One of the most readily apparent changes in our SWPPPs over the past few years has been a dramatic increase in the usage of erosion control blankets. Blankets have, in many applications, replaced more “traditional” BMPs such as ditch checks and slope barriers for erosion control. Many of us have now seen first hand the benefits of using blankets to stabilize finished slopes and ditches. Use of blankets for vegetation establishment without relying on barrier devices which often pond water improves results and reduces maintenance.

Like any technology, blankets have drawbacks and pitfalls. Blankets can be overwhelmed by high flow rates, or unfavorably dry weather conditions can cause the vegetation to die off. They also have a relatively high cost of installation, requiring significant labor and time for proper placement.

While we cannot control the weather, there are many factors we can control which impact the success or failure of our blanket installations. One such factor is in the selection of the particular blanket to be installed. The KDOT Pre-Qualified List includes erosion control blankets which have been tested and approved for use in various conditions. The class and type of blankets is specified during project design based on specific site characteristics such as degree of slope, soil type and expected flow. Making sure the product used in the field matches the specified material is a very important first step.

Once the appropriate material is on site the next factor we control is the installation. Very often our blanket “failures” can be traced back, at least in part, to improper installation. Excellent blanket installation begins with preparation of the underlying soil. A good seedbed free of clumps and clods is the ideal surface for blanket placement. This should, of course, begin immediately upon completion of the grading work.

Before placing the blanket over the properly prepped and seeded soil the installers and the inspector should review the installation standards and make sure any questions are answered or discrepancies addressed before the product is installed. Particular attention should be paid to the location of anchor trenches, staple checks and the overall staple pattern. As a general rule, the “uphill” edge of all blankets (including the sides of channel linings) should be secured in an anchor trench. “Staple checks” are typically required at 30-foot intervals along the length of each blanket. Additional staples are required over the rest of the blanket to secure it to the surface and maintain intimate contact with the soil. Failure to properly secure the blanket can lead to undercutting, “tenting” of the blanket as the vegetation lifts it off the ground, or physical displacement of the blanket itself.

The commonly used blanket types C, D, E, and F are generally uniform in installation requirements. Heavier blanket types may require special anchors or other procedures and the manufacturer’s guidelines should always be consulted before installation.

Upon completion of blanket installation we should always consider the need for watering the completed work. Water promotes vegetation and can greatly increase the success of our blanket installations.
Standard Drawing Revisions

A number of revisions to erosion control standard drawings have been completed and are planned for implementation in the January, 2017 letting. This update was intended to resolve some inconsistencies in the drawings and also to remove some unused details while providing more focus on structural BMPs that are commonly used on KDOT projects. Among these changes, you will notice the detail for silt fence ditch checks has been removed. The drawings for biodregradable log, filter sock and rock ditch checks have been revised and new details added.

In addition to the standard drawing revisions, changes have been made to the process for estimating initial quantities of SWPPP related items. Items such as filter socks and biodegradable logs should be seen in greater quantities while silt fence quantities should decrease somewhat.

Mulching items have also been modified. The old items for Mulching (Temporary) and Mulching (Permanent) have been eliminated and replaced with a single item, Mulching. This should reduce confusion regarding the separate items and simplify payment tracking for contractors and inspectors. Contracts should include an estimated mulching quantity based on 150% of the total seeding area for the project.

Contractors and inspectors should review their projects carefully for these changes.
Training Update
Classes have been scheduled and enrollment is open for 2017. KDOT CIT classes are available March 27-28, March 29-30, May 1-2, May 3-4 and June 7-8. Registration is online, visit http://citksu.com for details.

The Kansas Contractors Association (KCA) also sponsors classes. Their classes will be held February 8-9 and February 28-March 1. Contact the KCA for details and registration.

Everyone should review their recertification dates and enroll in the appropriate classes to ensure the certifications do not lapse. Classes may be canceled due to insufficient enrollment so please register early.

KDHE General Permit Update
KDHE is currently working on revisions to the construction stormwater general permit. The current version of the permit, issued in 2012, will expire March 2017. A draft permit is expected to be published for public review and comment some time within the next few months. More information will be shared as it becomes available.

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 Jason Van Nice (jason.vannice@ks.gov) for questions, comments or suggestions for future content.