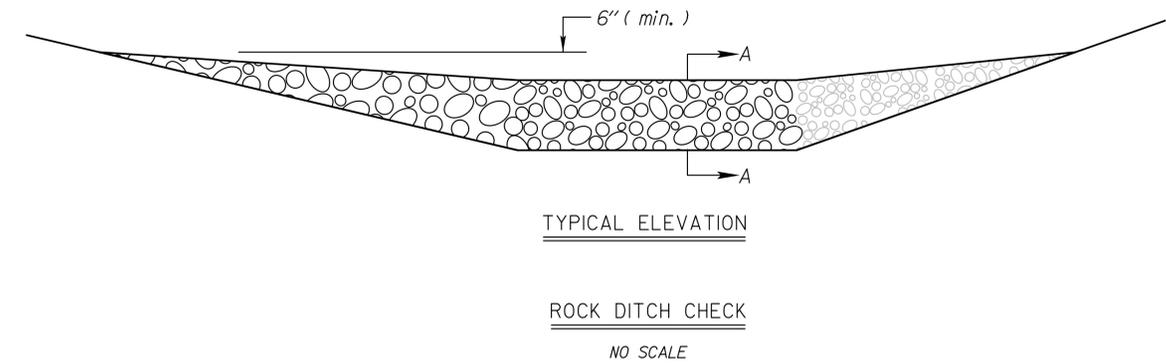
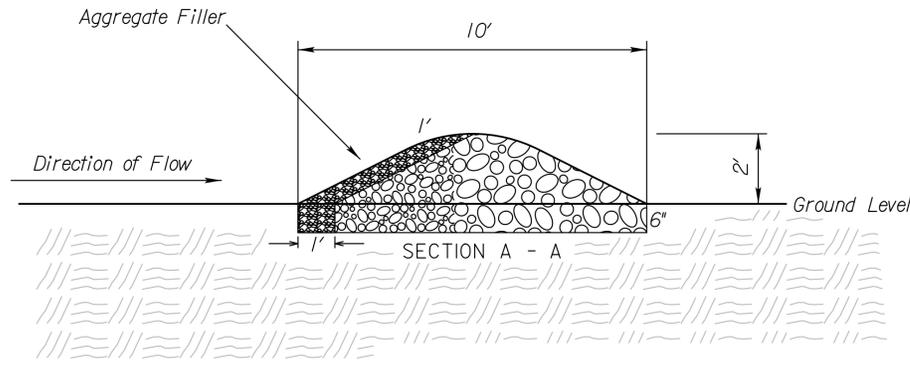
Place 1 pipe buried 6" into stream bottom, in the lowest point of the channel to allow the passage of aquatic organisms, with additional pipes placed along the remainder of the stream channel bottom such that ordinary high water (OHW) flows designated in the Contract Documents shall flow through the pipes without overtopping the crossing.

Clean aggregate fill will extend a minimum of 50' on the entrance and exit side of the crossing to prevent tracking. The aggregate shall be clean aggregate and a minimum of 6" thick and will be maintained through the use of the crossing.

See KDOT Specifications for more information.

| | | | | |
|-----|---------|--|-----|-------|
| 3 | 1/21/22 | Temp Stream Crossing - Clean Aggregate Fill Note Added | MRD | ML |
| 2 | 8/24/21 | Temp Stream Crossing - Clean Aggregate Fill Note Added | MRD | ML |
| 1 | 6/11/13 | Revised Standard | MRM | SHS |
| NO. | DATE | REVISIONS | BY | APP'D |

| | | | |
|---|----|------------|-------------|
| KANSAS DEPARTMENT OF TRANSPORTATION | | | |
| TEMPORARY EROSION AND POLLUTION CONTROL | | | |
| TEMPORARY STREAM CROSSING (AGGREGATE) | | | |
| TEMP. STREAM CROSS. (ARTC. CONC. BLOCKS) | | | |
| LA852B | | | |
| DESIGNED | ML | DATE | 1/21/2022 |
| APP'D | ML | QUANTITIES | APP'D |
| DESIGN CK. | ML | QUAN. CK. | CADD CK. |
| | | | Merlyn Lane |



| TEMPORARY ROCK DITCH CHECK SPACING | |
|------------------------------------|-------------------------|
| DITCH & SLOPE (%) | SPACING INTERVAL (FEET) |
| 5.0 | 60 |
| 6.0 | 50 |
| 7.0 | 43 |
| 8.0 | 36 |
| 9.0 | 33 |
| 10.0 | 29 |

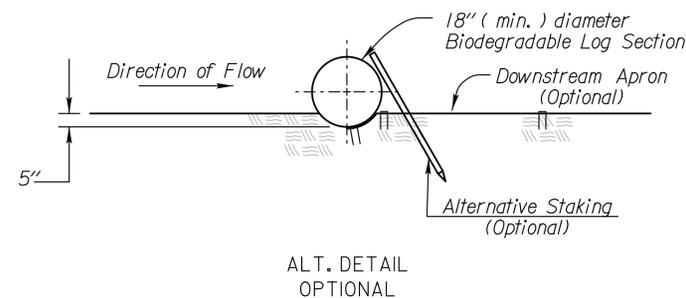
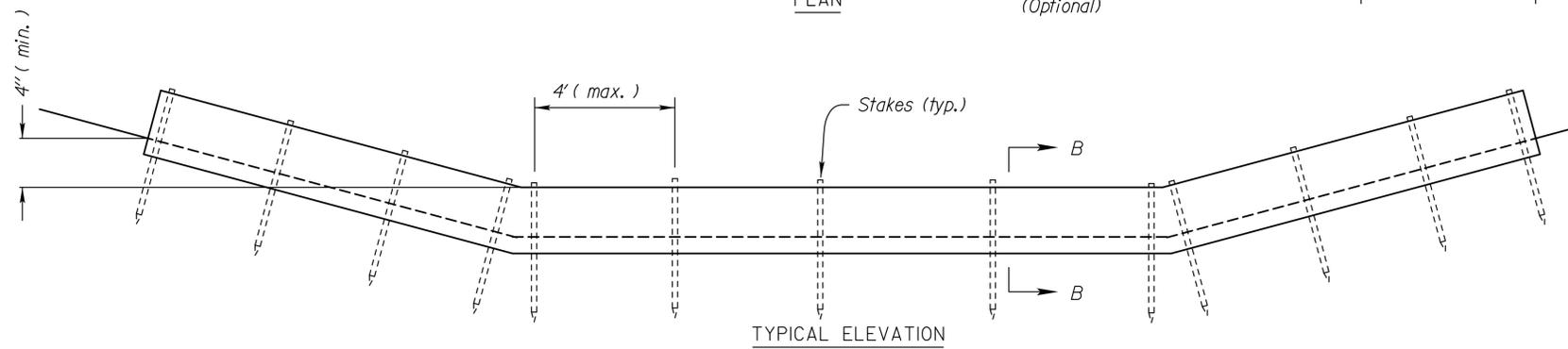
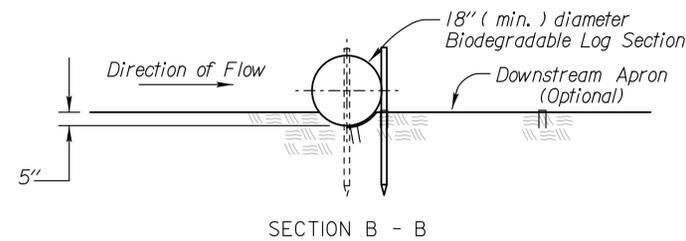
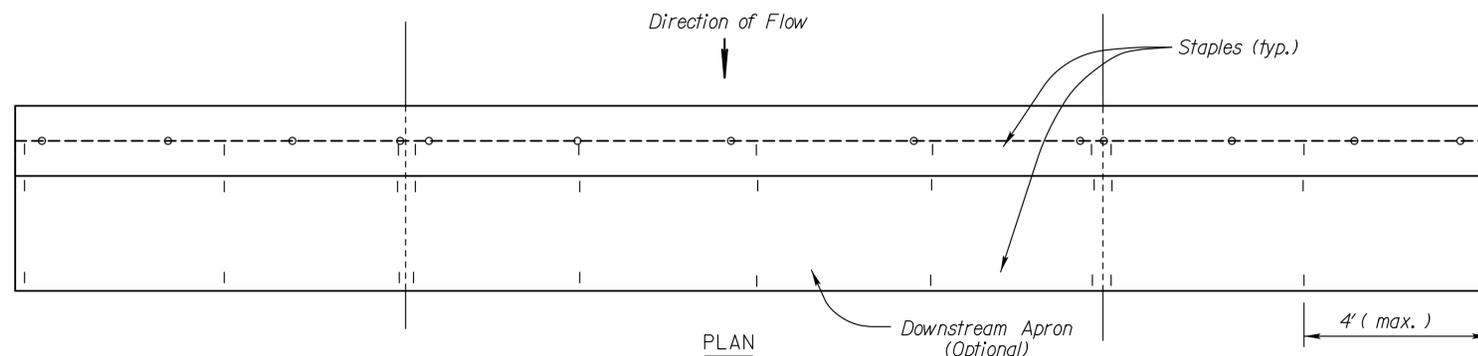
NOTE: Use this spacing for Rock Ditch Checks only.

ROCK DITCH CHECK NOTES

1. Rock shall be clean aggregate, D50-6" and aggregate filler.
2. Place rock in such manner that water will flow over, not around ditch check.
3. Do not use rock ditch checks in clear zone.
4. Excavation: The ditch area shall be reshaped to fill any eroded areas. Prior to placement of the rock, the ditch shall be excavated to the dimensions of the Rock Ditch Check and to a minimum depth of 6" (150mm). After placement of the rock, backfill and compact any over-excavated soil to ditch grade. This work shall be subsidiary to the bid item Temporary Ditch Check (Rock).
5. Aggregate excavated on site may be used as an alternate to the 6" rock, if approved by the Engineer.
6. The Engineer may approve the use of larger aggregates for the downstream portion of the check when conditions warrant their use.
7. When the use of larger rock is approved, D50-6" rock will be placed between the larger aggregate and the aggregate filler.
8. Aggregate filler will be placed on the upstream face of the ditch check. Aggregate filler will comply with Filter Course Type I, Division 1114.

BIODEGRADABLE LOG DITCH CHECK NOTES

1. Use as many biodegradable log sections as necessary to ensure water does not flow around end of ditch check.
2. Overlap sections a minimum of 18".
3. Stakes shall be wood or steel according to Section 2114 of the Standard Specifications. Length of stakes shall be a minimum of 2 x the diameter of the log.
4. Use Erosion Control (Class I) (Type C) as the downstream apron when required.
5. A downstream apron is required when directed by the Engineer. Apron material will be paid at the contract unit price.
6. Each log or sock (except compost filter socks) should be keyed into the ground at a minimum of 25% of its height. Compost filter socks should be placed on smooth prepared ground with no gaps between the sock and soil.



BIODEGRADABLE LOG DITCH CHECK
OR Filter Sock Ditch Check
NO SCALE

| NO. | DATE | REVISIONS | BY | APP'D |
|-----|----------|------------------|-----|-------|
| 3 | 11/19/20 | Revised Standard | MRD | ML |
| 2 | 8/10/15 | Revised Standard | RAA | SHS |
| 1 | 10/21/15 | Revised Standard | RAA | SHS |

KANSAS DEPARTMENT OF TRANSPORTATION
TEMPORARY EROSION AND POLLUTION CONTROL
ROCK DITCH CHECKS
BIODEGRADABLE LOG DITCH CHECKS

LA852G

| | | | | | | |
|------------|----|------------|----|------------|----------|-----|
| DESIGNED | ML | DETAILED | DK | QUANTITIES | CADD | RAA |
| DESIGN CK. | ML | DETAIL CK. | ML | QUAN. CK. | CADD CK. | RAA |

Mervin Lare

Std. Base File: la852g.dgn
 Plot Tech: KDOT-CADD-Support\teks.gbl
 File: la852g.dgn
 Plot Date: 24-NOV-2020 01:01



LIST OF PREQUALIFIED EROSION CONTROL PRODUCTS [2015 – SS 2113]

PQL – 34.1

REVISED – 12/22/21

CMS MATERIAL CODE GROUP (193)

The Contractor has the option of utilizing the following approved products in accordance with the Class and Type as specified on the plans. The types are ranked based on their effectiveness with Type C being the lowest and Type H being the highest. Substitution of a more effective product than what is specified is permitted. The current Approved Products List may be found on KDOT's webpage at: <http://www.ksdot.org/Assets/wwwksdotorg/bureaus/burMatrRes/PQL/pql-34-0.pdf>.

Direct all questions to the Stormwater Compliance Engineer, Bureau of Construction and Materials, Eisenhower State Office Building, 700 SW Harrison, Topeka, KS 66603. Phone (785)250-4793. Email ksdot.stormwaterinspection@ks.gov

CLASS 1 "SLOPE PROTECTION" Type C – Slopes Steeper than 3:1 – CLAY Soils:

AEC Premier Straw/Coconut
BioMac S1
BioMac SC
Excel S-1
Excel SR-1 All Natural
Greenfix CFS072R
Greenfix WS05
North American Green® S75BN
S1000 Single Net Straw
US-2X

**CLASS 1 “SLOPE PROTECTION”
Type D – Slopes Steeper than 3:1 – SANDY Soils:**

AEC Premier Coconut
AEC Premier Straw Double Net
BioMac SS 027.2
Curlex™ I
Curlex™ I CL
Curlex™ II CL
ECB S32 Double Net Straw
ECS-2
ETRS-2 Erosion Tech
ETRS-2BN Erosion Tech
Excel RC-1
Excel SS-2
GreenSolutions DNS2
GreenSolutions SNS 1
Kansas Erosion Product S2
North American Green® C125
North American Green® S150
Rhino Erosion King Single Net
Tackmat S
Tackmat X
TerraGuard DS
US-2S
WintersCoir
Winters Straw HV

APPROVED PRODUCT LIST
ITEM 169 "SOIL RETENTION BLANKET"

CLASS 2 - "FLEXIBLE CHANNEL LINER"
Type E - Shear Stress Range (Up to 2 Pounds Per Square Foot):

BioMac N20
Enkamat 7020
Excel CC-4 All Natural
Excel CS-3
Excel CS-3 All Natural
Greenfix CFG
KEP-SC2
KEP-SC2 Natural
KEP-C100
KEP-C100 Natural
North American Green® TMax 3K
SEC XL2

CLASS 2 - "FLEXIBLE CHANNEL LINER"
Type F - Shear Stress Range (Up to 4 Pounds Per Square Foot):

AEC Premier Straw/Coconut
BioMac C
Contech Coconut Mat w/Kraft Net
Curlex® II Stitched
Curlex® II (.98)
Curlex® II CL
Curlex® III Stitched
Curlex® Enforcer I
ECB PS42
ECB SC 32 Double Net Extended Term
ECP-3
ETSC 7030 Erosion Tech
Excel CC-4
Excel R-1
Excel SD-3
Greenfix CFG 2000
Greenfix CFO 72RR
Landlok® CS2
Landlok® C2
North American Green® C125BN
North American Green® C350
North American Green® SC150BN
North American Green® P300

**CLASS 2 - "FLEXIBLE CHANNEL LINER
Type G - Shear Stress Range (Up to 6 Pounds Per Square Foot):**

Curlex® Enforcer
Earth-Lock
Earth-Lock II
ECB EX32
ECP-3 Straw/Coconut TRM
Enkamat 7018
Greenfix CFG 2000
Greenstreak Pec-Mat
Koirmat™ 700
Landlok®TRM 1060
Multimat 100
TMax 3k

**CLASS 2 - "FLEXIBLE CHANNEL LINER
Type H - Shear Stress Range (Up to 8 Pounds Per Square Foot):**

| | |
|--------------------------------|---|
| Biomac CC 025.3 | |
| Channel Soxx | Multimat 100 |
| Contech C-35 | North American Green® 300 |
| Contech TRM C-45 | North American Green® 300 LW |
| Contech C 50 | North American Green® C350 |
| Contech Coconut/Poly Fiber Mat | North American Green® P350 |
| ECB P42 TRM | North American Green® SC250 |
| ECC-3 Coconut TRM | North American Green® P550 |
| ECP-2 10 oz Polypropylene TRM | North American Green® TMax 3K |
| ECP-3 | Pyramat ® |
| ECSC-3 Straw/Coconut TRM | Recyclex TRM |
| ETPP-10 Erosion Tech | Recyclex TRM-V |
| Excel PP5-Heavy Duty | |
| Excel PP5-8 | SEC P2 |
| Excel PP5-10 | StayTurf® ~ <i>A fully vegetative product that requires an establishment period</i> |
| Excel PP5-12 | T-RECS |
| GreenArmor 7020 | Webtec Terraguard 44P |
| Haymark HMI-350PP | Webtec Terraguard 45P |
| Landlok® TRM 435 | Winters Turf |
| Landlok® TRM 450 | WIF WINFAB Diamondback 4030 |
| Landlok® TRM 1051 | WIF WINFAB Diamondback 4030V |



LIST OF PREQUALIFIED HYDRAULIC EROSION CONTROL PRODUCTS(HECP)

[2015 – SS 2110]

PQL – 34.2

REVISED – 07/23/21

CMS MATERIAL CODE GROUP (187)

The Contractor has the option of utilizing the following approved products in accordance with the Class and Type as specified on the plans. **The types are ranked based on their effectiveness with Class A being the lowest and Class C being the highest. Substitution of a more effective product than what is specified is permitted.** The current Approved Products List may be found on KDOT's webpage at: <http://www.ksdot.org/Assets/wwwksdotorg/bureaus/burMatrRes/PQL/pql-34-0.pdf>.

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HECP Class "A" Maximum Slope 4:1- Minimum Application Rate 1800lb/acre

Hydrostraw Guar Plus Formulation
Hydro-Blanket

HECP Class "B" Maximum Slope 3:1- Minimum Application Rate 2500lb/acre

Hydrostraw Bonded Fiber Matrix
Proganics Dual

HECP Class "C" Maximum Slope 2:1- Minimum Application Rate 3500lb/acre

EarthGuard Fiber Matrix
EcoMatrix
Rainier Supreme
ProMatrix
Rainier Fiber Bonded Fiber Matrix
NaturesOwn X9000
NaturesOwn Evolution
CocoFlex Et-FGM
EcoFlex HP-FGM
Flexterra HP-FGM
Soil Guard
Spray Matrix

APPENDIX E

Construction Project Stormwater Compliance Plan

KDOT Construction Project Stormwater Compliance Plan

1. Personnel

- a. All persons performing inspections shall have a current KDOT Construction Stormwater Training (CSW) certification. See section 10 for additional information regarding the training program.
- b. Contractor's Water Pollution Control Manager (WPCM) and KDOT's Area / Metro Engineer shall maintain a current KDOT CSW certification.
- c. If the WPCM is replaced during the course of a project the replacement shall maintain a current CSW certification. The Area Engineer will be notified in writing of any such change in WPCM.
- d. If, during the course of the project, the designated Area/Metro Engineer is unavailable due to vacation, illness or other similar reasons, their responsibilities shall be assigned to another Area Engineer, the District Construction Engineer or other person of similar authority. The project Inspectors and the WPCM shall be notified of any such change in Area Engineer.
- e. Area / Metro Engineer Responsibilities:
 - i. Review and approve Contractor Stormwater Pollution Prevention Plan (SWPPP)
 - ii. Supervise all work necessary to meet stormwater requirements on the project.
 - iii. Order employees, contractors and sub-contractors to take appropriate action as necessary 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.
 - iv. Be familiar with the project SWPPP and have the authority to modify the project SWPPP or approve modifications recommended by others.
 - v. Review and sign all inspection reports within 3 days after receiving such reports
 - vi. Be the point of contact for the project for regulatory officials, KDOT employees, contractors, sub-contractors and consultants regarding stormwater requirements
- f. WPCM Responsibilities:
 - i. Supervise all work performed by the Contractor and sub-contractors that involves stormwater requirements or affects stormwater compliance.
 - ii. Order Contractor employees and sub-contractors to take appropriate corrective action as necessary 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 modifications or amendments to the Area Engineer
 - v. Be the point of contact for KDOT regarding stormwater compliance
 - vi. Review and sign inspection reports within 3 days after receiving such reports, acknowledging awareness of any deficiencies and ensuring the correction of all deficiencies.
 - vii. Maintain SWPPP documentation and site maps to track installation and removal of BMPs throughout the project and ensure modifications are properly documented
- g. Inspector Responsibilities
 - i. Be familiar with the project SWPPP
 - ii. Perform project inspections for compliance with the permit
 - iii. Recommend SWPPP modifications to the Area Engineer and WPCM

KDOT Construction Project Stormwater Compliance Plan

2. Pre-Construction Conference

- a. A stormwater pollution pre-construction conference shall be held prior to beginning work on each project that requires permit coverage.
- 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. Initial disturbed areas to be called out on the 247E form
 - iii. Responsibility for installation, inspection and maintenance of devices
 - iv. 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

3. General Inspection Requirements

- a. Routine and post-rainfall inspections shall be conducted jointly by Contractor and KDOT.
- b. Inspection requirements begin upon issuance of the Notice to Proceed. Exceptions shall be approved by the Stormwater Compliance Engineer.
- 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 SWPPP site map shall be consulted and updated during each inspection to ensure inspection and documentation of all BMPs implemented on the project.
- 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. Minor adjustments to locations or quantities of BMPs may be made based on agreement between the WPCM and KDOT inspectors. Significant changes to types of BMPs used or changes in overall erosion and sediment control strategy may require the approval of the Area/Metro Engineer.
- f. All BMPs present on the project are to be inspected. Multiple inspectors may be required in order to complete the inspections within the required time frame.
- g. Taking pictures is recommended. 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 shall be jointly measured and documented according to the requirements in the permit.
- i. The Contractor's responsibility to conduct inspections and maintain or correct identified deficiencies shall continue until the Engineer issues the Notice of Acceptance or a partial Notice of Acceptance when all physical work on the project is complete. The required 180-day observation period for pavement markings is not considered to be physical work.

KDOT Construction Project Stormwater Compliance Plan

4. Frequency of Inspections
 - a. Projects will be inspected at a frequency compliant with the KDHE General Permit.
 - b. Oversight inspections shall be scheduled according to section 7 of this document.
 - c. Additional project-level or oversight inspections may be scheduled if needed to ensure compliance with the Permit and project specifications. This may be due to changes in construction sequence, completion of major project milestones or at other times as determined by the project staff or the Stormwater Compliance Engineer.
5. Required forms
 - a. Only the approved Form 247 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.
 - c. Electronic Inspection reporting or alternative forms may be used with the approval of the Stormwater Compliance Engineer.
6. Submittal of Reports
 - a. Inspection reports are to be submitted to the Area / Metro Engineer no later than the next business day following the day of the inspection.
 - b. Inspection reports are to be submitted to the Contractor's WPCM no later than the next business day following the day of the inspection.
 - c. Inspection reports signed by the Area / Metro Engineer and WPCM shall be electronically submitted to KDOT.stormwaterinspection@ks.gov within 3 business days of the inspection.
7. Oversight Inspections
 - a. Independent inspectors will be assigned to perform oversight inspections on selected projects.
 - b. Independent inspectors will not be assigned to perform Oversight Inspections within their own District.
 - c. Oversight inspection reports will be completed and submitted according to section 6 of this document.
 - d. Oversight inspection frequency will be determined by the Stormwater Compliance Engineer (SWCE) based on the following risk factors:
 - i. Project scope
 - ii. Project size and/or complexity
 - iii. Proximity to environmentally sensitive areas
 - iv. Special environmental concerns or permit requirements
 - e. Oversight inspectors will be assigned as follows:
 - i. 1-5 Acres: No fulltime oversight inspector needed, but at least 1 oversight done during the life of the project. District Mentors, Construction Engineers/Managers (CE/CM) and SWCE will be assigned to these projects.
 - ii. 5.01 to 24.99 Acres: Oversight inspections every 90 days. Mentors, CE/CM and Field Engineering Administrators will be assigned to these projects.
 - iii. 25 to 99.99 Acres: Oversight inspections every 90 days. Area Engineers, District Construction Engineers, and District Maintenance Engineers would handle these projects.
 - iv. 100 and Above: Oversight inspections every 90 days. Headquarter personnel would handle these projects.

KDOT Construction Project Stormwater Compliance Plan

8. Post-Construction Inspections

- a. Project site inspections are to be continued by the owner at the same frequency following the Notice of Acceptance or Partial Notice of Acceptance to the Contractor until the Notice of Termination is submitted to KDHE.
- b. Include a copy of the Notice of Acceptance or Partial Notice of Acceptance with the SWPPP documentation.
- c. The Area Engineer is responsible to ensure that any discovered deficiencies are completed in compliance with the Permit.

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 or construction office for no less than three years following submittal of the Notice of Termination or no less than three years following termination of the Consent Decree (if applicable). Notify the Stormwater Compliance Engineer if the records will be kept at an alternate location.

10. Construction Stormwater Training

- a. CSW certifications will be valid for a period of four years.
- b. All Area/ Metro Engineers, Inspectors and WPCMs will be required to be current with the CSW certification.
- c. Individuals may be disqualified and/or lose their certification status in accordance with the procedures outlined in the KDOT Policy and Procedure Manual for The Certified Inspection and Testing Training (CIT) Program.

11. Stormwater Newsletter

- a. The Stormwater Compliance Engineer will prepare and electronically distribute a quarterly newsletter to KDOT staff, contractors and other interested parties.
- b. Stormwater newsletters will contain information relevant to stormwater management on KDOT construction projects.
- c. Stormwater newsletters will be posted and maintained on the KDOT website.

12. Annual Report

- a. The Stormwater Compliance Engineer will prepare an annual report on stormwater compliance for each calendar year.
- b. This report will summarize actions taken to improve state-wide practices related to stormwater management on construction projects.
- c. This report will be posted and maintained on the KDOT website.