Fall 2018 Update

2018 has been a busy year for stormwater for a multitude of reasons. The incredibly wet summer & fall season coupled with a heavy amount of construction permits meant plenty of challenges for City staff dedicated to drainage and stormwater quality. Many important topics are covered within this issue, so take the time to comb through and find out something new!

**MICS Program Standards**

An important challenge to highlight for 2018 is related to the minor impact construction site (MICS) program for individual lots disturbing less than an acre within a larger common plan of development. The MICS program places erosion & sediment control (ESC) responsibility of the lot unto the property owner and builders. There is still some confusion surrounding who is responsible for what in terms of a development’s ESC. Take a look at page 2 to refresh and educate yourself on responsibilities of developers, property owners, and builders in a standard MICS situation.

**Permit Discrepancies**

The busy summer season brought many site SWPPP’s under scrutiny. With that, there were some common differences noted between current SWPPP practices within Sioux Falls and what is intended within the new SDDENR General Permit for Stormwater Discharges. Take a look at page 3 for more details.

**Stormwater Enforcement**

Greater emphasis was given to enforcement of common erosion control problems in 2018.

**2018 Annual Stormwater Seminar Announcement**

Find out when and where the 2018 Stormwater Seminar will take place.
Many questions popped up during this wet season regarding the responsibilities of property owners, builders, and developers. MICS non-compliant locations within the City tested the reach of the MICS program and provided numerous educational opportunities regarding proper responsibilities. The following information is intended to clarify home builders’ and developers’ responsibilities regarding SWPPP maintenance.

The MICS program was created with the intention of stipulating responsibilities for individual home builders within a larger common plan of development. Under this program both the individual lot owner and the subdivision developer share ESC responsibilities. When the lot property owner signs the Notice of Stabilization as stipulated in Chapter 12 of the Sioux Falls Engineering Design Standards they are accepting ESC responsibility for the lot. To clarify, once the lot is sold by the developer to another party any sediment tracking onto paved streets, lack of bmp’s for filtering runoff, and other general ESC issues are the responsibility of the lot owner and builder. The subdivision developer is responsible for maintaining all controls stipulated on the development’s Erosion & Sediment Control Plan (ESCP) such as overall inlet protection, perimeter diversion or filtration, and development sediment basins or traps.

The City of Sioux Falls always wishes to work in conjunction with developers when problems arise as the developer is still responsible for the active stormwater permit through the State of South Dakota. This does not mean the developer will be held responsible for issues created by individual lot owners. If any issues can be tied to a specific lot, then the owner of said lot will be held responsible for any cleanup or maintenance. Proper SWPPP compliance in a subdivision setting requires the lot owner to implement necessary bmp’s to minimize the impact of his construction while the developer is also properly maintaining any overall controls such as inlet protections, ditches, and basins.
Common SWPPP Discrepancies Noticed After New SDDENR Stormwater General Permit Implementation

The newly implemented SDDENR General Permit for Stormwater Discharges Associated with Construction Activities has brought a few changes in need of highlighting for those that create and work with SWPPP’s within Sioux Falls and South Dakota. Regular issues State regulators have pointed out include:

1) The need to address site staff SWPPP training on narrative sheets.
2) Not properly addressing construction support areas and site stockpiling.
   a. Many times stockpiles and staging are not properly addressed or do not match up well with what the SWPPP calls for.
3) Most SWPPP’s still need to include provisions for handling dust generation, minimizing site run-on (not runoff), avoiding soil compaction when possible, and preserving as much existing topsoil as is feasible.
4) SWPPP maps should also include what controls are used during different phases of the project.
   a. For example, certain controls will be needed during rough grading that may not be useful once streets and utilities are in place.

One other change was made to the new permit to make inspection timing a little easier on the permittee. Below is the new inspection protocol which should make SWPPP inspection compliance a bit more manageable:

1) The site primary responsible party or inspecting engineer (for CIP) can follow this new SWPPP inspection schedule:
   a. One inspection per week OR
   b. One inspection every two weeks and within 24hrs of any 0.25” rain event.

This new inspection schedule allows the responsible party to choose either weekly inspections or biweekly inspections. If weekly inspections are done, then there is no need to worry about inspecting after a rain event.
Greater Enforcement Emphasis for Common ESCP Issues

Due to the nature of the weather in 2018 and the desire of the City to improve water quality and ESCP compliance, stormwater related code violations jumped by over 200% between 2017 and 2018. The City of Sioux Falls is working toward better compliance with stormwater standards across the City with a focus on educating developers and builders on commonly recurring issues. The most common issues are tied to tracking of sediment onto roadways without proper sweeping operations and the failure to install erosion controls before work begins on a site.

Stormwater code enforcement is not exclusively tied to sites requiring a SDDENR Stormwater Permit. Many instances this year were associated with projects less than 1 acre in size. There appears to be a common misconception for sites less than 1 acre that stormwater regulations do not apply. Smaller sites throughout Sioux Falls have been found without proper controls in place. Because of this issue, a good deal of enforcement this summer was tied to small sites not installing proper controls and allowing sediment laden waters to be conveyed downstream.

Tracking is a ubiquitous problem in Sioux Falls. SWPPP standards stipulate that a site is noncompliant if impacts to paved roadways are not mitigated by the end of the working day. The reasoning behind this stipulation has to do with the context of an urban setting. If sediment is sitting on top of an impervious surface such as a paved road, then there is only one place for the sediment to go. It will be swept up during a storm and end up in the storm sewer system. This is why a more concentrated effort was made in 2018 to enforce tracking violations. Less tracking on roads leads to a cleaner City stormwater system and downstream waters with less drainage and platting fees required to remove associated sediment.

Importance of Proper Sump Inlet Protection Maintenance

Another issue worth highlighting is the importance of proper maintenance of inlet protection (IP) in sump conditions. Sump conditions are generally the lowest elevation of the street with curbs on each side conveying to the inlet. If sump condition areas have construction ongoing they generally receive a higher rate of sediment and pollutant loading. Any existing inlets to the City’s system, especially in sump areas, need to have ESC controls in order to reduce sediment laden waters from being conveyed to receiving waters, i.e. the Big Sioux River. IP devices in sump conditions are required to provide an overflow device to allow conveyance of heavy rains into the inlet. There is a common misconception IP blocks inlets. To clarify, IP is designed to allow water to slowly filter, but effectiveness is lost during rains >0.5” per hour creating the need for an overflow. Because sump conditions generally receive higher sediment loading, is important to maintain sump IP on a regular basis. IP is to be removed only in situations which property damage is likely to occur or public safety is at risk.

Reminder: A big part of maintaining sump area inlet protection is keeping as much sediment and debris from upstream sites off of paved areas. This will reduce the impact to waters reaching the sump areas and help further reduce flooding problems.
Storm Sewer Inlet Curb Marker Program Update

Storm sewer inlet curb markers are placed as part of the educational aspect of the Sioux Falls Stormwater Program. More than 500 inlet markers such as the one depicted below have been placed in 2018. Areas covered so far were near the Midco Aquatic Center, Augustana and USF, Roosevelt High School, Galway Park, McKennan Park, Laurel Oak Park, Dan Dugan Park, and Thomas Edison Middle School.

The goal is to place more than 500 markers each year to greater improve public understanding of the need to protect the local drainage system. With more eyes seeing the simple ‘No Dumping!’ message, odds are improved that less illegal dumping of materials is happening within the City.

2018 Annual Stormwater Seminar Announcement!

The City of Sioux Falls is pleased to announce the 2018 Annual Stormwater Seminar will be held in conjunction with the 2018 Big Sioux River Water Summit on December 6th at the Hilton Garden in Sioux Falls Downtown. The seminar will be held in the morning with the summit to follow in the afternoon.

Many important stormwater subjects will be discussed in the morning and a multitude of interesting speakers will be on hand in the afternoon, so please mark your calendars!