

OTHER CONTROLS

Non-Sediment Pollutant Controls

Non-sediment pollutant sources, which may be present on a construction site, include paving operations, concrete washout, structure painting, structure cleaning, demolition debris disposal, drilling and blasting operations, material storage, slag, solid waste, hazardous waste, contaminated soils, sanitary and septic wastes, vehicle fueling and maintenance activities, and landscaping operations.

Handling of Toxic or Hazardous Materials

All hazardous and toxic waste materials will be disposed of in the manner specified by Local or State regulation or by the manufacturer. The individual who manages the day-to-day site operations will be responsible for seeing that these practices are followed. No toxic or hazardous wastes shall be disposed into storm drains, septic tanks, or by burying, burning, or mixing the wastes.

Waste Disposal

All waste materials will be collected and stored in a securely lidded, leak-proof metal dumpster rented from a licensed solid waste management company. The dumpster will meet all Local, City and State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of twice per week or more often if necessary, and the trash will be hauled off-site. No construction waste materials will be buried onsite. Notices stating these practices will be posted in the office trailer. The individual who manages the day-to-day site operations will be responsible for seeing that these procedures are followed.

Sanitary Waste Disposal

All sanitary waste will be collected from the portable units a minimum of three times per week by a licensed sanitary waste management contractor, as required by local regulation.

Clean Hard Fill

All bricks, hardened concrete, and soil waste must be free from contamination which may leach constituents to waters of the State. Any clean construction wastes that will be disposed into the property must meet all Local, City, and State regulations.

Construction and Demolition Debris

All construction and demolition debris waste will be disposed of in an Ohio EPA approved construction and demolition debris landfill as required by Ohio Revised Code 3714.

Off-Site Vehicle Tracking

Off-site vehicle tracking sediment shall be minimized. Construction vehicles are limited to the construction access roads noted on the plan. A stabilized construction entrance will be provided to help reduce vehicle tracking of sediments. All paved streets adjacent to the site will be swept daily to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

Open Burning

The contractor shall only perform on-site open burning as a means of waste disposal as allowed per Local, State, and Federal regulations.

Dust Control

Construction traffic must enter and exit the site at the stabilized construction entrance(s). Water trucks will be used as needed during construction to reduce dust generation. Dust control must be provided to a degree that is acceptable and in compliance with applicable local and state dust control regulations. After construction, the site will be stabilized (as described elsewhere in this plan), which will reduce the potential for dust generation.

Product Specific Practices

The following product specific practices will be followed onsite:

Fertilizers

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Petroleum Products

All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations. All contaminated soils must be treated and/or disposed in Ohio EPA approved solid waste management facilities or hazardous waste treatment, storage or disposal facilities.

Paints

The site superintendent responsible for the day-to-day site operations, will be the spill prevention and cleanup coordinator. He will designate site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer on-site.

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or State and Local regulations.

Concrete Trucks

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site. A concrete wash-out pit shall be by the contractor in order to control concrete wash water.

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present onsite during construction:

- Concrete
Detergents
Points (enamel and latex)
Metal Studs
Asphalt
Tar
Fertilizers
Petroleum Based Products
Cleaning Solvents
Wood

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 materials and substances to stormwater 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 product required to do the job.
All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
Products will be kept in their original containers with the original manufacturer's label.
Substances will not be mixed with one another unless recommended by the manufacturer.
Whenever possible, all of a product will be used up before disposing of the container.
Manufacturers' recommendations for proper use and disposal will be followed.
The site superintendent will 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 materials:

- Products will be kept in original containers unless they are not resealable.
Original labels and material safety data will be retained; they contain important product information.
If surplus product must be disposed of, manufacturers' or Local and State recommended methods for proper disposal will be followed.

Emergency Contact Information

In the event of a spill of petroleum fuel over 25 gallons, the contractor shall contact the Ohio EPA at 1-800-282-9378, and the local fire department, immediately.

Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
All spills will be cleaned up immediately after discovery.
The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
Spills of toxic or hazardous material will be reported to the appropriate State or Local government agency, regardless of the size.
The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

TIMING OF CONTROLS/MEASURES

As indicated in the Sequence of Major Activities, stabilized construction entrance, silt fence, and sediment basin will be constructed prior to clearing or grading of any other portions of the site. Areas where construction activity temporarily ceases for more than 14 days will be stabilized with a temporary seed and mulch within 7 days of the last disturbance. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch. After the entire site is stabilized, the accumulated sediment will be removed from the basin.

Disturbed areas that are to remain dormant for over 1 year or at final grade shall have permanent erosion controls applied within 7 days.

SOIL PROTECTION CHART

Table with columns for months (J, F, M, A, M, J, J, A, S, O, N, D) and rows for stabilization types: PERMANENT SEEDING, DORMANT SEEDING, TEMPORARY SEEDING, SODDING, MULCHING.

* - IRRIGATION NEEDED
** - IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS APPLIED

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE. Table with columns for months (JAN-DEC) and rows for construction sequences (TEMPORARY CONSTRUCTION ENTRANCE, TEMPORARY CONTROL MEASURES, SEDIMENT CONTROL BASINS, STRIP & STOCKPILE TOPSOIL, ROUGH GRADE, STORM FACILITIES, SITE CONSTRUCTION, PERMANENT CONTROL STRUCTURES, FINISH GRADING, LANDSCAPING/SEED/FINAL STABILIZATION).

1) CONTRACTOR SHALL UPDATE THE TABLE BY DATING THE APPLICABLE ACTIVITIES AS PROJECT PROGRESSES.
2) TIME SCHEDULE MUST CONCLUDE WITH SEQUENCE OF CONSTRUCTION.

MAINTENANCE/INSPECTION PROCEDURES

Erosion and Sediment Control Inspection and Maintenance Practices

These are the inspection and maintenance practices that will be used to maintain erosion and sediment:

- Less than 90% of the site will be denuded at one time.
All control measures will be inspected at least once each week and following any storm event of 0.5 inches or greater.
All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.
Built up sediment will be removed from silt fence when it has reached one-third the height of the fence.

- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
The sediment basin will be inspected for depth of sediment, and built up sediment will be removed when it reaches 40 percent of the design capacity or at the end of the job.
Diversion dikes will be inspected and any breaches promptly repaired.
Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
A maintenance inspection report will be made after each inspection. A copy of the report form to be completed by the inspector. The site superintendent will select individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.

Non-Stormwater Discharges

It is expected that the following non-stormwater discharges will occur from the site during the construction period:

- Water from water line flushings.
Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
Uncontaminated groundwater (from dewatering excavation).
All non-stormwater discharges will be directed to the sediment basin prior to discharge.
There shall be no sediment-laden discharges to surface waters resulting from dewatering activities. It is recommended that if a trench or ground water contains sediment that it must pass through a sediment settling pond or other equally effective sediment control device prior to being discharged from the construction site.

Dewatering Procedures

Should dewatering be required, e.g., from trenches, etc., during construction, all water shall be pumped to the temporary sediment basins, if possible, before being released to downstream channels, storm sewers, etc. If a temporary sediment basin is not shown on the plan, or not achievable for dewatering, the water shall be pumped into a sediment trap or through sediment bags onto a relatively flat surface away from inlet basins, streams, etc.

POST-CONSTRUCTION INSPECTION PROCEDURE

- The property owner or its authorized representative(s) is responsible for the inspection of the newly installed structures for outlet damage, proper flow, and sediment accumulations.
Maintenance costs, if inspected by the owner or the owner's representative(s), will be paid by the owner.
The site shall be maintained per the Post-Construction Maintenance Plan following the submittal of the NOT.

Regular inspections, especially following major storm events, will require an inspection report that shall be kept by the owner and submitted, if required, to the Summit County Engineer's Office.

VEGETATION MAINTENANCE PLAN

This is a suggested schedule only, Vegetative needs may vary depending on site conditions.

Some maintenance needs include:

- pH adjustment (as required)
pruning
pest control
reseeding (in particular after maintenance of forebay and micro pool if disturbances have occurred)
thatch and weed removal

Thatch removal includes the following unwanted woody seedlings in shoreline areas:

- Cottonwood (Populus deltoides)
Willow (Salix spp.)
Silver Maple (Acer saccharinum)

Weed removal includes the following species detrimental to wetland plantings:

- Common Reed (Phragmites australis)
Cattails (Typha spp.)
Purple Loosestrife (Lythrum salicaria)

When removing the Purple Loosestrife it is important to remove the large root systems as well as the plant prior to flowering (June through September). The plant and its parts should be immediately placed in a bag to prevent further spread of the species. If this procedure is not possible, regular remove the flower heads before seeds are dispersed.

If Weed growth exceeds 10" in height in seeded areas trim or mow to 4". Do not cut areas where live plants were installed.

LONG TERM MAINTENANCE PLAN

Typical Maintenance Activity For The Extended Water Quality Basin

The homeowner's association will be responsible for the long term maintenance of the basin.

This is a suggested schedule only, depending on rainfall and site conditions, the need for maintenance may vary.

- Monthly: Clean trash and debris from outlet structure. Address any accumulation of hydrocarbons.
Annually: Inspect embankment and outlet structure for proper flow. Remove woody vegetation (See Vegetation Maintenance) and fix any eroding areas. Monitor sediment accumulations in forebay and micropool.
Semi-Annually: Inspect wetland areas for invasive plants. (See Vegetation Maintenance)
3-7 Years: Remove sediment from forebays and micropools as needed.*
15-20 Years: Monitor sediment throughout entire basin and clean as the basin becomes eutrophic or basin volume is reduced significantly.

* This preservation operation should be scheduled when the forecast calls for dry weather, and in conjunction with any scheduled vegetation maintenance to allow all disturbed or damaged areas to be properly restored.

Table with columns: JOB NO (12269F), SCALE (NO SCALE), DRAWN BY (MJD), CHK'D BY (CJO), DWG NAME (12269F-ds3p), DATE (SEPTEMBER, 2014).

HILLSIDE ESTATES - PHASE 4
STORMWATER POLLUTION PREVENTION SPEC'S
TOWNSHIP OF COPLEY, COUNTY OF SUMMIT, STATE OF OHIO



Table with columns: REV NO, DATE, DESCRIPTION, BY. Row 1: 1, 09/15/14, ORIGINAL SUBMITTAL, CJO.

SHEET NO.
C2.2