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Job Number: 2020-0857

RIC – 3rd St 00.31

Stormwater Pollution Prevention Plan (SWPPP)

Prepared For: City of Mansfield

April 27, 2021

Engineers, Surveyors, Planners, Scientists

MEMO

Date: April 27, 2021

To: Robert Bianchi, PE, City of Mansfield

From: James Akins (614) 775-4389

Subject: RIC – 3rd St 00.31 SWPPP Manual

The following items are required in order to complete the SWPPP Manual:

1. Please sign the SWPPP certification sheet located within the front of the manual.
2. Upon receiving a copy in the mail from the Ohio EPA, insert a copy of the Ohio EPA Notice of Intent (NOI) approval letter within Appendix A. The assigned NPDES facility number is indicated on this letter.
3. Have the appropriate contractors complete and submit the Ohio EPA Notice of Intent (NOI) Co-permittee application. The Co-permittee application can be found on the Ohio EPA's EBusiness Center website.
4. All contractors associated with the implementation of the SWPPP are required to review the SWPPP and sign the acknowledgment form within Appendix B.
5. The contractor is required to keep an up-to-date disturbance and stabilization activities log. An example is provided within Appendix D. This is an EPA requirement to assist with determining if the disturbed areas associated with the construction activities are being properly stabilized by either temporary or permanent means. Soil stabilization requirements are outlined within the SWPPP Section 3.1.
6. Ensure that the required erosion control site inspections are being provided and create reports. An example of an inspection report is provided within Appendix E. Site inspection requirements are indicated within the SWPPP Section 3.7.
7. The contractor is required to update the SWPPP if modifications are necessary during construction activities. Indicate the SWPPP modifications on the log provided within Appendix F.
8. Ensure that a copy of the SWPPP manual and copies of the required inspections reports are kept on-site and available for the Ohio EPA to review during working hours.
9. Upon completion of the project, submit the Notice of Termination (NOT) form provided on the Ohio EPA's EBusiness Center website. This will terminate the NPDES permit coverage that was issued to cover the construction site stormwater discharges. Instructions are provided within the SWPPP Section 1.7.

Please let me know if you have any questions.

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SWPPP CERTIFICATION

"I certify under the 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 knowing violations."

Project Estimated Start Date: _____
Project Estimated Completion Date: _____

Project Owner: City of Mansfield

Signature: _____
Printed Name: Robert Bianchi, PE
Phone Number: (419) 755-9628

Date: _____

SWPPP Prepared By: EMH&T Inc.

Signature:
Printed Name: James Akins, CPESC No. 3998
Phone: (614) 775-4389

Date: April 27, 2021

Site Contact: Robert Bianchi, PE
City Engineer
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1.0 OVERVIEW

1.1 SWPPP Overview

This plan has been prepared for the RIC - 3rd St 00.31 project located within the City of Mansfield, Richland County. The SWPPP addresses the storm water management requirements within the Ohio Environmental Protection Agency General Permit No. OHC000005 which authorizes storm water discharges associated with construction activity under the National Pollutant Discharge Elimination System (NPDES) and the City of Mansfield Erosion and Sediment Pollution Control Regulations.

City of Mansfield is the operator associated with the project. Copies of the Ohio EPA NOI approval letter and Ohio EPA General Permit are provided in Appendix A.

The SWPPP identifies potential pollutant sources associated with construction site runoff and indicates the utilization of Best Management Practices (BMP's). BMP's consist of planned activities, structural and non-structural practices, maintenance procedures and management practices utilized to prevent or reduce the pollution of surface waters of the state. Construction activities covered under the permit include any clearing, grubbing, grading, excavating, filling procedures and dewatering activities that disturb the project area indicated on the Notice of Intent (NOI) application.

The permit also authorizes storm water runoff discharges from support activities associated with the project. Support activities include: concrete or asphalt batch plants; equipment staging yards; material storage areas; excavated material disposal and borrow areas. Non-storm water discharges covered by the permit include: discharges from firefighting activities; fire hydrant flushing; irrigation drainage; lawn watering; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred; air conditioning condensate; springs; uncontaminated ground water from trench or well point dewatering and foundation or footer drains where flows are not contaminated with the process materials such as solvents.

1.2 EPA NOI Co-permittee Application

Contractors associated with the project that meets the definition of a "site operator" per the Ohio EPA General Permit, shall complete the NOI co-permittee application and submit the application to the Ohio EPA. The Contractor shall be covered under the same Ohio EPA facility permit number assigned to the project that is indicated on the Ohio EPA NOI approval letter. The Contractor will be responsible for complying with the requirements within the EPA General Permit. The Ohio EPA NOI Co-permittee application is required to be filed electronically via the Ohio EPA's e-Business Center website which can be found by following the link below.

Ohio EPA EBusiness Center: https://ebiz.epa.ohio.gov/login.html

Steps to file a Co-permittee application are provided below.

1. Create an account/password and PIN on the Ohio EPA's e-Business Center.
2. Log on and click "Division of Surface Water NPDES Permit Applications (STREAMS).
3. At the top of the page under permit list click "Add Permit" and search for the project using the Ohio EPA NPDES Facility Permit Number. This was assigned to the project when the NOI was approved.
4. You will see your project added to the permit list. Click "Actions" and "Create Copermittee Permit Application"
5. Fill in the required information and submit the application form using your PIN.

Site Operator per the Ohio EPA General Permit: The party that has day-to-day operational control over those activities at a project which are necessary to ensure compliance with the SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

1.3 Potential Construction Site Storm Water Pollutants

The SWPPP identifies potential sources of pollutants which may reasonably be expected to affect the quality of storm water discharges associated with construction activities of the project. Descriptions of the BMP's are provided that shall be utilized to reduce the potential pollutants.

Potential Construction Site Storm Water Pollutants

Potential Pollutant	Best Management Practice
Sediment within construction site runoff	Compost filter socks, storm sewer inlet protection, temporary and permanent seeding and mulching
Sediment associated with dewatering activities	Placement of intake hose shall be positioned at the top of the water level. Discharge hose shall be directed into a filter bag with a sufficient existing vegetative buffer prior to the stormwater outfall
Dust	Water trucks or other acceptable means of managing dust from construction traffic approved by the local governing authority
Fuels	Fuel tanks shall be stored away from surface waters and storm sewer inlets within a diked area. Spills shall be contained as soon as possible upon notification and material removed from the site. Fuel containers shall be closed when not in use so not to expose to stormwater.
Grease & Oil	Spills shall be contained as soon as possible upon notice and material removed from the site. Containers shall be closed when not in use so not to expose to stormwater. Empty containers shall be removed from the site and properly disposed of.
Fertilizers/Pesticides	Applied at the required rates and not on impervious areas.
Alkalinity	Concrete trucks shall utilize areas to washout trucks. Accumulated concrete shall be removed from the site and disposed of properly. Alternatively, contractors shall use a roll off box with a liner.

Ohio EPA Emergency Spill Hotline

Hazardous or potential hazardous material that is utilized on the site shall be handled, stored and disposed of properly to reduce the potential of polluting storm water runoff. Spills or other unintended releases in excess of reportable quantities that discharge hazardous substances into surface waters of the state shall be contained and reported as required within section 40 of the Code of Federal Regulations Part 117 and Part 302. Spills are to be immediately reported to the Ohio EPA Emergency Spill Hotline (1-800-282-9378).

Petroleum product spills of 25 gallons or more shall be immediately reported to the Ohio EPA and the local fire department. All releases of hazardous substances to the environment must be handled pursuant to applicable laws. All spills that result in the contact with waters of the state must be reported to the Ohio EPA. Smaller spills on impervious areas such as pavement shall be contained and absorbed with sawdust or other absorbent material and disposed of at a licensed sanitary facility.

1.4 SWPPP Availability

On-site:

The SWPPP shall be available immediately upon request of the Ohio EPA Director or an authorized representative during working hours. Additionally, a copy of the Notice of Intent (NOI) application and the EPA letter granting permit coverage under the Ohio EPA General Permit Number OHC000005 shall be made available.

Written request:

The SWPPP shall be provided within 10 days upon written request from the EPA Director or the Director's authorized representative.

To the public:

All NOI applications, Ohio EPA general permit approval for coverage letters, and SWPPP's are considered reports that shall be available to the public in accordance with the Ohio Public Records law. The permittee may claim to the Ohio EPA any portion of an SWPPP as confidential in accordance with Ohio law.

1.5 SWPPP Revision Requirement

The SWPPP shall be revised to address any changes required by the Ohio EPA Director or authorized representative within 10 days of the notification. The SWPPP shall be submitted to the EPA or a written certification that the revision requests have been addressed.

The City of Mansfield shall amend the SWPPP whenever there is a change in the design, construction, operation or maintenance, which has a significant effect on the potential for the discharges of pollutants to surface waters of the state or if the SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction

activities. The changes made to the SWPPP are required to be indicated on the SWPPP Amendment Log located within Appendix F.

1.6 Contractor and Subcontractor SWPPP Acknowledgement

The City of Mansfield shall inform all contractors and subcontractors of the terms and conditions of the Ohio EPA general permit who will be involved with the implementation of the SWPPP prior to commencement of land disturbing activities on the site. The City of Mansfield shall maintain a written document containing the signatures of the contractors and subcontractors involved with the implementation of the SWPPP. The contractors and subcontractors roles associated with the SWPPP implementation shall be indicated on the signature sheet located within Appendix B.

1.7 Ohio EPA Notice of Termination

Erosion and sediment controls associated with the various construction activities shall be installed according to the erosion and sediment control plans located within Appendix C. The controls shall be inspected and maintained until the site is permanently stabilized and the Ohio EPA Notice of Termination (NOT) has been submitted which terminates the General Permit coverage. The NOT form shall be submitted to the Ohio EPA upon the permanent stabilization of the site and the removal of the temporary sediment controls. The Ohio EPA Notice of Termination (NOT) Application is required to be filed electronically using the Ohio EPA's e-Business Center.

Steps to file a Notice of Termination application are provided below.

1. Create an account/password and PIN on the Ohio EPA's e-Business Center.
2. Log on and click "Division of Surface Water NPDES Permit Applications (STREAMS).
3. At the top of the page under permit list click "Add Permit" and search for the project using the Ohio EPA NPDES Facility Permit Number. This was assigned to the project when the NOI was approved.
4. You will see your project added to the permit list. Click "Actions" and "Terminate Permit"
5. Fill in the required information and submit the application form using your PIN.

2.0 SITE DESCRIPTION

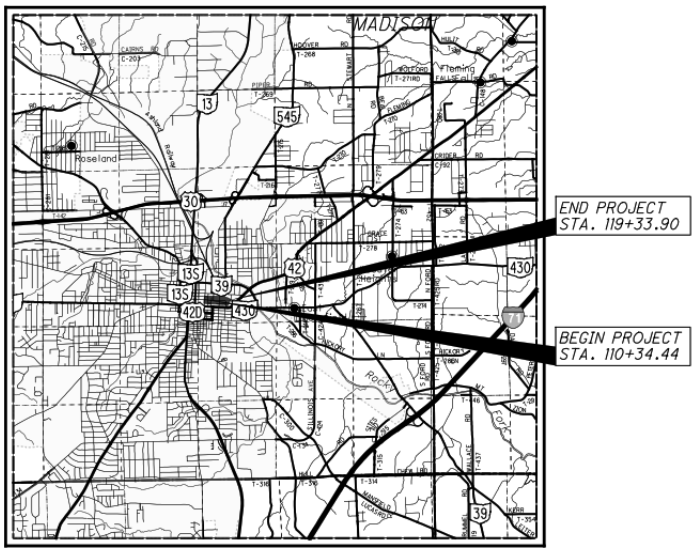
2.1 Construction Activity

The overall project consists of the partial replacement and rehabilitation of the existing 1,700 foot culvert structure conveying Ritter's Run beneath E. 3rd Street, including installation of excavation bracing, replacement of guardrail and pedestrian railing, proposed storm facilities, water line relocations, full depth pavement replacement and walk, resurfacing, pavement marking and signage.

Construction activities associated with the project include:

- installation of temporary sediment controls;
- removal of existing pavement and culvert;
- installation of the proposed culvert infrastructure;
- and permanent stabilization of the disturbed areas.

An estimated 1.31 acres shall be disturbed associated with construction activities.



LOCATION MAP
No Scale

2.2 Site Area Information

Total Site Disturbance as indicated on the EPA NOI =	1.31 Acres
Latitude:	40.759514°
Longitude:	-82.508009°
Pre-construction Impervious Area =	1.19 Acres
Post-construction Impervious Area =	1.17 Acres
Pre-construction Volumetric Runoff Coefficient =	0.83
Post-construction Volumetric Runoff Coefficient =	0.82

2.3 Soil Data

According to the USDA Soil Survey, the predominant soils on-site consist of:

- Ur – Urban land

Soil erosion rates increase as the existing cover is removed resulting from construction activities. Sediment controls are to be installed and properly maintained as indicated within this plan to minimize sediment laden runoff from flowing offsite. Disturbed areas are to be stabilized per the temporary and permanent stabilization requirements as indicated within Section 3.1.

Muddy water encountered within excavated areas will require to be pumped into a filter bag.

2.4 Existing Land Use & Adjacent Areas

The existing land-use associated with the site consists of existing roadway, sidewalks and a culvert beneath the existing roadway. The site is bordered by commercial and residential properties on the north and south sides of the road, the existing 3rd street to the west, and a railroad to the east.

2.5 Receiving Stream

Stormwater runoff associated with the project is tributary to Ritter's Run.

2.6 Construction Sequence – Best Management Practice Installation

Note: Ensure that a copy of the NOI, Ohio EPA approval letter, and the SWPPP are available on-site during working hours.

1. The Contractor shall place the required inlet protection on existing structures and all other erosion control measures noted hereon prior to any construction activity in accordance with the plan details.
2. Install compost filter socks around the building that is to be removed.
3. Demo the existing building and pavement, Seed and Stabilize the area per Item 659.
4. Begin removal of the existing culvert. Utilize the stream by-pass pumping detail for the pumping of clean water around the work area and a dewatering filter bag for the muddy water in the work area. All clean pumped water shall be pumped into the existing culvert that is downstream of the work area.
5. Replace existing inlets and re-install inlet protection.
6. Commence with pavement of the roadways and sidewalks.
7. Seed all remaining disturbed areas.
8. Once vegetation has become established, remove the temporary erosion and sediment control BMPs.

3.0 CONTROLS

Erosion controls, sediment controls and storm water management practices utilized shall be installed per the details indicated on the erosion and sediment control plan located within Appendix C.

Alternative controls installed by the contractor shall be documented within the SWPPP Amendment Log located within Appendix F and the installation of the controls shall meet the standards and specifications in the current edition of Ohio's Rainwater and Land Development manual or other standards acceptable to the Ohio EPA.

3.1 Erosion Control Practices

Temporary seeding and mulching applications shall be utilized to stabilize disturbed areas throughout the construction process.

Throughout construction activities, the site contractor is required to maintain a log documenting land disturbing and temporary/permanent stabilization activities associated with the site. A log is provided within Appendix D. Disturbed areas are to be temporarily and permanently stabilized per the requirements outlined below.

Temporary Stabilization

Project Area	Time Frame for Application
Disturbed areas within 50' of a surface water of the state and not at final grade	Within 2 days of the most recent disturbance
Disturbed areas that will be dormant for more than 14 days but less than 1 year, and not within 50' of a surface water of the state	Within 7 days of the most recent disturbance within the area. Residential lots are to be stabilized at least 7 days prior to transfer of the permit coverage
Disturbed areas that will be idle over the winter	Prior to the onset of winter weather

Note: The temporary seeding mix/application rates are provided on the ESC Plans.

Permanent Stabilization

Project Area	Time Frame for Application
Area to lie dormant for more than 1 year	Within 7 days of the most recent disturbance
Area within 50' of a stream and at final grade	Within 2 days of reaching final grade
Other areas at final grade	Within 7 days of reaching final grade

Note: The permanent seeding mix/application rates are provided on the ESC Plans.

3.2 Sediment Control Practices

Sediment control devices shall be implemented for all areas remaining disturbed for over 14 days. Additionally, the sediment controls shall be installed within 7 days of grubbing activities. The site will utilize sediment controls such as compost filter socks and inlet protection to manage runoff during construction. Details associated with the various sediment controls are indicated on the erosion and sediment control plan within Appendix C.

3.3 Post-Construction Storm Water Quality

Due to the nature of the project, no new or additional impervious area will be installed and thus there will be no need for Post-Construction Storm Water Quality.

3.4 Dewatering Activities

The direct discharge of muddy water to surface waters of the state is a direct violation of the Ohio EPA General Permit. Muddy water encountered during excavation activities shall be directed into a dewatering filter bag. Additional Best Management Practices such as perimeter sediment fence and gravel dikes around the bag are necessary if bags are utilized. Additionally, a dense vegetated buffer strip is required between the bag and the stormwater outfall location. A 50 foot minimum strip of vegetation is recommended.

3.5 Non-sediment Pollutant Controls

Waste Disposal

Containers shall be provided for the proper collection of all waste material. Construction and demolition debris (CD&D) must be disposed of in accordance with Ohio Revised Code 3714 at an approved Ohio EPA CD&D landfill. Temporary sanitary water facilities additionally must be provided and maintained. Dumpsters shall be closed or covered when not in use (non-operating hours) to limit the temporarily stored waste to storm water exposure and ensuring that no liquid wastes or wastes saturated with significant materials are allowed to be accumulated in trash dumpsters.

Construction Chemicals

The storage and mixing of chemicals shall be performed in a designated area away from watercourses and storm sewer inlets. Chemical containers shall be properly stored on-site to ensure that they are not exposed to rain events. Empty containers shall be properly disposed of off-site at an approved facility. Equipment maintenance and refueling areas are to be located away from storm water conveyance channels and surface waters. A Spill Prevention Control and Countermeasure Plan (SPCC) must be provided by the Contractor if on-site temporary fuel tanks exceed 660 gallons or if the combined storage is above 1320 gallons.

Concrete Washout Areas

Concrete trucks shall have a designated wash-pit or sump with no potential for discharge to ensure that the concrete wash shall not enter storm drains and waters of the state.

Contaminated Soils
Hazardous substances spilled or released into the soil shall be dug up and disposed of at a licensed sanitary landfill.

Dust Control
Manufactured dust suppressants shall be applied at the manufacturers specifications. Water trucks can additionally be used. Manufactured products shall be applied in a manner to not result in discharges to waters of the state. The suppressants shall not be applied if precipitation is noted in the short term forecast.

Off-site traffic
Temporary construction drives or the existing paved drives shall be utilized to assist with the prevention of off-site tracking of mud. Accumulated mud tracked beyond the limits of the project shall be removed on an as needed basis by the contractor. Collected mud shall be incorporated into the disturbance activities associated with the site and appropriately stabilized.

3.6 Inspections

Inspection of the temporary and permanent controls shall be conducted, at a minimum, once every seven days and within 24 hours of a 0.5" rain event or greater. The inspector shall have the proper knowledge and experience in the installation and maintenance of the controls and the permit requirements.

A report shall be completed for each inspection indicating the controls that have been installed, controls needing to be installed, maintenance required and indicate maintenance that has occurred. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, reseeding, re-mulching and re-netting must be performed within three days of the inspection. Required maintenance work associated with sediment basins shall be conducted within ten days of the inspection. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required. The permittee shall maintain the reports for a period of three years after the Notice of Termination form has been submitted. Inspection reports are located in Appendix E.

3.7 Erosion and Sediment Control BMP Maintenance

The temporary controls shall be maintained and repaired as indicated within the inspection reports to ensure proper functionality of the controls. The controls shall be maintained as indicated on the BMP details located on the erosion and sediment control plan within Appendix C. Maintenance shall be conducted until the upslope areas of the controls are permanently stabilized with permanent vegetation. Accumulated sediment shall be removed from the controls and utilized as fill material in non-structural areas. Maintenance conducted shall be recorded and filed within the SWPPP. If a control practice is in need of repair or maintenance, as indicated by inspection, it must be repaired or maintained within three days of inspection.

Temporary controls are to be removed upon permanent stabilization of the site. Permanent stabilizations consists of the establishment of permanent vegetation, decorative landscape mulch, matting, sod rip-rap and other landscaping techniques that provides permanent erosion control on areas where land disturbing activities are completed. Permanent stabilization by means of grass

vegetation is established when a uniform perennial vegetative cover with a density of at least 70% is achieved.

Storm Sewer Inlet Protection: Accumulated sediment must be removed from the filter fabric to ensure that the protections drain properly. Damaged protections must be repaired or replaced. Maintenance work must be performed within three days of the inspection.

Construction Entrance: The minimum rock thickness of 6" shall be maintained throughout the utilization of the temporary entrance. Sediment deposited onto the paved roads shall be removed daily. Maintenance work must be performed within three days of the inspection.

Rock Check Dam: Rock check dams shall be placed where standing water or excessive siltation will be minimized or where damage to vegetative lining will be insignificant. Sediment shall be removed from behind check dam once it accumulates to one-half the original height of the check dam.

Compost Filter Socks: Accumulated sediment must be removed from the sock when the sediment reaches 1/3 the above ground height of the sock. Undermined or overtopped sock must be repaired or replaced with a rock check dam. Maintenance work must be performed within three days of the inspection.

Dewatering Filter Bag: Filter bags and the associated perimeter controls are to be maintained throughout the duration of pumping activities. Bags shall be replaced once they have filled with sediment. Accumulated sediment within the bag shall be removed and placed on-site to dry. Spread soil and stabilize. The contractor shall monitor the outflow from the bags and through the perimeter controls and existing vegetated areas. If the quality of the water is "muddy" in appearance, then additional controls are required to be installed. Maintenance work must be performed immediately upon the inspection.

Temporary & Permanent Seeding: Seeded areas shall be inspected upon rain events to ensure areas are not washing out. Washed out areas shall be repaired and reseeded. Temporary sediment controls and/or erosion control matting may need to be utilized if washout problems routinely occur. Maintenance work must be performed within three days of the inspection.

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APPENDIX A: Ohio EPA Approval Letter & General Permit

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APPENDIX B: Contractor & Subcontractor SWPPP Acknowledgement Form

RIC - 3RD ST 00.31
Storm Water Pollution Prevention Plan
Contractor & Subcontractor Acknowledgement

"I have been informed of the terms and conditions of Ohio's storm water general permit for construction activities (the "Permit") and have reviewed and understand the conditions and responsibilities of this Storm Water Pollution Prevention Plan ("SWPPP"); I acknowledge my responsibilities under the Permit and SWPPP."

Company Name: _____

Signature: _____

Printed Name: _____

Date: _____

SWPPP Role: _____

Company Name: _____

Signature: _____

Printed Name: _____

Date: _____

SWPPP Role: _____

Company Name: _____

Signature: _____

Printed Name: _____

Date: _____

SWPPP Role: _____

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APPENDIX C: Erosion & Sediment Control Plan & Best Management Practice Details

PLAN, OWNERSHIP, DEVELOPER AND SITE CONTACT INFORMATION

PLAN ENGINEERS
EMH&T INC.
5500 NEW ALBANY ROAD
COLUMBUS, OH 43054
CRAIG SCHRADER, PE
PHONE (614)775-4500
FAX (614) 775-4800

OWNER/DEVELOPER
CITY OF MANSFIELD
30 NORTH DIAMOND ST
MANSFIELD, OHIO 44902

SITE CONTACT
CITY OF MANSFIELD
ROBERT BIANCHI, PE
CITY ENGINEER
30 NORTH DIAMOND ST
MANSFIELD, OHIO 44902
PHONE (419) 755-9628

SEDIMENT AND EROSION CONTROL GENERAL NOTES

CONTRACTOR'S RESPONSIBILITIES:
PRIOR TO CONSTRUCTION OPERATIONS IN A PARTICULAR AREA, ALL SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE IN PLACE. FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS MAY BE MADE BY THE ENGINEER OR THE CITY OF MANSFIELD.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT NO SOLID OR LIQUID WASTE IS DISCHARGED INTO STORMWATER RUNOFF. UNTREATED SEDIMENT-LADEN RUNOFF SHALL NOT FLOW OFF OF SITE WITHOUT BEING DIRECTED THROUGH A CONTROL FEATURE. CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE INTO OR ALONGSIDE RIVERS, STREAMS, OR CREEKS OR INTO NATURAL OR MAN-MADE CHANNELS OR SWALES LEADING THERETO. CONCRETE WASH WATER AND SURPLUS CONCRETE SHALL BE CONFINED TO APPROVED AREAS; AFTER SOLIDIFYING, THESE WASTE MATERIALS SHALL BE REMOVED FROM THE SITE.

THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS UPON PERMANENT STABILIZATION OF THE SITE.

IT MAY BECOME NECESSARY TO REMOVE PORTIONS OF THE SEDIMENTATION AND EROSION CONTROL FEATURES DURING CONSTRUCTION TO FACILITATE THE GRADING OPERATIONS IN CERTAIN AREAS. HOWEVER, THE SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE IN PLACE IN THE EVENING OR DURING ANY INCLEMENT WEATHER.

ALL TEMPORARY AND PERMANENT SEEDING SHALL BE COMPLETED USING THE REQUIREMENTS INDICATED UNDER ITEM 659.

MAINTENANCE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE SEDIMENT CONTROL FEATURES USED ON THIS PROJECT. THE SITE SHALL BE INSPECTED PERIODICALLY AND AFTER SIGNIFICANT RAINFALL. ANY SEDIMENT OR DEBRIS WHICH HAS REDUCED THE EFFICIENCY OF A STRUCTURE SHALL BE REMOVED IMMEDIATELY. SHOULD A STRUCTURE OR FEATURE BECOME DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THE CITY.

THE CONTRACTOR SHALL MONITOR THE RATE AT WHICH RUNOFF DRAINS THROUGH THE INLET PROTECTION DEVICES DURING AND FOLLOWING RAIN EVENTS. IF THE USE OF INLET PROTECTION CAUSES PONDING TO OCCUR WITHIN ACTIVE LANES OF TRAFFIC, THE CONTRACTOR SHALL REMOVE INLET PROTECTION TO ALLOW THE ROADWAY TO DRAIN.

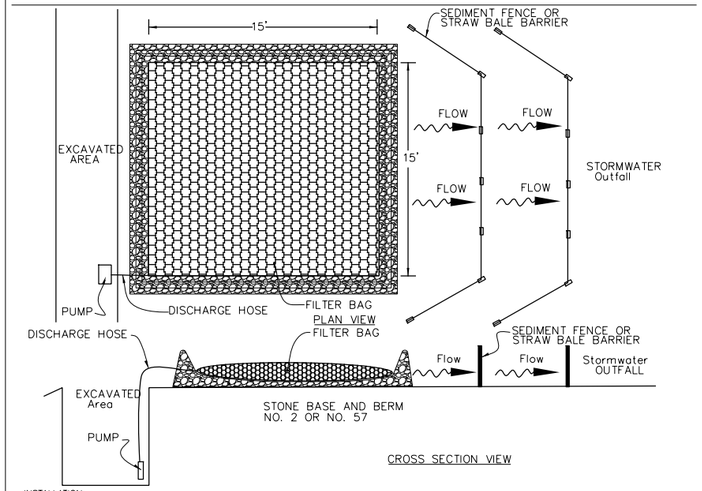
EROSION AND SEDIMENT CONTROL NARRATIVE

ALL EROSION & SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DIRECTION OF THE CITY OF MANSFIELD AND/OR THE OHIO EPA.

PROJECT DESCRIPTION:	THIS PROJECT CONSISTS OF THE PARTIALREPLACEMENT AND REHABILITATION OF THE EXISTING 1,700 FT CULVERT STRUCTURE CONVEYING RITTER'S RUN BENEATH E. 3RD STREET, INCLDUING INSTALLATIO OF EXCAVATION BRACING, REPLACEMENT OF GUARDRAIL AND PEDESTRIAN RAILING, PROPOSED STORM FACILITITES, WATER LINE RELOCATIONS, SANITARY SEWER REPLACEMENT, FULL DEPTH PAVEMENT REPLACEMENT AND WALK, RESURFACING, PAVEMENT MARKING AND SIGNAGE.
EXISTING SITE CONDITIONS:	THE SITE CURRENTLY CONSISTS OF EXISTING ROADWAY, SIDEWALKS, AND CULVERT BENEATH THE ROADWAY.
RECEIVING STREAM:	STORMWATER RUNOFF IS TRIBUTARY TO THE RITTER'S RUN.
DISTURBED AREA:	THE CALCULATED DISTURBED AREA IS 1.31 ACRES
EROSION AND SEDIMENT	EROSION AND SEDIMENT WILL BE CONTROLLED BY THE USE OF INLET PROTECTION.
PERMANENT STABILIZATION:	ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR PAVED.
MAINTENANCE:	ALL EROSION CONTROL DEVICES ARE TO BE INSPECTED FREQUENTLY. ANY DAMAGED FACILITIES ARE TO BE REPLACED/REPAIRED IMMEDIATELY AS MAY BE NECESSARY.
CONSTRUCTION SEQUENCE:	1. THE CONTRACTOR SHALL PLACE THE REQUIRED INLET PROTECTION ON EXISTING STRUCTURES AND ALL OTHER EROSION CONTROL MEASURES NOTED HEREON PRIOR TO ANY CONSTRUCTION ACTIVITY IN ACCORDANCE WITH THE PLAN DETAILS. 2. INSTALL COMPOST FILTER SOCKS AROUND THE BUILDING THAT IS TO BE REMOVED. 3. DEMO THE EXISITNG BUILDING AND PAVEMENT. SEED AND STABILIZE THE AREA PER ITEM 659. 4. BEGIN REMOVAL OF THE EXISITNG CULVERT. UTILIZE THE STREAM BY-PASS PUMPING DETAIL FOR THE PUMPING OF CLEAN WATER AROUD THE WORK AREA AND A DEWATERING FILTER BAG FOR THE MUDY WATER IN THE WORK AREA. ALL CLEAN PUMPED WATER SHALL BE PUMPED INTO THE EXISITNG CULVERT THAT IS DOWNSTREAM OF THE WORK AREA. 5. REPALCE EXISITNG INLETS AND RE-INSTALL INLET PROTECTION. 6. COMMENCE WITH REPAVEMENT OF THE ROADWAY AND SIDEWALKS. 7. SEED ALL REAMINING DISTURBED AREAS. 8. ONCE VEGETATION HAS BECOME ESTABLISHED, REMOVE THE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS.

CONTRACTOR RESPONSIBILITY: DETAILS HAVE BEEN PROVIDED ON THE PLANS IN AN EFFORT TO HELP THE CONTRACTOR PROVIDE EROSION AND SEDIMENTATION CONTROL. THE DETAILS SHOWN ON THE PLAN SHALL BE CONSIDERED A MINIMUM. ADDITIONAL OR ALTERNATE DETAILS MAY BE FOUND IN OHIO'S RAINWATER AND LAND DEVELOPMENT MANUAL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER CONTROL OF EROSION AND SEDIMENT RUNOFF FROM THE SITE ALONG WITH PROPER MAINTENANCE AND INSPECTION.

DEWATERING FILTER BAG



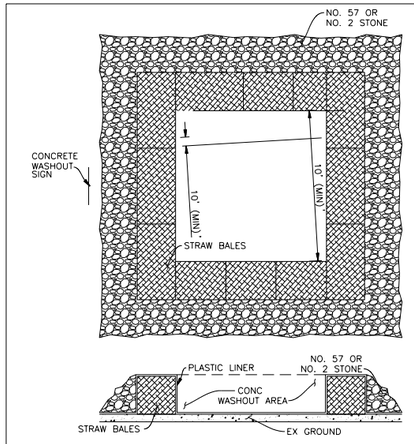
INSTALLATION:
THE CONTRACTOR SHALL PUMP MUDDY WATER ENCOUNTERED WITHIN EXCAVATED AREAS THAT ARE NOT TRIBUTARY TO SEDIMENT BASINS INTO A FILTER FABRIC BAG. THE BAG SHALL BE PLACED WITHIN A LEVEL UNDISTURBED AREA AS FAR AWAY FROM THE STORMWATER OUTFALL AS POSSIBLE. THE BAG SHALL BE PLACED ON TOP OF A AGGREGATE PAD. ADDITIONALLY, A PERIMETER AGGREGATE BERM SHALL BE CONSTRUCTED AROUND THE BAG. PERIMETER CONTROLS SUCH AS STRAW BALE BARRIERS OR SEDIMENT FENCE SHALL BE UTILIZED ALONG THE DOWNSTREAM SIDE OF THE BAG. THE PERIMETER CONTROLS SHALL BE INSTALLED TO ENSURE THAT THE WATER FLOWING OUT OF THE BAG DOES NOT FLOW AROUND THE ENDS OF THE CONTROLS. UPON COMPLETION, THE BAG SHALL BE REMOVED TO AN AREA AWAY FROM THE STORMWATER OUTFALL AND OPENED. THE ACCUMULATED SEDIMENT SHALL BE SPREAD OUT TO ALLOW TO DRY AND MIX WITH ONSITE TOPSOIL STOCKPILE. FILTERBAG SHALL BE JMD ENVIRO-PROTECTION FILTER BAG, SIZE IS 15'X15' OR EQUAL.

MAINTENACE:
THE FILTER BAG SHALL BE REPLACED WHEN THE BAG IS HALF FILLED WITH SEDIMENT.

THE CONTRACTOR SHALL CONTACT THE OWNER/ENGINEER FOR CONSULTATIVE SERVICES IF DEWATERING ACTIVITIES OVERWHELM THE FILTER BAG AND PERIMETER CONTROLS.

TABLE 1 - DISTURBED AREA STABILIZATION TIMEFRAME REQUIREMENTS

AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROL
ANY AREAS THAT WILL LIE DORMENT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE
ANY AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE
AREA REQUIRING TEMPORARY STABILIZATION	**TIME FRAME TO APPLY EROSION CONTROL**
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

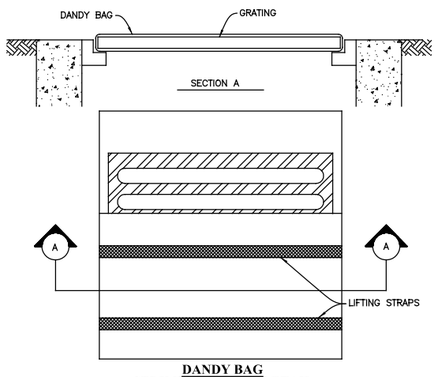


CONCRETE TRUCKS SHALL UTILIZE AREAS TO WASHOUT TRUCKS. ACCUMULATED CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.

AS AN ALTERNATIVE, CONTRACTOR SHALL USE A ROLL OFF BOX WITH LINER.

CONCRETE WASHOUT AREA
NOT TO SCALE

NOTE: FRYE FLOW SYSTEMS INLET SEDIMENTATION ASSEMBLY MAY BE USED AS AN ALTERNATE.



DANDY BAG
SEDIMENT FILTER DETAIL
NOT TO SCALE

INSTALLATION:

STAND GRATE ON END. PLACE DANDY BAG OVER GRATE. ROLL GRATE OVER SO THAT OPEN END IS UP. PULL UP SLACK. TUCK FLAP IN. BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR DANDY BAG WILL NOT FIT PROPERLY. HOLDING HANDLES, CAREFULLY PLACE DANDY BAG WITH GRATE INSERTED INTO CATCH BASIN FRAME SO THAT RED DOT ON THE TOP OF THE DANDY BAG IS VISIBLE.

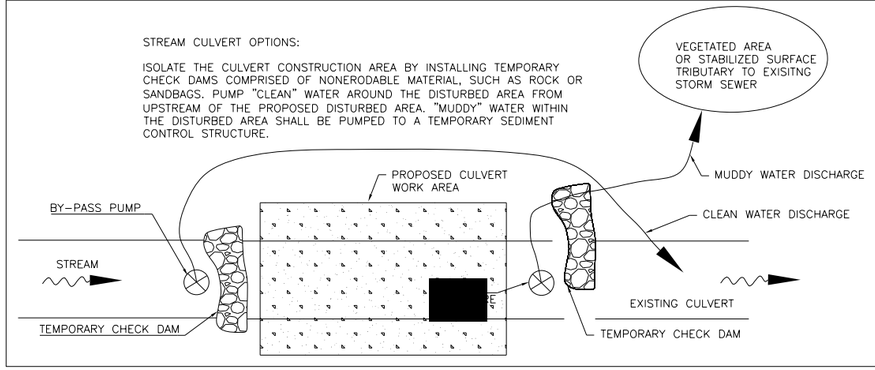
MAINTENANCE:

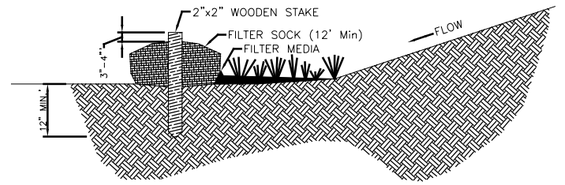
WITH A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL REMOVE SILT & OTHER DEBRIS OFF SURFACE AFTER EACH EVENT.

STREAM CULVERT SEDIMENT CONTROL

STREAM CULVERT OPTIONS:

ISOLATE THE CULVERT CONSTRUCTION AREA BY INSTALLING TEMPORARY CHECK DAMS COMPRISED OF NONERODABLE MATERIAL, SUCH AS ROCK OR SANDBAGS. PUMP "CLEAN" WATER AROUND THE DISTURBED AREA FROM UPSTREAM OF THE PROPOSED DISTURBED AREA. "MUDDY" WATER WITHIN THE DISTURBED AREA SHALL BE PUMPED TO A TEMPORARY SEDIMENT CONTROL STRUCTURE.





1. MATERIALS – COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF A PARTICLES RANGING FROM 3/8" TO 2".
2. FILTER SOCKS SHALL BE 3 OR 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS.

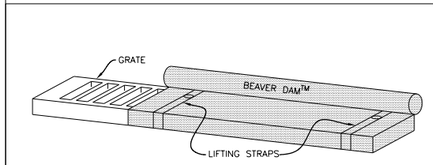
INSTALLATION:

3. FILTER SOCKS WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES, GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA. ON SLOPES APPROACHING 2:1, ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MIDSLOPE.
4. UPON INSTALLATION OF THE FILTER SOCK, ADDITIONAL FILTER MEDIA (MATCHING THE MEDIA INSIDE OF THE SOCK) SHALL BE PLACED ON THE UPLAND SIDE OF THE FILTER SOCK. FILTER MEDIA SHALL EXTEND HALFWAY UP THE SOCK AND SLOPE AT A MAXIMUM OF 45 DEGREES TO EXISTING GROUND ELEVATION.

MAINTENANCE:

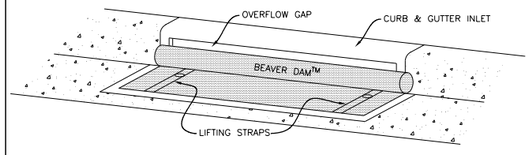
5. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.
6. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE.
7. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
8. REMOVAL – FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH AS WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDINGS.

FILTER SOCK
NOT TO SCALE



INSTALLATION:
STAND GRATE ON END. SLIDE THE BEAVER DAM BAG ON WITH DAM ON TOP OF THE GRATE PULL ALL EXCESS DOWN. LAY UNIT ON ITS SIDE. CAREFULLY TUCK FLAP IN. PRESS VELCRO STRIPS TOGETHER. INSTALL THE UNIT MAKING SURE FRONT EDGE OF GRATE IS INSERTED IN FRAME FIRST THEN LOWER BACK INTO PLACE. PRESS VELCRO DOTS TOGETHER WHICH ARE LOCATED UNDER LIFTING STRAPS. THIS INSURES STRAPS REMAIN FLUSH WITH GUTTER.

MAINTENANCE:
WITH A STIFF BRISTLE BROOM SWEEP SILT AND OTHER DEBRIS OFF SURFACE AFTER EACH EVENT.



BEAVER DAM
CURB & GUTTER INLET PROTECTION
NOT TO SCALE

CALCULATED NDD CHECKED RSH

EROSION AND SEDIMENT CONTROL NOTES

RIC-3RD ST-00.31

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PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF PARTIAL REPLACEMENT AND REHABILITATION OF THE EXISTING 1,700 FT CULVERT STRUCTURE CONVEYING RITTER'S RUN BENEATH E. 3RD STREET, INCLUDING INSTALLATION OF EXCAVATION BRACING, REPLACEMENT OF GUARDRAIL AND PEDESTRIAN RAILING, PROPOSED STORM FACILITIES, WATER LINE RELOCATIONS, SANITARY SEWER REPLACEMENT, FULL DEPTH PAVEMENT REPLACEMENT AND WALK, RESURFACING, PAVEMENT MARKING AND SIGNAGE.

℄ R/W & CONST SCOTT STREET

℄ CONST FOSTER STREET

POT Sta. 32+19.18

POT Sta. 61+80.01

BEGIN WORK
BEGIN PROJECT
STA 110+34.44

END WORK
END PROJECT
STA 119+33.90

MICAH PLACE

POT Sta. 109+00.00

N 3° 05' 23" E 31

N 2° 51' 01" E 61

S 83° 00' 32" E 50

N 3° 13' 07" E 49

N 3° 13' 07" E 79

POT Sta. 47+90.00

POI Sta. 77+85.00

RITTER'S RUN

℄ CONST EAST 3RD STREET

℄ CONST N BENTLEY ST

℄ R/W & CONST FOSTER STREET

Ex R/W

TMP

Ex U

LEGEND

- EXISTING CONTOURS
- CONSTRUCTION LIMITS (LIMITS OF DISTURBANCE)
- SEDIMENT FENCE
- SEDIMENT CONTROL (INLET PROTECTION) - NOT APPLICABLE
- CONSTRUCTION ENTRANCE (LOCATION TO BE DETERMINED BY ON-SITE ENGINEER)

PROJECT DATA	
TOTAL AREA (RIGHT OF WAY)..... 1.45 AC.	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE..... 0.83
PROJECT EARTH DISTURBED AREA.... 1.06 AC.	RUNOFF COEFFICIENT FOR POST CONSTRUCTION SITE..... 0.82
ESTIMATED CONTRACTOR EARTH DISTURBED AREA.....0.25 AC.	POST CONSTRUCTION BMP:
NOTICE OF INTENT EARTH DISTURBED AREA..... 1.31 AC.	N/A
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE..... 1.19 AC.	IMMEDIATE RECEIVING WATERS.....RITTER'S RUN
IMPERVIOUS (PAVED) AREA FOR POST CONSTRUCTION SITE..... 1.17 AC.	SUBSEQUENT RECEIVING WATER..... ROCKY FORK

HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED RSH
CHECKED MJR

EROSION AND SEDIMENT CONTROL PLAN
STA. 110+34.44 TO STA. 119+33.90

RIC-3RD ST-00.31

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EMH&T

APPENDIX D: Land Disturbance and Stabilization Activities Log

RIC - 3RD ST 00.31
LAND DISTURBANCE AND STABILIZATION ACTIVITIES LOG

Project Area Description	Land Disturbance Start Date	Land Disturbance Completion Date	Application of Temporary Stabilization Controls Date	Application of Permanent Stabilization Controls Date

EMH&T

APPENDIX E: Inspection Reports

EROSION & SEDIMENT CONTROL SITE INSPECTION

RIC - 3RD ST 00.31

Inspector:	Name:	Company:	Phone:

Site Contact:	Name:	Company:	Phone:

Date:		Time Arrived:	
Site Conditions:			
Construction Activity:			

Construction Entrance/Exit	
• Has a stabilized exit been established?	Yes ☐ No ☐ N/A ☐
• Is the exit blocking existing drainage?	Yes ☐ No ☐ N/A ☐
• Does the exit need top dressed with additional stone?	Yes ☐ No ☐ N/A ☐
• Is mud noted on offsite streets?	Yes ☐ No ☐ N/A ☐
Comments:	

Concrete Washout Area	
• Has designated area been established?	Yes ☐ No ☐ N/A ☐
• Is washwater overflowing?	Yes ☐ No ☐ N/A ☐
Comments:	

Dewatering Activities	
• Is muddy water being pumped into storm sewers/surface waters?	Yes ☐ No ☐ N/A ☐
Comments:	

EROSION & SEDIMENT CONTROL SITE OBSERVATION

Project: RIC - 3rd St 00.31 **Date:**

Perimeter Controls - Sediment Fence/Straw Wattles/Compost Filter Socks	
• Has sediment fence been properly installed – trenched, backfilled, tight?	Yes ☐ No ☐ N/A ☐
• Are gaps present in the fence or runoff flowing under the fence?	Yes ☐ No ☐ N/A ☐
• Does the fence need to be repaired or installed?	Yes ☐ No ☐ N/A ☐
Comments:	

Storm Sewer Inlet Protection	
• Have inlets been protected?	Yes ☐ No ☐ N/A ☐
• Are they damaged or in need of replacement?	Yes ☐ No ☐ N/A ☐
• Does accumulated sediment need removed from the protection?	Yes ☐ No ☐ N/A ☐
Comments:	

Soil Stabilization	
• Does it appear that disturbed areas have been idle for more than 14 days?	Yes ☐ No ☐ N/A ☐
• Are disturbed areas present within 50' of a stream?	Yes ☐ No ☐ N/A ☐
• Are disturbed areas present that are to remain idle over the winter?	Yes ☐ No ☐ N/A ☐
• Are soil stockpiles present on site?	Yes ☐ No ☐ N/A ☐
• Does it appear that areas are at final grade and need stabilized?	Yes ☐ No ☐ N/A ☐
Comments:	

Check Dams	
• Is runoff flowing around the ends of the check dams?	Yes ☐ No ☐ N/A ☐
• Does accumulated sediment need to be removed?	Yes ☐ No ☐ N/A ☐
Comments:	

EROSION & SEDIMENT CONTROL SITE OBSERVATION

Project: RIC - 3rd St 00.31 **Date:**

Additional Comments:

"I certify under the 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 knowing violations."

Inspector Signature: _____Date:_____

EMH&T

APPENDIX F: SWPPP Amendment Log

RIC - 3RD ST 00.31
SWPPP AMENDMENT LOG

Amendment Number	Description of the Amendment	Amendment Date	Amendment Prepared By (Name & Title)