Stormwater Pollution Prevention Plan

For:

STAG'S FIELD
NE BOWLIN ROAD
LEE'S SUMMIT, MISSOURI

Operator(s):

BOWLIN ROAD INVESTMENTS, LLC
RYAN ROBERTSHAW
7021 JOHNSON DR
MISSION, KANSAS 66202
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SWPPP Contact(s):

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SWPPP Preparation Date:

04 / 26 / 2021

Estimated Project Dates:

Project Start Date: 05 / 01 / 2021
Project Completion Date: 02 / 15 / 2022

Contents

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: STAG'S FIELD
Project Street/Location: 2345 NE BOWLIN RD
City: LEE'S SUMMIT State: MO ZIP Code:
County or Similar Subdivision: JACKSON

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:	Longitude:
1. _39º 00 ' 15" N (degrees, minutes, seconds)	1. 94º 20' 44" W (degrees, minutes, seconds)
2. _ _ º _ _ . _ _' N (degrees, minutes, decimal)	2. _ _ º _ _ . _ _' W (degrees, minutes, decimal)
3. _ _ . _ _ _ _ º N (decimal)	3. _ _ . _ _ _ _ º W (decimal)

Method for determining latitude/longitude:
☐ USGS topographic map (specify scale: 7.5) ☐ EPA Web site ☐ GPS
☒ Other (please specify): Google Earth

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*:

**(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 / Responsable Parties

Owner(s):

BOWLIN ROAD INVESTMENTS, LLC

RYAN ROBERTSHAW
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MISSION, KANSAS 66202
913-562-5644
RYAN@STAGCOMMERCIAL.COM

Operator(s):

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STAG COMMERCIAL, LLC

Responsible Party - Project Manager or Site Supervisor:

BOWLIN ROAD INVESTMENTS, LLC
RYAN ROBERTSHAW
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This SWPPP was prepared by:
(Preparer is Not Contracted for SWP2 compliance documentation)

Schlagel & Associates, P.A.
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14920 West107th Street
Lenexa, KS 66215
913-492-5158
JL@schlagelassociates.com

Subcontractor(s): See Appendix H for Subcontractor Certifications

Subcontractor Responsibility: ***GRADING/STREET CONTRACTOR***
Company:_____
Project Superintendant:_____
Address:_____
City, State, Zip Code:_____
Telephone Number:_____

Subcontractor Responsibility: ***SANITARY SEWER CONTRACTOR***
Company:_____
Project Superintendant:_____
Address:_____
City, State, Zip Code:_____
Telephone Number:_____

Subcontractor Responsibility: ***OTHER CONTRACTOR***
Company:_____
Project Superintendant:_____
Address:_____
City, State, Zip Code:_____
Telephone Number:_____

Subcontractor Responsibility: ***OTHER CONTRACTOR***
Company:_____
Project Superintendant:_____
Address:_____
City, State, Zip Code:_____
Telephone Number:_____

Subcontractor Responsibility: ***INSPECTOR***
Company:_____
Project Superintendant:_____
Address:_____
City, State, Zip Code:_____
Telephone Number:_____

1.3 Nature and Sequence of Construction Activity

Describe the general scope of the work for the project, major phases of construction, etc.:

The scope of this project is limited to site grading for residential development. See erosion and sediment control staging chart on attached erosion and sediment control plan.

What is the function of the construction activity?

☒ Residential ☐ Commercial ☐ Industrial ☐ Road Construction ☐ Linear Utility

☐ Other (please specify):

Estimated Project Start Date: 05 / 01 / 2021

Estimated Project Completion Date: 02 / 15 / 2022

Estimated Timeline of Activity	Construction Activity and BMP Descriptions
05/01/2021 – 02/15/2022	**Before any site grading activities begin** 1. Install perimeter silt fences and/or mulch berm (See Section 2, Part 2.7) 2. Construct stabilized construction exit (See Section 2, Part 2.9). 3. Install siltation basins.
05/01/2021 – 02/15/2022	**Site grading** 1. Begin site clearing and grubbing operations 2. Begin overall site grading and topsoil stripping 3. Establish topsoil stockpile (See Section 2, Part 2.1) 4. Install silt fences around stockpile and cover stockpiles (Section 2, Part 2.1) 5. Disturbed areas where construction will cease for more than 14 days will be stabilized with erosion controls (See Section 2, Part 2.4) 6. Install silt fence as shown on Land Disturbance Plan when mass grading has been completed. Reducing migration of silt to siltation basin.

05/01/2021 – 02/15/2022	**Infrastructure (utilities, streets, etc)** 1. Construct staging and materials storage area (See Section 3, Part 3.2) 2. Install temporary sanitary facilities and dumpsters (See Section 3, Part 3.1) 3. Construct temporary concrete washout area (See Section 3, Part 3.3) 4. Grade building pads. 5. Construction of buildings. 6. Install sanitary sewers and storm sewers 7. Prepare street and parking lot pavement subgrade, install curb and gutters. Install pavement for streets and parking lots. 8. Install water service lines. May be necessary prior to street and parking lot construction. 9. Remove temporary concrete washout area (See Section 3, Part 3.3)
05/01/2021 – 02/15/2022	**Final Stabilization and Landscaping** 1. Prepare final seeding and landscaping 2. Remove all temporary control BMP's and stabilize any areas disturbed by their removal with erosion controls 3. Monitor stabilized areas until final stabilization is reached

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s):

See Soils Report

Slopes (describe current slopes and note any changes due to grading or fill activities):

See Grading Plan or Land Disturbance Plan.

Drainage Patterns (describe current drainage patterns and note any changes dues to grading or fill activities):

Drainage is form south to north into two detention basins which will act as siltation basins during construction.

Vegetation:

Will be primarily turf vegetation, trees and landscaping.

Other:

N/A

1.5 Construction Site Estimates

The following are estimates of the construction site.

Total project area:	28. 6 acres
Construction site area to be disturbed :	33.73 acres
Percentage impervious area before construction:	2.0% on Site. Bowlin Road is approximately 50% pavement.
Runoff coefficient before construction:	CN = 74.5 on Site.
Percentage impervious area after construction:	35%
Runoff coefficient after construction	CN = 85.4 on site

1.6 Receiving Waters

Description of receiving waters:

Drainage is to Blue Springs Lake

Description of storm sewer systems:

Private on-site system. Designed to the specifications of the City of Lee's Summit

Description of impaired waters or waters subject to TMDLs:

Other:

Description of unique features that are to be preserved:

Describe measures to protect these features:

1.7 Site Features and Sensitive Areas to be protected

Sensitive or Protected Areas (50' from stream/defined channel)

N/A

Describe measures to protect these features (if applicable):

N/A

1.8 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

Grading activities to bare soil for installation of streets, parking and buildings.

Potential pollutants and sources, other than sediment, to stormwater runoff:

- Combined Staging Area – small fueling activities, minor equipment maintenance, sanitary facilities, and hazardous waste storage.
- Materials Storage Area – general building materials, solvents, adhesives, paving materials, paints, aggregates, trash, and so on.
- Construction Activity – paving, curb/gutter installation, concrete pouring/mortar/stucco, and building construction.
- Concrete Washout Area.

For all potential construction site pollutants, see Table 2 – next page.

Table 2. Potential Construction Site Pollutants

Material	Physical Description	Stormwater Pollutants	Location*
Pesticides secticides, fungicides, herbicides, rodenticides)	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic	Herbicides used for noxious weed control
Fertilizer	Liquid or solid grains	Nitrogen, phosphorous	Newly seeded areas
Plaster	White granules or powder	Calcium sulphate, calcium carbonate, sulfuric acid	Building construction
Cleaning solvents	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates	No equipment cleaning allowed in project limits
Asphalt	Black solid	Oil, petroleum distillates	Streets and roofing
Concrete	White solid/grey liquid	Limestone, sand, pH, chromium	Curb and gutter, building construction
Glue, adhesives	White or yellow liquid	Polymers, epoxies	Building construction
Paints	Various colored liquid	Metal oxides, Stoddard solvent, talc, calcium carbonate, arsenic	Building construction
Curing compounds	Creamy white liquid	Naphtha	Curb and gutter
Wood preservatives	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper, chromium	Timber pads and building construction
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil	Leaks or broken hoses from equipment
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE	Secondary containment/staging area
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes	Second containment/staging area
Kerosene	Pale yellow liquid petroleum hydrocarbon	Coal oil, petroleum distillates	Secondary containment/staging area
Antifreeze / coolant	Clear green/yellow liquid	Ehtylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	Leaks or broken hoses from equipment
Sanitary toilets	Various colored liquid	Bacteria, parasites, and viruses	Staging area

1.9 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☐ Yes ☐ No

Describe how this determination was made:

Missouri Department of Conservation was contacted. MDC issued a Natural Heritage Review – Level 3 Report for possible endangered federal and state species in the area. Project type recommendations are contained in this report. Because trees will be removed from the project area, additional correspondence as sent to National Fish & Wildlife Service. See Appendix L.

If yes, describe the species and/or critical habitat:

Possibility: Indiana Bats. Northern Long-eared Bats.

If yes, describe or refer to documentation that determines the likelihood of an impact on identified species and/or habitat and the steps taken to address that impact. (Note, if species are on or near your project site, EPA strongly recommends that the site operator work closely with the appropriate field office of the U.S. Fish and Wildlife Service or National Marine Fisheries Service. For concerns related to state or tribal listing of species, please contact a state or tribal official.)

During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy.

1.10 Historic Preservation

Are there any historic sites on or near the construction site?

☐ Yes ☐ No

Describe how this determination was made:

To verify there were no historic sites on or near the project, Schlagel contacted Missouri Department, State Historic Preservation Office, PO Box 176, Jefferson City, MO 65102.

See attached letter in Appendix L

If yes, describe or refer to documentation that determines the likelihood of an impact on this historic site and the steps taken to address that impact.

N/A

1.11 Applicable Federal, Tribal, State or Local Programs

N/A

1.12 Maps

See Appendix B – Site Maps

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

The SWPPP Operator or Delegated Authority must identify the responsible staff for each BMP as either himself/herself or provide the responsible staff, along with their qualifications.

The required BMP devices proposed for this SWPPP, as well as their design specifications, installation, maintenance, and inspection requirements are provided on the attached Erosion Control Plan. The sections below describe the general categories of the BMPs, and identify the Responsible party for each category.

2.1 Minimize Disturbed Area and Protect Natural Features and Soil

Top Soil

BMP Description:

Topsoil stripped from the site will be stockpiled as identified on the site map or as determined by the Site Supervisor. Establish perimeter sediment controls prior to grading activities per Section 2.7.

Installation Schedule:	See attached Land Disturbance Plans for Stag's Field.
Maintenance and Inspection:	Inspect weekly for erosion and after storm events. Maintenance and inspections procedures are described in Section 2.
Responsible Staff:	

Phase Construction

BMP Description:

This project is intended to take place in one phase, due to the nature of the construction. Once the fills have been placed, the site is to be immediately stabilized with permanent vegetation, as defined by this document.

Installation Schedule:	See attached Land Disturbance Plans for Stag's Field.
Maintenance and Inspection:	Inspect weekly for erosion and after storm events. Maintenance and inspections procedures are described in Section 2.
Responsible Staff:	

Existing Vegetation

BMP Description:

The preserved area of vegetation, as identified on the site map, will be surrounded by a temporary orange colored plastic mesh fence. Clearing and grubbing within 50 feet of a defined drainage channel should be avoided, if feasible. The fencing shall be at least three feet tall and the openings shall not be larger than 2 inches by 2 inches. The fencing shall be installed at the drip lines of the trees and undergrowth vegetation to be protected.

Installation Schedule:	No temporary fencing is planned for this project
Maintenance and Inspection:	Inspect weekly to ensure fence is intact and visible.
Responsible Staff:	

2.2 Phase Construction Activity

See Section 1.3 for Sequence of Construction Activity

No phasing planned for this project.

BMP Description: This project is intended to take place in one phase, due to the nature of the construction. Once the fills have been placed, the site is to be immediately stabilized with permanent vegetation, as defined by this document.	
Installation Schedule:	See attached Land Disturbance Plans for Stag's Field.
Maintenance and Inspection:	
Responsible Staff:	

2.3 Control Stormwater Flowing onto and through the Project

Silt Fence

BMP Description: Silt fence shall be installed as indicated in the Land Disturbance Plans during construction to help control migration of silt form site. Offsite flow onto and through the project is minimal.	
Installation Schedule:	Silt fence to be maintained throughout site construction. Additional silt fence will be necessary as construction progresses and installed to reduce the migration of silt form the site.
Maintenance and Inspection:	Inspect weekly for silt build-up and after storm events. Maintenance and inspections procedures are described in Section 2.
Responsible Staff:	

***BMP Description*:**	
***Installation Schedule*:**	
***Maintenance and Inspection*:**	
***Responsible Staff*:**	

2.3 Stabilize Soils

Temporary Stabilization

BMP Description: Topsoil stock piles and disturbed portions of the site where construction activity temporarily ceases for more than 14 days will be stabilized with temporary seed and mulch no more than 14 days from the last construction activity in that area. The temporary seed shall be as specified below. After seeding, each area shall be mulched with 2,000 pounds per acre of straw. The straw mulch is to be tacked into place by a disk with blades set nearly straight.

Seeding Rate: Dec. 1 - March 1 80 lbs/acre oat grain
March 1 - Dec. 1 80 lbs/acre cereal rye or wheat

☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Portions of the site where construction activities have ceased for more than 14 days.
Maintenance and Inspection:	Weekly and after rain events. If washout, breakage, or erosion occurs, the area will be repaired and re-seeded and mulched.
Responsible Staff:	

Permanent Stabilization

BMP Description: Stabilization shall be initiated immediately at disturbed portions of the site where construction activities have permanently ceased. The permanent seed mix shall consist of 80 lbs/acre tall fescue, and 40 lbs/acre kobe lespedeza or another mix as determined by the Landscape Architect. After seeding, each area shall be mulched with 4,000 pounds per acre of straw. The straw mulch is to be tacked into place by a disk with blades set nearly straight.

☒ ***Permanent***	☐ ***Temporary***
Installation Schedule:	Permanent stabilization shall be initiated immediately where construction has permanently ceased.
Maintenance and Inspection:	Weekly and after rain events until a dense cover of vegetation is established. If failure is noticed, the area will be reseeded, fertilized, and mulched immediately.
Responsible Staff:	

Dust Control

BMP Description: Dust from the site will be controlled by using a mobile pressure-type distributor truck to apply potable water to disturbed areas. The mobile unit will apply water at a rate of 300 gallons per acre and minimized as necessary to prevent runoff and ponding.

Installation Schedule:	Dust control will be implemented as needed once site grading has been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of potable water will be performed no more than three times a day during the months of May-September and as necessary to limit the generation of dust to neighboring areas.
Maintenance and Inspection:	
Responsible Staff:	

2.5 Protect Slopes

Geotextile Erosion Control Blanket BMP Description:
Geotextile erosion control blankets will be used to provide stabilization for the slopes greater than 4:1 or as required by the Landscape Architect. The blanket will cover the entire area of the graded slope. The erosion control blanket will be installed according to the manufacturer's instructions and specifications. For design specifications, see Figure 2.

Installation Schedule:	The erosion control blankets will be installed once the slopes have reached final grade.
Maintenance and Inspection:	The erosion control blanket will be inspected weekly and immediately after storm events to determine if cracks, tears, or breaches have formed in the fabric; if so, the blanket will be repaired or replaced immediately. Good contact with the soil must be maintained and erosion should not occur under the blanket. Any areas where the blanket is not in close contact with the ground will be repaired or replaced.
Responsible Staff:	INSERT NAME

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

2.5A Protect Steep Slopes

BMP Description:
When construction activities on steep slopes (slopes of forty (40) percent or greater, cannot be avoided, the SWPP Plan must require the contractor to 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 where feasible

Installation Schedule:	Silt fence shall be installed around steep slope stockpiles at the start of stockpiling. Temporary cover (seeding and mulching, or hydromulching, shall be applied when construction activities have permanently or temporarily ceased, and will not resume for a period exceeding 7 calendar days.
Maintenance and Inspection:	The BMPs will be inspected weekly and immediately after storm events to determine if maintenance or reapplication of cover material is required.
Responsible Staff:	

BMP Description:	
Installation Schedule:	

Maintenance and Inspection:	
Responsible Staff:	

2.6 Protect Storm Drain Inlets

Existing Storm Drain Inlets

BMP Description: Refer to the Erosion Control Plan from the Street and Storm Sewer Plans for Bowlin Road for protection of existing storm drain inlets. These inlets will be protected from sediment by gravel bag filters or other approved commercially available protection devices. Proposed inlets will be protected during site grading activities as well as after street construction using the BMP identified on the site plan. On site inlets will be protected as shown on the Land Disturbance Plans for Stag's Field	
Installation Schedule:	See attached Land Disturbance Plans for Stag's Field and the Erosion and Sediment Control Plan from Bowlin Road Plans.
Maintenance and Inspection:	The catch basin inserts will be inspected weekly and immediately after storm events. If the basin insert becomes clogged with sediment, the insert will be removed and cleaned or replaced per the manufacturer's recommendations. See attached Erosion and Sediment Control Plan
Responsible Staff:	INSERT NAME

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

2.7 Establish Perimeter Controls and Sediment Barriers

Silt Fence

BMP Description: Silt fences will be installed along the perimeters of the site and around the topsoil stockpile. Mulch berms may also be used where acceptable. See attached Land Disturbance Plans for Stag's Field.	
Installation Schedule:	See attached Land Disturbance Plans for Stag's Field.
Maintenance and	Silt fences will be inspected weekly and immediately after

Inspection:	storm events to ensure it is intact and that there are no gaps where the fence meets the ground or tears along the length of the fence. If gaps or tears are found during the inspection, the fabric will be repaired or replaced immediately. Accumulated sediment will be removed from the fence base if it reaches one-third the height of the silt fence and hauled off-site for disposal at an approved landfill. If accumulated sediment is creating noticeable strain on the fabric and the fence might fail from a sudden storm event, the sediment will be removed more frequently. Before the fence is removed from the project area, the sediment will be removed. The anticipated life span of the silt fence is 6 months and will likely need to be replaced after this period. See attached Land Disturbance Plans for Stag's Field
Responsible Staff:	INSERT NAME

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

2.8 Retain Sediment On-Site

Sediment Basin

BMP Description: A temporary sediment basin will be constructed in two locations as shown on Land Disturbance Plans for Stag's Field and to remove sediment from stormwater runoff for the site for design specifications. See below.	
Installation Schedule:	The sediment traps shall be installed prior to commencing major earth moving activities.
Maintenance and Inspection:	The traps shall be inspected weekly and after storm events. The trap will be checked for signs of erosion, seepage, and structural damage. The outlet and trash rack will be checked for any damage or obstructions and any damage present will be repaired and obstructions removed. Sediment will be removed and the trap restored to its original dimensions when the sediment has accumulated to one-half the design depth of the trap. The removed sediments will be hauled off-site for disposal at an approved landfill.
Responsible Staff:	INSERT INFORMATION

2.9 Establish Stabilized Construction Entrances

Stabilized Construction Entrance

BMP Description: Construction entrance will be installed at locations indicated on the Erosion Control Plan included in the Land Disturbance Plans for Stag's Field. The construction exits will be at least 50 feet long, a minimum of 20 feet wide, flared at the end closest to the paved road, and will consist of a 6-inch-thick layer of crushed stone (2 inches in diameter). The crushed stone will be placed over a layer of geotextile filter fabric to reduce the mitigation of sediment from the underlying soil. For design specifications, see erosion control details in the Land Disturbance Plans for Stag's Field.	
Installation Schedule:	The stabilized entrances will be installed before construction begins on the site. The stone will remain in place until the subgrade of pavement is installed at the site. See attached Erosion and Sediment Control Plan in the Land Disturbance Plans for Stag's Field.
Maintenance and Inspection:	The entrances shall be inspected weekly and after storm events or heavy use. The exits will be maintained in a condition that will prevent tracking or flowing of sediment onto adjacent streets. This could require adding additional crushed stone to the exit. All sediment tracked, spilled, dropped, or washed onto and adjacent streets will be swept up immediately and hauled off-site for disposal at an approved landfill. If excess sediment has clogged the pad, the exit will be topdressed with new crushed stone. Replacement of the entire pad might be necessary when the pad becomes completely filled with sediment. The pad will be reshaped as needed for drainage and runoff control. Broken road pavement as a result of construction activities on roadways immediately adjacent to the project site will be repaired immediately. The stone anti-tracking pad will be removed before the subgrade of pavement is applied to the parking lot.
Responsible Staff:	INSERT INFORMATION

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

2.10 Additional BMPs

Additional BMPs may be required as the project progresses, or if any of the proposed devices are determined to be inadequate. These BMPs will be provided below.

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 Material Handling and Waste Management

Waste Materials

BMP Description:
All waste materials will be collected and disposed of into metal trash dumpsters in the materials storage area. Dumpsters will have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all federal, state, and municipal regulations. Only trash and construction debris from the site will be deposited in the dumpster.

Installation Schedule:	Trash dumpsters will be installed once the materials storage area has been established
Maintenance and Inspection:	The dumpsters will be inspected weekly and immediately after storm events. The dumpster will be emptied weekly and taken to an approved sanitary landfill. If trash and construction debris are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently.

Responsible Staff:	

Hazardous Waste Materials

BMP Description:

All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids will be stored in structurally sound and sealed shipping containers, within the hazardous materials storage area. Hazardous waste materials will be stored in appropriate and clearly marked containers and segregated from other non-waste materials. Secondary containment will be provided for all waste materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous waste materials will be disposed of in accordance with federal, state, and municipal regulations. Hazardous waste materials will not be disposed of into the on-site dumpsters. All personnel will be instructed, during tailgate training sessions, regarding property procedures for hazardous waste disposal. Notices that state these procedures will be posted in the office trailer and the individual who managers day-to-day site operations will be responsible for seeing that these procedures are followed.

Installation Schedule:	Shipping containers used to store hazardous waste materials will be installed once the site materials storage area has been installed.
Maintenance and Inspection:	The hazardous waste material storage areas will be inspected weekly and after storm events. The storage areas will be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material safety data sheets, material inventory, and emergency contact numbers will be maintained in the office trailer.
Responsible Staff:	

Sanitary Waste

BMP Description:

A minimum of two temporary sanitary facilities (portable toilets) shall be provided at the site throughout the construction phase. The toilets will be in the staging area with additional toilets provided at other locations as deemed necessary by the project superintendent. The portable toilets will be located away from a concentrated flow paths and traffic flow and will have collection pans underneath as secondary containment.

Installation Schedule:	The portable toilets will be brought to the site once the staging area has been established.
Maintenance and Inspection:	All sanitary waste will be collected from the portable facilities a minimum of three times per week by a licensed sanitary waste management contractor. The portable toilets will be inspected weekly for evidence of leaking holding tanks. Toilets with leaking holding tanks will be removed from the site and replaced with new portable toilets.
Responsible Staff:	

Recycling

BMP Description:

Wood pallets, cardboard boxes, and other recyclable construction scraps will be disposed of in a designated dumpster for recycling. The dumpster will have a secure watertight lid, be placed away from stormwater conveyances and drains and meet all local and state solid-waste management regulations. Only solid recyclable construction scraps from the site will be deposited in the dumpster. All personnel will be instructed, during tailgate training sessions, regarding the correct procedure for disposal of recyclable construction scraps. Notices that state these procedures will be posted in the office trailer, and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.

Installation Schedule:	Designated recycling dumpster will be installed once the combined staging area has been established.
Maintenance and Inspection:	The recycling dumpster will be inspected weekly and immediately after storm events. The recycling dumpster will be emptied weekly and taken to an approved recycling center. If recyclable construction wastes are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently.
Responsible Staff:	

3.2 Establish Proper Building Material Staging Areas

Materials Storage Area

BMP Description: Construction equipment and maintenance materials will be stored at the combined staging area and materials storage areas. Gravel bag berms will be installed around the perimeter to designate the staging and materials storage area. A watertight shipping container will be used to store hand tools, small parts, and other construction materials. Non-hazardous building materials such as packaging material (wood, plastic, and glass), and construction scrap material (brick, wood, steel, metal scraps, and pipe cuttings) will be stored in a separate covered storage facility adjacent to the shipping container. All hazardous-waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids will be stored in structurally sound and sealed containers under cover within the hazardous materials storage area.	
Installation Schedule:	The materials storage area will be installed after grading and before any infrastructure is constructed at the site.
Maintenance and Inspection:	The storage area will be inspected weekly and after storm events. The storage area will be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners will be repaired or replaced as needed to maintain proper function
Responsible Staff:	

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	