SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Johnson County Gateway - I435/I35/K10

Project Street/Location: I-435 east from 87th ST to US 69 HWY – I-35 from just south of I435 to just north of 95th ST – K10 from Ridgeview Road to I435, College Blvd from Ridgeview Road to Renner Blvd

City: Overland Park, Olathe, and Lenexa State: KS ZIP Code: Multiple

County or Similar Subdivision: Johnson County

Township: 13 South : Range: 24 East

Latitude:
1. 38° 56' 39.44 N (degrees, minutes, seconds)

Longitude:
1. 94° 46' 14.14 W (degrees, minutes, seconds)

Method for determining latitude/longitude:

■ USGS topographic map (specify scale: 1:18,056 inches) ☐ EPA Web site ☐ GPS

☐ Other (please specify): _____

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."_____

Is this project considered a federal facility? ☐ Yes ☒ No

NPDES project or permit tracking number*: KS Permit S-KS34-0248 Federal Permit KSR109025

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate National Pollutant Discharge Elimination System (NPDES) construction general permit.)*

1.2 Contact Information/Responsible Parties

Project Manager(s) or Site Supervisor(s):
Gateway Interchange Constructors
9645 Legler, Lenexa, KS 66219
Ph 816-483-8800 Fax 816-241-6823
Bryan Wilkerson – Project Mgr – Cell ph 816-718-2273 / bwilkerson@clarksonconstruction.com
Billy Clarkson - WPCM – Cell ph 816-804-6845 / beclarkson@clarksonconstruction.com
Brian Cichello - Construction Mgr - Cell ph 816-536-8112 / bcichello@clarksonconstruction.com
Rick Parrot – Site Superintendent – Cell ph 816-810-8729/ rparrot@clarksonconstruction.com

SWPPP Contact(s) and Prepared by:
Erosion Control, Inc.
Margie Sobczynski, CPESC
15720 S Keeler St, Olathe, KS 66062
Cell ph 913-915-0723 – PH 913-397-7324 – FX 913-397-9324 – erosioncontrol@ecikc.com

1.2 Contact Information/Responsible Parties - Continued

Subcontractor(s):

Erosion Control, Inc.
Margie Sobczynski, CPESC - Cell ph 913-915-0723
Dan Sobczynski - Cell ph 913-915-8408
15720 S Keeler St, Olathe, KS 66062
Ph 913-397-7324 Fx 913-397-9324 / Email: erosioncontrol@ecikc.com

Emergency 24-Hour Contact:

Gateway Interchange Constructors –
Billy Clarkson – WPCM – Cell ph 816-804-6845
Brian Cichello - Construction Mgr - Cell ph 816-536-8112
Bryan Wilkerson – Project Mgr – Cell ph 816-718-2273
Rick Parrot – Site Superintendent – Cell ph 816-810-8729

Subcontractor: Erosion Control, Inc. –
Margie Sobczynski - cell ph 913-915-0723
Dan Sobczynski – cell ph 913-915-8408

1.3 Nature and Sequence of Construction Activity

This design-build project consists of the construction of interchange improvements on existing alignment at I-435 / I35 / K10 in Johnson County, KS. The proposed project is being constructed to enhance freeway capacity, provide route continuity, relieve traffic congestion, and improve roadway safety. A series of drainage modifications are being proposed within the project alignment to facilitate roadway construction. Drainage modifications include the extension and addition of reinforced concrete box culverts and bridge construction.

The design-build project is being divided into 12 segments. See **Appendix A for the color coded work area** of each segment. As the design for each segment is completed, the maps and erosion control plans will be approved by The Department and submitted to KDHE before work commences and approved documents updated in the appropriate SWPPP appendixes. Any other additional information needing added to the SWPPP after the design is complete will be added at that time including but not limited to new BMP devices, schedule changes, sequence of activities, etc. Below is the estimated start and completion time of each segment:

Segment – Estimated project start and completion dates per segment

#1 – April 2014 to December 2014
#2 – April 2014 to December 2015
#3 – June 2014 to December 2015
#4 – July 2014 to July 2015
#5 – July 2014 to December 2015
#6 - September 2014 to November 2016
#7 – 2015
#8 – 2015
#9 – 2015
#10 – 2016
#11 – 2015
#12 – 2016

Reference the erosion control plans designed for each segment to be included in Appendix D for the phasing of each segment as the design-build erosion control plans are completed.

Sequence of Activities within each segment:

1. Mobilization
2. Demolition, clearing and grubbing will be performed only as necessary to install initial erosion control devices including but not limited to slope barriers and construction accesses beginning on or around the estimated start time noted above for each segment.
3. Rough grading operations and construction of the interchange improvements will follow the same sequence for each segment with installation of temporary BMP's occurring prior to any site disturbance or significant change in site construction.
4. As operations move and change, the BMP's and the SWPPP plan will be updated as needed.
5. Notify seeding contractor (yet to be determined) prior to commencing with final grading to properly schedule seeding activities to immediately follow grading.
6. Temporary or permanent stabilization activities will commence immediately behind specific discipline construction activities listed above within each segment. See Appendix M for stabilization specifications.
7. Permanent and temporary BMP's will be utilized together at this point. Associated BMP's will be maintained by the Design-Builder until adequate vegetative cover is established and removed as soon as no longer needed.
8. Demobilize

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s):

Soil reports to be provided during the project as available for each segment. Reports will be under separate cover at the construction office. Typical soils known for the area this time are Chillicothe silt loam (36%), Oska-Martin complex (20%), Grundy silt loam (11%) – silt loam to silty clay loam.

Slopes:

Slopes vary throughout the project.

Drainage Patterns:

All current drainage flows to various points along the project. See drainage maps in Appendix C.

Vegetation:

Existing vegetation varies throughout project from road right-of-way to wooded areas along unnamed tributaries to Indian Creek and Mill Creek Watershed.

Description of unique features that are to be preserved:

Unnamed tributaries to Indian Creek and Mill Creek Watershed

Describe measures to protect this feature: Riprap ditch checks, silt fence, excelsior or coir logs, triangular silt dikes, and use of various necessary temporary erosion control measures such as but not limited to seeding, mulching, tackifiers, etc. until permanent soil stabilization is obtained.

1.5 Construction Site Estimates

**The below numbers reflect final design acres specific to this project.*

Total project area to encompass entire project:	Estimated 451 acres
Construction site area to be disturbed:	Estimated 360 acres
Percentage impervious area before construction:	20 %
Percentage impervious area after construction:	43 %

1.6 Receiving Waters

Description of receiving waters: Mill Creek Watershed and Unnamed tributaries to Indian Creek
Description of storm sewer systems: Cities of Overland Park, Olathe, and Lenexa, KS
Description of impaired waters or waters subject to TMDLs (See Appendix N): Indian Creek
Other:

1.7 Endangered Species and Historical Sites Certification

See Appendix G for documentation received from the Kansas Dept of Wildlife and Parks for List of Threatened and Endangered Species.

See Appendix H for documentation received from the Kansas Historical Society.

1.8 Applicable Federal, Tribal, State or Local Programs

Applicable storm water management requirements will be reviewed and updated per the City of Overland Park, Olathe, and Lenexa Stormwater Regulations, the Kansas Dept of Transportation, and the Kansas Dept of Health and Environment.

1.9 Maps

See the site maps in Appendix A, C, and D (erosion control plans to be provided prior to beginning each segment).

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

The Project shall exercise Best Management Practices (BMP's) throughout the project to control water pollution. BMP's that may be used on the project are listed and described below. As the road construction project progresses, this list of erosion and sediment control BMP's may change, adding BMPs as they become necessary. The appropriate erosion control measures and the timing during the construction process that these measures are to be implemented will be determined as the project progresses. Installed BMP's will be identified on the erosion and sediment control design-build plans for each segment as the project progresses. These plans will be updated by the field personnel responsible for them whenever the:

- Work schedules or sequence of construction changes
- Design, operation, or maintenance of BMP's is changed and erosion control BMP's have been installed or removed.
- Design of the construction project is changed that could significantly effect the quality of the storm water discharges
- Permittee's inspections indicate deficiencies in the SWPPP or any BMP
- SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g., there is visual evidence, such as excessive site erosion or excessive sediment deposits in streams or lakes).

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

Clearing of the right-of-way and removal of vegetation will be limited to the minimum width and depth of scraping necessary, using required equipment, safety and engineering design constraints. Vegetation removed from the site will be properly disposed of off-site. Salvaged topsoil will be stockpiled and protected with, but not limited to, the temporary BMP's listed in 2.2 and stabilized as noted in 2.3 until it is reused.

Stockpile and staging areas will be located at least 50 feet from the edge of wetlands, streams or other sensitive areas such as low points in the grade following the project temporary BMP's and stabilization requirements in Appendix J and Appendix M. Temporary BMP's will be installed prior to, or at the time of, ground disturbing construction and will remain in place until permanent measures

have taken effect. They will be maintained until final stabilization and re-vegetation has been achieved. Temporary erosion and sediment controls shall include but not be limited to silt fence, excelsior or coir logs, rock ditch checks, concrete washout, gravel accesses, etc will be installed at the edge of the work area, at storm sewer inlets, culvert pipes, within temporary and completed ditches, bottoms of cut and fill slopes and shall have significant redundancy as necessary, to prevent transport of sediment into any downgrade or adjacent stream, wetland, river, etc. This work shall consist of furnishing, installing, maintaining, and removing temporary erosion control measures as shown on the plans. Final stabilization and re-vegetation will be based upon Kansas Dept of Health and Environment (KDHE) and the Kansas Dept of Transportation (KDOT) as noted by the project specifications in Appendix M. After final stabilization of the disturbed areas has been achieved, all temporary soil erosion and sediment control measures will be removed and properly disposed.

ON LY WHEN NECESSARY and unless requested in writing from the Design-Builder, and approved in writing by the Department, or specified otherwise in the Design Documents, do not exceed 750,000 square feet of surface area of erodible earth material per equipment spread at one time. The WPCM will limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations. Limit the exposed erodible earth material according to the capability and progress, and in keeping with the approved schedule.

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

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

- Finish grade the completed area;
- Seed, mulch, etc. according to DIVISION 900 (See Appendix M); and
- Do not disturb the area again without a written request from the Design-Builder and written approval from the WPCM and the Department;

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

- Rough grade; and
- Seed, mulch, etc. according to DIVISION 900 (See Appendix M)

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

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

2.2 Control Stormwater Flowing onto and through the Project

BMP Description: Silt fence, biodegradable or filter sock logs, temporary berms or slope drains will be installed to control runoff onto and from the site prior to start of construction, continue through progression of project, and removed when final stabilization has been achieved.

BMP Description: Silt fence, biodegradable or filter sock logs, SiltSaver Domes, or other prefabricated protection devices will be installed to control runoff to inlets. One of these BMP's will be installed based on the stage of the inlet construction and the devices used will be revised as needed through the progression of the project to be removed only when final stabilization has been achieved.

BMP Description: Temporary rock access roads will be installed prior to start of construction in designated areas if necessary.

BMP Description: Rock or biodegradable log ditch checks will be installed when necessary to reduce the velocity of flow and to allow suspended sediment to settle. These devices may be installed along with channel liner or erosion control blankets as velocity dissipaters to reduce erosion of concentrated stormwater flows as necessary

toward outfall locations. Reference KDOT Temporary Erosion Control Manual for suggested spacing of ditch checks. http://www.ksdot.org/burconsmain/Connections/ecm.pdf

***BMP Description*:** Biodegradable or filter sock logs in various diameters, channel liners, and erosion control blanket may possibly be used to stabilize slopes and/or inlet protection.

Maintenance Procedures:

- Additional specifics for ditch checks, slope barriers, inlet barriers, sediment basins, erosion control blankets, and temporary seeding are addressed in the *KDOT Temporary Erosion-Control Manual*, http://www.ksdot.org/burconsmain/Connections/ecm.pdf
- Sediment Basins: Final erosion control design for each segment of the project will exploit opportunities for sediment basin locations within the right of way available for the project. Sediment basins will be used for over 10 acres and will be according to KDHE requirements along with Section D(5) of the NOI (See Appendix B). Sediment basins will be constructed to adhere to permit requirements for their size in relation to their protected area. Sediment basins will likely be associated with a single segment of construction and will be operational before construction activity begins for the associated area of work. Sediment basins will require cleaning when 20% capacity is reached and withdrawal of impounded water will adhere to permit requirements.
- All BMP's shall be monitored daily and repairs initiated as soon as the contractor is aware of a deficiency. If a repair is necessary on an inspection report, the repair shall be corrected within seven (7) calendar days of the inspection report. No additional time will be granted to complete corrective actions unless approved by the Department once a deficiency is noted on a site inspection report.
- Should flooding and frozen ground conditions make it impossible to perform corrections within the allowed time, notify the Department within 48 hours of the event. Within 3 days of the notification, submit in writing an explanation and description of the reasons for the delay; and a schedule for implementation of any measures to be taken to prevent or mitigate the delay. Include with the submittal any relevant documentation supporting the claim that the delay is due to flooding or frozen ground conditions and that best efforts were made to complete the required corrections and to minimize any delay to the extent possible. No additional time will be granted to submit the required information unless approved in writing by the Department.
- Deposited sediment shall be removed from BMP's when it has reached ½ (one half) the height of the control measure, or before and shall be disposed of according to KDOT specifications.
- Silt fence and excelsior or coir logs shall be maintained for height of sediment, connection to stakes, and stability of stakes and tears or gaps.
- All other BMP's shall be maintained for sediment load, appropriateness given field conditions and adequate redundancy for potential sediment load based on disturbed surface.
- Remove the temporary devices according to the SWPPP or when directed by the WPCM and the Department's 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.

Trenching and Structural Excavation/Excavation De-watering:

Soil excavated from trenches and other relatively small excavations shall be placed on the up-slope side of the excavation, if possible, to prevent sediment runoff away from the site.

De-watering discharge from any trench or excavation shall be controlled with temporary BMP's to prevent sediment runoff from entering drainage structures and streams; filters on the inlet side of the pump, scour protection and outlet protection BMP's will be installed to meet permit requirements. De-watering will take place only after the WPCM's approval prior to beginning operations.

2.3 Soil Stabilization

Disturbed areas outside the permanent roadways will be graded and seeded to restore them to pre-construction conditions or the requirements of the landscape plans associated with this project. Site conditions will be considered restored when construction has been completed, final soil stabilization has occurred, all temporary erosion and sediment control measures have been removed or arrangements have been made for their removal at an appropriate future time, and re-vegetation is in compliance with Appendix M. When construction activities on steep slopes (slopes of 40% or greater) cannot be avoided, the contractor must immediately initiate placement of appropriate erosion control BMPs in any exposed steep slope areas 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, other appropriate erosion control practices such as geotextiles or erosion control mats shall be utilized. Diversion of concentrated or channelized stormwater flows around steep slopes or slope drains shall be utilized.

Immediately initiate temporary stabilization on areas that have been disturbed after construction activities have permanently ceased on that portion of the project site. Initiate temporary stabilization measures on areas that have been disturbed immediately after construction activities have temporarily ceased on that portion of the project site if construction activities will not resume for a period exceeding 14 calendar days. Temporary stabilization may include temporary seeding, geotextiles, mulches or other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb the area. This stabilization must be completed within 21 calendar days.

Permanent stabilization measures will be initiated immediately, and in most cases within 14 days after completion of construction, in any given section of the project. An exception may occur when construction ends near or after the end of the local growing season, due to weather conditions. In that case, temporary measures will remain in place and be maintained until the next growing season. See Appendix J for plan specifications for temporary and permanent soil stabilization.

2.4 Construction Equipment near Waterways, Stabilization, and Restoration:

Only equipment required to perform the construction activity and to restore disturbed areas shall be allowed in waterways. Temporary channel crossings will be provided whenever an applicable number of stream crossings are required, and temporary slope protection or erosion control measures will be applied to minimize erosion of the channel slopes. Equipment will not cross or enter waterways for convenience only.

Temporary Stream Crossing –Anticipate one (1) crossing at the Mill Creek tributary by the south detention pond from July 2014-July2015.

1. General. Before beginning work in the streambed, record existing stream channel elevations. Construct temporary stream crossings as shown in the Design Documents of the SWPPP (See Appendix J).
    a. 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 Design Documents shall flow through the pipes without overtopping the crossing. If the OHW is not designated in the Design 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.
    b. Submit to the WPCM for review and approval, the design flow calculations to determine the number and diameter of pipes requires. A minimum 12 inch diameter pipe is required.
    c. Place pipes parallel to flow
    d. Cover pipes with a minimum of 12 inches of clean aggregate fill.
    e. Dispose of sediment on the Project at locations approved by the WPCM and the Department's Engineer. When necessary, stabilize the material as directed by the WPCM and the Department's Engineer.
2. Maintenance. At a minimum, perform weekly inspections to verify that drift and debris are not blocking the flow of the 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.

Restored waterway areas subject to erosion due to concentrated water flow or rising waters due to heavy precipitation may be stabilized with erosion control fabric, fiber blankets, or other appropriate means. Seeding and mulch may also be used to help stabilize the area.

2.5 Protect Storm Drain Inlets

Inlet protection may include but not be limited to SiltSaver Domes, silt fence inlet cages, biodegradable logs, triangular silt dikes, and gravel bags. Appropriate protection will be installed during construction and maintained or replaced with the appropriate protection for the next phase as construction progresses.

2.6 Stabilized Construction Access/Dust Control

Vehicle tracking of soil onto public roads and paved areas will be minimized by limiting the number of entrances/exists per segment. When possible per segment, construct a stabilized construction access pad for one entrance and one exit per direction of traffic to assist in removing excess material from tires prior to entering public roads. Accumulated debris will be removed from the roadway by shoveling or sweeping at least daily. If sediment and debris control is not achieved by methods described above, periodic roadway washing may be used to clean the pavement. A sample construction access design is attached in Appendix J.

BMP's will be employed to control dust during construction. These could include watering of haul roads and sited during dry or windy conditions, covering loads in transit and storage bins, roughening surfaces to minimize sediment uplift or temporary work shutdown if high winds occur for certain operations such as grading or concrete saw-cutting.

SECTION 3: GOOD HOUSEKEEPING BMPS

Material needed for the project will be stored in an area designated by the Design-Builder to minimize disturbance to the project area. See Section 6.2 for documentation of safety and good housekeeping training. Material or substances expected to be present on site during project construction:

- Portland Cement Concrete
- Concrete Cure
- Asphalt Concrete
- Fertilizers
- Petroleum based products (fuel, oil, and lubricants)
- Cleaning Solvents
- Demolition material
- Lime
- Other fill material
- Cement
- Paints and stains

Material Management Practices:

The following material management practices shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff:

- Store only enough products require to reasonably do the job
- Materials stored on site shall be stored in a neat, orderly manner in their appropriate containers and, if practical, under a roof or other enclosure.
- Products shall be kept in their original containers with the original manufacturer's labels.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Wherever possible, all of the product in a package shall be used before disposing the container.
- Follow manufacturer's recommendations for proper use and disposal shall be followed.
- Containment berms and drip pans shall be installed at liquid storage tanks and containers.
- Construction materials shall be stored away from drainage courses and low areas.
- Products shall be kept in original containers unless they are not re-sealable.
- Original labels and material safety data sheets (MSDS) will be retained; they contain important product information.
- If surplus product must be disposed, manufacturers or local and state recommended methods for proper disposal shall be followed.

3.1 Material Handling and Waste Management

The Design-Builder will install sanitary waste units on site prior to start of construction. All sanitary waste will be collected from the portable units a minimum of once a week by a licensed sanitary waste management contractor, as required by local regulations. These units will be properly weighted to ensure high winds do not tip them over and placed in locations where they will not jeopardize stormwater run-off if tipped over.

Contractor will clean and maintain site daily to minimize construction debris, trash and waste from leaving the site. Whenever possible the concrete, asphalt, and brick material will be used on site as fill material and will be crushed as necessary to meet material specification requirements. All personnel shall be trained regarding the correct procedure. The contractor's site superintendent in charge of the day-to-day operations of the construction activities will be responsible for compliance with procedures.

3.2 Designate Washout Areas

The Contractor will designate the area(s) at each segment located away from ditches and install proper containment for concrete washout if the concrete trucks will be washed out on site. The washout basin will consist of a lined pit or empty portable totes with proper signage. No vehicle washing will occur on site.

3.3 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products retained on site will be stored in tightly sealed containers, which are clearly labeled.

3.4 Spill Prevention and Control Plan

In addition to the good housekeeping and material management practices discussed in the previous section of this plan, the following practices will be followed for spill prevention and cleanup:
All hazardous wastes generated during the project either from construction materials used or unforeseen materials discovered during construction shall be disposed of per the local, state, federal regulations or per manufacturers' recommended methods for spill cleanup. Spills of toxic or hazardous material shall be reported to the appropriate state or local government agency, regardless of size. When unknown materials including potentially contaminated soil and groundwater are encountered, they will promptly be identified, contained to prevent exposure to rain and sediment runoff with temporary BMP's and will be properly disposed of at a licensed disposal facility.

The only Hazardous Substances expected within the 95th Street and I-35 interchange are those resulting from three former gas stations and one dry cleaner near the interchange. Information regarding the impacts of these Hazardous Substances is included in the Categorical Exclusion for 95th Street, which has been approved by FHWA. The City of Lenexa has remediated these impacts beyond what is necessary to perform the Work: however, Design-Builder shall coordinate with KDHE on the scope of remediation and any potential limits to the Project. At least one of these former gas stations has monitoring wells that may be impacted by the Work. Coordinate with KDHE when impacting, removing, or replacing these monitoring wells.

The manufacturer's recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and clean-up supplies.

Material and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials may include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

All spills will be cleaned up immediately after discovery. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

The spill prevention plan will be adjusted to included measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will be included.

The site superintendent responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. He shall designate at least three (3) other site personnel, one (1) of who shall be from the nightshift if applicable, who shall receive spill prevention and clean-up training. These individuals shall each become responsible for a particular phase of prevention and clean up. The names of responsible spill prevention personnel shall be posted in the material storage area and in the office trailer on site.

Storage and handling procedures will be practiced by all subcontractors:

- Storage areas must be located at least 50 feet from a watercourse.
- Store chemicals in secondary containers protected from the weather. Store all containers that will be stored outside within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged , or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in covered area or having a spill kit available on site).
- Do not store incompatible materials in the same secondary containment basin.
- Avoid transferring chemicals from one container to another. If a transfer is necessary, perform the transfer in secondary containment.
- Ensure that all chemical containers are properly labeled, indicating the contents and hazards involved.
- Inspect all containers for damage or leaks at least weekly and before attempting to move them.
- Each employee should look for damaged or leaking containers each time they use a chemical from the storage area or add to the chemical stock.
- When working with hazardous materials, protect the ground or flooring with a suitable covering (one which is resistant to penetration by the material being used and that will contain small drips and spills).

To prevent fuel spills, the practices listed below should be followed:

- Equipment fueling will be performed by a mobile unit coming to the project work area. The equipment should be staged at least 50 feet from a watercourse.
- Mobile fueling trucks will not be permanently staged on the project. If parked on the project, they will stay within BMP-contained limits to eliminate potential runoff.
- Stored material for mobile fueling trucks will adhere to the storage and handling procedures specified in this SWPPP.
- Pay attention when refueling vehicles/equipment so that they are not overfilled.
- If a leak is detected in a vehicle or piece of equipment, repair the leak as soon as possible; place plastic sheeting, or other receptacle of sufficient size to contain all leaking fluid, under the leak until the repair is made. If repairs cannot be made within 24 hours or if the leaking fluid cannot be contained, then the leaking equipment must be removed from the site immediately. An enclosed storage trailer will be located in the staging area (location yet to be determined) to store oil/gas cans, filters, etc as well as in the mobile service truck.

Spill Response

If a hazardous material spill should occur, it must be cleaned up immediately as follows:

- If a spill of gasoline or discharge of pollutants occurs, the local emergency staff should be contacted **first by dialing 911**. Hazardous materials spills and air releases that need federal reportable quantities must also be reported to **Kansas Division of Emergency Management (KDEM), which receives reports for the State Emergency Response Commission (SERC) (1-800-275-0297) and KDHE (785-296-1679).** These incidences should also be reported to the National Spill Response Center (1-800-424-8802). The above numbers will be posted in a central location on site.
- Place all contaminated soil on an adequately-sized sheet of plastic.
- If a hazardous material spill occurs on pavement, it shall be absorbed with sand or other inert material then placed on plastic sheeting. This includes spills of vehicle fluids. Pavement will not be washed where a hazardous material spill has occurred (including vehicle fluids) until all spilled material has been cleaned up.
- Cover contaminated soil or inert absorbent material with plastic to prevent runoff contamination and to prevent the material from becoming airborne in wind.

- Provide the Project Manager with a Material Safety Data Sheet for the type of spilled material to determine whether or not the material is hazardous.
- The project engineer will make a determination as to the proper method of disposal required and will coordinate with the Project Manager. The subcontractor shall arrange for disposal according to the guidelines and requirements provided by the Project Manager.
- Notify the Department 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 the containment or remediation actions taken. This notice to the Department does not relieve the Design-Builder of responsibility to report to the KDHE or to any other agency.

3.5 Non-Stormwater Discharge Management

Demolition of structures such as existing bridges may require water to be used as a form of dust mitigation. Under this circumstance, additional BMP's shall be installed to increase redundancy to at least the two (2) closest inlets in all drainage patterns adjacent to the demolition activity.

Flushing water line:
Initial Filling and Flushing of Pipeline

The new main will be filled from the existing main as determined by the design. When the main is initially filled, flushing will continue, while simultaneously exercising all blow off assemblies to expel all air out of the line. Flush water will be discharged to a nearby curb inlet or channel with hoses or pipe after it has been neutralized as stated below.

Method of Disinfection

The line is to be disinfected using the continuous feed method. 10% liquid chlorine solution will be used to provide 75 ppm chlorine residual in line. Chlorine will be introduced into the line through a temporary corp on the proposed main. Calculations for chemical usage will be made prior to disinfection to determine quantity and time required for disinfection.

Water in line is to be monitored by Design-Builder or subcontractor at various blow off assemblies throughout the line. When the chlorine solution is witnessed at the end of the line, then the admission of the solution will stop.

The chlorine solution will remain in the line for 24 hours.

Following the 24 hour period, the residual chlorine concentration will be checked to ensure that no less than 10 mg/L of free chlorine is present in all portions of the main. After checking the residual concentration, the chlorine solution will be discharged through the end of line. The chlorine will be neutralized at this point with the admission of Sodium Bisulfite or Sodium Thiosulfate.

Two consecutive sets of samples taken at least 24 hours apart shall be collected for bacteriological tests.

After satisfactory bacteriological test results, the connection will be made. Materials used for tie-ins will be swabbed with chlorine solution. All tie-ins and placing the main into service will be coordinated with WaterOne.

SECTION 4: SELECTING POST-CONSTRUCTION BMPs

Re-vegetation Procedures:

As the project progresses, permanent stormwater management will be incorporated with the use of culverts, outlet protection, detention and sediment basins ditches, as required by the contract and inlets. Final grading around these transference systems will occur, followed by permanently stabilization via seeding or landscaping. When permanent seeding and planting cannot occur due to the local growing season, temporary seeding and mulching along with BMP's shall continue to be used to maintain the slope until the vegetation cover is adequate. Re-vegetative materials and applications shall conform to Kansas Dept of Health and Environment (KDHE), unless otherwise noted by the contract. See Appendix M for plan specifications for remainder of the project.

Permanent BMP's:

In conjunction with the re-vegetation efforts for this project, permanent BMP's will be shown on the drainage/grading plans. As the project progresses, these features will be identified to meet the contract requirements. Permanent BMP's will be constructed as soon as practical within the site so they may be partially used during construction. See Appendix M for plan specifications.

SECTION 5: INSPECTIONS

5.1 Inspections- See Appendix K (WPCM) and Appendix L (EIT) for Certifications

Inspection Personnel:

Gateway Interchange Constructors – Billy Clarkson (WPCM and EIT) – Project Designated WPCM

9645 Legler, Lenexa, KS 66219 – PH 816-483-8800 – Fax 816-241-6823

Email: beclarkson@clarksonconstruction.com

Erosion Control, Inc. - Margie Sobczynski (WPCM and EIT) or Carl Schwieterman (EIT)

15720 S Keeler St, Olathe, KS 66062 - Ph 913-397-7324 - Fax 913-397-9324

Email: erosioncontrol@ecikc.com

The designated Water Pollution Control Manager (WPCM) shall visit the Project during normal work hours on a frequent basis and in no instance less than once per week until all physical work is complete and the Engineer issues the Notice of Acceptance or a partial Notice of Acceptance. The required 180 day observation period for pavement markings is not considered to be physical work. The WPCM shall thoroughly review the project and SWPPP documentation during these site visits to ensure the Contractor's compliance with this specification and with the NPDES permit. In addition, the WPCM shall:

- Have the authority to supervise all work performed by the Contractor and subcontractors that involves stormwater requirements or affects stormwater compliance;
- Have the responsibility to order Contractor employees and subcontractors to take appropriate corrective action to comply with stormwater requirements, including requiring any such person to cease or correct a violation of stormwater requirements and to order or recommend such other actions or sanctions as necessary to meet stormwater requirements;
- Be familiar with the Project SWPPP;
- Be responsible for updating the Project SWPPP and site maps to accurately reflect the BMPs in use on the Project;
- Be the point of contact for KDOT regarding stormwater compliance;
- Attend the stormwater erosion control pre-construction conference and other stormwater erosion control conferences required. 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 Department, 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.
- Have completed KDOT's Environmental Inspector Training and Environmental Manager Training programs within the twelve months prior to beginning construction activities. These certifications shall be maintained for the duration of the project;

• Be responsible for reviewing inspection reports within 3 days after receiving such reports, acknowledging awareness of any deficiencies and ensuring the correction of all deficiencies.

• Maintain and monitor an active email account capable of receiving electronic communications including inspection reports, photos and other documents relevant to stormwater compliance.

The WPCM may, when practical, perform SWPPP Inspections. Include with the project SWPPP documents proof of certification for Environmental Inspectors who will be performing SWPPP Inspections on the project. KDOT's Environmental Inspector and the Contractor's Environmental Inspector shall perform a joint inspection of the temporary erosion and pollution control devices every 14 days during normal work hours and within 24 hours of a rainfall event of ½ inch or more. Inspections shall continue at this frequency until all physical work is complete and the Engineer issues the Notice of Acceptance or a partial Notice of Acceptance. The required 180 day observation period for pavement markings is not considered to be physical work.

Document the SWPPP inspections on KDOT Form 247, (SWPPP Inspection and Maintenance Report – See Appendix D)

The KDOT and Contractor Environmental Inspectors shall each sign the report. Submit completed copies of KDOT Form 247 to the Area/Metro Engineer and Contractor's WPCM within 24 hours after an inspection has been made. The WPCM shall review and sign the report within 3 calendar days of receiving the completed inspection report. The WPCM's signature acknowledges awareness of all reported deficiencies and corrective actions required to be taken within 7 calendar days of the inspection.

Immediately notify the Department in writing if the designated WPCM is replaced. The replacement WPCM shall comply with the above requirements, except that they shall have completed the training requirements within the twelve months prior to assuming WPCM duties. The notification shall include training certificates and contact information for the replacement WPCM.

Inspection Practices –
All control measures, temporary and permanent BMP's shall be inspected by KDOT's Environmental Inspector and The Design-Builder's Environmental inspector at least once every 14 calendar days during work hours and a rainfall event within any continuous 24-hour period of 0.50 inches or greater. This inspection schedule does not relieve the Design-Builder of the responsibility to monitor temporary erosion and pollution control devices daily during active construction in the work area. Inspections shall continue at this frequency until all physical work is complete and the Department issues Final Acceptance.

To determine if a storm event of 0.50 inches or greater has occurred on your site, use the greatest rainfall depth reported from the following rain gauges found at *Stormwatch: Johnson county Kansas Regional Weather* (Stormwatch.com):
(1) JCCC – Sensor ID: 1700
(2) Waterford Place – Sensor ID: 1400
(3) K-10 & K-7 – Sensor ID: 3200
(4) 79th ST @ Mill Creek – Sensor ID: 3160
For any rainfall event measuring 0.50 inches or greater, you must record the total rainfall measured for that event.

Document the SWPPP inspection on the attached sample of KDOT Form 247 – See Appendix D.

- The KDOT and Design-Builder Environmental inspectors shall each sign the report.
- Submit completed copies of the KDOT Form 247 to the Department and Design-Builder'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 inspections report. The WPCM's signature acknowledges awareness of all reported deficiencies and corrective actions required to be taken within 7 calendar days of the inspection.
- In the event that the Design-Builder's and the Department's Environmental Inspectors are unable to come to an agreement on deficiencies or required actions for SWPPP Inspection, the Project Director shall make the final determination in his/her sole discretion.

- Inspection reports shall be kept in the SWPPP binder in the on-site project office or at an easily accessible location so that it can be made available at the time of an onsite inspection or upon request by EPA.
- A copy of the inspection report shall be initialed and dated by the responsible person verifying the corrections have been completed.
- Temporary and permanent slope stabilization shall be inspected for large bare areas and rill formation leading to significant sediment movement.

5.2 Delegation of Authority

Duly Authorized Representative(s) or Position(s):
Gateway Interchange Constructors
9645 Legler, Lenexa, KS 66219
Ph 816-483-8800 Fax 816-241-6823

Brian Cichello – Construction Manager – Cell ph 816-536-8112
Rick Parrot – Site Superintendent – Cell ph 816-810-8729
Billy Clarkson (WPCM and EIT) – Project Designated WPCM – Cell ph 816-804-6845

5.3 Corrective Action Log

Changes to the SWPPP will be recorded on the bi-weekly inspection reports and/or daily activity log.

SECTION 6: RECORDKEEPING AND TRAINING

6.1 Recordkeeping

The following records kept will include, but not be limited to, when:

- Major grading activities occur
- Addition of new BMPs
- Replacement of failed BMPs
- Rainfall Activity Log
- Significant changes in the activities or the timing of the project
- Construction activities temporarily or permanently cease
- An area is either temporarily or permanently stabilized
- Updates to site maps
- Changes in personnel

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

6.2 Training

General Stormwater, Good Housekeeping requirements (Section 3), and BMP awareness training will be provided for staff and subcontractors. Detailed training will be provided for staff and subcontractors with specific stormwater responsibilities as needed.