

**BMP & STORM WATER POLLUTION PREVENTION PLAN  
THE VILLAGE AT JENNINGS CREEK**

**A. SITE DESCRIPTION**

The construction activities on this are to:

- (1) Install BMPs & General Grading
- (2) Build Street and Re-grade Creek
- (3) Install Utilities

The order of construction, after the erosion control devices are in place, will be

- (1) General Grading
- (2) Build Streets and Re-grade Creek
- (3) Install Utilities

The estimated total area is 71.05 acres. The estimated total disturbed area is 6.00 acres. The post construction coefficients are .25 for grassy areas and, .95 for roofs and parking lots.

There is no data describing the soil conditions or quality. The storm water runoff will be collected and piped to the stream that flows through the property, then flow over and through velocity dissipaters to the Jennings Creek flood plain.

**B. SEDIMENT AND EROSION CONTROL DEVICES**

**Soil Stabilization Practice.** Existing vegetation will be preserved where possible. All disturbed areas will be stabilized.

**Temporary Stabilization:** Temporary soil stock piles and disturbed portions of the site where construction activity temporarily ceases for at least 21 days will be stabilized with temporary seed and mulch, no later than 14 days from the last construction activity in that area. The temporary seed shall be rye (grain) applied at the rate of 120 pounds per acre. Prior to seeding, 2000 pounds of ground agriculture limestone and 1000 pounds of 10-10-10 fertilizer shall be applied to each acre to be stabilized. After seeding, each acre shall be mulched with 4000 pounds of straw. The straw mulch shall be tacked in place. Areas of the site to be paved will be temporarily stabilized by applying a stone sub-base until bituminous can be applied. Silt fencing will be installed around the perimeter and sinkhole sediment areas prior to clearing and grubbing as shown on the BMP plan.

**Permanent Stabilization** – Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed within fourteen (14) days after the last construction activity. All disturbed areas shall be fine graded with sufficient topsoil (Min of 4 inches) to achieve an acceptable stand of grass. The area shall then receive an application of agricultural ground limestone and 12-12-12 granulated commercial fertilize, the latter being applied at the rate of 20 pounds per 1000 square feet

area. The permanent seed mix shall be applied at the rate of 2 pounds per 1000 square feet of area.

- 60% Kentucky 31 fescue
- 10% Creeping red fescue
- 10% Red top
- 10% Annual rye grass
- 10% Landing clover

To the above mixture add one bushel per acre of Balboa rye for fall seeding. After seeding, (within 48 hours) each area shall be mulched with 2,000 pounds per acre of straw. The straw mulch is to be spread uniformly to form a continuous blanket 1-1/2 inches in loose depth. When snow cover causes delays, stabilization shall begin ASAP. Other soil stabilization practices that may be used on this project include planting trees, and shrubs.

**Perimeter Structural Practices.** Drain inlets and outlets shall be protected with rock by means of creating check dams. Silt fences will be used on all side and down slopes to prevent soil or sediment from leaving the site. All entrances leading to public roads need to be stabilized by removing the vegetation and cutting down about 6 inches, place non-woven geo-textile material, and then place at least 6 inches of #2 aggregate on top. Area must be a minimum of 14 feet wide and 100 feet long.

**Storm Water Management Devices.** A storm water management device will be installed during construction to control pollutants in storm water dischargers that occur after construction is complete. Velocity dissipation devices, as shown on the plan, will be placed in discharge locations if needed, to provide a non-erosive flow. The storm water management devices used on this project are the retention basins.

### C. OTHER CONTROL MEASURES

**Waste Material** - No solid materials, including building materials, shall be discharged to the waters of the ~~state~~. All waste materials will be collected and stored in a dumpster provided by a licensed solid waste management company. The dumpster shall meet all federal, state, or local regulations. All trash and construction debris from the site will be placed in the dumpster. The dumpster shall be emptied a minimum of twice per week or more often if necessary. The waste will be hauled to an approved landfill. No construction material shall be buried on site. All personnel will be instructed in the proper procedures for waste disposal. Notices stating these practices will be posted in the office trailer. The on site superintendent or person in responsible charge shall be responsible for seeing that these procedures are followed.

To prevent storm water contamination from the job-site, the following BMP's will be implemented.

- Fertilizers shall be applied only in the minimum amounts recommended by the manufacturer. Fertilizers shall be worked into the soil.
- All vehicles on site are to be monitored daily for leaks.

- Petroleum products shall be stored in tightly sealed containers, which are clearly labeled.
- Spill kits shall be located on the job-site, for fueling activities and maintenance.
- Any asphalt substance used on site shall be applied according to manufacturer's recommendations.
- All paint containers and curing compounds shall be tightly sealed and stored in an inside storage room when not required for use. Excess paint shall be properly disposed of according to the manufacturer's instructions.
- All spills shall be cleaned up immediately upon discovery.
- Concrete trucks shall be required to clean out in one designated area that shall be provided by the onsite superintendent or person in responsible charge. A copy of a map of the site, with the location of the concrete clean out area clearly shown, shall be given to each truck driver. Washout concrete shall be removed from the site at the end of the project and disposed of properly.
- Offsite vehicle sediment tracking and dust generation shall be minimized. A stabilized construction entrance shall be constructed to reduce vehicle tracking of sediment.
- The paved street adjacent to the site shall be swept daily, to remove excess mud, dirt, or rock tracked from the site.

**Hazardous Waste** - All hazardous waste material shall be disposed of as specified by state and local regulations or by the manufacturer. All on-site personnel shall be instructed in these practices. The on-site superintendent or person in responsible charge shall be responsible in seeing that these practices are followed.

**Sanitary Waste** - Waste disposal methods and sanitary sewer or septic systems shall comply with applicable state and local regulations. All sanitary waste shall be collected from the potable units a minimum of twice per week by a licensed sanitary waste management contractor.

#### **D. OTHER STATE AND LOCAL PLANS**

This BMP & SWPPP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state and local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and enforceable under this permit.

#### **E. MAINTENANCE**

The contractor who prepared the NOI shall be responsible for the proper installation of all erosion control measures and maintain them in a good and effective operating condition.

- All BMP measures shall be maintained in good working order. If a repair is necessary it shall be initiated within 24 hours of a report.
- Built up sediment shall be removed from silt fences when it has reached one-third the height of the fence.

- Built up sediment on check dams shall be removed when it reaches 10 percent of the design capacity or at the end of the job.
- The job-site superintendent or the person in responsible charge of the work shall be responsible for maintenance and repair activities.
- Personnel assigned to maintenance shall receive training from the on-site superintendent or person in responsible charge in all maintenance practices necessary for keeping the erosion controls used on site in good working order.
- For additional information and requirements, see the [BMP Manual](#) on the web

## F. INSPECTION

The contractor who prepared the NOI shall be responsible for the inspection of all erosion control measures in a timely manner.

- All BMP measures shall be inspected by qualified personnel at least once every 7 days and following any storm event of 0.50 inches or greater. The 7-day requirement shall begin anew after the 0.50-inch or greater rain event. Inspections shall include date of inspection, observations made, and corrective measures taken.
- Silt fences shall be inspected to check for depth of sediment, and tears, to see (1) if the fabric is securely attached to the fence posts, and (2) that the fence posts are firmly in the ground.
- The sediment check dam will be inspected for depth of sediment. See the third maintenance bullet above.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- An inspection report shall be made after each maintenance-inspection.
- The job site superintendent or the person in responsible charge shall be responsible for all inspections.
- Personnel assigned to inspection duties shall receive training from the on-site superintendent or person in responsible charge in all inspection practices necessary for keeping the erosion and sediment control measures in a good working order.
- A report summarizing the scope of the inspection, names and qualifications of personnel conducting the inspection, the date of the inspection, major observation relating to the implementation of this BMP plan, and any corrective actions taken shall be made and kept as a part of this BMP plan for at least three years after the date of inspection, or until, one year after coverage under this permit ends, whichever date is later.

**G. NON-STORM WATER DISCHARGES**

It is expected that non-storm water discharges may occur from the site during construction as noted below: Please itemize below.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**H. CONTRACTORS AND SUBCONTRACTORS**

The contractor shall implement each control measure identified in this BMP.

**CONTRACTOR AND SUBCONTRACTORS CERTIFICATION**

All contractors and subcontractors associated with this project must sign the certification below.

I certify under penalty of law that I understand the terms and conditions Of the general National Pollutant Discharge Elimination System (NPDES) Permit that authorizes the storm water discharge associated with industry Activity from the construction site identified as part of this certification.

NAME (Print or Type)	TITLE
SIGNATURE	DATE

**GENERAL CONTACTORS'S CERTIFICATION CONCERNING SWPPP**

I certify that I have read the Storm Water Pollution Prevention Plan (SWPPP) and understand my obligations to it.

NAME (Print or Type)	TITLE
SIGNITURE	DATE

**I. INVENTORY FOR POLLUTION PREVENTION PLAN**

The materials or substances listed below are expected to be present onsite during construction. Please list below.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**J. SPILL PREVENTION**

**Material Management Practices** – The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of material and substances to storm water runoff.

**Good Housekeeping** – The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough products required to do the job.
- All materials stored on site shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- If the materials are not under roof or other enclosure, provisions are to be made for a temporary dike to control possible spills.
- Products shall be kept in their original containers with the original manufacturer's label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used before disposing of the container.
- Manufacturer's recommendations for proper use and disposal shall be followed.
- The job site superintendent or person in responsible charge shall inspect daily to ensure proper use and disposal of materials on site.

**Hazardous Products**

These practices are used to reduce the risks associated with hazardous material.

- Products shall be kept in original containers unless they cannot be resealed.
- Original labels and material safety data shall be retained in a file folder of the project labeled *Safety Material and Data* ... they contain important product information.
- If a surplus product must be disposed of, manufacturer's recommended methods for proper disposal shall be used, or in accordance with local and state regulations.

## K. PRODUCT SPECIFIC PRACTICES

The following product specific practices shall be followed.

**Petroleum Products** ~ All petroleum products onsite shall be monitored for leaks. Preventive maintenance records must be provided if requested. Petroleum products shall be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used on site shall be applied according to the manufacturer's recommendation.

**Fertilizers** – Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. Any unused material must be removed from the site.

**Paints** – All containers will be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the storm water system, and will be properly disposed of according to manufacturer's instructions, or state and local regulations.

**Concrete Trucks** – Concrete trucks will have to wash out or discharge surplus concrete at the location as directed by the on-site superintendent or person in responsible charge, and do so until the completion of the project. Once the project is complete, the dried concrete must be removed from the job-site.

## L. SPILL CONTROL PRACTICES

The following practices shall be followed for spill prevention and cleanup.

- Manufacturer's recommended methods for spill cleanup shall be available on the job site and personnel shall be made aware of the procedures, location of information, and cleanup supplies.
- Materials and equipment necessary for spill cleanup shall be kept in the storage trailer of the superintendent.
- All spills shall be cleaned up immediately after discovery.
- The spill area shall be kept well ventilated, and personnel shall wear appropriate protective clothing to prevent injury by contact with hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of size.
- The spill prevention plan shall be adjusted to include measures to prevent a spill from recurring and how to clean up the spill if it does. A description of the spill, what caused it, and the clean up measures shall also be included.
- The job-site superintendent responsible for the day-to-day site operations, shall be the spill prevention and cleanup coordinator. He will have other contractors on site to help with the prevention and cleanup. The personnel names will be posted in the office job trailer onsite. The trade that has a spill will be responsible for helping with clean up along with the job site superintendent or person in responsible charge.