Burlington County Soil Conservation District

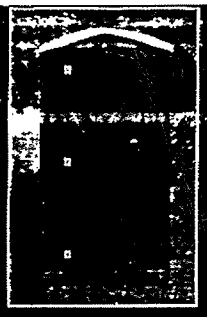
NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL PRECONSTRUCTION GUIDE

(609) 267-7410

WWW.BSCD.ORG

VERSION 2018

Provide adequate containers, such as roll-offs, for all construction waste, including wood scraps, drywall, tree parts, concrete, roofing materials, plastic, metal, and glass windows and doors.



Provide adequate disposal facilities for all workers' sanitary needs. Never discharge raw sewage onsite.

Provide adequate receptacles for the disposal of recyclable materials.

Maintain designated concrete washout areas that are properly lined, bermed and marked. Do not discharge directly onto the ground or into the water.

Remove and properly dispose of hardened concrete.

Conduct weekly site inspections to ensure your stormwater pollution prevention measures are in place and are being followed by all site workers.

Provide an adequate number of containers with lids for workers to deposit their litter.

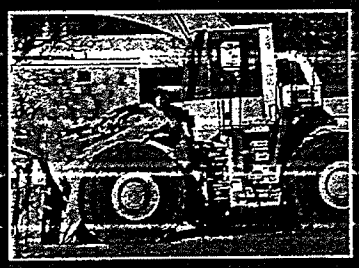
Do not throw litter such as cups, cigarettes, grass clippings, paper or other garbage onto the ground. Use trash receptacles.

Questions? contact your local Soil Conservation District.

Clean Job Site, Clean Water

Stormwater Construction Permit Site Controls

Proper management of a job site isn't just about scheduling contractors and implementing soil erosion and sediment controls. It's also your job to keep your site clean to prevent pollution from flowing into our water. This isn't just responsible management, it's the law. When you leave litter, construction materials or hazardous waste lying on the ground, rain and snow melt can carry it into storm drains and then into our lakes, streams and the ocean. Each of us has a responsibility to make sure these contaminants stay out of our water.



Store fertilizers, pesticides, fuels, paints and other chemicals in covered containers. Store these containers in a dry, covered area such as a shed, trailer or garage.

Keep spill kits onsite to clean up any spills of hazardous substances such as chemicals, fuels, paints, cleaning solvents and acids, oil or antifreeze, and detergents.

Never discharge hazardous waste onto the ground or into storm drains.

New Jersey Department of Environmental Protection

CLEAN WATER
It's Up to You New Jersey

Record Keeping

WHAT TO KEEP

You must keep copies of the SPPP, inspection records, copies of all reports required by the Permit, and records of all data used to complete the Request for Authorization (RFA) to be covered by the Permit for a period of at least three (3) years from the date that Permit coverage expires or is terminated.

RECORDS SHOULD INCLUDE

- A copy of the SPPP (certified soil erosion and sediment control plan).
- A copy of the RFA and Authorization to Discharge (ATD) and any stormwater related correspondence with federal, state, and local regulatory authorities.
- Inspection forms, including the date, place, and time of inspections.
- Names of inspector(s).
- The date, time, exact location, and a characterization of significant observations, including spills and leaks.
- Records of any non-stormwater discharges.
- BMP maintenance and corrective actions taken at the site.
- Any documentation and correspondence related to endangered species and historic preservation requirements.
- Weather conditions (e.g., temperature, precipitation).
- Date(s) when major land disturbing (e.g. clearing, grading, and excavating) activities occur in an area.
- Date(s) when construction activities are either temporarily or permanently ceased in an area.
- Date(s) when an area is either temporarily or permanently stabilized.

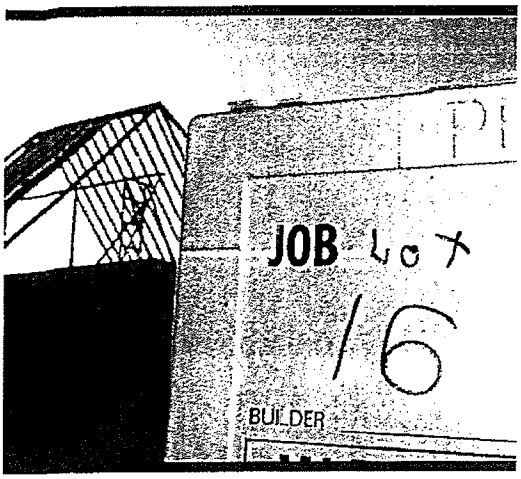
Enclosed Forms: Inspection forms may be adapted to better suit the criteria for the site construction, but the Annual Certification must be completed as follows.

DEFINITION

All construction site operators are required to complete inspections and annual certifications. Maintaining complete records during the construction period is essential.

PURPOSE

Regardless of who performs the inspections, it is critical to maintain proper documentation. Use the inspection form for each inspection. Log books are often used, but they need to include more information than merely the date of the inspections. Permitting authorities require self-inspections, and if they audit the site, they will want to see proof of inspections to document compliance. Permitting authorities may also wish to see inspection and maintenance documentation for each specific BMP.



Maintaining Accurate Records is Essential

ANNUAL REPORTS AND CERTIFICATIONS

The permittee must prepare an annual report summarizing each routine inspection that was performed on the facility. (Please refer to 3.a on page 5 of the Narrative Requirements of the Permit). The report must include:

- **Annual Certification**: That the facility is in compliance with the SPPP and the Permit, except that if there were any incidents of noncompliance, those incidents be identified in the certification. (The form is included in this guide or available from NJDEP.)
  - If there are any incidents of noncompliance, the certification should identify the steps being taken to remedy the noncompliance and to prevent a reoccurrence of the noncompliant incident.
- **Annual Report**: Summary of all routine inspections performed.
- The Certification and Annual Report shall be signed and dated by the permittee (in accordance with N.J.A.C. 7:14A-4.9) and shall be maintained for at least five (5) years. This period may be extended by written request from NJDEP at anytime. (Please refer to 4.a on page 6 of the Narrative Requirements of the Permit.)

Inspection Sheet Stormwater Pollution Prevention

Inspections must be conducted once every seven (7) days and within twenty-four (24) hours of 0.5" or greater rainfall. All sediment controls must be installed prior to grading and within seven (7) days of first grubbing.

TEMPORARY STABILZATION

		Compliant	Non-Comp
1	Are there disturbed areas of the site that will likely be dormant for over 30 days?		
2	Have all dormant, disturbed areas been temporarily stabilized completely?		
3	Have all stockpiles that will sit for over thirty (30) days been stabilized?		
4	Has seed and mulch been applied at the proper rate? *(see SESC plan for details)*		
5	Are any erosion (gullies, sediment plumes) problems that have formed sitewide been repaired and/or stabilized?		
6	Has seed or mulch blown away? If so, repair.		

Note area where repairs or maintenance is needed or where this practice needs to be applied:

CONSTRUCTION ENTRANCES

		Compliant	Non-Comp
1	Is sediment being tracked from the entrance onto paved surfaces?		
2	Is the stone 1 1/2" to 2" in diameter?		
3	Is the stone at a depth of 6", with a width and length as per the SESC plan?		
4	Are there areas where stone is ground in and no longer functioning for wheel cleaning? {i.e. stone should be loose to allow for scraping of tires before exiting site}		

Note area where repairs or maintenance is needed or where this practice needs to be applied:

SEDIMENT BARRIERS

		Compliant	Non-Comp
1	Is the silt fence dug in at least six inches (6") into the ground?		
2	Is the trench backfilled to prevent runnoff from cutting underneath the fence?		
3	Is the fence placed as noted on the certified soil erosion and sediment control plan?		
4	Have all gaps and tears in the fence been eliminated?		

Note area where repairs or maintenance is needed or where this practice needs to be applied:

INLET PROTECTION

		Compliant	Non-Comp
1	Has the inlet protection been replaced when it deteriorates?		
2	Curb inlet protection - does it filter runoff but allow for overflow into the inlet?		
3	Yard inlet protection - does the barrier encircle the entire grate?		
4	Is the protection properly entrenched or anchored so that water passes through it and under it?		
5	Is sediment that accumulates around the inlet/curbline removed on a regular basis?		

Note area where repairs or maintenance is needed or where this practice needs to be applied:

PERMANENT STABILIZATION

		Compliant	Non-Comp
1	Are areas at fina grade and stabilized?	☐	☐
2	Has the soil been properly prepared to accept permanent seeding?	☐	☐
3	Has seed and mulch been applied at appropriate rate? *(see SESC plan for details)*	☐	☐
4	If rainfall has been inadequate, are seeded areas being watered?	☐	☐
5	Are permanent controls (grassed waterways, conduit outlet protection, channel, etc.) constructed in time with the sequence of construction?	☐	☐

Note area where repairs or maintenance is needed or where this practice needs to be applied:

_____

_____

NON-SEDIMENT POLLUTION CONTROL

		Compliant	Non-Comp
1	Has an area been designated for washing out concrete trucks? Washings must be contained on site within a contained areas until they harden. The washings should never be directed towards a water course, ditch or storm drain.	☐	☐
2	Is waste and packing disposed of in a dumpster? Do not burn or bury them on site.	☐	☐
3	Are fuel tanks and drums of toxic or hazardous material stored within a diked area or trailer and away from any water course, ditch or storm drain?	☐	☐
4	Are streets swept as often as necessary to keep them clean and free from sediment? **NOTE:** Sediment should be swept back onto the lot, not down the storm sewers.	☐	☐
5	Are stockpiles of soil or other material stored away from any water course, ditch or storm drain?	☐	☐
6	If an area of the site is being dewatered, is it being pumped and filtered and in a way not to cause erosion?	☐	☐

Note area where repairs or maintenance is needed or where this practice needs to be applied:

_____

_____

SEDIMENT BASINS (where present)

		Compliant	Non-Comp
1	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
2	Is the connection between the riser pipe and the permanent outlet water tight?	☐	☐
3	Is it time to clean out the sediment pond to restore its original capacity?	☐	☐

Note area where repairs or maintenance is needed or where this practice needs to be applied:

_____

_____

Inspected By: _____ Inspection Date: _____

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3 Are fuel tanks and drums of toxic or hazardous material stored within a diked area or trailer and away from any water course, ditch or storm drain?		
4 Are streets swept as often as necessary to keep them clean and free from sediment? **NOTE:** Sediment should be swept back onto the lot, not down the storm sewers.		
5 Are stockpiles of soil or other material stored away from any water course, ditch or storm drain?		
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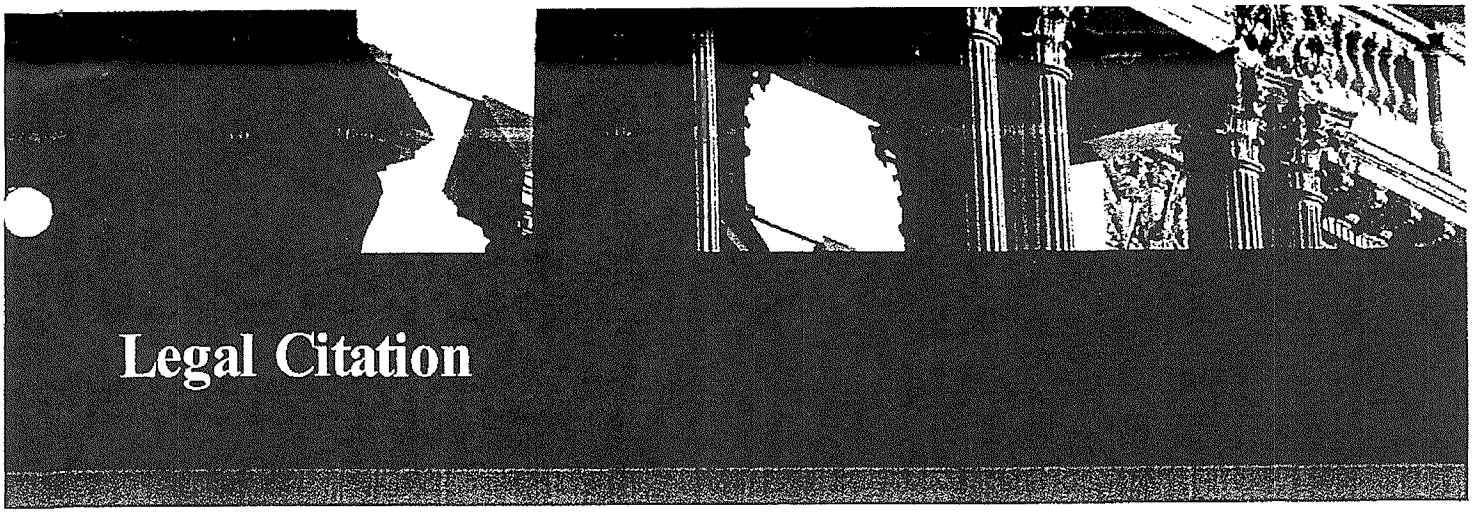
2 Is the connection between the riser pipe and the permanent outlet water tight?		
3 Is it time to clear out the sediment pond to restore its original capacity?		

Note area where repairs or maintenance is needed or where this practice needs to be applied:

Inspected By: _____ Inspection Date: _____

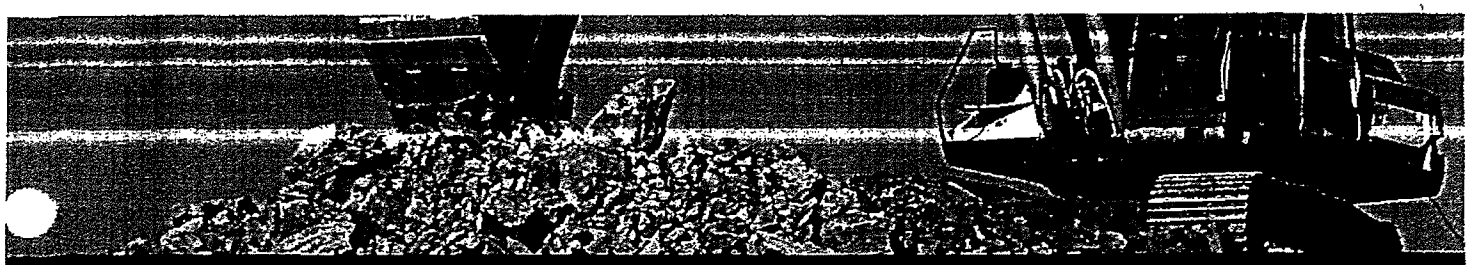


Legal Citation

ROUTINE INSPECTIONS

a. The permittee shall conduct and document routine inspections of the facility to identify areas contributing to the stormwater discharge authorized by this Permit and evaluate whether the stormwater pollution prevention plan (SPPP) identified under E.1, [page 5 RFA Narrative found under Regulations tab] is being properly implemented and maintained, or whether additional measures are needed to implement the SPPP. (Routine inspections minimum weekly.)

NJG0088323 5G3 Renewal



New Jersey Construction Site Inspection Glossary

By installing and maintaining basic Best Management Practices (BMPs) construction site operators can do their share to protect New Jersey's water resources from the harmful effects of construction site stormwater runoff. The conditions and needs of individual sites will dictate which of these practices are applicable. Please refer to the certified soil erosion control plan for greater detail. The ***Standards for Soil Erosion and Sediment Control in New Jersey*** contains greater detail on erosion and sediment control practices. Copies of the standards are available for purchase from the local soil conservation district.

TEMPORARY STABILIZATION

Provides temporary protection against the impacts of wind and rain, slows the overland movement of stormwater runoff, increases infiltration and retains soil and nutrients on-site, protecting streams or other stormwater conveyances.

STABILIZED CONSTRUCTION ACCESSES

Construction accesses are installed to minimize off-site tracking of sediments. A stone access drive should be installed at every point where vehicles enter or exit the site. Every individual lot should also have its own stone drive once construction of the lot begins.

SEDIMENT BASINS

Used to prevent the undesirable sediment deposition on bottom-lands and developed areas; to trap sediment originating from critically eroding areas and construction sites; and to reduce or abate pollution by providing basins for deposition and storage of silt, sand, gravel and stone.

SEDIMENT BARRIERS

Typically used at the perimeter of a disturbed area. The purpose of a sediment barrier is to intercept and detain small amounts of sediment from unprotected areas of limited extent.

INLET PROTECTION

The primary benefit to water quality is the removal of sediment from stormwater runoff prior to entering the storm sewer system. As an added benefit, other floatable debris, such as vegetative matter and litter may also be filtered out of the runoff. This must be installed on all yard drains and curb drains. Even if there is a sediment trap or basin, inlet protection is still recommended, as it will increase the overall sediment removal efficiency.

PERMANENT STABILIZATION

All areas at final grade must be permanently stabilized within ten (10) days of reaching final grade. This is usually accomplished by using seed and mulch, but special measures are sometimes required. This is particularly true in drainage ditches or on steep slopes. These measures include the addition of topsoil, erosion control matting, rip-rap or retaining walls. Permanent seeding should be done February 15 to May 15 and August 15 to October 15. Dormant seeding can be done from November 20 to March 15. At all other times of the year, the area should be irrigated, or temporarily stabilized, until permanent seeding can be applied.

NON-SEDIMENT POLLUTION CONTROL

Although sediment is the pollutant of greatest concern on most construction sites, there are other sources of pollution such as construction debris, litter, etc., which must be properly addressed.

Most of these BMPs are easy to implement, with a little bit of planning, and go a long way toward keeping your site clean, organized and in compliance with the permit. Please be sure to inform all subcontractors how these BMPs affect their operations on the site, particularly those that will be working near a stream.

Routine BMP Inspection & Maintenance

PLANNING CONSIDERATIONS

It is the responsibility of the construction site operator to ensure that regular inspections take place. Inspectors must be familiar with the location, design specifications, maintenance procedures, and performance expectation of each BMP.

Three types of BMP inspections are performed:

1. Routine inspections.
2. Inspections performed before rain events.
3. Inspections performed after rain events.

ROUTINE INSPECTIONS

Routine inspection and maintenance minimizes the work required to prepare a site before a rain event, and it helps protect a site from future rains. Inspect a minimum of once a week if there is no rain. More frequent inspections may be needed during times of heavy construction activity.

- Identify the individual(s) responsible for conducting inspections and describe their qualifications. Reference or attach the inspection form that will be utilized.
- Describe the frequency that inspections will occur at your site including any correlations to storm frequency and intensity.
- Describe the general procedures for correcting problems when they are identified. Include responsible staff and time frames for making corrections.
- Describe actions taken, date completed, and note the person who completed the work.
- Note any changes made as a result of specific conditions.

TIP *It is more cost effective to inspect and repair BMPs as routine maintenance than it is to deal with the expense of remediation for any environmental damage.*

DEFINITION

To document the condition and repairs needed as noted by the builder's on-site representative.

PURPOSE

Stormwater control best management practices (BMPs) need regular inspections to ensure their effectiveness, and many permitting authorities require self-inspection for construction projects. The inspections should identify areas contributing to the stormwater discharge authorized by the Permit and evaluate whether the SPPP is being properly implemented and maintained, or whether additional measures are needed to implement the plan.*

Weekly Inspections by the Builder's On-site Representative are Needed to Manage and Control Stormwater Pollution

INSPECTIONS BEFORE RAIN EVENTS

It is important that construction site operators pay attention to weather forecasts. To prepare for impending rains:

- Operators should walk the construction site and ensure that BMPs are cleaned out and operating properly.
- They should verify that dumpsters are covered, paint and other chemicals are covered, and no oil spills are present.
- Operators should also visually inspect all BMPs when the site will be inactive for several days, such as weekends or holidays. This will help to prepare for rains that might occur when workers are off-site.

INSPECTIONS AFTER RAIN EVENTS

- Eight (8) hours after rain, inspect, clean, and repair the site's BMPs. This will keep the site clean and minimize complaints from nearby residents.
- Remove mud in traffic areas and remove mosquito-breeding standing water.
- Clean mud and debris from silt fences and other BMPs. Clogged BMPs will not prevent pollutant releases during subsequent rain events, so clean, repair, or replace them as quickly as possible.
- Prepare the site for the next rain event.

MAINTENANCE & REPAIR

Construction site operators should allow enough time and resources for BMP maintenance and repair. As site conditions change, BMP designs may prove to be inadequate in controlling erosion and sedimentation. A knowledgeable inspector will be able to identify these deficiencies and ensure that necessary improvements are made.

EFFECTIVENESS

Inspections and maintenance ensure that BMPs function properly and help prevent pollution discharges. Education of on-site personnel is another important factor in an effective program. To recognize and preempt problems, those responsible for maintaining BMPs must be familiar with their design and installation. However, making everyone at the site aware of general erosion and sedimentation control principles can expedite identification of maintenance problems and repairs.

**Please refer to E.1 on page 5 of the Permit's Narrative Requirement found under the Regulations tab.*

Soil Erosion, Sediment & Runoff Controls

CONDITIONS WHERE PRACTICE APPLIES

All land development projects that expose soil.

Statewide soil erosion and sediment control regulations and/or municipal ordinances may further define where practices apply

PLANNING CONSIDERATIONS

Runoff Control

- Minimize disturbed areas and protect natural features and soil.
- Phase construction activity.
- Control stormwater flowing onto and through the project.
- Stabilize soils promptly.
- Protect slopes.

Soil Erosion and Sediment Control

- Protect storm sewer inlets.
- Install perimeter controls.
- Retain sediment on-site.
- Install stabilized construction accesses.
- Inspect and maintain controls routinely and after storm events.

EXAMPLES OF RUNOFF CONTROLS

- Permanent Slope Diversions.
- Temporary Diversions.
- Land Grading.

TIP *Divert stormwater run-on and runoff away from disturbed areas.*

DEFINITION

Soil erosion and sediment controls are structural and non structural practices used during construction to keep soil in place and to capture sediment that is moved by storm water before it leaves the site.

PURPOSE

To protect rivers, estuaries, lakes, wetlands and coastal waters from pollutants in storm water runoff. Uncontrolled stormwater runoff from construction sites can have a significant impact to the environment. Sediment in waterbodies from construction sites can reduce the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation.

Filtration Tubes in a Channel

Slope Stabilization

Inlet Protection

- Slope Protection.

  TIP *Erosion control mats, geotextiles and erosion control blankets are just a few examples of erosion control products used to stabilize slopes, channels and stream banks.*

- Temporary stabilization of areas not under construction activity.
- Permanent stabilization of areas no longer subject to construction activity.

  TIP *Once soil disturbing activity is completed, and the area is stabilized, inspection and maintenance becomes minimal.*

- Construction roadway, staging and parking area stabilization.

  TIP *Require employees and subcontractors to use designated construction accesses only.*

- Grass Lined Channels.
- Vegetated Buffers.
- Vegetated Filter Strips.

  TIP *Design and construction of the above can aid in satisfying NJDEP water quality requirements.*

- Controlled Dewatering.

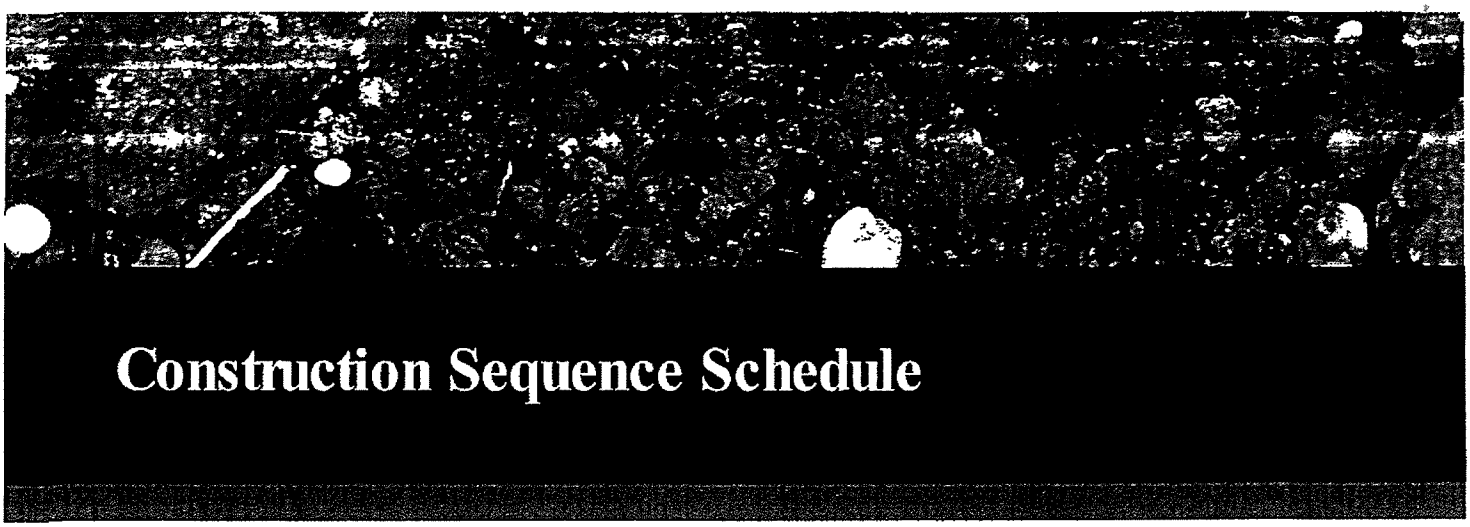
EXAMPLES OF SOIL EROSION & SEDIMENT CONTROLS

- Sediment Basins and Sediment Traps.
- Stabilized Construction Accesses.
- Sediment Barriers (e.g. silt fence and hay bales).
- Storm Sewer Inlet Protection.
- Sediment Retention On-site.
- Dust Control (e.g. mulch, vegetative cover, spray-on adhesives, tillage, sprinkling and calcium chloride).
- Turbidity Barriers.
- Armor Protection (e.g. rip rap).
- Filtration Tubes.
- Soil Bio-Engineering Techniques.

  TIP *A proactive approach and timely installation of the necessary and appropriate controls can reduce costly soil erosion and sediment control repairs on and offsite.*

REFERENCES

Standards for Soil Erosion and Sediment Control in New Jersey
United States Environmental Protection Agency
New Jersey Department of Environmental Protection



Construction Sequence Schedule

CONDITIONS WHERE PRACTICE APPLIES

All land-development projects that expose soil.

Statewide soil erosion and sediment control regulations and/or municipal ordinances may further define where practices apply.

PLANNING CONSIDERATIONS

A site specific and detailed work schedule that coordinates the timing of soil disturbing activities and the installation of soil erosion and runoff controls is perhaps the most cost-effective way of controlling erosion and runoff while soil is exposed and subject to construction activity. (See example below).

Construction procedures that limit soil exposure and promote the installation of soil erosion and sediment controls to stabilize disturbed areas in a timely fashion can significantly reduce the erosion potential of a construction site. The construction schedule sequence is not only a guide for the contractor, but also a proactive approach to control and minimize soil erosion and runoff.

EXAMPLE OF A CONSTRUCTION SEQUENCE SCHEDULE AS FOUND ON A SOIL EROSION CONTROL PLAN

Chronological Timeline Days		Phase 1 Construction
-30	1.	Notify the NJDEP Land Use Regulation Program, Bureau of Stream Encroachment 30 days prior to any land disturbance relating to the construction of the by-pass drainage pipe. *Duration: 1 Day*
-3	2.	Notify Freehold Soil Conservation District 72 hours before any land disturbance. *Duration: 1 Day*
0-1	3.	Construct/reconstruct access road entrances from Middlesex Center Blvd. and from Davidson Mill Road. *Duration: 1 Day*

DEFINITION

A specified work schedule that coordinates the timing of soil disturbing activities and the installation of soil erosion and sediment control measures.

PURPOSE

To reduce on-site erosion and off-site sedimentation when performing land disturbing activities and installing erosion and sedimentation control practices in accordance with a planned schedule.

Chronological Timeline Days		
1-30	4.	Install erosion control measures for Phase 1 and along the by-pass alignment and as shown on the Soil Erosion and Sediment Control plans. Construct temporary sediment basin 1. Construct diversion swale 1 and berm with temporary grass seeding applied immediately. Construct permanent infiltration basin. *Duration: 30 Days*
6-8	5.	Strip topsoil for path of by-pass drainage line and new drainage system from HW-17 to MH-26. Store stripped topsoil and excess fill material in temporary stockpile and surround the stockpile with silt fence. If stockpile or other disturbed areas are to remain in a disturbed state for more than 30 days and will not be subjected to traffic are to receive temporary seeding immediately. If the season prevents the establishment of a vegetative cover, then disturbed areas shall be mulched with straw or equivalent material at a rate of 2 tons per acre. *Duration: 2 Days*
8-68	6.	Install by-pass drainage line and proposed drainage pipeline from HW-17 to MH-26. *Duration: 60 Days*
14-28	7.	Connect offsite 66" RCP from Davidson Mill Road to the on-site infiltration basin. *Duration: 14 Days*
15-36	8.	Strip area for Phase 1 building, parking and driveway. Grade area to proposed (subgrade) elevations. *Duration: 21 Days*
25-40	9.	Construct Phase 1 drainage system, and utilities. Install subbase stone courses in building location, and stone and bituminous stabilize courses in parking and driveway locations. Construction of concrete floor pads and superstructure for building to be on-going. *Duration: 15 Days*
		Phase 2A Construction
33-35	1.	Install erosion control measures for Phase 2 as shown on the SESC plans to construct temporary sediment basin 2. Construct diversion swale 2 and berm with temporary grass seeding applied immediately. *Duration: 2 Days*
35-56	2.	Strip area for Phase 2A building, parking and driveway. Grade area to proposed (subgrade) elevations. *Duration: 21 Days*
45-60	3.	Construct Phase 2A drainage system, and utilities. Install subbase stone courses in building location, and stone and bituminous stabilize courses in parking and drive way locations. Construction of concrete floor pads and superstructure for building to be on-going. *Duration: 15 Days*
		Phase 2B Construction
60-63	1.	Upon completion and final connection of by-pass drainage line to existing four 8'x4' box culverts located at the West side of Middlesex Center Blvd., strip area for Phase 2B building, parking and driveway. Dismantle sediment basin 2 and grade to proposed (subgrade) elevations. *Duration: 3 Days*
63-73	2.	Construct retaining walls. *Duration: 10 Days*
63-78	3.	Install Phase 2B stone courses in building location, and stone and bituminous base courses in parking and driveway locations. Construction of concrete floor pads and superstructure for building to be on-going. *Duration: 15 Days*
63-84	4.	Continue constructions of building to completion. Duration: *On-going – 21 Days*
78-80	5.	Dewater and dismantle sediment basin 1. Fine grade areas and connect sediment basin 1 to infiltration basin excavate remaining 2 feet of entire infiltration to elevation 92.00. *Duration: 2 Days*
79-82	6.	Stabilize all disturbed areas, over seed all bare areas and install permanent stabilization where required. *Duration: 3 Days*
82-84	7.	Construct final *surface pavement course over base pavement in parking areas and access driveways. Duration: 2 Days*
80-84	8.	Apply pavement striping and signage. Install permanent landscaping and appurtenances. *Duration. 4 Days*

Construction Site & Land Disturbance Dewatering

CONDITIONS WHERE PRACTICE APPLIES

Where excavated facilities, due to construction, need to be dewatered to facilitate or complete the construction process.

PLANNING CONSIDERATIONS

The water pumped out of excavated areas contains sediments that must be removed prior to discharging to receiving bodies of water. The dewatering technique, location and duration must be considered to ensure the water will be discharged in a non-erosive manner.

EXAMPLES OF DEWATERING PROCESSES

Removable Pump Stations

- Commonly used when long durations of pumping are required.
- Water pumped from the station shall be discharged into a sediment basin or suitable filter area.

Sump Pits

- Temporary pits used to remove excess water while minimizing sedimentation.
- Water is pumped from a perforated vertical standpipe backfilled with filter material and then discharged to a suitable discharge area.

Portable Sediment Tank and Silt Control Bags

- Movable containers through which sediment laden water is pumped to trap and retain sediment.
- A sediment tank or a silt control bag is used on sites where excavations are deep, and space is limited and where direct discharge of sediment laden water to resource areas is to be avoided.

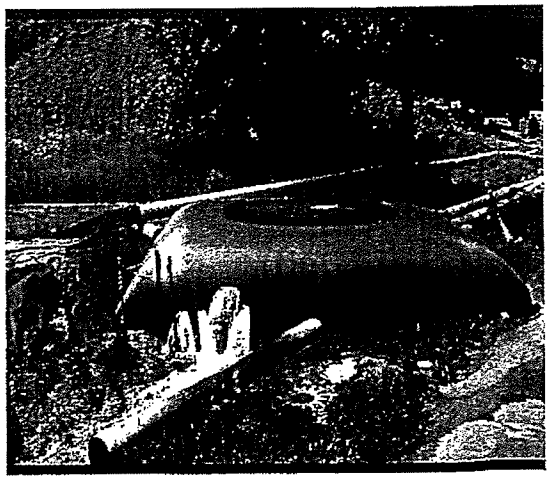
See Standards for Soil Erosion and Sediment Control in New Jersey for construction details.

DEFINITION

The removal and discharge of sediment-laden water from an excavated area, construction site or sediment basin.

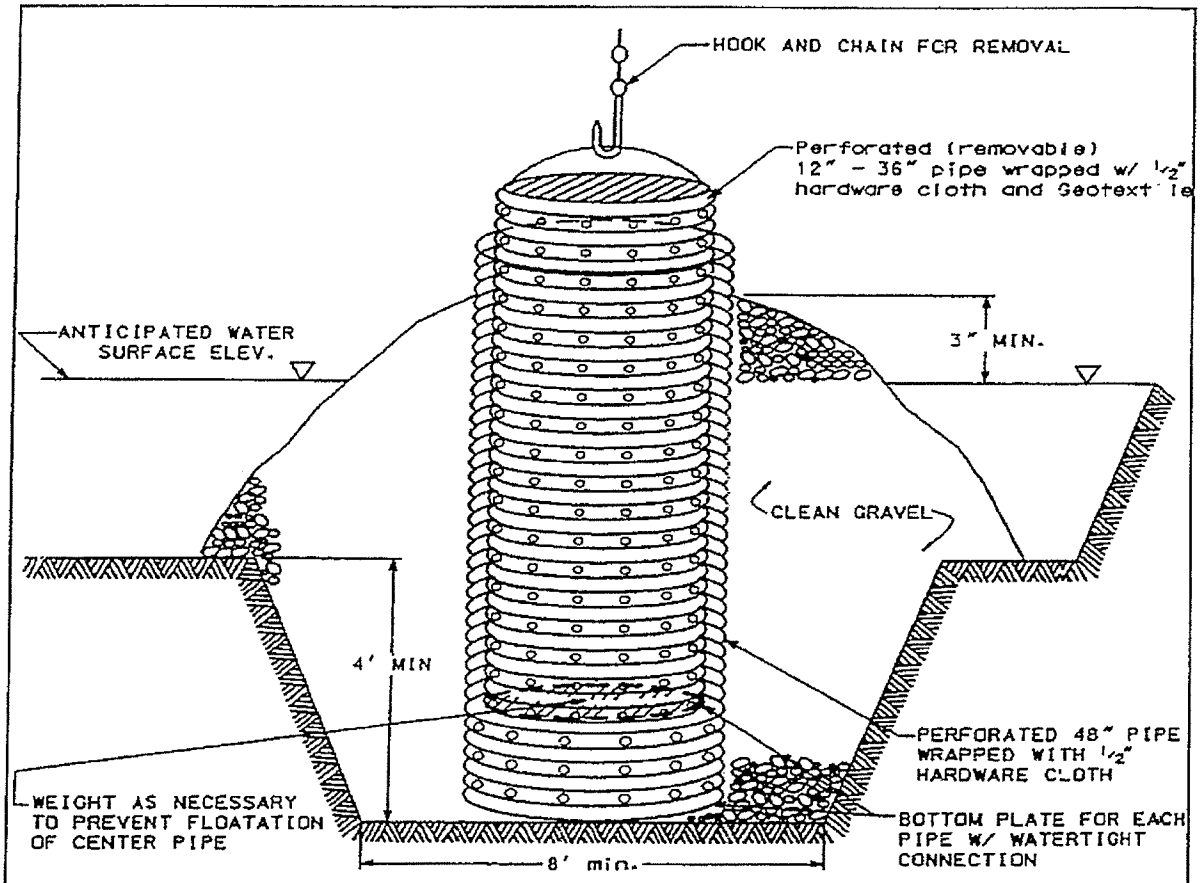
PURPOSE

To properly remove suspended sediments and water from excavated areas through filtration and/or settlement prior to discharging water to a receiving water course or body.



Example of a Silt Bag

Detail 14-1 Removable Pumping Station



ELEVATION (CUT AWAY)

Construction Specifications

1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations.

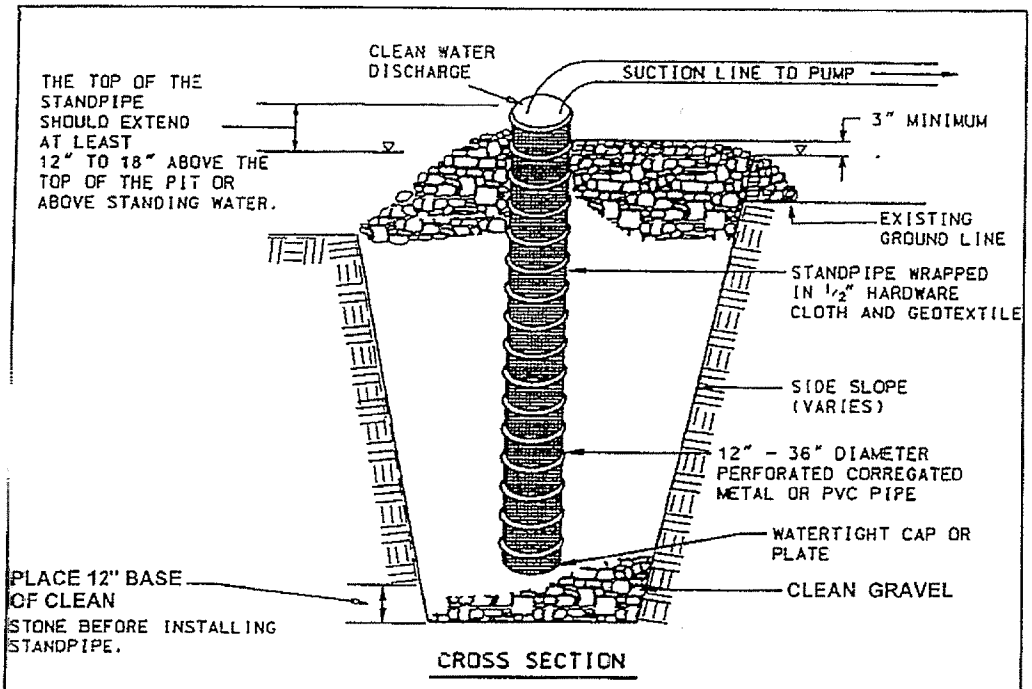
2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.

3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be 1/2" X 6" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class E.

4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

Source: USDA NRCS 1994

Detail 14-2: Sump Pit



Construction Specifications

1. Pit dimensions are variable, with the minimum diameter being 2 times the standpipe diameter.

2. The standpipe should be constructed by perforating a 12" to 24" diameter corrugated or PVC pipe. Then wrapping with ½" hardware cloth and Geotextile fabric. The perforations shall be ½" x 6" slits or 1" diameter holes.

3. A base of filter material consisting of clean gravel or ASTM C 33 stone should be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe should then be backfilled with the same filter material.

4. The standpipe should extend 12" to 18" above the lip of the pit or the riser crest elevation (basin dewatering only) and the filter material should extend 3" minimum above the anticipated standing water elevation.

Source: USDA NRCS 1994