

# CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

For:

B-Line Trail Extension and Multiuse Path  
INDOT Designation Number: 1700735

Prepared by:



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**CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN**  
**B-Line Trail Extension and Multiuse Path**

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**ATTACHMENT A** Construction Plan Set

**ATTACHMENT B** Soil Map Excerpt from Wetland and Waterway Determination by Little River  
Consultants, LLC, Dated September 27, 2019

**ATTACHMENT C** Existing Site Layout Map



## PROJECT LOCATION INFORMATION

This project is within the City of Bloomington, Monroe County, Indiana and extends from the current B-Line trail terminus at Adams Street, between 10<sup>th</sup> Street and the Indiana Railroad, to the intersection of Crescent Road and 17<sup>th</sup> Street, via the Indiana Railroad, Fountain Drive (formerly Vernal Pike), and Crescent Road.

## PROJECT OWNER AND KEY PERSONNEL

### Owner

Name: City of Bloomington  
Address: 401 N Morton Street  
Bloomington, IN 47404  
Representative: Roy Aten  
Title: Senior Project Manager  
Telephone: (812) 349-3913

The owner is the party that has overall control of the activities and that has funded the implementation of the construction plans and specifications. This is the party with ownership of the property on which the construction activity is occurring.

### Operator

Name: City of Bloomington  
Address: 401 N Morton Street  
Bloomington, IN 47404  
Representative: Roy Aten  
Title: Senior Project Manager  
Telephone: (812) 349-3913

An operator is defined as the party that has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications. The party also has day-to-day operational control of those activities at a project necessary to ensure compliance with a storm water pollution prevention plan for the site of other permit conditions.

### Stormwater Quality Manager (SWQM)

Name:  
Address:

Representative:  
Title:  
Telephone:

The Contractor shall designate one person as the contract SWQM. The designated individual shall be trained as a level 1 or level 2 SWQM as indicated within the 100 contract documents. The SWQM training level shall meet or exceed the level required within the contract documents.

## **NOTICE OF INTENT**

All parties defined as owners or operators must submit a Notice of Intent (NOI) at 48 hours prior to commencement of on-site construction activities. Submittal of late NOIs is not prohibited; however, authorization under the construction general permit is only for discharges occurring after permit coverage is granted. Unpermitted discharges may be subject to enforcement actions by the Environmental Protection Agency (EPA).

## **USE OF INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARDS**

Wherever a number reference is given, the number refers to the applicable portion of the Indiana Department of Transportation (INDOT) Standard Specification (ISS). In addition, INDOT Standard Drawings and recurring special provisions have been referenced throughout this SWPPP. The 2018 INDOT Storm Water Management Field Guide (hereinafter referred to as INDOT Field Guide) and the IDEM Storm Water Quality Manual (ISWQM) have also been referenced in this document. All INDOT standards can be found on their website at the following website location <http://www.in.gov/dot/div/contracts/standards>.

## **SECTION A - GENERAL PLAN COMPONENTS**

### **A2 VICINITY MAP**

A Vicinity Map depicting the project site location in relation to recognizable local landmarks, towns, and major roads is shown on the title sheet of the construction plans.

### **A3 PROJECT NARRATIVE**

The project will extend the B-Line Trail west and north from its current terminus at Adams Street to the intersection of Crescent Road and 17<sup>th</sup> Street by constructing a new paved multiuse path along the north side of the Indiana Railroad, the east side of Fountain Drive, and the east side of Crescent Road. The path will be 8-feet to 12-feet wide depending on location. In addition to extending the B-Line Trail, the project will also consist of the following scope of work items:

- Realigning a portion of Fountain Drive slightly to the west
- Realigning the Fountain Drive / Crescent Road intersection
- A new storm water drainage system that includes curb, gutter, inlets, conveyance pipe, and grading the existing detention basin north of the Indiana Railroad as well as replacing the existing detention basin inlet and outlet structures
- Two new concrete pads for future bus stops, one at 11th Street just east of the intersection with Crescent Road, and one on Crescent Road north of the intersection with Fountain Drive
- Retaining walls at some locations along the path
- Utility installation and relocations
- Installing fencing and lighting along the portion of the path north of the Indiana Railroad
- Reconstructing driveways
- Pavement marking and signing
- Temporary and permanent erosion, sediment, and pollution control features

**A4 LATITUDE AND LONGITUDE OF PROJECT SITE**

The project begins at a latitude of 39.170932 North and at longitude of -86.549773 West.

**A5 LEGAL DESCRIPTION OF PROJECT SITE**

The project site is located in Township 9 North, Range 1 West, in portions of Sections 31 and 32.

**A6 11 X 17 PLAT**

Plat No.1 is provided in the construction plans (sheets 11-13).

**A7 100-YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES**

The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) was consulted to assess the impact of the project on the floodplains near the project site. There are no floodplains within or near the construction limits of the project.

**A8 ADJACENT LAND USE**

The adjacent land use consists of commercial, light industrial, and residential. New residential developments within the project area include a housing subdivision on the north end of Crescent Road constructed in 2010, and an apartment complex on Crescent Road just south of this subdivision constructed in 2020. Commercial and light industrial operations are located along both sides of Fountain Drive.

**A9 IDENTIFICATION OF A U.S. EPA APPROVED OR ESTABLISHED TMDL**

The project occurs within the Salt Creek Lower Watershed Total Maximum Daily Load (TMDL). The pollutants associated with the watershed include Escherichia coli (E. COLI).

**A10 IDENTIFICATION OF ALL RECEIVING WATERS**

The nearest receiving waters are unnamed ephemeral watercourses. North of the Crescent Road and Fountain Drive intersection, the unnamed receiving waters convey flows to the east eventually discharging into Griffy Creek located approximately 2.3 miles northeast of the project site. South of the Crescent Road and Fountain Drive intersection, the unnamed receiving waters convey flows south eventually discharging into an unnamed tributary to Clear Creek that is located approximately 0.34 miles south of the project.

**A11 IDENTIFICATION OF DISCHARGES TO WATER ON THE CURRENT 303(d) LIST OF IMPAIRED WATERS AND THE POLLUTANT(S) FOR WHICH IT IS IMPAIRED**

The unnamed tributary to Clear Creek is designated as a 303(d) impaired water and is included in the Salt Creek Lower Watershed TMDL report. The pollutants associated with the unnamed tributary include E. COLI.

**A12 SOILS MAP OF THE PREDOMINANT SOIL TYPES**

All soils information was obtained from the NRCS Web Soil Survey for Monroe County (<http://websoilsurvey.nrcs.usda.gov/app/>). This site primarily contains the following soils: Crider silt loam (CrC), Crider-Urban Land Complex (CtB and CtC), Hagerstown silt loam (HaD), and Hosmer-Urban Land Complex (HtB). The soil survey map is provided as part of the Wetland and Waterway Determination Report in Attachment B.

**A13 LOCATION AND NAME OF ALL WETLANDS, LAKES, AND WATERCOURSES ON AND ADJACENT TO THE SITE**

There are no wetlands, lakes, or watercourse located within the project site. All watercourses adjacent to the project site are unnamed ephemeral streams. See Attachment C: Existing Site Layout Map for locations of receiving waters.

**A14 STATE AND FEDERAL WATER QUALITY PERMITS**

The project will not involve impacts to any wetlands or jurisdictional waterways; therefore, a Clean Water Act Section 404/401 permit or State Isolated Wetland Permit is not required.

**A15 IDENTIFICATION AND DELINEATION OF EXISTING VEGETATIVE COVER, INCLUDING NATURAL BUFFERS**

Existing vegetative cover consists of several small, forested areas containing the following tree species: beech (*Fagus spp.*), oak (*Quercus spp.*), and maple (*Acer spp.*) All other unpaved areas within the project site consist of mown grass lawn and grassy roadside swales. See Attachment C for Existing Site Layout Map.

**A16 EXISTING SITE TOPOGRAPHY**

Existing site topography is detailed on the *Plan and Profiles* (sheets 18-27) in the construction plans. The existing topography information has been screened and appears lighter on the Plan sheets.

**A17 LOCATION(S) WHERE RUN-OFF ENTERS THE PROJECT SITE**

See Attachment C: Existing Site Layout Map for locations where run-off leaves the project site.

**A18 LOCATION(S) WHERE RUN-OFF DISCHARGES FROM THE PROJECT SITE PRIOR TO LAND DISTURBANCE**

See Attachment C: Existing Site Layout Map for locations where run-off leaves the project site.

**A19 LOCATION OF ALL EXISITNG STRUCTURES ON THE PROJECT SITE**

Existing structures are detailed on the *Plan and Profiles* (sheets 18-27) in the construction plans.

**A20 EXISTING PERMANENT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLANDS, DESIGNED FOR THE PURPOSE OF STORMWATER MANAGEMENT**

An existing detention basin is located at the southern end of the project north of the Indiana Railroad.

**A21 IDENTIFICATION OF ALL POTENTIAL DISCHARGES TO GROUNDWATER**

Discharges during construction may include oil, fuel, and other vehicular/equipment fluids. Several karst sinkholes are present in the area including some immediately adjacent to the project area. Silt fence will be installed as permit control to prevent adverse impacts to adjacent karst features. See *Erosion Control Details* (sheets 37-38) in Attachment A: Construction Plan Sets, for location of karst features and proposed stormwater control measures.

**A22 SIZE OF THE PROJECT AREA**

In total, the project area is approximately 4.84 acres.

**A23 TOTAL EXPECTED LAND DISTURBANCE**

Total land disturbance anticipated for the project is approximately 4.24 acres.

**A24 PROPOSED FINAL SITE TOPOGRAPHY**

Proposed final topography is defined by the *Typical Sections* (sheets 3-10) and the horizontal and vertical alignment on the *Plan and Profiles* (sheets 18-27) in Attachment A: Construction Plan Set.

**A25 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS**

The construction disturbance limits are shown on the *Plan and Profiles* (sheets 18-27) in Attachment A: Construction Plan Set.

**A26 LOCATIONS, SIZE, AND DIMENSIONS OF PROPOSED STORMWATER SYSTEMS**

The proposed pipe structures are detailed on the *Plan and Profiles* (sheets 18-27) in Attachment A: Construction Plan Set. Detailed structure information, including size and length of pipe and inlet elevations are shown in the *Structure Data Tables* (sheets 65-66) in Attachment A: Construction Plan Set. Detailed specifications are found in ISS 715 and 720; product specifications are found in ISS 907 and 908.

**A27 SPECIFIC POINT WHERE STORM WATER DISCHARGE WILL LEAVE THE SITE**

South of the Crescent Road and Fountain Drive intersection, stormwater will flow through an existing system of pipes that convey stormwater to roadside swales along Fountain Drive. The roadside swales drain to the south to an existing detention basin just north of the Indiana Railroad. Storm water discharges will leave the site south of the detention basin through a pipe outlet. North of the Crescent Road and Fountain Drive intersection, stormwater flows through an existing

system of pipes and leaves the site at a karst feature located east of Crescent Road and along grass line swales adjacent to Fountain Drive.

**A28 LOCATION OF ALL PROPOSED SITE IMPROVEMENTS**

The new roadway and trail construction items are shown on the *Typical Sections* (sheet 3-10), the *Plan and Profiles* (sheets 18-27) and the *Construction Details* (sheets 29-60) in Attachment A: Construction Plan Set.

**A29 LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL AREAS**

Stockpiling of selected materials shall be in accordance with ISS 212 and as directed by the engineer. The location of any soil stockpiles shall be determined by the contractor. The contractor is directed to provide specific information regarding the location of borrow or disposal areas to the IDEM Wet Weather Section prior to establishing the stockpiles. Information that shall be provided is listed in ISS 203.08. See ISS 205 for additional details.

**A30 PLANS FOR ANY OFF-SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT**

No off-site construction activities are proposed.

**A31 LOCATION OF ANY IN-STREAM ACTIVITIES**

No in-stream activities are anticipated for this project.

**A32 PRECONSTRUCTION AND POST-CONSTRUCTION ESTIMATE OF PEAK DISCHARGE**

The existing pre-construction peak discharges for a 60-minute storm duration are as follows:

10 year storm event = 11.20 cfs

100 year storm event = 23.40 cfs

The proposed project would re-purpose the existing detention basin as well as making drainage improvements. Under post-construction conditions peak discharge for a 60-minute storm duration is estimated as:

10 year storm event = 8.50 cfs

100 year storm event = 20.70 cfs

**SECTION B – CONSTRUCTION COMPONENT**

**B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES**

Pollutant sources that may be associated with construction activities on site include, but are not limited to, the following.

1. Exposed soils
2. Windblown dust
3. Leaking vehicles and equipment
4. Construction waste material
5. Fuel storage areas and fueling stations
6. Sanitary waste from temporary toilet facilities
7. Litter
8. Soil tracking off site from construction equipment
9. Material storage areas
10. Demolished existing roadway debris
11. Fertilizers and pesticides
12. Improperly installed concrete washout

Construction materials that may be staged or stored on site at various points during development include, but are not limited to, the following.

1. Structural Fill
2. Road base Materials
3. Aggregate for stable construction entrance
4. Concrete drainage structures
5. Miscellaneous pipe materials
6. Pavement marking and signing materials
7. Riprap and Geotextiles
8. Storm Water Structure Casting

Vegetation clearing shall be performed as needed to remove any objects such as trees, shrubs, etc., that are considered obstructions, as shown on the plans. Clearing shall be conducted in accordance with ISS 201.03. The act of clearing and removing of obstructions may result in unintentional ground disturbances that may, in turn, result in the possibility of sediment migration from the site. The contractor shall monitor surface stabilization throughout the removal process and implement measures necessary to maintain appropriate surface stabilization as required. Any areas left undisturbed for more than seven days shall be stabilized by the use of temporary seeding and mulching, as directed in ISS 205.

The contractor is responsible for all construction activities and the pollutants associated with them, as well as their remediation in accordance with ISS 108.04. The contractor is directed to

submit an amended erosion control plan to IDEM and the project owner prior to earthmoving activities. See ISS 108.

## **B2 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS**

Construction access shall be from the Fountain Drive roadway at the southern end of the project. Access will occur on the east side of Fountain Drive directly north of the Indiana Railroad. The Contractor shall maintain the roadway and the area around it for conformance to the requirements stipulated in ISS 108.04 and 205.03. Refer to INDOT Standard Drawings E 205-TECD-12 and INDOT Field Guide (pages 104-107) for details and good practices. If the contractor chooses to develop an amended access plan, it shall be submitted in writing to IDEM and the project owner prior to commencing. See ISS 108.

## **B3 TEMPORARY AND PERMANENT STABILIZATION SPECIFICATIONS**

Surface stabilization measures include permanent seeding all areas within seven (7) days. If the final grade has not been achieved within seven (7) days and will remain undisturbed, temporary seed shall be applied to all areas that will be left are defined in ISS 205.04.

Seeding or sodding shall be placed in all areas that will not be paved or are not proposed multi-use paths or sidewalks and are within the construction limits. The seed mixtures and sod shall be in accordance with ISS 914 and shall be applied in accordance with ISS 621. All incidentals including ground preparation, fertilizing, and mulching shall be in accordance with ISS 621. Seed mixtures and sod shall be placed within seven days of final grade.

## **B4 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS**

Concentrated flow areas will occur in the gutter areas and along the existing grass drainage swales along Fountain Drive.

The Contractor shall be responsible for providing appropriate curb inlet protection and is instructed to protect all curb inlets from sediment during construction using INDOT approved methods in accordance with ISS 205.05. Locations for installation of inlet protection are shown on the *Erosion Control Details* (sheets 37-38) in Attachment A: Construction Plan Set.

Refer to INDOT Standard Drawings E 205-TECD-02 through E 205-TECD-05 for details. Locations for installation of rock check dams are shown on the *Erosion Control Details* (sheets 37-38) in Attachment A: Construction Plan Set. Refer to INDOT Field Guide and ISWQM Chapter 7. Rock check dams are to be used in order to slow concentrated flows enough to drop sediments in the water. Sediment is to be periodically removed from the check dams. The dams are to be maintained in good working order. After construction is complete and the site has been stabilized the check dams are to be removed and disturbed areas are to be returned to existing condition prior to start of work. Any existing, vegetated ditches outside of the construction limits are not to be disturbed.

**B5 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS**

As the first action of construction, silt fence shall be installed at the locations shown in the *Erosion Control Details* (sheets 37-38) in Attachment A: Construction Plan Set. Sheet flow will occur on exposed areas during construction with the potential for erosion. All disturbed areas shall be temporarily seeded and mulched. If the final grade has not been achieved within seven (7) days and will remain undisturbed, temporary seed shall be applied to all areas that will be left are defined in ISS 205.04. Reseeding and mulch shall be required each time areas are disturbed. Silt fence, placed in accordance with the INDOT Standard Drawing E 205-TECD-11. The location of all measures to control sheet flow areas is shown on the *Erosion Control Details* (sheets 37-38) in Attachment A: Construction Plan Set.

**B6 RUNOFF CONTROL MEASURES**

The detention basin located at the southern end of the project north of the Indiana Railroad will receive the stormwater from the project site and allow for water to drop sediments before leaving the project site through an outlet pipe. The entire perimeter of the project area shall be silt fenced and all disturbed areas shall be temporarily seeded and mulched.

**B7 STORM WATER OUTLET PROTECTION LOCATION AND SPECIFICATIONS**

Riprap pads will be installed at the outlet of a proposed stormwater pipe located near Station 111+37.50 as shown on the *Plan and Profiles* (sheet 23) in Attachment A: Construction Plan Set, and on the downstream end of the proposed pipe outlet discharging into the detention basin as shown on the *Detention Basin Grading Plan* (sheet 35) in Attachment A: Construction Plan Set. Additionally, a riprap lined v-ditch will be installed at the outlet of an existing pipe near Station 30+00 as shown on the *Drainage Detail* (sheet 36) in Attachment A: Construction Plan Set. Refer to ISWQM Chapter 7 and the INDOT Field Guide (pages 86-89) for details and good practices.

**B8 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS**

Concrete masonry retaining walls (CMU) are required within the construction site. For locations of CMUs see the *Retaining Wall Details* (sheets 39-41) in Attachment A: Construction Plan Set.

**B9 DEWATERNG APPLICATIONS AND MANAGEMENT METHODS**

There are no dewatering operations anticipated for this project.

**B10 MEASURES UTILIZED FOR WORK WITHIN WATERBODIES**

Work within waterbodies is not anticipated for this project.

**B11 MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE**

The monitoring and maintenance of all temporary erosion control measures shall be in accordance with ISS 205.07, “Temporary Erosion Control Measures” and “Stormwater Pollution Prevention Plan.” In addition to weekly inspections of the measures, a post-event inspection shall

occur within 24 hours of each 0.5-inch storm event. Inspections shall use the sheet provided in INDOT Recurring Special Provisions (RSP 108-C-192d).

All temporary erosion control measures shall be installed and maintained in accordance with ISS 205 and the applicable standard drawings and material specifications contained within the ISS. All temporary erosion control measures are shown on the *Erosion Control Details* (sheets 37-38) in Attachment A: Construction Plan Set.

### **Silt Fence**

Silt fence shall be installed in accordance with INDOT Standard Drawing E 205-TECD-11. The materials shall be in accordance with ISS 918. Per ISS 205.07(a), if the fence fabric tears, starts to decompose, or becomes ineffective, the affected portion shall be replaced. Deposited sediment shall be removed once it reaches 1/2 the height of the fence at its lowest point. Once the contributing drainage area has been stabilized, the Contractor shall remove the fence and sediment deposits, grade the site to blend with the surrounding area, and stabilize the graded area.

### **Temporary Seeding and Mulching**

Temporary seeding and mulching shall be completed in accordance with ISS 621.05. Seeding and mulching shall be placed in accordance with ISS 621.05, sodding shall be placed in accordance with ISS 621.09, and seeding, sodding, and mulching materials shall be in accordance with ISS 914.

### **Inlet Protection**

Inlet protection measures should be in accordance with ISS 205.05. See INDOT Standard Drawings E 205-TECD-02 through E 205-TECD-05. Per ISS 205.07(d), accumulated sediment shall be removed once identified and after each storm event. Flushing with water will not be allowed. The sediment shall not be allowed to re-enter the paved area or storm drains. Curb inlet inserts shall be cleaned in accordance with the manufacturer's recommendations.

### **Filter Sock**

Filter sock shall be in accordance with ISS 914.09(h). See INDOT Standard Drawings E 205-TECD-02. Per ISS 205.07(c), accumulated sediment shall be removed once it reaches 1/4 of the height of the filter berm. The filter berm shall be inspected to ensure that it is holding its shape and allowing adequate flow. Eroded and damaged areas shall be repaired.

### **Check Dams**

Check dams shall be installed in accordance with ISS 205.05(a). See INDOT Standard Drawing E 205-TECD-06 through E 205-TECD-08. Per ISS 205.07(e), sediment shall be removed once it reaches 1/2 the height of the check dam. Sediment shall be removed and disposed of in accordance with ISS 201.03 and ISS 203.08. The Contractor shall rebuild or repair each damaged check dam to maintain the design height, cross section, and control function.

### **Construction Entrance**

Temporary erosion control perimeter construction entrance shall be installed in accordance with INDOT Standard Drawing E 205-TECD-12. Locations where vehicles exit the site shall be inspected for evidence of off-site sediment tracking. Per ISS 205.07, redress the #2 stone as necessary to provide clean stone with voids capable of trapping additional sediment, remove stone and sediment and replace with clean #2 stone on construction entrances near sensitive areas (wetlands, streams, etc.) or where redressing could cause a safety (example: sight lines) or drainage problems, sweep or otherwise remove sediment from public roads as necessary, and reshape, resize or relocate ineffective construction entrances.

### **B12 SEQUENCE DESCRIBING STORM WATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES**

Due to construction phasing, portions of the sequence outlined below may be repeated.

1. Install temporary perimeter erosion control measures, silt fence and temporary rock check dams.
2. Install temporary erosion control measures appropriate for stable construction entrance and right-of-way clearing.
3. Install construction entrances, inlet protection for existing storm facilities and proceed with clearing and removal items. Maintain silt fence and check dams, reseed disturbed areas.
4. Install staging areas, material storage areas, fueling stations and protection measures.
5. Begin utility relocation activities. Maintain water quality measures in place, supplement as necessary.
6. Rough grade site and maintain existing storm inlet protection, silt fence, temporary seed and mulch and rock check dams.
7. Install proposed storm water facilities. Maintain water quality measures in place, supplement as necessary. Install new storm inlet protections (INDOT Standard Drawing E 205-TECD-02 through E 205 TECD-05).
8. Construct retaining walls. Maintain water quality measures in place, supplement as necessary.
9. Construct curb, pavement and walks. Maintain water quality measures in place, supplement as necessary. Install new storm inlet protections (INDOT Standard Drawing E-205-TECD-02 through E 205 TECD-05).
10. Finish grading and complete construction activities. Install permanent seed/sod and landscaping. See ISS 621 and 622.

The contractor may be required to adjust the proposed erosion control plan as needed for the construction phasing of the project. The contractor is required to submit a plan for their sequence of operations and implementation of erosion control measures following awarding of the contract to the Engineer and IDEM. See ISS 108.

**B13 PROVISIONS FOR EROSION AND SEDIMENT CONTROL ON INDIVIDUAL RESIDENTIAL BUILDING LOTS**

No structures will be disturbed for the proposed reconstruction.

**B14 MATERIAL HANDLING AND SPILL PREVENTION PLAN**

Discharge of hazardous substances or oil into storm water is subject to reporting requirements. In the event of a spill, the contractor is required to notify the IDEM Office of Environmental Response [(888) 233-7745] to properly report the spill. In addition, the contractor shall submit a written description of the release, including type and amount of materials released, date of release, circumstances, and steps taken to prevent future spills to the Engineer.

**Materials Handling and Spill Prevention**

Materials should be stored in a manner that prevents or minimizes the chance a spill will reach soils, groundwater, or surface water. Materials stored inside shall be placed in a manner to prevent a spill from migrating outside the confines of the building or into any drain leaving the building and discharging into soils, groundwater, or surface water. If an onside fueling station is used, a spill kit shall be provided.

If a spill does occur, then the spill must be contained immediately utilizing appropriate response techniques, including diking and absorbents. Clean up of the spill should occur as soon as possible once the spill is stabilized and contained. Spills shall be cleaned up using acceptable methods, such as absorbents on impervious surfaces or removal of contaminated soils. In all cases, cleanup standards must adhere to local, state, and federal requirements. Failure to clean up any spill is a violation of the Indiana State Spill Rule (327 IAC 2-6.1), which is enforced by IDEM. Certain spills must be reported to the local response agency, Local Emergency Planning Committee, and/or IDEM. Initial calls should be made to the 911 systems if the spill exceeds reportable quantities or is a threat to public safety. The 911 system will typically notify the fire department. IDEM [(888) 233-7745] can typically assist with information on cleanup operations or clean up contractors.

All spills that occur near an inlet to the storm water conveyance system must have “curbing” implemented immediately. “Curbing” is the use of a barrier (absorbent material) that prevents the spill from making contact with the storm water conveyance system of storm water runoff.

Spill prevention starts with pre-planning. A spill prevention and control plan should be developed and utilized prior to any emergency. This plan should be shared with all employees and reviewed periodically.

## **B15 MATERIAL HANDLING AND STORAGE PROCEDURES**

### **Solid Waste Disposal**

No solid material, including construction materials, is permitted to be discharged to surface waters or buried on site. All solid waste materials, including disposable materials incidental to the construction activities, must be collected in containers or closed dumpsters. The collection containers must be emptied periodically, and the collected material hauled to a landfill permitted by the state and/or appropriate local municipality to accept the waste for disposal.

### **Hazardous Waste**

Whenever possible, minimize the use of hazardous materials and generation of hazardous wastes. All hazardous waste materials shall be disposed in the manner specified by federal, state, or local regulations or by the manufacture.

Chemicals, paints, solvents, fertilizers, and other toxic or hazardous materials should be stored in their original containers. (If original container is not re-sealable, store the products in clearly labeled, waterproof containers.) Except during application, the containers should be kept in trucks or in bermed areas within covered storage facilities. Runoff containing such materials shall be collected, removed from the site, and disposed of in accordance with the federal, state, and local regulations.

As may be required by federal, state, or local regulations, the contractor shall have a Hazardous Materials Management Plan and/or Hazardous Materials Spill and Prevention Program in place. The location of any hazardous material storage areas shall be included in the amended storm water pollution prevention plan prepared by the contractor prior to the start of construction.

### **Equipment Fueling and Storage Areas**

Equipment fueling, maintenance, and cleaning shall only be done in protected areas (i.e., bermed area). Leaking equipment and maintenance fluids shall be collected and not allowed to discharge onto soil where they may be washed away during a rain event. If an onsite fueling station is used, a spill kit must be provided.

Equipment wash down (except for wheel washes) shall take place within an area surrounded by a berm. The use of detergents is prohibited.

### **Dust Control/Off-Site Vehicle Tracking**

During construction, water trucks shall be used, as needed, by each contractor or subcontractor to reduce dust. After construction, the site shall be stabilized to reduce dust.

Construction traffic shall enter and exit the site at a construction entrance with a rock pad or equivalent device. The purpose of the rock pad is to minimize the amount of soil and mud tracked onto existing streets. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

Sediment shall be removed with a vacuum and/or sweeper and not brushed into the air or storm water conveyances.

### **Sanitary/Septic**

Contractors and subcontractors must comply with all state and local sanitary sewer, portable toilet, or septic system regulations. Sanitary facilities shall be provided at the site by each contractor or subcontractor throughout construction activities. The sanitary facilities shall be utilized by all construction personnel and serviced regularly. All expenses associated with providing sanitary facilities are the responsibility of the contractors and subcontractors. The location of any sanitary facilities shall be indicated on the storm water pollution prevention plan.

### **Water Source**

Water used to establish and maintain grass, control dust, and for other construction purposes must originate from a public water supply or private well approved by the state or local health department.

## **SECTION C – POST-CONSTRUCTION COMPONENT**

### **C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE**

The proposed land use is a public roadway. The pollutants and sources of each pollutant normally expected from this type of land use are listed below.

*Pollutant Source:* Passenger vehicles, delivery vehicles

*Type of Pollutant:* Oil, gasoline, diesel fuel, any hydrocarbon associated with vehicular fuels and lubricants, grease, antifreeze, windshield cleaner solution, brake fluid, brake dust, rubber, glass, metal and plastic fragments, grit, road de-icing materials, litter, and other trash. In addition, the use of fertilizers and insecticides are likely.

### **C2 DESCRIPTION OF PROPOSED POST-CONSTRUCTION STORMWATER MEASURES**

Seed/sod shall be used in all disturbed areas for permanent stormwater quality measures and placed in accordance with ISS 621. Vegetation works to reduce sediment migration by holding soil in place, as well as filtering sheet flow runoff as it moves over the vegetation. Since roadway pollutants often bind to soil particles, this keeps much of the roadway pollution on-site. Catch basins have been included within the proposed storm sewer system to collect sand and gravel from the roadway. Temporary inlet protection will prevent sediment from entering the storm sewer system during construction allowing it to operate as designed throughout construction.

One existing Structural BMP (detention basin) would be re-purposed and connected to the proposed stormwater system and associated existing inlet and outlet pipes would be replaced. Utilizing the existing detention basin would allow the capture of sediment and other pollutants before it leaves the project site. The project is designed so that the post-development run-off from the project site does not exceed the pre-development run-off.

**C3 PLAN DETAILS FOR EACH STORMWATER QUALITY MEASURE**

Details for the proposed detention basin are shown on the *Detention Basin Grading Plan* (sheet 35) in Attachment A: Construction Plan Set.

**C4 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION**

The Contractor shall implement permanent erosion control measures as soon as it is practical. Permanent seeding or sodding shall occur when the disturbed area is at final grade. Once the project has been completed and before final approval of the project, the Contractor shall inspect all previously installed measures for compliance with the standard specifications and construction plans. The Contractor shall remove any built-up sediment deposits and repair any measures that have failed, including reseeding or sodding any areas where surface runoff has removed the previously installed measure. All disturbed ground shall be temporarily seeded if it is left undisturbed for more than seven (7) calendar days, and any additional seeding or sodding shall be completed when the project is substantially complete.

Seed/sod shall be used in all disturbed areas for permanent storm water quality measures and placed in accordance with ISS 621. Vegetation works to reduce sediment migration by holding soil in place, as well as filtering sheet flow runoff as it moves over the vegetation. Since roadway pollutants often bind to soil particles, this keeps much of the roadway pollution on-site. Catch basins have been included within the proposed storm sewer system to collect sand and gravel from the roadway. Temporary inlet protection will prevent sediment from entering the storm sewer system during construction allowing it to operate as designed throughout construction.

One existing Structural BMP (detention basin) would be re-purposed and connected to the proposed storm water system and associated existing inlet and outlet pipes would be replaced. Utilizing the existing detention basin would allow the capture of sediment and other pollutants before it leaves the project site.

**C5 MAINTENANCE GUIDELINES FOR POST-CONSTRUCTION STORMWATER QUALITY MEASURES**

The proposed detention basin would be maintained by removing sediment once design volume is reached. Filter stone would be replaced when water does not drain within 72 hours (see INDOT Field Guide: Page 117).

**C6 ENTITY THAT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE POST-CONSTRUCTION STORMWATR MEASURES**

City of Bloomington Utilities Department will be responsible for maintaining all areas along the roadway and within the right-of-way.

Routine inspections of all area inlets will be inspected for sediment build-up around and within the inlet.

Routine cleaning and emptying of the Structural BMPs will be needed to remove sediment to ensure the proper function of the BMPs.

Suggested maintenance measures include regular mowing and litter pick up along the roadway, sediment removal from inlets, and reconstruction of areas of significant erosion.

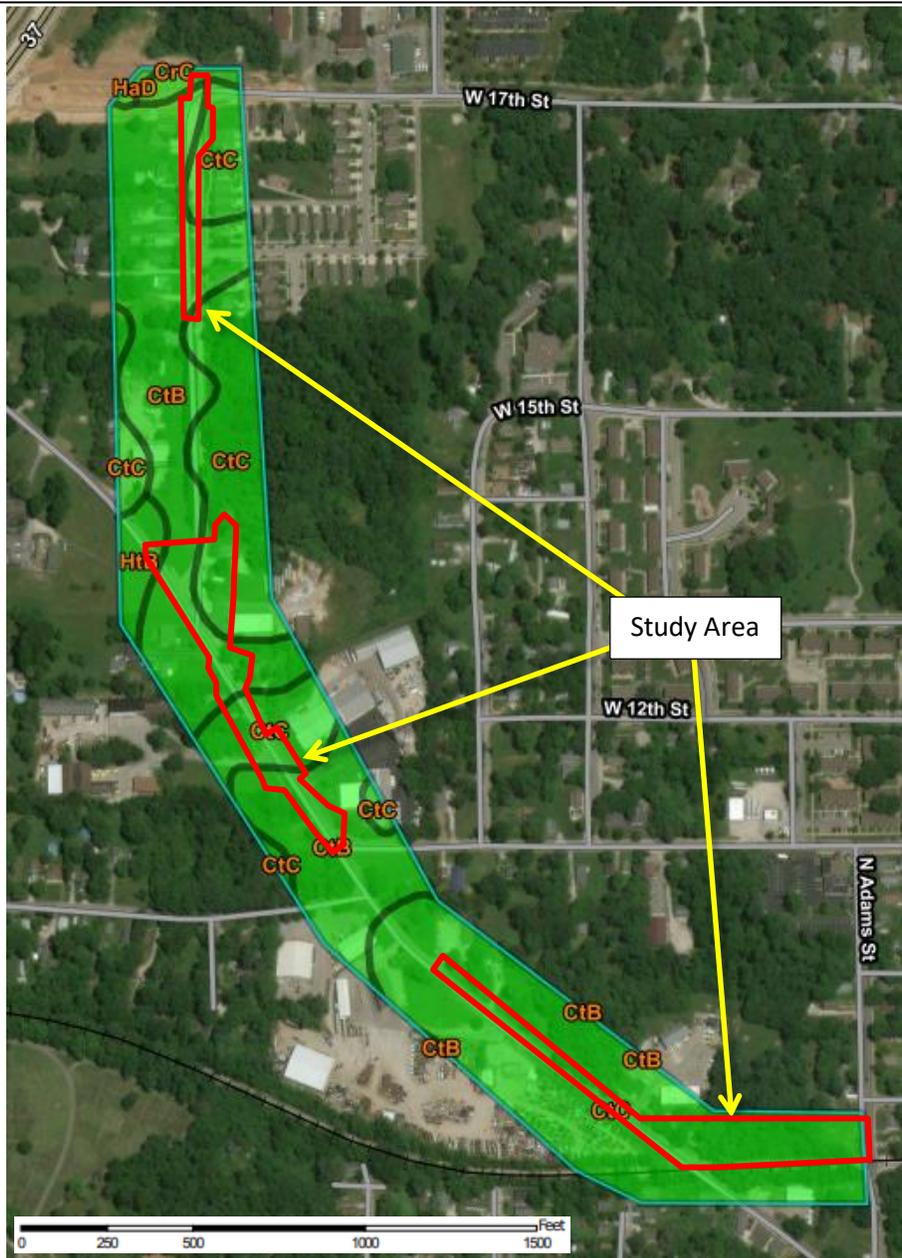
# **ATTACHMENT A**

## Construction Plan Set

**NOTE: See STG 3 Submittal for Construction Plans**

## **ATTACHMENT B**

Soil Map Excerpt from Wetland and Waterway Determination by Little River  
Consultants, LLC, Dated September 27, 2019



**Tables – Hydric Rating by Map Unit – Summary By Map Unit**

**Summary by Map Unit – Monroe County, Indiana (IN105)**

Summary by Map Unit – Monroe County, Indiana (IN105)

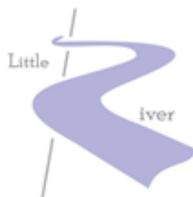
Map unit symbol	Map unit name	Rating
CrC	Crider silt loam, 6 to 12 percent slopes	0
CtB	Crider-Urban land complex, 2 to 6 percent slopes	0
CtC	Crider-Urban land complex, 6 to 12 percent slopes	0
HaD	Hagerstown silt loam, 12 to 18 percent slopes	0
HtB	Hosmer-Urban land complex, 2 to 12 percent slopes	0

**Exhibit 4 – Soil Survey**

**Wetland and Waterways Delineation**

Created: August 26, 2019  
 Source: NRCS Web Soil Survey  
 Scale As Shown

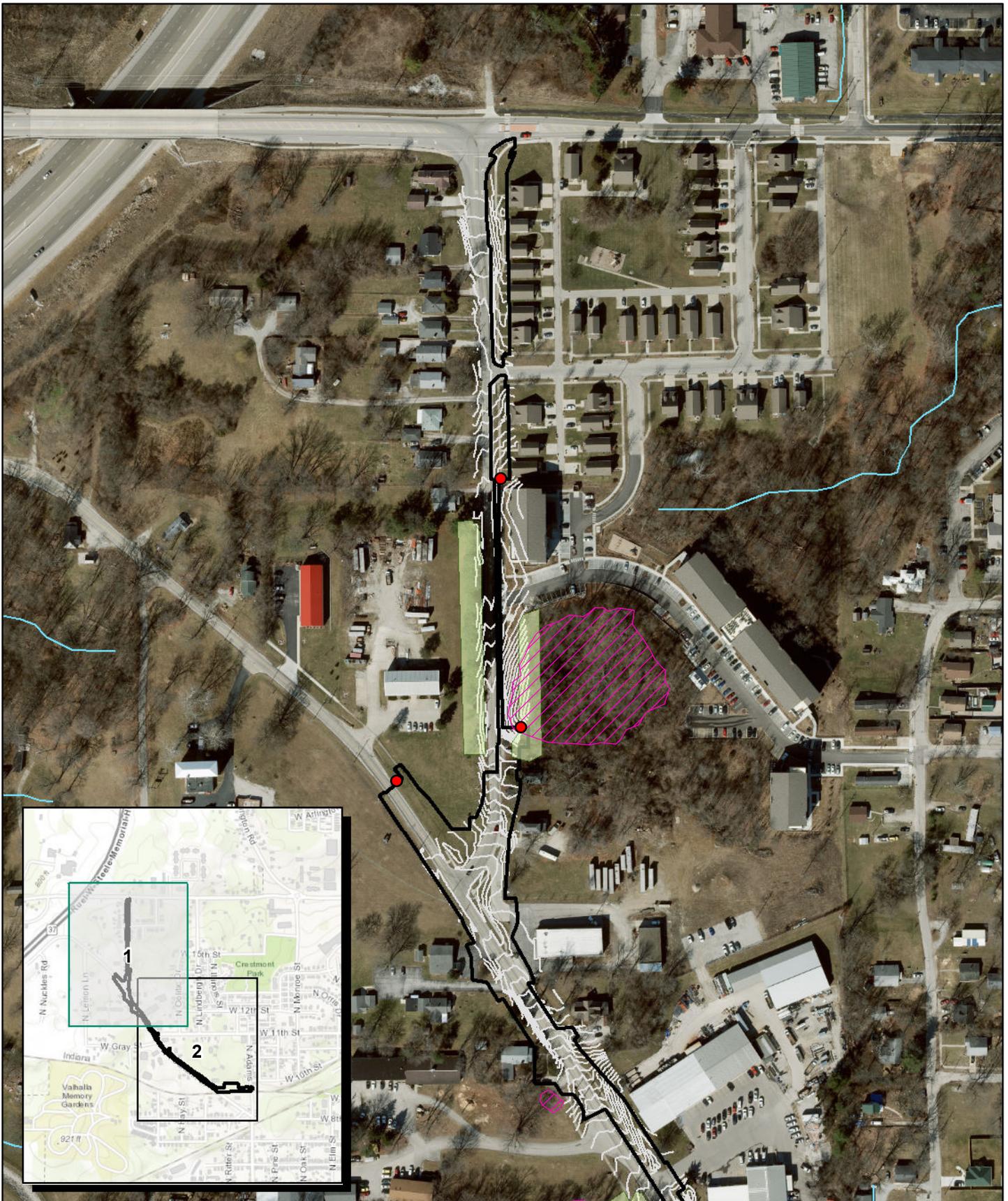
B-Line Trail Expansion  
 Bloomington, IN  
 Project No: 19-018



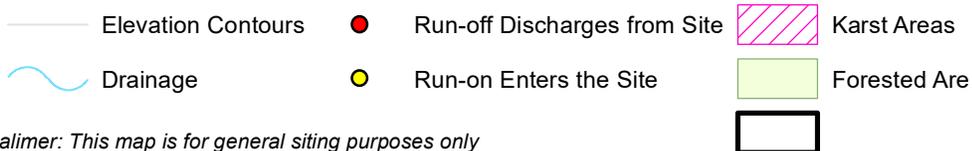
## **ATTACHMENT C**

### Existing Site Layout Map

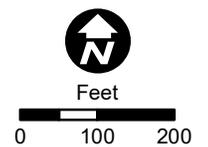
# Existing Site Layout Map - Sheet 1 of 2



Sources: AZTEC (2022); Indiana Orthophotography (2021); NHD (2016)



Map Disclaimer: This map is for general siting purposes only



# Existing Site Layout Map - Sheet 2 of 2



Sources: AZTEC (2022); Indiana Orthophotography (2021); NHD (2016)

- Elevation Contours
- Drainage
- Run-off Discharges from Site
- Run-on Enters the Site
- Karst Areas
- Forested Area
- 

Feet

Map Disclaimer: This map is for general siting purposes only