

Stormwater Pollution Prevention Plan (SWPPP)

For

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
KEENE-SWANZEY X-A000(458), 10309P
Town of Keene & Swanzey, New Hampshire**

Prepared For:

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SWPPP Preparation Date: March 11, 2016

(Revised March 15, 2016)

Estimated Project Dates:

Estimated Project Start Date: April 14, 2016

Estimated Project Completion Date: November 14, 2016

NPDES #: NHR12AL12 (CPM Constructors)

NPDES #: NHR12AJ58 (NHDOT)

(Pathways Project No. 12689)

SWPPP Preparer:



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SWPPP Revision Schedule

This SWPPP should be revised and updated within seven (7) calendar days following the occurrence of any changes in site conditions, new or revised government regulations, additional on-site stormwater pollution controls, and/or other circumstances listed below, pursuant to the Construction General Permit 2012 (CGP) Part 7.4.1:

- Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater control measures, pollution prevention measures, or other activities at your site that are no longer accurately reflected in your SWPPP;
- To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
- If inspections or investigations determine that SWPPP modifications are necessary for compliance with this permit;
- Where EPA determines it is necessary to impose additional requirements on your discharge;
- To reflect any revisions to applicable Federal, State, Tribal, or local requirements that affect the stormwater control measures implemented at the site; and
- If applicable, when a change in chemical treatment systems or chemically-enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

All revisions to the SWPPP must be documented on the SWPPP Revision Documentation Form included in Appendix G, which should include the information shown below for each draft or revision of the SWPPP. The authorized facility representative who approves the SWPPP should be an individual at or near the top of the facility's management organization, such as the president, vice president, construction manager, site supervisor, or environmental manager. The signature of this representative attests that the SWPPP revision information is true and accurate. Previous authors and facility representatives are not responsible for the revisions.

SWPPP Revision Documentation Form

Amendment Number	Date of Amendment	Description of Amendment	Amendment Prepared By [Name(s) & Title]	Company Representative Signature
Draft Issued	March 11, 2016		Pathways Consulting, LLC	 Scott A. Williams, P.E.  Jeffrey D. Durell, CPESC
Final Issued	March 15, 2016		Pathways Consulting, LLC	 Scott A. Williams, P.E.  Jeffrey D. Durell, CPESC
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- Appendix B – Soil Characteristics
- Appendix C – Site Plans
- Appendix D – Copy of Construction General Permit
- Appendix E – Copy of Notice of Intent and Acknowledgement from EPA
- Appendix F – Inspection Reports and Corrective Action Logs
- Appendix G – SWPPP Revision Documentation Log
- Appendix H – Subcontractor Certifications/Agreements
- Appendix I – Grading and Stabilization Activities Log
- Appendix J – SWPPP Training Log
- Appendix K – Delegation of Authority Form
- Appendix L – Copies of Additional Permits and Environmental Documentation

1.0 CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Contact Information

PROJECT OWNER:	PHONE/FAX/MOBILE:	ADDRESS:
State of New Hampshire Department of Transportation	Phone: (603) 271-7401 Fax: (603) 271-3914	John O. Morton Building 7 Hazen Drive Post Office Box 483 Concord, NH 03302-0483
SITE OPERATOR (OWNER):	PHONE/FAX/MOBILE:	ADDRESS:
Shaun M. Flynn, NHDOT District Construction Engineer	Phone: (603) 271-2571 Email: SFlynn@dot.state.nh.us	John O. Morton Building 7 Hazen Drive Post Office Box 483 Concord, NH 03302-0483
Randy Talon, Environmental Coordinator, NHDOT Bureau of Environment	Phone: (603) 271-7966 Mobile: (603) 419-0252 Email: RTalon@dot.state.nh.us	
Mark Moran, NHDOT Contract Administrator	Phone: (603) 271-2571 Mobile: (603) 313-3894 E-mail: mmoran@dot.state.nh.us	
SITE OPERATOR, SWPPP COORDINATOR, And 24-HOUR CONTACT (GENERAL SUBCONTRACTOR):	PHONE/FAX/MOBILE:	ADDRESS:
Mitchell Bois, Project Manager CPM Constructors	Phone: (207) 865-0000 Mobile: (207) 720-1748 Email: mbois@cpmconstructors.com	CPM Constructors 30 Bonney Street Post Office Box B Freeport, Maine 04032
Jeff McGuire, Site Superintendent CPM Constructors	Mobile: 207-615-8547 E-mail: jmcguire@cpmconstructors.com	
SWPPP PREPARER(S) And MONITOR(S):	PHONE/FAX/MOBILE:	ADDRESS:
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1.2 Stormwater Team and Responsibilities

This section is intended to assist the site operator(s) with identifying the specific staff members that comprise the project stormwater team and outlining individual responsibilities with regard to maintaining compliance with the Construction General Permit 2012 (CGP). These responsibilities may be delegated differently as deemed necessary to adhere to separate contractual relationships between the owner and construction team, as long as the CGP requirements are met and any changes in responsibilities from those contained herein are clearly documented in this SWPPP.

Project Owner Contact:

New Hampshire Department of Transportation (NHDOT):
Shaun M. Flynn., District Construction Engineer
Mark Moran, Contract Administrator
Randy Talon, Environmental Coordinator

The owner shall be responsible for the following duties:

- General compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP). A copy is provided in Appendix D;
- Completion of a Notice of Intent (NOI) to the Environmental Protection Agency (EPA) for coverage under the CGP. A copy is provided in Appendix E;
- Communications with all site operators regarding compliance with CGP;
- Overseeing contractor operations and CGP compliance independent of any owner-contractor contractual obligations;
- Providing available representatives for authorizing decisions necessary for maintaining compliance with CGP, implementing and/or supervising corrective actions;
- Communications with the SWPPP preparer when modifications are necessary, unless delegated to other parties;
- Communicating with stormwater team as necessary during construction; and
- Communications with outside parties as necessary for maintaining compliance and providing required notifications.

Site Operator, SWPPP Coordinator and 24-Hour Contact (General Contractor):

CPM Constructors:
Mitchell Bois, Senior Project Manager
Jeff McGuire, Site Superintendent

The General Contractor shall be responsible for the following duties:

- Provide representatives available for contact on a 24-hour on-call basis throughout construction, in accordance with CGP requirements;
- Compliance with the NPDES General Permit for Discharges from Construction Activities (CGP). A copy is provided in Appendix D;

- Completion of a NOI to the EPA for coverage under the CGP. A copy is provided in Appendix E;
- Implementing the SWPPP and committing resources to implement the BMPs;
- Communications and delegation of responsibilities between owner, SWPPP preparer and monitor, and others on the stormwater team during construction;
- Installing stormwater, erosion, and sediment and pollution prevention controls at the project site;
- Training of all staff and subcontractors as necessary to make them aware of the BMPs, control measures and good-housekeeping procedures that must be implemented on the project site;
- Implementing and documenting the completion of maintenance activities for erosion and sediment and pollution prevention controls within the required timeframes pursuant to CGP Part 2.1.1.4 and Part 2.3.2.1;
- Implementing and documenting the completion of corrective actions within the required timeframes pursuant to CGP Part 5.0;
- Supervising and implementing good housekeeping programs, such as site clean-up and disposal of trash and debris, hazardous material management and disposal, vehicle and equipment maintenance;
- Conducting routine inspections of the site to ensure all BMPs are being implemented and maintained;
- Maintaining the BMPs;
- Meeting time deadlines for initiating and completing site stabilization measures;
- Meeting time deadlines (i.e., CGP 2.1.1.4, 2.3.2.1, and 5.0) for completing maintenance and corrective action measures, and obtaining signatures for corrective action logs, as necessary;
- Notifying the owner and SWPPP preparer when modifications to the SWPPP are necessary;
- Communicating changes in the SWPPP to people working on the site.
- Subcontractor compliance with the SWPPP. If a subcontractor certifies corporate compliance with the SWPPP, a copy shall be included in Appendix H; and
- Maintaining an up-to-date on-site SWPPP document in accordance with the CGP, including inspection reports, information in appendices, training logs, updating the erosion control plan to identify erosion, sediment and stormwater controls, and other BMPs used on the site.

SWPPP Preparer and Monitor:

Scott A. Williams, P.E (Preparer-Monitor)
 Jeffrey D. Durell, CPESC (Preparer-Monitor)
 Pathways Consulting, LLC
 240 Mechanic Street, Suite 100
 Lebanon, New Hampshire 03766

The SWPPP preparer and monitor shall be responsible for the following duties:

- Producing a SWPPP document in accordance with the CGP requirements;

- Assisting with the completion of a NOI to the EPA for obtaining coverage under the CGP for construction activities. A copy is provided in Appendix E;
- Providing updates to the SWPPP document upon request;
- Monitoring the site conditions, erosion and stormwater controls, and BMPs in accordance with the CGP requirements, permit conditions and project documents;
- Review site compliance with the CGP. A copy is provided in Appendix D;
- Recommendations relating to SWPPP and BMPs, including maintenance activities related to erosion and sediment controls, and identifying potential corrective actions when observed on the project site;
- Documenting changes to the SWPPP and notifying the site operators when changes to the SWPPP are required per the CGP;
- Conducting periodic inspections according to CGP. Inspections to include entire site to ensure all BMPs are being implemented and maintained, and follow-up reporting;
- Producing Monitoring Reports in accordance with CGP requirements;
- Noting when initial disturbances occur for each area and identify time remaining for initiation and completion of stabilization during inspection visits; and
- Identifying and tracking time deadlines (i.e., CGP 2.1.1.4, 2.3.2.1, and 5.0) on Inspection Reports and Corrective Action Logs during completion of maintenance and corrective action measures.

2.0 SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 Project/Site Information

Project/Site Name: NHDOT Keene 10309P

Project Street/Location: MUT Bridge over NH 101

Town: Keene, NH Zip Code: 03431

County or Similar Subdivision: Cheshire

Latitude/Longitude:

Latitude: 42.9222° N
(degrees, decimal)

Longitude: 72.2847° W
(degrees, decimal)

Method for determining latitude/longitude:

USGS topographic map (specify scale: 1:24,000) EPA Web site GPS

Other: NHGRANIT

Horizontal Reference Datum:

NAD 27 NAD 83 or WGS 84 Unknown

Additional Information:

Is the project located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe? Yes No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including the name of Indian reservation if applicable). If not in Indian country, provide the name of the Indian tribe associated with the property, or indicate "not applicable": Not applicable

Is this project related to a public emergency (e.g., natural disaster, extreme flooding conditions)? Yes No

If yes, provide information substantiating its occurrence (e.g., state disaster declaration), and describe construction necessary to reestablish effective public services: Not applicable

Is this project applying for coverage as a “federal operator” as defined in Appendix A of the 2012 CGP? Yes No

NPDES project or permit tracking number(s):

CPM CONSTRUCTORS: NHR12AL12
 NHDOT: NHR12AJ58

2.2 Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? Yes No

Are there any surface waters that are located within 50 feet of your construction disturbances? Yes No

Table 1 - Names of Receiving Waters

Name(s) of the first surface water that receives stormwater directly from your site and/or from the MS4 (note: multiple rows provided where your site has more than one point of discharge that flows to different surface waters)
1. Wetlands

[Include additional rows as necessary.]

	Is this surface water listed as “impaired”?	If you answered yes, then answer the following:			
		What pollutant(s) are causing the impairment?	Has a TMDL been completed?	Title of the TMDL document	Pollutant(s) for which there is a TMDL
1.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	NE Regional Mercury	

Table 2 - Impaired Waters/TMDLs (Answer the following for each surface water listed in Table 1 above) [Include additional rows as necessary.]

Describe the method(s) you used to determine whether or not your project/site discharges to an impaired water: **Project was located on a USGS map and NHDES One-Stop GIS system to determine the receiving waters.**

	Is this surface water designated as a Tier 2, Tier 2.5, or Tier 3 water? (see Appendix F of CGP)	If you answered yes, specify which Tier (2, 2.5, or 3) the surface water is designated as?
1.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO *	
2.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO *	
3.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO *	
4.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO *	

Table 3 - Tier 2, 2.5, or 3 Waters (Answer the following for each surface water listed in Table 1 above) *NHDES does not have an official list of Tier 2/2.5 waters but does have a list of Tier 3 waters (i.e., outstanding resource waters or ORW’s). NHDES assumes all surface waters to be Tier 2 unless not impaired for sediment-related parameters (e.g., total suspended solids, turbidity, nutrients, phosphorus, and nitrogen).

Additional Requirements Based on Receiving Water:

Is the receiving water impaired for sediment-related parameters, such as total suspended solids (TSS), turbidity, and/or nutrients (phosphorus, nitrogen)?

Yes No

Is the receiving water an Outstanding Resource Water (ORW) according to the NHDES 303(d) "List of ORW and Impaired Waters for CGP NOI"?

Yes No

Check if no to both questions and project shall comply with:

- Inspection requirements in CGP Part 4.1.2 (once every 7 days OR once every 14 days and within 24 hours following storm event); and
- Stabilization requirements in CGP Part 2.2.1.2 (complete in 14 days).

Check if yes to either question, receiving waters are considered "sensitive" and project shall comply with:

- Inspection requirements in CGP Part 4.1.3 (once every 7 days AND within 24 hours following storm event); and
- Stabilization requirements in CGP Part 2.2.1.3C (complete in 7 days).

2.3 Nature of Construction Activity

This project consists of the construction of a new multi-use trail (MUT) bridge in the City of Keene. This bridge (No. 128/061) will connect the Ashuelot Rail Trail over NH Route 12/101 and allow for safe passage of trail users. The new bridge crossing will be located approximately 1,600 feet east of the Keene roundabout and approximately 2,400 feet west of Main Street and NH Route 101. Approximately 400 feet of approach fill on each side of NH Route 12/101 will be constructed to raise the grade of the bridge over NH Route 12/101.

The overall project scope also includes temporary access and staging areas, traffic controls, erosion and sediment controls, site restoration and stabilization, and other miscellaneous incidental work on the project site.

The site encompasses previously disturbed property within the Rail Trail and NH Route 12/101 right-of-ways (ROW), and/or within temporary construction and/or permanent easements that have been obtained by the NHDOT for all work outside the ROW. The project site includes approximately 1.66 acres of total land disturbance as part of the project.

What is the function of the construction activity?

Residential Commercial Industrial Road Construction
 Linear Utility Other (please specify): Multi-Use Recreational Trail and Bridge.

Estimated Project Start Date: April 14, 2016

Estimated Project Completion Date: November 14, 2016

2.4 Construction Site Statistics

The following are estimates of the construction site:

Total Parcel Area	Unknown**
Construction Site Area to be disturbed	1.66 acres
Maximum Site Area to be disturbed at one time	5.0/1.0 acres*
Percentage of construction site impervious before construction	Unknown**
Runoff coefficient before construction	Unknown**
Percentage of construction site impervious area after construction	Unknown**
Runoff coefficient after construction	Unknown**

*Per the NHDES Alteration of Terrain requirements, 5.0 acre limit during construction season, reduced to 1.0 acre between November 30 to May 1.

**Detailed drainage calculations were not provided by the NHDOT at the time this SWPPP was prepared, but the project is not expected to change the drainage conditions after construction, based on the nature and extent of work proposed.

2.5 Soils, Slopes, Vegetation, Wetlands, and Drainage

Soils: The Natural Resource Conservation Service (NRCS) classifies four Hydrologic Soils Groups based on the soil's runoff potential. The four Hydrologic Soils Groups are A, B, C, and D. The A soil groups generally have the smallest runoff potential and D soil groups the greatest.

Details of this classification system can be found in "Urban Hydrology for Small Watersheds" published by the Engineering Division of the Natural Resource Conservation Service, United States Department of Agriculture, Technical Release-55. We have summarized the general characteristics of each soil group in the following paragraphs.

Group A soils are sand, loamy-sand, or sandy-loam types of soils. They have low runoff potential and high infiltration rates even when thoroughly wetted. These soils consist chiefly of deep, well to excessively drained sands or gravels, and have a high rate of water transmission.

Group B soils are silt loam or loam. They have a moderate infiltration rate when thoroughly wetted and consist chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures.

Group C soils are sandy clay loam. They have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine structure.

Group D soils have a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink/swell potential, soils that have a high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

According to the NRCS soils map, the general soils on the project site are mapped as two (2) soil classifications, encompassing hydrologic soil groups A, C, and D as shown in Table 4 below. See Appendix B for a NRCS soil survey map and additional information on these soils:

Table 4 - Soil Classification on the Project Site

Map Unit Legend	Soil Name	Hydrologic Soil Group
218	Raynham-Wareham complex, occasionally flooded	C/D
401	Occum fine sandy loam	A

Slopes: The existing Rail Trail surface is approximately 12-15 feet wide with a crowned surface pitching from the centerline toward the top of slope at a grade of 1-2%. The Rail Trail sits on top of an embankment with slopes in the range of 2:1 (50%) to 2.5:1 (40%) pitching to the east and west toward adjacent forested and wetland areas with an approximate grade change of 6 to 8 feet in each direction. Longitudinal grades along the centerline of the Rail Trail are relatively flat with slopes less than 1%, except for slightly steeper grades ($\pm 2\%$) as the Rail Trail approaches from the north and south to the at-grade crossing of the NH Route 12/101 roadway corridor. The general areas outside the ROW consist of gradual sloping to flat terrain with large wetland areas.

Vegetation: The project site consists of a previously developed recreational trail converted from an abandoned railroad line that previously ran through this area. The vegetation along the Rail Trail corridor consists of low-lying grass, scrub-shrub, and mature trees. The project area also appears to contain many areas of Type I (Common buckthorn, Honeysuckle, Japanese barberry, Autumn olive), and some Type II (Japanese Knotweed) invasive species. There also may be other Type I and II invasive species on the project site that are not currently depicted on the NHDOT plans, and it is the responsibility of the contractor to identify these areas, as needed. The project plans indicate significant disturbances that may occur within these areas, and potential disturbances during construction will need to be addressed in accordance with a separate Invasive Species Management Plan that will be prepared prior to any work.

The NHDOT contract includes limited clearing and grubbing of existing vegetation and trees as part of the trail improvement/raising, bridge construction, and other miscellaneous work. The proposed clearing limits and limits of disturbance, where applicable, have been depicted on the project plans and the contractor shall adhere to these limits for any removal of vegetation, unless otherwise approved by the NHDOT. The NHDOT contract anticipates some disturbances within areas of invasive vegetation, but the contractor should avoid impacts to invasive species areas wherever possible. Invasive vegetation will only be disturbed if within the clearing and construction limits. When construction activities require interaction with areas where invasive species are present, the utmost care must be taken to prevent the further spread of the plants. The contractor must submit an Invasive Species Management Plan to the NHDOT for review and approval before conducting any work in areas containing Type I or Type II invasive species, and these activities shall be managed in accordance with this plan at all times. For specific NHDOT Regulations and guidance on containment and disposal measures for addressing the presence of invasive plants within the work areas, please refer to the contract documents and NHDOT specifications.

Wetlands: There are significant jurisdictional wetland areas located within or adjacent to the project area. The delineated wetlands include jurisdictional areas associated with the broad floodplain wetlands within the Ashuelot River valley to

the east of the project area, and isolated scrub-shrub and/or forested wetland areas, especially at the toe of the Rail Trail embankment slopes within the Rail Trail ROW and construction limits, as depicted on the project plans. A significant amount of the jurisdictional areas within the project area will be impacted as part of the project design and permitting, but these impact areas are generally limited only to the areas required for reconstructing and raising the approach embankments up to the proposed bridge structure. The wetland impacts include temporary and permanent impacts of approximately 23, 685 SF within the project area that have been approved through NHDES Wetland Permit No. 2015-0105. All wetland impacts are subject to the conditions of the wetland permits obtained from the NHDES and United States Army Corps of Engineers (USACE) for this project. During construction, extreme care must be taken to maintain wetland impacts within the permitted limits, and to protect wetlands outside the construction limits and adhere to all contract provisions and applicable permit conditions.

Drainage: See Appendix A for site location map(s) of the project area. The entire project is within the overall Ashuelot River watershed. All of the stormwater runoff from the site flows to adjacent wetland areas, which eventually flow towards the Ashuelot River to the east of the project area, and ultimately into the Connecticut River.

The project design includes minimal drainage improvements limited to only four (4) proposed drainage structures and slope drains that will be located on the top of the Rail Trail embankment adjacent to the bridge approaches, and collect runoff from the surface of the bridge structure. The proposed slope drains do not discharge directly to any surface waters, but do discharge onto areas adjacent to jurisdictional wetlands. The existing drainage patterns within the project site will not be altered significantly as a result of these improvements. All drainage along the proposed bridge structure will be conveyed to the four new drainage structures, while the raised bridge approach embankments will continue to sheet flow onto adjacent wetland areas and roadside ditches similar to the existing condition. The existing drainage channels, ditches and/or wetlands, will be maintained throughout construction with temporary stormwater, erosion and sediment control measures as part of this SWPPP and project. Discharge points involving sheet flow will be contained with perimeter controls, and other erosion and sediment controls. In fact, the primary goal of this SWPPP is to ensure that the existing drainage patterns are maintained throughout the duration of construction, and that adequate stormwater, erosion and sediment controls are in place to control and slow drainage flows and prevent sedimentation and impacts to adjacent wetlands, drainage channels, and public and/or private properties outside of the ROW.

2.6 Site Features and Sensitive Areas to be Protected

All existing water bodies, including streams and jurisdictional wetlands near the project site, warrant the utmost protection during all project work, which is the focus of this SWPPP.

Areas to be protected include primarily the existing jurisdictional wetland areas (scrub-shrub and/or forested wetlands) that are not subject to the proposed construction and associated permitting. Wetlands adjacent to the project site are

to remain undisturbed unless permitted for disturbance, and should be protected to the maximum extent possible. The perimeter of the project area also contains some existing vegetation and mature stands of trees. The Contractor should preserve as much of these wooded buffers as possible, and strictly adhere to the approved limits of clearing and disturbance, including any temporary and/or permanent easements obtained for the project.

Areas within the public ROW, including road ditches, pavement, driveway entrances, shoulder areas, signage, utilities, and structures (e.g., mailboxes) outside of work limits, should be protected with perimeter and erosion controls, where necessary. The drainage system and associated outlets within the project site shall be protected to the maximum extent possible using stormwater, erosion and sediment control features as specified on the erosion control plans to prevent impacts to downstream water bodies and areas.

Limits of work shall be carefully delineated to minimize disturbance due to the proposed construction, and erosion controls shall be located as necessary to provide protection and contain sediment. The area of disturbance has also been shown on the project plans and the Contractor should preserve areas beyond the disturbance limits to the extent possible throughout the duration of construction.

Any private, residential, and commercial properties located along the project corridor must be protected from any disturbances during construction, including associated structures, utilities, fences, mailboxes, landscaping, driveway approaches, etc. Contractors must also maintain vehicular and pedestrian access for private property owners and related service personnel throughout the duration of construction, independent of the traffic control plans developed for the project.

Slopes along the project corridors that are not affected by construction activities must be protected at all times. In the event of damage or work outside of construction limits, ground cover or other appropriate means for protection, must be reestablished immediately to prevent the chance of erosion, or other safety concerns.

Care shall be taken to phase the required construction activities and traffic controls to minimize impact to normal traffic flow along NH Route 12 / 101, cross streets, and egress/ingress to all properties within or adjacent to the work areas. Perimeter and erosion controls shall be installed by the Contractor as necessary to prevent impacts to all properties bordering the work areas and outside the work limits. The contractor shall take care to maintain existing flows throughout the construction period.

Any work within areas containing invasive species, whether delineated on the plans or not, shall be addressed in accordance with the NHDOT specifications, contract document requirements, and permit conditions, and will require an Invasive Species Management Plan before such work may proceed.

Soils located within the project limits on the Ashuelot Rail Trail, a formerly active railroad line, are classified by NHDOT as impacted soils, including railroad ballast, as they routinely contain non-leachable impacts just above the allowable limits to be considered "clean material." The NHDOT requires that materials excavated from the top 4 feet of material on the rail trail extending approximately

3 feet from either edge of the existing rail-trail to be considered impacted soils. The NHDOT requires the Contractor to keep excavation within these areas of soils to a minimum, and the NHDOT Bureau of Environment shall be notified if contaminated soils are encountered during construction. If contaminated groundwater is encountered during construction and dewatering of the area is necessary, the contractor shall be required to obtain a groundwater discharge permit from the NHDES. The Contractor is required to handle any contaminated soils and/or groundwater in accordance with all applicable conditions in the contract documents. The contract documents also require soils excavated within the limits of Ashuelot Rail Trail to be reused within the project limits, preferably within the Rail Trail, prior to using "clean" fill. These soils shall be placed above the water table, not on a steep grade, and be sufficiently covered with humus.

2.7 Sequencing and Phasing of Construction Activity

Phasing of the overall construction activities, as well as sequencing of the stormwater and erosion control installation to correspond with each area of disturbance will minimize the duration of exposed soil and the amount of soil that is exposed to the elements at any given time.

In order to comply with the CGP requirements, the contractor must also sequence the land disturbances to minimize open areas of the site where construction activities are underway, provide for installation of stormwater, erosion controls within these open areas, and provide temporary and/or permanent stabilization measures as quickly as possible within each work phase.

The following general sequencing information has been based on a preliminary work schedule provided by the contractor to assist the site operators with developing a detailed phasing plan for the work activities. It should also be noted that the phasing and related traffic controls may be modified by the contractor to be more efficient than the initial proposed traffic control phasing included in the contract plans and documents. As long as NHDOT approves of any phasing and traffic control changes prior to implementation, the general phases may be completed out of the sequence listed below. ***This phasing/sequencing should be modified with specific calendar dates and timing of various construction activities as the work proceeds, including noting when installation of sediment and erosion controls and stabilization occurs.***

The general construction phase segments are outlined as follows:

- Mobilization to Jobsite: April 14 to 27, 2016
- Installation of Construction Signage: April 19 to 21, 2016
- Set up Site Access and Staging Areas: April 21 to 27, 2016
- Perimeter Erosion Controls: April 28 to May 2, 2016
- Clearing and Grubbing: May 3 to 6, 2016
- Invasive Species Control: May 3 to 6, 2016
- Embankment Construction: May 9 to 20, 2016
- Drive Piles Pier 1: May 3 to 9, 2016
- Drive Piles Pier 2: May 10 to 16, 2016
- Phase 1 Preload (45 Calendar Days) May 25 to July 11, 2016

- Construct Pier 1: May 27 to June 9, 2016
- Construct Pier 2: June 10 to 23, 2016
- Construct Abutments: July 12 to August 1, 2016
- Phase 2 Waiting Period (30 Calendar Days) August 2 to 31, 2016
- Erect Bridge: September 1 to 8, 2016
- Concrete Bridge Deck: September 9 to 29, 2016
- Drainage Installation: October 4 to 5, 2016
- Stone Dust Installation: October 10 to 12, 2016
- Final Site Seeding and Stabilization: October 13 to 18, 2016
- Installation of Chain Link Fence: October 19 to 20, 2016
- General Site Clean-up and Demobilization: September 26 to 30, 2016
- Remove Erosion Controls: October 21 to 27, 2016
- Contract Completion: November 14, 2016

The general site construction sequence is outlined as follows:

1. Flag or fence clearing limits.
2. Stake or flag all clearing, construction limits, wetland areas, and invasive species areas with survey tape, in accordance with contract documents.
3. Perimeter Controls: Install all necessary perimeter controls (silt fence, compost sock, and construction fence) at the limits of disturbance, clearing limits, and/or construction limits for all work areas prior to any land clearing and/or disturbances.
4. Stormwater Inlet Protection: Install storm drain inlet protection for all catch basins and drainage structures within and adjacent to the work areas. Inlet protection should include any stormwater and erosion controls (e.g., stone check dams, silt fence, mulch netting) as necessary to prevent erosion and contain sediment from existing ditches and disturbed areas along US Route 2 and 3.
5. Construction Entrances: Grade and install construction entrance(s) at on-site and/or off-site staging areas, and for temporary access roads, as required, prior to any clearing, land disturbances or usage. *Stabilized construction entrances may be needed at several points of ingress and egress into the project site, including access to the Rail Trail and/or NH Route 12/101 ROW. The need for additional stabilized construction entrances will be determined in the field during work.*
6. Install all necessary traffic controls and lane closures within work areas for each work phase according to the approved phasing plan.
7. Install any temporary access barriers, gates and/or construction fence in areas where vehicular and pedestrian access should be prevented. Barriers around work areas should not impede normal access for off-site areas or abutting buildings.
8. Staging Areas: Set up construction staging areas for equipment, material, and soil storage within the work areas. These are anticipated on a short-term basis only and will be located within the ROW, lanes temporarily closed to traffic (short term use only), along shoulder areas, and at off-site locations approved by the contract administrator (as long as temporary agreements are obtained from private property owners). *The contractor is intending to use the areas within the existing Rail Trail and NH Route 12/101 ROW's for locating field trailers, staging equipment, and materials. Additional staging areas will be determined in the field during*

construction, and the SWPPP will be updated as needed. Install perimeter controls (silt fence and construction fence) as necessary around staging areas. Install crushed stone on the surface of staging areas as necessary to provide a stable working platform, minimize erosion, and contain sediment. All materials with the potential to contaminate stormwater shall be covered and contained, as necessary.

9. Stockpile Areas: Prior to any earthwork, set up stockpile areas for all earthen materials (including topsoil, sand, fill, debris from tree clearing, and grubbing), excluding clean gravel, crushed stone or stone fill materials free of fine sediments, prior to establishing stockpiles. This shall include installing any necessary perimeter controls, such as silt fence, hay bales, and/or stone check dams to contain materials. If stockpiles are to remain for an extended period of time (generally longer than one month) on the project site, stockpile materials shall be covered with tarps or covered with temporary seed and mulch to stabilize and preserve materials. *The contractor is intending to use on-site designated staging areas for any storage and stockpiling of materials. Stockpiles and associated material containment may be required at each specific work location, as determined in the field.*
10. If the existing drainage flow path in ditches and/or culverts along roadways or at drainage crossings are interrupted due to staging, stockpile areas, or temporary widening, water diversion measures, such as diversion swales, temporary pipes at driveway approaches or across the roadway, and/or dewatering measures, and associated erosion controls (such as check dams) may be necessary to allow drainage flow to bypass these areas. This may be needed during rock scaling operations, depending on the location and access methodology utilized for this work.
11. Prior to tree clearing, grubbing, or stockpile activities, install erosion control measures (silt fence, stone check dams, hay bales, etc.) along the clearing and/or disturbance limits adjacent to wetlands or surface waters, and around drainage inlet/outlets.
12. Tree Clearing: Cut trees and remove vegetation within work areas, avoiding wetlands, invasive species areas, and other “restricted” areas to remain undisturbed. Dispose of debris properly, either at off-site areas, or within established stockpile areas. *The contractor shall adhere to specific environmental commitments and permit conditions contained in the contract documents during any clearing activities, including the restrictions pertaining to the presence of invasive species, Endangered Species, and/or historic properties within or adjacent to the site.*
13. Construct additional erosion or surface water controls (e.g., sediment basins, diversion ditches, check dams, stone lined ditches, mulch netting, or silt fence), simultaneously with land clearing, grubbing, and grading within the work areas.
14. Grubbing and Topsoil Stripping: Remove vegetation and topsoil within work areas and dispose of properly, either at off-site areas, or within established stockpile areas.
15. Removal of vegetation, topsoil, or other excavation within areas that contain invasive species shall be undertaken in a separate and contained operation, in accordance with the Invasive Species Management Plan, to prevent the spread of related soil and debris.

16. General Rail Trail, Embankment, and Access Road Construction:
 - a. Complete grading, slope embankment cutting and filling, drainage and channel work, roadway construction, subbase preparation, paving, guardrail removal/replacement, stabilization, and incidental work within each phase.
 - b. Construct additional stormwater conveyance, erosion and sediment controls (sediment basins, diversion ditches, check dams, hay bales, stone lined ditches, or silt fence), simultaneously with activities within each work phase to accommodate drainage, minimize and contain sediment on-site, prevent erosion, and provide stormwater treatment until permanent stormwater features are in place and fully stabilized.
 - c. Excavated materials shall be stockpiled for re-use or disposal in a stabilized location with adequate perimeter controls as discussed above.
 - d. Slopes shall be surface roughened prior to any temporary or final slope stabilization.
 - e. SWPPP Monitor shall note date of initial disturbance and time remaining for stabilization/completion for each area during inspection visits.
17. Drainage and Dewatering Work:
 - a. Culverts shall be stabilized, including inlet and outlet aprons, inlet protection and ditches, and keep them free of sediment, prior to allowing water to run through them.
 - b. Excavated materials shall be stockpiled for re-use or disposal in a stabilized location with adequate perimeter controls as discussed above.
 - c. Any water diversion or dewatering necessary to create a dry condition within the disturbed work areas shall include sediment treatment measures at the outlet end as necessary to contain sediment and prevent downstream erosion. This may include the use of a filter bag installed on the end of the discharge hose, a stone and fabric check dam installed at the discharge point, or other measures as deemed necessary. The discharge location shall be adjusted in the field to ensure that discharge will flow away from, and will not flow back toward the immediate work areas.
 - d. Discharge from dewatering and/or diversion treatment measures shall be located in the uplands or within the permitted wetland limits with a minimum of 20 feet of undisturbed vegetated buffer between the discharge point and any surface waters or wetlands, and shall be lined with hay bales, stone, or other sediment trapping measures. Promote discharge flows to flow through undisturbed vegetated wetlands before joining adjacent waterways.
 - e. Water contaminated with concrete, grout or mud slurry shall be pumped to a sediment basin/sand filter located in an acceptable location, sufficiently away from surface waters, wetlands, or other restricted areas.
 - f. During grouting or concrete operations, contractor shall ensure that no excess grout, concrete, or washwater is allowed to pass downstream of the work area. All contaminated water shall be pumped to a sediment basin/sand filter for treatment.

- g. Contractor shall have extra pumps and hose available to accommodate excessive water conditions that may occur during or after storm events.
 - h. The contractor shall continuously monitor dewatering measures and sediment basins throughout the duration of these activities to ensure that the methods used are adequately handling and treating the flows, and that no untreated water escapes from the work areas.
 - i. Dewatering activities shall also continue until such time as the disturbed areas (channel bottom and side slopes, inlet, and outlet) are fully stabilized, and all potential sources of sediment have been eliminated. Once this condition is achieved, flow may be re-established through the work area.
 - j. ***The contractor shall continuously monitor the stormwater flows from culverts, drainage structures, dewatering measures, and sediment basins throughout the duration of these activities to ensure that the methods used are adequately handling and treating the flows, and that no untreated water escapes from the work areas.***
18. Bridge Rehabilitation:
- a. The contractor shall install erosion and sediment controls on the bridge deck to prevent sediment and construction debris from entering drainage scuppers and drop inlets discharging into any of the surface waters within the project area.
 - b. Extra caution shall be taken while placing concrete and washing concrete trucks to prevent concrete from entering any surface waters.
 - c. Extreme precautions shall be taken at all times during remediation and removal of any hazardous waste materials on the bridges to prevent the escape of associated materials, debris, dust, or contaminated water into surface waters or onto adjacent banks.
19. Temporary Stabilization:
- a. Initiate stabilization immediately, or by the end of the next work day following when disturbances have permanently or temporarily ceased. Complete stabilization in accordance with the required timeframe outlined herein and in the applicable section of the CGP. This time deadline shall be as soon as practical and no later than fourteen (14) calendar days after initiation of stabilization measures.
 - b. Temporary stabilization shall include the application of seed and mulch for vegetated areas, seed, mulch netting, surface roughening, tackifiers, stone fill, and/or erosion control blankets for temporary protection of slopes 3:1 or greater, or subbase materials for roads.
 - c. SWPPP Monitor shall note date of initial disturbance and time remaining for stabilization/completion for each area during inspection visits.
20. Permanent Stabilization:
- a. Initiate stabilization immediately, or by the end of the next work day, following when disturbances have permanently or temporarily ceased. Complete stabilization in accordance with the required timeframe outlined herein and in the applicable section of the

- CGP. This time deadline shall be as soon as practicable and no later than three (3) calendar days after the last activity in the area where construction activities are complete.
- b. Final stabilization shall include the application of topsoil, seed and mulch for vegetated areas, topsoil, seed, mulch netting, surface roughening, tackifiers, stone fill, and/or erosion control blankets for slopes 3:1 or greater, or subbase materials for roads. Other final stabilization may also include final treatments such as wood chips, sodding, paving, gravel surfaces, landscaping, stone fill, or riprap.
 - c. SWPPP Monitor shall note date of initial disturbance and time remaining for stabilization/completion for each area during inspection visits.
 - d. Upon completion of each phase of the project, all disturbed areas must be stabilized according to the conditions of the SWPPP (see general erosion control notes) and permit conditions.
21. Regular Maintenance and Monitoring Activities:
- a. SWPPP monitor shall utilize Accuweather website (www.accuweather.com) or other approved service to predict rainstorm events. Contractor shall be prepared to install all erosion and sediment controls prior to rain events. Contractor and SWPPP Monitor shall use official weather stations available through Weather Underground website (www.wunderground.com) and/or a rain gauge located onsite for documenting rainfall amounts received per storm events.
 - b. Contractor shall have all necessary erosion control equipment and materials, including mulch and mulching equipment, on-site for the duration of work in order to stabilize disturbed slopes, inlets, outlets, and any other areas of potential concern.
 - c. Maintain dust control in current work area at all times.
 - d. Once existing pavement has been removed, all unpaved roadway areas intended for overnight travel shall be treated with water or another approved dust control product (e.g., Calcium Chloride) prior to the end of the work day.
 - e. Continuously inspect and maintain all stormwater, erosion, and sediment control measures throughout construction, until disturbed areas have been stabilized.
 - f. Remove trapped sediment from erosion and sediment control measures as appropriate for each type of BMP utilized, and as directed.
 - g. If for any reason winter conditions apply, monitoring of the SWPPP and erosion controls shall continue prior to, during, and after weather conditions that could cause erosion and or sedimentation issues. The contractor shall also anticipate the need to return to the site to address any deficiencies, as directed, on a very short time frame.
22. Temporary erosion and sediment control measures may be removed once final stabilization has been achieved for all disturbed work areas.

2.8 Allowable Non-Stormwater Discharges

The following is a list of the non-stormwater discharges allowed under CGP Part 1.3(d). The actual locations of any of these allowable non-stormwater discharges must be identified on the site plans kept with the on-site SWPPP document.

Table 5 - Allowable Non-Stormwater Discharge

Type of Allowable Non-Stormwater Discharge	Likely to be Present at Your Site?
Discharges from emergency fire-fighting activities	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Fire hydrant flushings	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Landscape irrigation	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Waters used to wash vehicles and equipment (provided that no discharge of soaps, solvents, or detergents are used)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Water used to control dust	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Potable water including uncontaminated water line flushings	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Routine external building wash down (that does not use detergents)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Pavement wash waters (provided that spills or leaks of toxic or hazardous materials have not occurred, detergents are not used, and discharge is not directed to any surface water, storm drain inlet, or stormwater conveyance, unless sediment basin, sediment trap, or other control used)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Uncontaminated air conditioning or compressor condensate	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Uncontaminated, non-turbid discharges of ground water or spring water (e.g., roadway underdrains, weep holes, etc.)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Foundation or footing drains (that do not contain solvents or contaminated groundwater)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Construction dewatering water (once treated by appropriate control)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

2.9 Site Maps

Site plans for the project are included in Appendix C. These plans include maps of the undeveloped site and its current features, the proposed developed site, and locations for proposed structural BMPs. These plans should be kept updated on a regular basis with the following information, to the extent this is not already depicted on the plans, including dates installed:

- Limits of construction and/or disturbances;
- Locations of stabilized construction entrances;
- Locations of stormwater discharges and/or allowable non-stormwater discharges, including where these will be discharged to surface waters;
- Direction(s) of stormwater flow and approximate slopes before and after major grading activities;
- Areas of soil disturbance;
- Areas that will not be disturbed;
- Natural features to be preserved;

- Locations of all surface waters and wetlands, and indication of water bodies that are impaired, designated as Tier 2/2.5/3 waters, and/or outstanding resource waters;
- Limits of natural buffer areas where preserved and/or impacted;
- Areas of federally-listed critical habitat for endangered or threatened species;
- Locations of potential pollutant-generating activities;
- Locations of major structural and non-structural BMPs identified in the SWPPP;
- Locations and timing of stabilization measures;
- Locations of storm drain inlets, stormwater collection, treatment, and conveyance measures;
- Areas where final stabilization has been accomplished;
- Staging and stockpile locations; and
- Locations where chemical treatments will be used, if applicable.

3.0 DOCUMENTATION OF COMPLIANCE WITH FEDERAL REQUIREMENTS

3.1 Endangered Species Protection

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

Yes No

If answered yes above, list species and status:

Listed as near the Project Area:

- *Common Nighthawk (Chordeiles minor)* Listed as State endangered species by NH Fish and Game Department (NHFG):
- *Northern Leopard Frog (Rana pipiens)* – Listed as State species of special concern by NHFG
- *Wood Turtle (Glyptemys insculpta)* - Listed as State species of special concern by NHFG
- *Northern long-eared Bat (Myotis septentrionalis)* - Listed as federal threatened species by the US Fish and Wildlife Service (USF&WS)

Listed as Within the Project Area: None

Supporting Documentation:

Describe how this determination was made:

The project has been screened for potential impacts to known occurrences of rare, threatened, or endangered species as well as exemplary natural communities, according to the environmental documentation obtained for this project. The project was reviewed through the NH Natural Heritage Bureau (NHB) (File #NHB14-2784) and it was determined that the project is not expected to impact any listed species, despite the fact that there was a NHB record (e.g. rare wildlife, plant, and/or natural community) present in the vicinity of the project. The project is also within areas that are listed as potential habitat for the federally-listed endangered Northern long-eared Bat, but a “not likely to adversely affect” determination has been submitted to USF&WS. Additional follow-up review may be required with the USF&WS if any bats are found to be present, or

evidence of related bat usage in the project area. No other federally listed or proposed threatened or endangered species were located within the project area. The documentation from NHNHB has been included in Appendix L and the NHDOT files.

Eligibility Criterion: Under which criterion listed in Appendix D are you eligible for coverage under this permit?

A B C D E F

For reference purposes, the eligibility criteria listed in Appendix D are as follows:

Criterion A. No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.

Criterion B. The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.

NOI Tracking Number (if applicable): NHR12AJ58

Criterion C. Federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area" and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.

Criterion D. Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion E. Consultation between a Federal Agency and the USF&WS and/or the National Marine Fisheries Service under Section 7 of the ESA has been concluded. The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:

- i. a biological opinion that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or
 - ii. written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally-designated habitat.
- You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion F. Your construction activities are authorized through the issuance of a permit under Section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally-designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

3.2 Historic Preservation

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

Yes No Don't Know

Describe how this determination was made:

The site has been previously disturbed and developed as part of the original roadway and railroad/rail trail construction. The NHDOT has provided a Historic Preservation document for this project on pages 35 to 44 of the Contract Documents that was developed in 1999 in relation to an upgrade project for NH Routes 9, 10, 12, and 101 in the Town of Swanzey and the City of Keene. This document references historic places along the project corridor. There were several historic places noted in this memorandum, but these are outside of the work area for this project. The proposed project will have no adverse effects to any district, site, building, structure, or object that is included in the related memorandum. The project would also not impact any archaeologically sensitive areas. This determination was made by the NHDOT's Advisory Council on Historic Preservation, as documented in the related letter and the NHDOT "Memorandum of Agreement," dated May 1999, which is included in Appendix L.

Additional Historical Determination:

Step 1:

Do you plan on installing any of the following stormwater controls at your site?

YES NO

Check all that apply below:

- Dike Berm Catch Basin Pond Culvert
 Stormwater Conveyance Channel (e.g., ditch, trench, perimeter drain, swale)
 Other type of ground-disturbing stormwater control:

Step 2:

If answered no above, no further documentation is required.

If answered yes above, have prior surveys or evaluations conducted on the site already determined that historic properties do not exist, or that prior disturbances at the site have precluded the existence of historic properties? YES NO

Step 3:

If answered yes in Step 2, no further documentation is required.

If answered no in Step 2, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? YES NO NOT APPLICABLE

Step 4:

If answered yes in Step 3, provide documentation of the basis for your determination (i.e., references to documents, studies or other sources relied upon).

See information at the beginning of this section regarding review by the NHDHR and the determination that no historic resources would be impacted by this project.

If answered no in Step 3, did the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Office (THPO), or other tribal representative respond to you within 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? YES NO NOT APPLICABLE

If no, no further documentation is required.

If yes, describe the nature of their response:

- Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions.
- No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls.
- Other: **MEMORANDUM OF AGREEMENT (MOA), MAY 1999 BETWEEN NHDHR, NHDOT AND FHWA.**

[Include copies of letters, emails, or other communications between applicable SHPO, THPO, or other tribal representative.]

3.3 Safe Drinking Water Act Underground Injection Control Requirements

Do you plan to install any of the following controls? YES NO

Check all that apply below:

- Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)
- Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow

- Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)
If yes, include copies of letters, emails, or other communications with state agencies or the EPA regional office: **Not Applicable**

3.4 Applicable Federal, Tribal, State, or Local Programs

Are there any other applicable Federal, Tribal, State, or local soil and erosion control and stormwater management requirements that apply to the construction site? Yes No

4.0 EROSION AND SEDIMENT CONTROL BMPs

Erosion and sediment controls are the structural and non-structural practices used during the construction process to keep sediment in place (erosion control) and to capture any sediment that is moved by stormwater before it leaves the site (sediment control). The SWPPP relies on erosion controls as the primary means of preventing stormwater pollution. Sediment controls provide a necessary second line of defense to properly designed and installed erosion controls.

This SWPPP document shall be updated during each phase of the construction activities with the following form designed to identify and briefly describe each type of erosion and sediment control BMP that will be utilized:

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.1 Natural Buffers or Equivalent Sediment Controls

Buffer Compliance Alternatives

Are there any surface waters within 50 feet of your project's earth disturbances?
 YES NO

[If no, no further documentation is required.]

Check the compliance alternative that you have chosen:

- ALTERNATIVE 1: 50-foot undisturbed natural buffer will be maintained.

Required Information:

- show the 50-foot natural buffer limit on the site map;
- show on site map how all discharges from construction disturbances through the natural buffer area will be treated by erosion and sediment controls and any velocity dissipation devices used to prevent erosion within the natural buffer area.

- ALTERNATIVE 2: An undisturbed natural buffer less than 50 feet will be maintained and supplemented by additional erosion and sediment controls, which in combination, achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Required Information:

- show the natural buffer limit on the site map;
 - show on site map how all discharges from your construction disturbances through the natural buffer area will be treated by the erosion and sediment controls and any velocity dissipation devices used to prevent erosion within the natural buffer area;
 - Identify width of natural buffer to be maintained;
 - Provide one of the following:
 - estimated sediment removal from Tables in CGP Appendix G and buffer vegetation and soil type.
- OR
- site-specific calculations for estimated sediment removal of a 50-foot buffer.
 - Describe additional erosion and sediment controls used in combination with natural buffer area;
 - Specify model used to estimate sediment load reductions; and
 - Provide calculations to show that natural buffer area in combination with additional erosion and sediment controls meet or exceed sediment removal efficiency of 50-foot buffer determined above.

- ALTERNATIVE 3: It is infeasible to provide and maintain an undisturbed natural buffer of any size. Therefore, additional erosion and sediment controls will be installed to achieve sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Required Information:

- Describe rationale in support of this conclusion;
 - Provide one of the following:
 - estimated sediment removal from Tables in CGP Appendix G and buffer vegetation and soil type.
- OR
- site-specific calculations for estimated sediment removal or a 50-foot buffer.
 - Describe additional erosion and sediment controls used in combination with natural buffer area;
 - Specify model used to estimate sediment load reductions; and
 - Provide calculations to show that natural buffer area in combination with additional erosion and sediment controls meet or exceed sediment removal efficiency of 50-foot buffer determined above.

- I qualify for one of the exceptions in CGP Part 2.1.2.1.e, as follows.

Buffer Exceptions:

Which of the following exceptions to the buffer requirements applies to your site?

- There is no discharge of stormwater to the surface water that is located 50 feet from my construction disturbances.
[No further documentation is required.]
- No natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for this project.
[No further documentation is required, unless some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances. In this case, compliance with one of the alternatives 1-3 is required.]
- For a “linear project”, site constraints (e.g., limited ROW) make it infeasible to meet any of the CGP Part 2.1.2.1.a compliance alternatives.

Required Information:

- Describe rationale in support of infeasibility conclusion; and
 - Identify width of natural buffer to be maintained and/or additional erosion and sediment controls to be used to treat discharges to surface waters.
- The project qualifies as “small residential lot” construction (defined in Part 2.1.2.1.e.iv).

Required Information:

For Alternative 1 (see CGP Appendix G, Part G.2.3.2.a):

- Identify width of natural buffer to be maintained;
- Include information from CGP Appendix G; and
- Describe rationale for complying with requirements.

For Alternative 2 (see CGP Appendix G, Part G.2.3.2.b):

- Identify risk level, soil type and average slope per Tables in CGP Appendix G;
- Include requirements based on CGP Appendix G Table G-7; and
- Describe rationale for complying with requirements.

- Buffer disturbances are authorized under a CWA Section 404 permit (only applies to disturbances authorized under permit but not upland portion).

Required Information: [Describe disturbances within buffer area.]

- Buffer disturbances will occur for the construction of a water-dependent structure or water access area (e.g., pier, boat ramp, and trail).

Required Information: [Describe disturbances within buffer area.]

Additional Documentation: Since some of the project disturbances are located within 50 feet of surface waters (i.e., wetlands), the project needs to comply with this section of the CGP that requires providing natural buffers or equivalent sediment controls where discharges from disturbed areas will reach the surface water. The project will utilize compliance alternatives Nos. 1, 2, and 3, depending on the specific location of disturbances as listed below, including areas where buffer requirements do not apply due to no disturbances within 50 feet of

surface waters. The following information is provided to document how this compliance is achieved in each location:

- 1) Compliance Alternative #1 - provide and maintain a 50-foot undisturbed natural buffer, as indicated on the enclosed plans:
 - The entire project corridor, unless noted below.
- 2) Compliance Alternative #2 - provide and maintain an undisturbed natural buffer that is less than 50 feet supplemented by erosion and sediment controls equivalent to a 50-foot buffer, as indicated on the enclosed plans:
 - Sta. 201+00 to 202+00 RT: Grading and trail work within buffer, buffer width reduced.
 - Sta. 201+00 to 203+90 LT: Grading and trail work within buffer, buffer width reduced.
 - Sta. 205+10 to 206+50 LT: Grading and trail work within buffer, buffer width reduced.
 - Sta. 205+80 to 206+50 RT: Grading and trail work within buffer, buffer width reduced.
 - Sta. 207+00 to 207+55 RT: Grading and trail work within buffer, buffer width reduced.
 - Sta. 207+70 to 208+40 LT: Grading and trail work within buffer, buffer width reduced.
 - Sta. 209+30 to 212+50 LT: Grading and trail work within buffer, buffer width reduced.
 - Sta. 210+40 to 212+50 RT: Grading and trail work within buffer, buffer width reduced.
- 3) Compliance Alternative #3 - maintaining an undisturbed natural buffer of any size is infeasible and erosion and sediment controls equivalent to a 50-foot buffer will be implemented, to the extent possible, as indicated on the enclosed plans:
 - Sta. 202+00 to 205+80 RT: Grading and trail work within referenced surface water so no buffer feasible.
 - Sta. 207+55 to 210+40 RT: Grading and trail work within referenced surface water so no buffer feasible.
 - Sta. 208+40 to 205+80 RT: Grading and trail work within referenced surface water so no buffer feasible.
- 4) No disturbances within 50 feet of surface water: *Not Applicable.*

4.2 Perimeter Controls and Sediment Barriers

Minimum CGP Requirements that must be met:

- Sediment controls must be installed along all perimeter areas of the site that will receive stormwater from areas disturbed during construction;
- Sediment must be removed before it accumulates to one-half the above-ground height of any perimeter control;

- Perimeter controls shall be in place prior to any earth disturbances;
- SWPPP must contain specific descriptions of the perimeter controls used on the site, including design or manufacturer's specifications, locations depicted on the site maps, dates of installation; and
- Where impracticable to use perimeter controls (e.g., linear projects, site constraints, etc.), documentation must be provided in the SWPPP for this case.

Maintain natural areas and supplement them with sediment barriers around the perimeter of the site to help prevent soil erosion and stop sediment from leaving the site. Install controls on the downslope perimeter of your project and also on the upslope where necessary to limit runoff over highly erodible soil slopes. Sediment barriers can be used to protect stream buffers, riparian areas, wetlands, or other waterways. They are effective only in small areas and should not be used in areas of concentrated flow. Construction fence and delineated limits around wetlands should remain for the duration of the project. Specific types of perimeter controls may include silt fence, fiber rolls, filter berms, diversion dikes, or other.

The NHDOT also provides general guidance on the use of silt fences and fiber rolls that should be utilized for this project. Silt fences shall be used for a maximum drainage area of 0.5-acre per 100 linear feet of silt fence, and for maximum slope lengths as follows:

<u>Slope Steepness</u>	<u>Maximum Slope Length</u>
2:1	50 feet
3:1	75 feet
4:1	125 feet
5:1	175 feet
Flatter than 5:1	200 feet

Silt Fence: A silt fence is a temporary sediment barrier consisting of a geotextile attached to supporting posts and trenched into the ground. Silt fencing is intended to retain sediment that has been dislodged by stormwater. It is designed only for runoff from small areas and is not intended to handle flows from large slopes or in areas of concentrated flow. Installation is required before the ground freezes; otherwise stakes will be difficult to drive. Inspect frequently and remove any collected sediment before predicted thaws or rainy periods in order to provide as much capacity as possible. Silt fence may be used in place of, or in conjunction with, coir or straw-logs or wattles. *Silt fence shall not be utilized across any swale or drainage channel. Use fiber rolls, coir logs, or stone check dams in channels to control flowing water.*

Fiber Rolls: Fiber rolls serve the same purpose and consist of an open mesh tubular sleeve filled with a fibrous material which traps sediment. Fiber rolls are generally staked to the ground. Installation is required before the ground freezes; otherwise stakes will be difficult to drive. Inspect frequently and remove any collected sediment before predicted thaws or rainy periods in order to provide as much capacity as possible. The coir or straw-logs or wattles shall be installed as per the manufacturers' instructions, with a minimum of three stakes per log.

Installation:

DO:

- Use silt fence or fiber rolls as perimeter controls, particularly at the lower or downslope edge of a disturbed area.
- Leave space for maintenance between toe of slope and silt fence or roll.
- Trench in the silt fence on the uphill side (6 inches deep by 6 inches wide).
- Install stakes on the downhill side of the fence or roll.
- Curve the end of the silt fence or fiber roll up-gradient to help it contain runoff.

DON'T:

- Install silt fence in ditches, channels, or areas of concentrated flow.
- Install it running up and down a slope or hill.
- Use silt fencing or fiber rolls alone in areas that drain more than a quarter-acre per 100 feet of fence.

Maintenance:

- Remove sediment when it reaches one-third of the height of silt fence or one-half the height of the fiber roll.
- Replace the silt fence or fiber roll where it is worn, torn, or otherwise damaged.
- Retrench or replace any silt fence or fiber roll that is not properly anchored to the ground.

Site Specific BMPs:

Silt fence and/or erosion control socks will be installed around the perimeter of the site on the downgradient side of all site disturbances where sheet flow has the potential to discharge into areas outside the construction limits or off-site areas.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.3 Sediment Track-Out

Minimum CGP Requirements that must be met:

- Vehicle use must be restricted to properly designated exit points;
- Appropriate stabilization techniques (e.g., aggregate stone underlaid with geotextile, non-woven filter fabric, or turf mat) at all exit points onto paved roads to remove sediment prior to vehicle exit;

- Use additional controls (e.g., wheel washing, rumble strips, rattle plates) as necessary to remove sediment prior to vehicle exit;
- Remove sediment tracked-out from site onto off-site paved areas (roads and/or sidewalks) by the end of the next work day;
- Acceptable techniques for removing sediment include sweeping, shoveling, and vacuuming, but hosing or sweeping sediment into any stormwater conveyance, storm drain or surface water is prohibited unless a sediment basin, sediment trap, or other control is utilized; and
- SWPPP must contain specific descriptions of the sediment track-out controls used on the site, including design or manufacturer's specifications, locations depicted on the site maps, dates of installation; Vehicles entering and leaving the site have the potential to track significant amounts of sediment onto streets. A rock construction exit will reduce the amount of mud transported onto paved roads by vehicles. The construction exit does this by removing mud from vehicle tires before the vehicle enters a public road. If mud is especially difficult to remove, or space does not allow sufficient tire revolutions (four or five are needed) before exiting the site, it may be necessary to install a wheel wash. Direct wash water to a suitable sediment area, do not discharge wash water to a stream or storm drain. Sweeping the street regularly completes this BMP. These temporary areas shall be inspected on a daily basis and maintained as necessary. Replenishment or replacement of aggregate shall be required if it becomes clogged with sediment.

Installation:

- Ensure that the exit is at least 50 feet long (generally, the length of two dump trucks) and graded so runoff does not enter the adjacent street.
- Place a geotextile fabric under a layer of aggregate at least 6 inches to 12 inches thick. The stones or aggregate should be 3 inches to 6 inches in diameter.
- Train employees and subcontractors to use the designated construction exits.
- Empower your employees to provide directions to subcontractors and others that are not on the site every day.

Site Specific BMPs:

Stabilized construction entrances shall be utilized at any designated staging areas at a minimum, and at all other locations where frequent construction traffic will be entering or exiting paved areas into a specific work area. This includes any off-site areas used for staging through any separate arrangements the contractor may make with other property owners and/or the NHDOT. A stabilized construction entrance is anticipated at several points of access into the project site from the Rail Trail and/or NH Route 12/101 ROW, and the need for stabilized entrances will be determined in the field during construction.

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

4.4 Stockpiled Sediment or Soil

Minimum CGP Requirements that must be met:

- For purposes of these requirements, stockpiles include earthen soil materials, gravels, crushed stone, topsoil, clearing debris, trimmings, vegetation, or any other excess materials containing sediment stored in one location on the project site for multiple days;
- Stockpiles shall be located outside of any natural buffers established or maintained as necessary to meet other CGP requirements (e.g., buffers);
- Stockpiles shall be located as far away as possible from any surface waters, wetlands, sensitive areas to be preserved or protected, stormwater conveyances or storm drain inlets;
- Stockpiles must be protected from contact with stormwater flowing in the vicinity of stockpiles using temporary perimeter sediment barriers such as berms, dikes, silt fence, fiber rolls, sandbags, gravel bags, or straw bales;
- Where practicable, cover with tarps or provide temporary stabilization (e.g., seed, mulch and/or mulch netting or erosion blankets) to avoid contact with precipitation and minimize sediment discharge;
- Sediment accumulated on surfaces around stockpiles shall not be swept or washed into any surface waters, wetlands, sensitive areas to be preserved or protected, stormwater conveyances, or storm drain inlets unless protected by a sediment basin, sediment trap, or similar sediment control;
- Secure and/or protect stockpiled materials from wind and excessive dust; and
- SWPPP must contain specific descriptions of the perimeter and sediment controls used for stockpiles on the site, including depicting locations on the site maps, dates of installation.

Site Specific BMPs:

Any stockpiles that remain on-site for more than one day shall be contained with silt fence and/or erosion control socks. Stockpiles that will remain on the site for an extended period of time may require additional protection, such as covering with tarps, mulch, and/or seeding, as deemed necessary in the field.

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

4.5 Minimize Dust

Minimum CGP Requirements that must be met:

- Minimize the generation of dust through regular water or other dust suppression applications in order to avoid discharging pollutants into surface waters or onto adjacent properties;
- Minimize the potential for dust by immediately and continuously addressing dust-producing conditions and BMPs that include providing temporary and permanent stabilization of open and exposed site disturbances, removing accumulated sediment and debris from paved roadways, stabilizing exposed soil stockpiles, limiting vehicular travel to surfaces stabilized with gravels, crushed stone or pavement, and applying gravels, stone or pavement to staging areas;
- Where practical, cover any dust-producing materials with tarps to protect from wind; and
- SWPPP must contain specific descriptions of the appropriate dust controls and BMPs used for minimizing dust on the site, including depicting locations on the site maps, dates of installation.

This BMP describes products or measures used for reducing or preventing wind erosion by protecting the soil surface, roughening the surface, and reducing the surface wind velocity. Several dust control treatments are described below. Other methods are also available.

Vegetative Cover: For disturbed areas not subject to traffic, vegetation provides the most practical method of dust control.

Mulch (including gravel mulch): When properly applied, mulch offers a fast and effective means of controlling dust.

Spray-On Adhesive: Asphalt emulsions, latex emulsions, or resin in water can be sprayed onto mineral soil to control dust.

Calcium Chloride Treatment: Exposed soils may be treated with calcium chloride where necessary to temporarily stabilize areas, as long as this methodology will not impact downstream water bodies, wetlands, or landscaping of other sensitive areas.

Sprinkling: The site may be sprinkled with water until the surface is wet. Sprinkling is especially effective for dust control on haul roads and other traffic routes.

Stone: Stone or gravel used to stabilize construction roads and disturbed soils can also be effective for dust control and reduce soil losses from those areas by up to 80%.

Surface Roughening: Tilling or discing the surface of disturbed soils to produce a rough surface or ridges which when perpendicular to prevailing winds can reduce soil losses due to wind by 80%.

Barriers: A board fence, wind fence, sediment fence, or similar barrier can control air currents and blowing soil. All of these fences are normally constructed of wood. Perennial grass and stands of existing trees may also serve as wind barriers. Barriers prevent erosion by obstructing the wind near the ground and preventing the soil from blowing off site.

The above measures for dust control should be used when open, dry areas of soil are anticipated on the site. Clearing and grading activities create the opportunity for large amounts of dust to become airborne. Therefore, one or several dust control measures should be considered prior to clearing and grading.

Use Preventive Strategies Wherever Possible:

- Minimize amount of bare ground exposed at one time; and
- Minimize amount of ground disturbance occurring when wind erosion is highest.

Implement Dust Control Measures as Needed:

- Provide stabilized roadway to minimize amount of dust generated by construction vehicles and highway traffic (gravel, pave, or moisten the bare areas of the highway or detour route);
- Apply protective materials to exposed areas (e.g., stone, mulch, adhesive/emulsions);
- Install barriers to prevent dust from blowing off-site;
- Establish vegetation at the earliest possible opportunity (using establishment water if necessary to ensure viability);
- Keep haul roads, detours, and other bare areas moist by sprinkling them with water; and
- Perform street sweeping, as needed.

Dust control requires constant attention and is not a one-time effort. All dust control methods require daily maintenance and attention.

Site Specific BMPs:

The Contractor shall provide surface treatment of exposed soil areas at the end of each work day, as necessary to control dust, as deemed appropriate by NHDOT. This may include additional measures and BMPs for containing sediment and debris during any portions of the work that have the potential to create dust or other air-borne debris (i.e., bridge deck work, rock cutting and scaling, pavement saw cutting and removal, clearing, etc.).

The use of calcium chloride should be considered prohibited for this project, unless specifically approved by the NHDES and/or the Local River Advisory Committee.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

4.6 Minimize Disturbance and Protect Slopes

Minimum CGP Requirements that must be met:

- Disturbances on steep slopes (generally considered slopes greater than 15%) must be minimized, to the extent feasible;
- Minimization of disturbances on steep slopes does not preclude the development on steep slopes. Rather, minimization is intended to include implementation of standard erosion and sediment control practices, such as phasing and using stabilization measures that are specifically designed, effective and appropriate for use on steep slopes;
- Although the CGP specifically highlights “steep slopes,” all other CGP requirements pertaining to erosion and sediment control, stabilization and other requirements still apply to other slope disturbances outside of this definition, especially considering the higher risk of erosion, sediment transport and difficulties slopes present for stabilization; and
- SWPPP must contain specific descriptions of the erosion, sediment control and stabilization controls used on the site slopes, including design or manufacturer’s specifications, locations depicted on the site maps, dates of installation.

All slopes must be protected with appropriate erosion controls. Steeper slopes, slopes with highly erodible soils, or long slopes require a more complex combination of controls. Erosion control blankets, bonded fiber matrices, turf reinforcement mats or riprap treatment are effective options. Silt fence or fiber rolls may also be used to help control erosion on moderate slopes and should be installed on level contours spaced at 10-foot to 20-foot intervals. Diversion channels and berms can be used to keep stormwater off slopes.

Immediately following final slope grading or loam treatment and prior to any temporary or permanent stabilization treatment, disturbed slopes shall be temporarily scarified using mechanical techniques that will create grooves perpendicular to slope direction.

Erosion Control Products: Erosion control products include mats, geotextiles, erosion control blankets, benching, tacifiers, and products that provide temporary stabilization and help to establish vegetation on disturbed soils. Such products help control erosion and help establish vegetation and are often used on slopes, channels, or stream banks.

Cut Slopes: Cut slopes equal to or steeper than a 3 (horizontal) to 1 (vertical) slope shall be required to have mulch with tack. Cut slopes equal to or steeper than a 2 (horizontal) to 1 (vertical) slope shall be required to have matting/ netting and pinning. All cut slopes shall be constructed in 500' to 1,000' sections and stabilized within the required timeframe for completion and/or temporary suspension of activity. Additional erosion control devices, i.e., crushed stone

check dams, silt fence, etc., may be necessary at the toe of slope before stabilization. The determination for the need for additional devices will be made based on field conditions observed daily.

Embankment Slopes: Embankment slopes equal to or steeper than a 3 (horizontal) to 1 (vertical) slope shall be required to have mulch with tack. Embankment slopes equal to or steeper than a 2 (horizontal) to 1 (vertical) slope shall be required to have matting/netting and pinning. All slopes shall be constructed in 500' to 1,000' sections and stabilized within the required timeframe for completion and/or temporary suspension of activity. Additional erosion control devices (i.e., crushed stone check dams, silt fence, etc.) may be necessary at the toe of slope before stabilization. The determination for the need for additional devices will be made based on field conditions observed daily.

Loaming and Seeding Slopes:

- Loaming and seeding of slopes shall be an ongoing construction phase to be performed as soon as possible after disturbance.
- Loam and other topsoil materials, i.e. humus, have a greater erosion potential than gravel, but use of loam and other topsoil materials are necessary to produce an adequate seed bed for establishing vegetative cover. Maintain all surfaces subject to loaming and seeding until vegetative cover is established.
- Loam shall not be placed unless it is to be seeded directly thereafter.
- Mulch netting or erosion control matting shall be placed on all slopes 3:1 or greater.

Site Specific BMPs:

Disturbed slopes generally steeper than 3:1 slope shall be stabilized on a temporary and/or permanent basis with mulch netting, tackifiers and/or erosion control blankets, as deemed necessary in the field.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.7 Preserve Topsoil and Natural Features, Minimize Disturbed Areas

Minimum CGP Requirements that must be met:

- Disturbance and removal of native topsoil must be minimized on the project site, to the extent feasible;
- Minimization of native topsoil does not preclude the development of sites where this is not feasible. Rather, minimization is intended to include

standard practices, such as stockpiling native topsoil from disturbances for reuse on another area of the site, and protecting areas not critical for disturbance, where possible;

- Although the CGP specifically highlights “preserving topsoil,” minimization of disturbances to other areas has also been covered in this section due to the connection with early site disturbances and the CGP requirements pertaining to erosion and sediment control and stabilization; and
- SWPPP must contain specific descriptions of the practices utilized for meeting this requirement, a description of why this may not be feasible, locations of practices depicted on the site maps, and dates of implementation.

Protect Natural Features and Preserve Topsoil: Removing topsoil exposes underlying layers that are often more prone to erosion and have less infiltration capacity. Keeping topsoil in place preserves the natural structure of the soils and aids the infiltration of stormwater. Utilizing native topsoil on the same site also encourages the reestablishment of native vegetation and minimizes the risk of invasive plant species from colonizing the site.

During grubbing and stripping the following methods should be utilized as appropriate:

- Excavated topsoil and/or humus shall be stockpiled on-site in the designated areas for later use. Silt fences shall be placed around the perimeter of the stockpile and the stockpiles should be covered with mulch and/or tarps as needed to protect the materials for future use and limit erosion;
- Stripping shall be done in a manner that will not concentrate runoff, and if precipitation is expected, earthen berms will be left around the stripped area. A silt fence shall be located in an arc at the low point of the berm;
- Stripping shall not proceed downhill toward drainage courses. Materials shall be pushed uphill resulting in disturbed materials being stored away from the low areas of the site;
- Great effort shall be undertaken to retain all possible topsoil and/or humus; and
- Of great concern is the stripping of slopes leading to wetlands and drainage structures which discharge into sensitive environments. At the time of stripping, care shall be taken to ensure an earthen berm exists between the sensitive area and the area being stripped. Diverted water should be collected and allowed to pass in a controlled manner.

Minimize Disturbed Area: The natural features of the site were considered in delineating and controlling the area that will be disturbed by grading or construction activities. The disturbed areas have been limited to only those necessary for the construction of this project. Natural vegetation can greatly reduce the potential for soil erosion and stormwater pollution problems. Protecting and preserving topsoil preserves the natural structure of the soils and aids the infiltration of stormwater. The clearing and construction limits as delineated on the plans provided in Appendix C must be clearly marked by fencing or flagging prior to any site disturbance.

Considerations for tree clearing activities:

- Any vehicles utilized in the wood clearing process should not travel through running water;
- As the clearing process continues, the movement of vehicles should be limited as much as possible to the area of the proposed disturbance;
- Any wheel ruts shall be filled in and graded so that stormwater runoff is not concentrated;
- Consideration shall be given to the chipping of brush and branches to generate mulch for use in stabilization of disturbed areas;
- No organic materials, including stumps, branches, trees, or vegetation shall be buried with fill materials or used for slope stabilization; and
- All clearing activities must be in accordance with the Alteration of Terrain permit conditions.

Site Specific BMPs:

Due to the disturbance area required for the project (1.66 acres), the project may not be subject to specific open area limitations (i.e., 5 acres open at one time) contained in the NHDES Alteration of Terrain Env-Wq 1500 requirements, or the NH Stormwater Manual Volume 3, "Erosion and Sediment Controls During Construction." However, the Contractor must be prepared to provide adequate resources (equipment and manpower) to respond to storm events and maintain all stormwater, erosion and sediment control measures and related issues in multiple site areas simultaneously. This issue will be reviewed by the SWPPP monitor on a consistent basis in order to track open site areas and gage contractor performance on keeping up with required measures.

The maximum open area is further limited to one (1) acre during construction that takes place between November 30 and May 1, unless a winter construction plan is provided by the contractor addressing erosion and sediment controls during this period. Since the project is scheduled for completion by November 14, 2016, winter construction is possible for this project, and winter construction provisions are addressed within Section 4.15 of this document, in the event any work would be extended into the winter period.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.8 Minimize Soil Compaction

Minimum CGP Requirements that must be met for areas where final vegetation stabilization will occur or where infiltrative stormwater practices will be installed:

- Vehicle and equipment use in these locations will be restricted to avoid soil compaction, to the extent feasible;
- Prior to seeding or planting, areas of exposed soil that have been compacted, soil conditioning techniques, such as tilling, aeration, scarifying, or other, must be implemented to condition the soils to support vegetation, as necessary and feasible; and
- SWPPP must contain specific descriptions of the practices utilized for meeting this requirement, a description of why this may not be feasible, locations of practices depicted on the site maps, and dates of implementation.

Site Specific BMPs:

This BMP will only be utilized within areas where compaction of soils may have an impact on final stabilization of vegetated slopes, or other sensitive areas that may be restored with vegetation.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.9 Protect Storm Drain Inlets

Minimum CGP Requirements that must be met:

- Any storm drain inlets that carry stormwater flow from the project site to surface waters must be protected with inlet protection measures that remove sediment prior to discharge into the inlet;
- These requirements do not apply to any storm drain inlets that the site operator does not have the authority to access;
- Inlet protection may include fabric filters, sandbags, concrete blocks, gravel barriers, or other prefabricated devices;
- Inlet protection measures may be removed in the event of flood conditions or to prevent erosion, as long as they are replaced immediately following the event;
- Inlet protection measures must be maintained, cleaned, removed, and replaced as soon as sediment accumulates, the filter becomes clogged, and/or performance is compromised;
- Where sediment accumulation is found adjacent to the inlet protection measure, sediment must be removed by the end of the same work day, or by the end of the next work day, if not feasible; and

- SWPPP must contain specific descriptions of the inlet protection measures used on the site, including design or manufacturer's specifications, locations depicted on the site maps, dates of installation.

Protect all inlets that could receive stormwater from the project until final stabilization of the site has been achieved. Install inlet protection before soil-disturbing or demolition activities begin. Maintenance throughout the construction process is important. Upon completion of the project, storm drain inlet protection is one of the temporary BMPs that should be removed. Storm drain inlet protection should be used not only for storm drains within the active construction project, but also for storm drains outside the project area that might receive stormwater discharges from the project.

The NHDOT allows the use of five specific types of inlet protection. The specific technique to be used at each location depends on the intended function, location, size and type of drainage area and material availability. The contractor must also consider roadside safety in placement of a specific type of inlet protection. These measures should not be used in place of sediment trapping devices or drainage diversion. The five types of inlet protection measures are as follows:

1. Excavated - for use where significant flow is expected and excavation is possible to allow storage of a 2-year storm volume without overtopping; not suitable for paved areas.
2. Stone and Block- for use where some flow is expected or where excavation is difficult; not suitable for paved areas.
3. Stone and Wire Mesh - for use prior to final stabilization; not suitable for paved areas unless stone placed flush with grate.
4. Sediment Filter Bags - for use in paved areas prior to final stabilization.
5. Sedi-Guard Inlet Protection Device, for use in all areas prior to final stabilization.

Storm Drain Inlet Protection: Storm drain inlet protection prevents sediment from entering a storm drain by surrounding or covering the inlet with a filtering material. All catch basins or drop inlets in disturbed areas shall have crushed stone placed around the grate to provide inlet protection. For catch basins that are in the travel lane, alternative inlet control includes the use of Sediment filter bags ("Silt Bags") or Sedi-Guard inlet protection devices. The inlet protection shall be maintained and/or replaced based upon daily observances to ensure proper treatment of the stormwater. Inlet protection shall be maintained until final stabilization around the drop inlet.

Install inlet protection as soon as storm drain inlets are installed and before land disturbance activities begin in areas with existing storm drain systems. Protect all inlets that could receive stormwater from the construction activities. Inspect inlets frequently and after each rainfall. Remove accumulated sediment from around the device and check and remove any sediment that might have entered the inlet. Replace or repair the inlet protection if it becomes damaged. Sweep streets, sidewalks, and other paved areas regularly.

Site Specific BMPs:

For this project, inlet protection will be necessary where disturbances may occur near existing catch basins and/or any new drainage structures where runoff from disturbed areas has the potential to discharge into these drainage structures.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.10 Stormwater Conveyance Controls

Minimum CGP Requirements that must be met:

- Stormwater conveyance controls must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible;
- Minimize erosion of channels, embankments, outlets, streambanks, slopes, and downstream waters during stormwater discharge by utilizing erosion controls and velocity dissipation devices, such as check dams, sediment traps, riprap, grouted riprap, diversion ditches, and berms, along any stormwater conveyance channels and inlet/outlets to provide a non-erosive flow velocity; and
- SWPPP must contain specific descriptions of the erosion and velocity controls used on the site, including design or manufacturer’s specifications, locations depicted on the site maps, and dates of installation.

The plan accounts for potential stormwater flows coming onto the project area from upstream locations. The existing flow patterns will be maintained or, if required, the flows will be diverted around or slowed through the construction site to prevent erosion. Any off-site runoff that is diverted into or through disturbed areas shall be considered contaminated stormwater and shall be treated as if generated on-site with appropriate stormwater, sediment, and erosion controls. Care shall be taken not to combine off-site clean water with construction site water. Clean water shall be defined as stormwater free of sediment or other contaminants from construction operations and only generated from off-site areas or completely stabilized on-site areas. The volume and velocity of on-site stormwater runoff will be controlled to minimize soil erosion. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and shall remain in place until the area is stabilized. Silt fence must be removed when the area is stabilized. Silt fence is not appropriate for use in ditches, swales, or drainage channels. Use fiber rolls, coir logs, or stone check dams in flowing water.

Diversion Ditches or Berms: An earthen perimeter control usually consists of a berm or a combination berm and channel constructed along the perimeter of and within the disturbed part of a site. An earthen perimeter control is a ridge of compacted soil, often accompanied by a ditch or swale with a vegetated lining, at the top or base of a sloping disturbed area.

When on the upslope side of a site, earthen perimeter controls help to prevent surface runoff from entering a disturbed construction site. An earthen structure located upslope can improve working conditions on a construction site. It can prevent an increase in the total amount of sheet flow runoff traveling across the disturbed area and thereby lessen erosion on the site.

Diversion ditches or berms may also be located on the downslope side of a site. They divert sediment-laden runoff created on-site to sediment-trapping devices, preventing soil loss from the disturbed area.

For this project, the roadside ditches will effectively perform as upslope and downslope diversion ditches for many of the disturbed areas along the linear roadway construction. Diversion swales or other perimeter controls will be utilized where further protection is warranted. All roadside ditches discharge to the temporary sediment basins, grasses treatment swales, vegetated aprons, riprap-lined channels, or closed-drain stormwater features that are designed to trap sediment prior to discharge to wetlands or other receiving waters.

Check Dams: Check dams are relatively small, temporary stone structures constructed across a swale or channel. They are used to slow the velocity of concentrated water flows, a practice that helps reduce erosion. As stormwater runoff flows through the structure, the check dam catches sediment from the channel itself or from the contributing drainage area. A check dam should not be more than three feet high, and the center of the dam should be at least six inches lower than its edges. This design creates a weir effect that helps to channel flows away from the banks and prevent further erosion. Dams can be made more stable by implanting the material into the sides and bottom of the channel. Also recommended for diversion swales and ditches to reduce velocity of stormwater runoff.

The ditches adjacent to the roadways may require crushed stone check dams. The locations shall be determined based upon existing or projected field conditions for a particular section. If the check dams are required, the devices shall be placed such that the crest of the downstream check dam is at the elevation of the toe of the upstream check dam or at maximum 50-foot horizontal distance between check dams, whichever yields the shorter spacing. These check dams will treat initial stormwater runoff and reduce velocities on the steeper drainage ditch slopes. These check dams shall need to be maintained periodically based upon daily observations.

Riprap Slopes and Pipe Inlet/Outlet Protection: Riprap slope and inlet/outlet protection is created by installing an arranged layer or pile of crushed rock or stone placed over the soil surface on slopes and/or at the inlet and outlet of a storm drain outfall, temporary dike, or berm. The use of geotextile filter or separation fabric beneath the stone layer is recommended for retention of fine soil particles, to maintain separation between stone and soil layers, and to aid in minimizing erosion of materials beneath the stone layer, unless designed

otherwise. Riprap used as slope protection protects against erosion and dissipates the energy of surface water flow over the slope, and can also be effective to limit erosion and divert water seeping through an exposed slope.

Outlet protection reduces the speed of concentrated stormwater flows, thereby reducing erosion or scouring at stormwater outlets. In addition, outlet protection lowers the potential for downstream erosion. Outlet protection should be installed at the outlets of all pipes, culverts, catch basins, sediment basins, ponds, interceptor dikes, and swales or channel sections where the velocity of flow may cause erosion in the receiving channel. Outlet protection should be installed in conjunction with headwalls and/or prefabricated end treatments for pipes, as required by the drainage design. Outlet protection should be installed early during construction activities, but may be added at any time, as necessary. Inspect after heavy storms and high flows for scouring under the outlet and dislodged stones, and repair damage promptly.

Site Specific BMPs:

For this project, stone check dams may be necessary along existing ditches/swales that have the potential to receive runoff from disturbed areas, or in newly graded ditches/swales, as deemed necessary in the field. Stone check dams and/or erosion control socks may specifically be needed to control flow velocity and contain sediment along the roadway and around drainage structures.

This project also includes minor drainage work and the potential for some dewatering or water diversion measures (such as cofferdams, sand bag dams, bypass pipes, or bypass pumping) is anticipated. Contractor shall provide measures and procedures to prevent mixing of clean water with sources of sediment, or other contaminants (grout, concrete, etc.) during proposed drainage improvements. Only “clean” water, free of sediment or contaminants, shall be allowed to flow downstream from drainage structures or culvert crossings where work is taking place. All contaminated water flow will be collected and treated using a sediment basin/sand filter, or other approved treatment method at the outlet end of the discharge. Also, discharge points shall be stabilized with stone and/or check dams to prevent scouring and to decrease the velocity of the water downstream. Filter bags are also an acceptable measure for discharge of pumped water where significant treatment is not necessary.

This plan provides several methodologies and details for controlling and diverting stormwater or groundwater during required work on drainage components or other subsurface. The SWPPP preparer and/or monitor shall review the intended methodology to be used at any drainage crossings or other areas prior to Contractor beginning and related work, and the SWPPP will be updated as necessary to account for these specific measures.

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

4.11 Sediment Basins

Minimum CGP Requirements that must be met:

- Sediment basins must provide a minimum storage equivalent to the calculated volume of runoff from a 2-year, 24-hour storm, or 3,600 cubic feet per acre of area routed to each sediment basin;
- Discharges from a sediment basin must utilize outlet structures that draw water from the surface of the basin to minimize the discharge of pollutants, unless infeasible;
- To prevent erosion, the surface area of the sediment basin must be stabilized with erosion control blankets or other appropriate measures, and the inlet and outlet stabilized using erosion controls and velocity dissipation devices;
- Sediment basins must be located outside of surface waters and any natural buffers established under the CGP requirements, and must avoid collecting water from wetlands;
- Sediment basins must be regularly maintained in effective operating condition with accumulated sediment removed to maintain at least 50% of the design capacity at all times; and
- SWPPP must contain specific descriptions of the sediment basins used on the site and erosion and velocity controls at each location, including design or manufacturer's specifications, locations depicted on the site maps, and dates of installation.

Retain Sediment On-Site: Sediment traps or sediment basins are required to retain sediment from large areas. These practices detain sediment-laden runoff for a period of time, allowing sediment to settle before the runoff is discharged. Proper design and maintenance are essential to ensure that these practices are effective. Excess materials and sediments excavated from the periodic maintenance of these controls shall be disposed in protected areas. Disposal sites shall receive appropriate erosion control devices.

Install temporary sediment basins as necessary during construction to capture sediment from stormwater runoff before it leaves the construction site. These structures allow a pool to form in the depression, where sediment can settle out prior to discharge. Sediment basins are also commonly utilized for treatment of flow from dewatering activities.

Routine inspection and maintenance of sediment basins is essential to their continued effectiveness. Inspect basins after each storm event to ensure proper drainage from the collection pool and determine the need for structural repairs. Replace material eroded from earthen embankments immediately. Remove sediment from the basin when the storage capacity has reached approximately 50%. Remove trash and debris from around dewatering devices promptly after

rainfall events. All associated erosion and velocity controls must be maintained regularly, and repaired or replaced as soon as any erosion is noted.

Sediment basins must be constructed with the following requirements:

- Located on the upland, not in wetlands or jurisdictional areas;
- Located away from areas where water flow may impact vehicular or pedestrian travel, or flow onto adjacent properties outside the project area;
- Lined with stone fill, geotextile material, or other scouring protection;
- Contained with adequate perimeter controls, such as hay bales, silt fence, stone check dams or other acceptable sediment trapping measures; and
- Set back as far as possible from wetlands and surface waters, and in all cases, with a minimum of 20 feet of undisturbed vegetated buffer from discharge point to downstream water bodies or wetlands.

Site Specific BMPs:

Separate temporary sediment basins are not anticipated for this project. However, these requirements shall be utilized for dewatering flow control and sediment containment wherever deemed necessary in the field to prevent contaminated runoff and sediment from leaving the site.

<i>BMP Description:</i>	
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<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.12 Chemical Treatment

The use of treatment chemicals (such as polymers, flocculants) are allowed under the CGP as long as the minimum CGP requirements are complied with. However, it is understood at this time that the NHDES has more stringent requirements than the CGP governing chemical treatments, and does not currently allow the use of most chemical treatments, so these are not recommended for use on this project site. If any chemical treatments are required due to extenuating circumstances on the project site, the NHDES and the regional EPA office should be consulted and provide approval prior to any usage, and all requirements in CGP Part 2.1.3.3 must be complied with. In addition, the contractor shall provide any necessary chemical treatment information to the SWPPP preparer and NHDOT prior to use, and the SWPPP shall be updated accordingly.

Site Specific BMPs:

Chemical treatments are not anticipated to be necessary for this project.

4.13 Dewatering Practices

Minimum CGP Requirements that must be met:

- Discharging accumulated groundwater or stormwater removed from excavations, trenches, foundations, vaults, or other similar points of accumulation are prohibited unless waters are first managed by appropriate controls. These include sediment basins, sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, filtration systems (e.g., bag or sand filter), or other measures designed to remove sediment;
- Uncontaminated, non-turbid dewatering flows can be discharged without being routed to a control;
- Discharge shall not include visible floating solids or foam;
- If dewatering flow is found to contain oil, grease, or other products, an oil-water separator or suitable filtration device specifically designed to remove the contaminate must be used;
- Vegetated upland areas should be used to infiltrate dewatering flows prior to discharge, to the extent feasible. Surface waters shall not be considered part of the treatment area;
- Velocity dissipation devices, such as check dams, sediment traps, riprap, grouted riprap, diversion ditches, and berms, must be used at all points where dewatering flows are discharged;
- Backwash water must be hauled away for disposal or returned to the beginning of the treatment process;
- The filter media used in dewatering devices must be cleaned and/or replaced when the pressure differential equals or exceeds the manufacturer's specifications;
- Treatment chemicals used to treat dewatering flows must comply with CGP Part 2.1.3.3; and
- SWPPP must contain specific descriptions of the dewatering and associated erosion and velocity controls at each location, including design or manufacturer's specifications, locations depicted on the site maps, and dates of installation.

All dewatering activities should be discharged on-site to the designated constructed sediment basins, or other approved measures. The use of filter bags is recommended during dewatering operations to reduce silt transportation to the sediment basin areas. The following are some additional considerations for dewatering practices:

- Only "clean" water, free of sediment or contaminants, shall be allowed to flow downstream;
- All contaminated water flow will be collected and treated using an approved treatment method at the outlet end of the discharge;
- Regardless of whether water quality treatment is required, the discharge points for pumped or diverted water shall be stabilized with stone and/or check dams to prevent scouring and to decrease the velocity of the water downstream;
- Locate sediment basins or other treatment devices on the upland, away from wetlands or jurisdictional areas;

- Locate away from areas where water flow could impact vehicular or pedestrian travel, or flow onto adjacent properties outside the ROW or project area;
- Line treatment area with stone fill, geotextile material, or other scouring protection;
- Contain area with adequate perimeter controls, such as hay bales, silt fence, stone check dams, or other acceptable sediment trapping measures; and
- Set back as far as possible from wetlands and surface waters, and in all cases, with a minimum of 20 feet of undisturbed vegetated buffer from discharge point to downstream water bodies or wetlands.

Site Specific BMPs:

This project has may have the potential for encountering contaminated groundwater. If contaminated groundwater is encountered during construction and dewatering the area is necessary, the Contractor is required to obtain a groundwater discharge permit from NHDES.

Documented project borings show that the project may require dewatering in the proposed location of the abutments and piers on the project. Dewatering flows, even for “clean” water shall not be discharged directly from diversion or other collection measures into surface waters, or wetlands, unless specifically approved by the NHDOT and NHDES. Rather, all flows shall be discharged to an approved sediment basin/sand filter, sediment basin, or other water quality treatment device, in accordance with the conditions outlined in this SWPPP and CGP.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

4.14 Site Stabilization

Minimum CGP Requirements that must be met:

- Stabilization is required for all exposed portions of the site with the exception of areas intended to be left unvegetated or unstabilized following construction (e.g., dirt access roads, utility pole pads, storage areas for vehicles, equipment, or materials);
- The “Grading and Stabilization Activities Log” contained in Appendix I and the table form included at the end of this section should be utilized to document the type and location of stabilization, and compliance with the stabilization requirements; and

- SWPPP must contain specific descriptions of the various types of stabilization measures utilized throughout the project site, including the specific type (i.e., vegetative and/or non-vegetative) by location, any applicable design or manufacturer's specifications, locations depicted on the site maps, and dates of initiation and completion.

Deadlines for Initiating and Completing Stabilization Activities:

- **Deadline for Initiating Stabilization:** Stabilization measures must be initiated immediately (as soon as practicable, but not later than the end of the next work day) whenever disturbances have permanently or temporarily ceased on any portion of the site:
 - Disturbances have permanently ceased when clearing and excavation within any area has been completed, excluding areas that will include permanent structures not yet installed; and
 - Disturbances have temporarily ceased when clearing, grading, and excavation within any area will not resume for a period of 14 or more calendar days.
- **Initiation of Stabilization:** The CGP considers the following types of activities to constitute the initiation of stabilization:
 - Preparing the soil for vegetative and/or non-vegetative stabilization;
 - Applying mulch or other non-vegetative product to the exposed area;
 - Seeding and/or planting the exposed area;
 - Starting any of the activities in items 1 to 3 on a portion of the area; and
 - Finalizing arrangements (e.g., scheduling of a seeding contractor) to have stabilization product fully installed in line with the applicable deadline for completing stabilization.
- **Deadline for Completing Stabilization*:** Stabilization measures must be completed as soon as practicable, but no later than 14 calendar days after initiation of stabilization measures on any portion of the site where work has been temporarily suspended, and no later than three (3) calendar days after the last activities in an area. [*Limited exceptions are allowed in regard to meeting the completion deadline, including unplanned or unanticipated delays in construction beyond the contractor's control (e.g., problems related to labor, funding, weather, or other conditions rendering the site unsuitable for work), provided that these reasons are documented in the SWPPP.]
- **Completion of Stabilization:** The CGP considers the following types of activities to constitute the completion of stabilization:
 - For vegetative stabilization, all activities necessary to seed or plant the area, including soil conditioning, application of seed or sod, planting of seedlings or other vegetation, application of fertilizer, and watering, as applicable; and
 - For non-vegetative stabilization, the installation of non-vegetative measures.

Providing Adequate Final Stabilization: An area is considered adequately stable if one of the following has occurred:

- For vegetative stabilization, including seeded or planted areas:
 - Established uniform vegetation evenly distributed without large bare areas;
 - Vegetative cover density of 70% or more;
 - For final stabilization, vegetative cover must be perennial; and
 - Installation of non-vegetative erosion controls (e.g., mulch or rolled erosion control products) that provide cover to the area while vegetation.
- For non-vegetative stabilization:
 - Provide effective non-vegetative cover such as hydromulch and erosion control blankets, riprap, gabions, and geotextiles.

Other General Stabilization Measures: Final stabilization measures that typically meet the stabilization requirements also include base course gravels installed in areas to be paved, pavement, structures, concrete and 3" minimum of non-erosive material such as stone or riprap.

Where construction activities have temporarily or permanently ceased, exposed soils must be stabilized to minimize erosion. Temporary measures are necessary when an area of a site is disturbed but where activities in that area are not completed or until permanent BMPs are established. All disturbed areas within each work area must be temporarily stabilized in accordance with the CGP requirements, or as required in the contract documents or permit conditions, if more stringent.

Grading of Roadway:

1. The completion of the grading shall follow the excavation and fill sequence.
2. The site shall be subgraded to sheet water away from the sensitive areas. The *trail* shall then be brought to the proper crown and/or grade just prior to paving. If intense rainfall is expected, runoff water should be carried to a relatively flat area surrounded by a haybale, dike, or stone check dam.
3. If intense precipitation is anticipated, consideration shall be given to the utilization of haybales, dikes, and silt fences. The materials required shall be stored on-site at all times.
4. If additional water is needed during compaction, it shall be applied in a uniform manner that prevents runoff from the area being concentrated.

Maintenance of Disturbed Surfaces:

1. The fill and excavation sequences shall result in localized depressions (sediment traps) to trap products of erosion.
2. Runoff shall be diverted from disturbed side slopes in both cut and fill areas.
3. Disturbed slopes shall be scarified to minimize runoff velocities as soon as final grading has been completed. Scarifying shall be done according to proper mechanical techniques that will create grooves perpendicular to slope direction and prior to temporary or permanent stabilization treatment.
4. Mulching for temporary stabilization is to be used.

5. Haybale, dikes, stone check dams, or silt fences shall be installed to trap sediment and control erosion and shall be inspected and maintained following all storm events.

Completion of Work:

1. During the placement of roads and pavement, the entrances to the stormwater drainage systems shall be closed, and/or protected with adequate inlet protection measures prior to the threat of rain. When entrances are closed, consideration must be given to the direction of runoff. All inlet protection must be in place and inspected prior to rain events to ensure adequate protection and capacity to handle the stormwater runoff. Measures shall be undertaken to minimize erosion and to provide for the collection of sediment.
2. Drainage shall be directed so as not to concentrate runoff during the construction of drainage swales and ditches. Effort shall be made to divert runoff from drainage structures until vegetation is well established or riprap is in place.
3. Where runoff might occur, or in areas that could be subject to erosion, proper mulching and erosion control measures shall be utilized. Shoulders and slopes shall be uniformly graded as soon as possible.
4. Grading shall be accomplished so as not to concentrate runoff, and where the concentration of runoff cannot be avoided, proper erosion control measures shall be undertaken.
5. Erosion control measures include proper mulching, staked haybales, and silt fences.

Stabilization of Surfaces:

1. As indicated, stabilization of surfaces shall be an ongoing process; however, it is highlighted in this section to emphasize its importance.
2. Stabilization of surfaces requires the placement of properly sized stone fill, and/or the establishment of vegetated surfaces.
3. A maximum effort shall be made to establish vegetative cover during the proper growing season and establishment should be enhanced by proper adjustment for pH, fertility, and moisture content.
4. Surfaces that are disturbed by erosion processes, vandalism, or by construction shall be stabilized as soon as possible.
5. Hydro-mulching of grass surfaces is recommended, especially if seeding of the surfaces is required outside the normal growing season.
6. Hay mulch is an effective method of temporarily stabilizing surfaces, but only if it is properly secured by crimping, branches, weighted snow fences, or weighted chicken wire. Care should be taken to remove these components as soon as the grass begins to grow.
7. Inlet protection measures should remain in place until all disturbed surfaces are stabilized adequately or for as long as the potential for sediment transport exists.

Form for documenting compliant stabilization:

BMP Description:	
<input type="checkbox"/> <i>Vegetative</i>	<input type="checkbox"/> <i>Non-vegetative</i>
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
Description of Stabilization Practice:	
Installation Date:	
Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

Form for documenting non-compliant (e.g., delays) stabilization:

BMP Description:	
<input type="checkbox"/> <i>Vegetative</i>	<input type="checkbox"/> <i>Non-vegetative</i>
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
Justification for Not Meeting Time Deadline and Intended Schedule:	
Description of Stabilization Practice:	
Installation Date:	
Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

Site Specific BMPs:

Temporary and permanent stabilization measures will be necessary throughout the duration of this project for all areas disturbed as part of construction. While it will be the site operator's responsibility to ensure that stabilization measures are implemented in accordance with the CGP and other related permit conditions, the SWPPP monitor will also be reviewing these measures during each monitoring visit, including recommending specific measures, timeframes, etc.

4.15 Special Winter Considerations

Disturbed areas will further require monitoring, maintenance, and repair during winter periods. The major focus of winter erosion and sediment control is the period of intense runoff associated with mid-winter thaws and rainstorms, and the spring melt. The following should be considered relative to the winter maintenance season:

- Frozen ground makes the installation and maintenance of erosion control measures very difficult and time consuming. Installation should take place well before the ground freezes.
- Intense runoff in mid-winter thaws and rainstorms, and the spring melt period, can result in more severe erosion and sedimentation problems than runoff from summer storms. The soil is often completely saturated with water, and is also often underlain by a frost layer. Both of these factors result in a greater percentage of the rain or meltwater running over the ground surface. Winter and spring rainstorms are often heavier and more intense than summer showers. For these reasons, erosion and sedimentation can be especially severe in mid-winter thaws and spring melt.

- The contractor shall continue to monitor all erosion controls during the winter maintenance season and shall devote the necessary manpower to maintaining the erosion and sediment control measures.
- Mulching: Mulch alone should not be considered an adequate erosion and sediment control technique for areas that are disturbed in the winter or spring. Mulch is easily washed away by intense runoff flowing over saturated or frozen soil. It is essential that mulch be laid down in such a way that it will not blow or wash away. Stump grindings may also be used during winter conditions for covering disturbed areas as they can be placed on top of snow and are less apt to wash away, but shall not be used to control flowing water.
- Mulch Berms: Berms created from mulch and/or stump grindings may be used during winter conditions for temporary stormwater and erosion control, but not directly in ditches or channels with flowing water, and are more resistant to washing away.
- Silt fence: Installation is required before the ground freezes; otherwise stakes will be difficult to drive. Inspect frequently and remove any collected sediment before predicted thaws or rainy periods in order to provide as much capacity as possible. Silt fence may be used in place of, or in conjunction with, coir or straw-logs or wattles.
- Coir or straw-logs or wattles: Installation is required before the ground freezes; otherwise stakes will be difficult to drive. Inspect frequently and remove any collected sediment before predicted thaws or rainy periods in order to provide as much capacity as possible. The coir or straw-logs or wattles shall be installed as per the manufacturer's instructions, with a minimum of three stakes per log.
- Vegetated areas with less than 70% growth by October 15 shall be stabilized with seeding, mulch netting, and erosion control blankets.
- Ditches and swales with less than 70% growth by October 15 shall be stabilized with stone or erosion control blankets.
- Incomplete road or parking surfaces shall be protected with a minimum of three (3) inches of crushed gravel.
- Follow-Up: Installation of permanent vegetative controls will be required as early as is practical at the beginning of the growing season.

Site Specific BMPs:

Construction is anticipated to begin in April 2016 and is scheduled for completion by November 14, 2016. No winter construction is anticipated. Full permanent stabilization of all areas is required by the end of the construction period. However, in the event that construction is delayed, continued into the winter of 2016/2017, or full stabilization is not achieved prior to the onset of winter conditions, winter construction provisions have been provided in this SWPPP (summarized above) and on the attached SWPPP plans that specify additional temporary requirements for site areas under these conditions or prior to the winter suspension of work.

Regardless of whether some limited work and disturbances continue up to and during the winter period, all disturbed areas shall continue to be addressed in accordance with other stabilization requirements and time deadlines contained in the SWPPP and other permit conditions.

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

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

5.0 POLLUTION PREVENTION STANDARDS

Construction projects generate large amounts of building-related waste, which can end up polluting stormwater runoff if not properly managed. The standards and procedures described in this section include pollution prevention, spill prevention and response, and/or good housekeeping practices that are designed to prevent contamination of stormwater from a wide range of materials and wastes that have the potential to be exposed to stormwater during site and building construction work at the site.

5.1 Potential Sources of Pollutants

Special Note: This project has identified the possibility of contaminated soils and groundwater on the site. Soils located within the project limits on the formerly active railroad line, are considered to be classified as impacted soils. The NHDOT requires the Contractor to keep excavation within these areas of soils to a minimum, and the NHDOT Bureau of Environment shall be notified if contaminated soils are encountered during construction. If contaminated groundwater is encountered during construction and dewatering of the area is necessary, the contractor shall be required to obtain a groundwater discharge permit from the NHDES. The Contractor is required to handle any contaminated soils and/or groundwater in accordance with all applicable conditions in the contract documents.

Potential sources of pollution (including sediment) from construction materials and activities at the site that may reasonably be expected to impact the quality of stormwater discharges are identified in the Table below. ***In order to comply with the pollution prevention requirements of the CGP, site operators are expected to identify all pollution-generating activities and keep an updated inventory of pollutants, associated constituents and specific locations on the site where these pollutants may be exposed to stormwater during construction, using the general format contained in the following table.***

Table 6 - Potential Sources of Other Contaminants

Likely to be Present at Site	Potential Source of Pollution	Physical Properties of Pollutant	Stormwater Pollutants or Constituents (Circle or list specific types)	Location on Site (or reference site map)
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Roadway and parking construction, clearing, grading, excavation, installation of stormwater components, landscaping, site maintenance, and cleanup	Sediment	Sediment, debris, trash, and other deleterious materials	

Likely to be Present at Site	Potential Source of Pollution	Physical Properties of Pollutant	Stormwater Pollutants or Constituents (Circle or list specific types)	Location on Site (or reference site map)
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Pesticide (insecticides, fungicides, herbicides, rodenticides) usage for noxious weed control	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Fertilizer usage during seeding, landscaping, and site restoration	Liquid or solid grains	Nitrogen, phosphorous	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Cleaning solvent usage during painting and cleanup for site work and building construction activities	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Asphalt constituents during paving operations or roofing	Black solid	Oil, petroleum distillates	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Concrete during site work and building construction	White solid/grey liquid	Limestone, sand, chromium	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Glue, adhesives during utility pipe work, and building construction	White or yellow liquid	Polymers, epoxies	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Paints during building construction	Various colored liquid	Metal oxides, stoddard solvent, talc, calcium carbonate, arsenic	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Curing compounds during site concrete work and building construction	Creamy white liquid	Naphtha	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Wastewater from construction vehicle and equipment washing	Water	Soil, oil and grease, solids	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Wood preservatives during timber building construction	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper, chromium	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Hydraulic oil/fluids from construction vehicle and equipment operation	Brown oily petroleum hydrocarbon	Mineral oil	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Gasoline from construction vehicle and equipment operation	Colorless, pale brown, or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Diesel fuel from construction vehicle and equipment operation	Clear, blue-green to yellow liquid	Petroleum distillate, oil and grease, naphthalene, xylenes	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Kerosene for heating during winter operations	Pale yellow liquid petroleum hydrocarbon	Coal oil, petroleum distillates	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Antifreeze/coolant from construction vehicle and equipment operation and building construction	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Sanitary toilets during general site operations	Various colored liquid	Bacteria, parasites, viruses	

5.2 Spill Prevention and Response

Information provided in this section does not represent a formal Spill Prevention Control and Countermeasures (SPCC) plan, if required under applicable Federal laws. These procedures shall not preclude the site operator(s) from responsibility to follow any required procedures in the event of a leak, spill or release of hazardous substances or oil in the amount equal to or in excess of reportable quantities under other federal laws and regulations.

The following practices, at a minimum, shall be observed to help prevent and respond to the discharge of pollutants to stormwater from spills.

- Chemical storage areas will be located _____.
This location is _____ (distance) to storm drains, drainage tributaries, or surface waterbodies.
- When transferring liquids, use drip trays, funnels, or other means to avoid spills.
- Use spring-loaded drum covers, valves, or other positive shut-off devices.
- Keep all containers closed when not adding or removing material.
- Store all containers on an impervious surface (concrete) that is protected from weather.
- Instruct employees in spill response procedures.
- Post a list of emergency numbers by the phone.
- Maintain spill control and containment equipment in a designated area.
- Procedures for immediate clean-up of spills and proper disposal:

Initial Response:

- Stop the spill at its source.
- Prevent spilled material from entering storm drains, waterways, drainage ditches, etc.
- Contain spilled material using a barrier (absorbent pads or socks), temporary dike, or trench.

Report the Spill:

- If there is a hazardous material/waste spill emergency, call the local Fire Department first! **Local Fire Departments: 911**
- Then call NHDES if the spill occurs during business hours. If spill occurs after business hours, call the NH State Police, who will contact NHDES for you.
- To report a hazardous/solid waste issue or a hazardous material/waste spill during business hours:

Spill Response and Complaint Investigation Section

Monday - Friday 8 a.m. to 4 p.m.

Phone: (603) 271-3899

- To report hazardous material/waste emergencies on evenings and weekends:

New Hampshire State Police

Call (603) 846-3333

Clean-up and Follow-up:

- The spill must be cleaned-up to the extent that it no longer presents a threat to human health or the environment.
- Make a hazardous waste determination for all spill clean-up materials.
- Ensure that contaminated soil/water/debris is collected and managed appropriately.
- A **spill report** must be submitted to NHDES within 15 days of the incident, detailing how the spill was cleaned-up and how waste was managed. Sent the completed report to:

**New Hampshire Department of Environmental Services
 Spill Response and Complaint Investigation Section
 29 Hazen Drive, Post Office Box 95
 Concord, New Hampshire 03301-0095
 Phone (603) 271-3899
 Fax (603) 271-2456**

Other Local Authorities:

City of Keene, NH:

- Keene Police Department: 911, or Administrative Contact Chief Brian Costa (603) 357-9813;
- Keene Fire Department: 911, or Contact Chief Mark Howard (603) 357-9861;
- City Manager: Medard Kopczynski (603) 357-9804;
- Public Works Department: Contact Kurt Blomquist, Director (603) 352-6550;

Site Operator Response Team: The site operators must designate the appropriate personnel responsible for implementing the plan in the event of a spill.

Identify Personnel:

Name: _____	Name: _____
Company: _____	Company: _____
Address: _____	Address: _____
_____	_____
Phone: _____	Phone: _____
Mobile: _____	Mobile _____

Identify Other Personnel (as needed):

Name: _____	Name: _____
Company: _____	Company: _____
Address: _____	Address: _____
_____	_____
Phone: _____	Phone: _____
Mobile: _____	Mobile _____

Other Spill Response Items: The SWPPP will be modified within seven (7) calendar days of knowledge of a spill to include information regarding the nature,

date, and cause of the release. The plan will be modified with measures to prevent reoccurrence and to improve response.

5.3 Fueling and Maintenance of Equipment and Vehicles

Minimum CGP Requirements that must be met:

- SWPPP must contain descriptions of equipment and vehicle fueling and maintenance practices to eliminate the discharge of spilled or leaked chemicals using acceptable methods such as secondary containment, spill berms, containment pads, spill pallets, and have spill kits readily available; and
- SWPPP must contain specific descriptions of the practices, including design or manufacturer’s specifications, locations depicted on the site maps, and dates of installation.

5.4 Washing of Equipment and Vehicles

Minimum CGP Requirements that must be met:

- SWPPP must contain descriptions of equipment and vehicle washing practices to minimize the discharge of pollutants from activities such as equipment and vehicle washing and wheel wash water;
- These activities must be located away from surface waters and stormwater conveyances and water must be directed to sediment basins, sediment traps, filtration devices, filter bags, or sand filters;
- SWPPP must describe how discharge of soaps, detergents or solvents will be prevented from exposure to stormwater using practices such as covers; and
- SWPPP must contain specific descriptions of the practices, including design or manufacturer’s specifications, locations depicted on the site maps, and dates of installation.

The following practices shall be observed to help prevent the discharge of pollutants to stormwater from equipment/vehicle washing.

- Employees and subcontractors will be trained in proper washing procedures.
- Washing areas shall be clearly marked and workers shall be informed that all washing must occur in this area.
- Wash water shall be contained, treated, and infiltrated whenever possible.
- The wash facility will use high-pressure water spray without any detergents because water will remove most dirt adequately.
- No other activities, such as vehicle maintenance, shall occur in the wash area.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

BMP Description:	
<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

5.5 Storage, Handling, and Disposal of Construction Products, Materials, and Waste

Minimum CGP Requirements that must be met:

- SWPPP must provide information on practices that will be used to prevent a potential pollutant discharge during storage, handling and disposal for any building or construction products listed in Section 5.1 of this SWPPP, or other products located on the site;
- Examples of materials include building products, pesticides, fertilizers, landscape materials, fuels, hydraulic fluids, other petroleum products, hazardous materials, and toxic, construction, domestic, sanitary wastes;
- SWPPP must address practices that will be used to minimize the discharge of fertilizers containing nitrogen and phosphorus into surface waters and stormwater conveyances; and
- SWPPP must contain specific descriptions of the practices, including design or manufacturer’s specifications, locations depicted on the site maps, and dates of installation.

Material Staging and Storage Areas: Paints, solvents, pesticides, fuels, and oils, other hazardous materials or any building materials that have the potential to contaminate stormwater shall be stored indoors or under cover whenever possible or in areas with secondary containment. Secondary containment prevents a spill from spreading across the site and includes dikes, berms, curbing, or other containment methods. The contractor shall designate staging areas for activities such as fueling vehicles, mixing paints, plaster, mortar, and so on. Designated staging areas will help to monitor the use of materials and to clean up any spills. Training employees and subcontractors shall be a part of this pollution prevention principle. Designated Staging areas shall be identified on the SWPPP Plans and shall include appropriate perimeter and erosion controls prior to using.

Site Specific BMPs:

The general contractor (CPM Constructors) is intending to use the areas within the project limits and ROW’s adjacent to the Rail Trail and NH Route 12/101 to stage equipment and materials for this project. Stormwater, sediment and erosion controls will be addressed as necessary to comply with this SWPPP and CGP coverage for the staging areas. The areas shall be protected by the necessary BMPs as determined by the NHDOT, the SWPPP preparer and/or SWPPP monitor. The site subcontractor may also use its own pit for temporary storage of materials (e.g., topsoil) that may be reused on-site, with approval by NHDOT, and off-site areas shall remain the responsibility of the contractor(s) in regard to CGP and SWPPP requirements.

Material Disposal: Building materials and other construction site wastes must be properly managed and disposed of to reduce the risk of pollution from materials such as surplus or refuse building materials or hazardous wastes. Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater runoff to mobilize construction site wastes and contaminate surface or ground water.

All waste materials will be collected and stored in a securely lidded metal dumpster. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as often as needed and the trash will be hauled to licensed landfill. No construction materials will be buried on-site. All personnel will be instructed regarding the correct procedure for waste disposal. All sanitary waste will be collected from portable units provided by a sanitary waste management contractor. Good housekeeping and spill control practices will be followed during construction to minimize stormwater contamination from petroleum products, fertilizers, paints, and concrete.

Site Specific BMPs:

Same as above. The contractor intends to utilize the on-site areas noted above for stockpiling. Excess material is anticipated on the project and will be utilized on-site in fill slopes, to the extent possible. If off-site disposal areas become necessary they must be approved by NHDOT. Off-site areas shall remain the responsibility of the contractor in regard to CGP and SWPPP requirements.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

5.6 Washing of Applicators and Containers for Paint, Concrete, or Other Materials

Minimum CGP Requirements that must be met:

- SWPPP must provide information on practices that will eliminate the discharge of water from washout and cleanup of equipment and excess products associated with the use of stucco, paint, concrete, form release oils, curing compounds, or other construction materials on the site;
- All washwater and excess products must be directed into leak-proof containers or pits designed and adequately sized to prevent overflow during precipitation;
- Wastes must not be discharged into surface waters or stormwater conveyances at any time;

- Wastes, including hardened concrete, must be properly disposed of in accordance with any applicable regulations;
- Washout locations must be located as far away as possible from surface waters and stormwater conveyances;
- Washout locations must be designated in the SWPPP and on site maps and these activities should only be conducted at designated locations; and
- SWPPP must contain specific descriptions of the practices, including design or manufacturer's specifications, locations depicted on the site maps, and dates of installation.

Whenever possible, the contractor(s) shall use the washout facilities at their own plants or dispatch facilities. If it is necessary to provide for concrete washout areas on-site, specific washout areas will be designated and facilities will be designed to handle anticipated washout water. Washout areas will be designated for paint, mortar, concrete, grout, and stucco operations.

Washout areas can be a source of pollutants from leaks or spills, they should be located at least 50 yards away from storm drains and watercourses whenever possible. Prefabricated washout containers are recommended over self-constructed washouts. However, if a self-constructed washout is used, it shall consist of digging a pit and lining it with 10-mil plastic sheeting or by creating an aboveground structure from straw bales or sandbags with a plastic liner. Self-constructed washouts shall be inspected daily for leaks or tears in the plastic. All washouts shall be inspected and maintained regularly to ensure they have adequate capacity and are being utilized appropriately. Training employees and subcontractors shall be a part of this pollution prevention principle.

Materials in the washouts shall be disposed of properly. The preferred method is to allow the water to evaporate and to recycle the hardened concrete. Full service companies may provide dewatering services and should dispose of wastewater properly. Concrete wash water can be highly polluted. It should not be discharge to any surface water, storm sewer system, or allowed to infiltrate into the ground. It should not be discharged to a sanitary sewer system without first receiving written permission from the system operator.

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

<i>BMP Description:</i>	
<input type="checkbox"/> <i>Permanent</i>	<input type="checkbox"/> <i>Temporary</i>
<i>Installation Schedule:</i>	
<i>Maintenance and Inspection:</i>	
<i>Responsible Staff:</i>	

6.0 INSPECTION, MAINTENANCE, AND CORRECTIVE ACTION

6.1 Inspection Personnel and Procedures

Minimum CGP Requirements that must be met:

- SWPPP must contain specific descriptions of practices utilized for meeting this requirement, a description of why this may not be feasible, locations of practices depicted on the site maps, and dates of implementation.

Inspection Personnel: Minimum CGP Requirements that must be met:

- All personnel conducting inspections must be considered a “qualified person.” Which is defined by CGP Part 4.1.1 as a person knowledgeable in the principles and practices of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit;
- In the absence of another mechanism in the project contract where a third-party SWPPP monitor has been retained for the project, the site operator(s) is responsible for ensuring that the personnel conducting inspections met these qualifications; and
- SWPPP must identify the specific personnel responsible for conducting inspections and reporting.

<i>Inspector</i>			
<i>Title</i>			
<i>Company</i>			
<i>Qualifications</i>			

<i>Inspector</i>			
<i>Title</i>			
<i>Company</i>			
<i>Qualifications</i>			

Inspection Schedule: Minimum CGP Requirements that must be met:

- Site inspections must be conducted according to the required inspection frequency in CGP Part 4.1.2 (standard) or 4.1.3 (increased frequency), and this frequency must be documented in the SWPPP;
- The project, or portion of the project disturbances, may qualify for a reduced inspection frequency as long as the criteria in CGP Part 4.1.4 is met; and
- Inspection frequency that is more stringent than the minimum required frequency of the CGP is allowed, as deemed appropriate and acceptable to the project owner (e.g., NHDOT specifications require frequency similar to increased frequency in CGP Part 4.1.3) regardless of project and/or location.

The following frequency has been determined in Section 2.2 of this SWPPP:

- Standard Inspection Frequency per CGP 4.1.2
 - Inspections must be conducted once every 7 days; OR
 - Once every 14 days and within 24 hours following a storm event that measures 0.25 inches or greater.

- ☒ Increased Inspection Frequency per CGP 4.1.3*
 - Inspections must be conducted once every 7 days; AND
 - Within 24 hours following a storm event that measures 0.25 inch or greater.

****NHDOT Specifications require a more stringent inspection schedule independent of the CGP requirements pertaining to sensitive waters, and this will be utilized for inspections by the SWPPP Monitor.***

A reduced inspection frequency may be utilized if the following conditions, per CGP Part 4.1.3 apply to the specific portions or site conditions:

For Stabilized Areas:

- Inspection frequency may be reduced to once per month for any area of the site where stabilization activities have been completed;
- If construction activities resume within areas of reduced inspection frequency, the previous inspection frequency also must be resumed immediately; and
- The SWPPP must document the specific site areas where a reduced inspection frequency applies and the beginning and end dates for this period.

For Frozen Conditions:

- Inspection frequency may be temporarily suspended on the site if earth-disturbing conditions are suspended due to frozen conditions;
- Prior to suspending inspections, frozen conditions must be expected to continue for at least 3 months and runoff from the site is unlikely due to frozen conditions;
- Normal inspection frequency must resume on the site when thawing conditions begin to occur and/or during unexpected weather conditions that may result in runoff, such as rain or snow events, and above freezing periods;
- Normal inspection frequency must resume on the site when disturbances resume;
- This exception only applies once all disturbed areas have been temporarily or permanently stabilized; and
- The SWPPP must document the specific site areas where a reduced inspection frequency applies and the beginning and end dates for this period.

Required Inspection Scope:

The scope of the inspections must include a visual review of all areas and measures covered under the CGP permit, including the following, for each official inspection conducted in accordance with the required inspection frequency:

- All site areas that have been cleared, graded, excavated, and/or disturbed where stabilization has not been completed;
- All stormwater, erosion and sediment, and pollution prevention controls;
- Material, waste, borrow, or equipment storage and maintenance areas;

- All areas where stormwater typically flows within the site;
- All points of discharge from the site;
- All locations where stabilization measures have been implemented;
- Check whether all erosion and sediment and pollution prevention controls are installed, operational, and are working to minimize discharges;
- Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants;
- Identify areas where new or modified stormwater controls may be necessary;
- Check for signs of visible erosion and sedimentation that have occurred and are attributable to site discharges at all points of discharge, and near surface waters, if applicable;
- Identify any incidents of non-compliance observed;
- Identify where discharges are occurring, if any;
- Observe and document visual quality and characteristics of the discharge (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, or other obvious indicators of stormwater pollutants);
- Document whether stormwater controls are operating effectively, and describe any controls that are not operating as intended, or need maintenance; and
- Based on inspection observations, initiate corrective actions, as necessary.

Inspection Report Forms:

Minimum CGP Requirements that must be met:

- An inspection report must be completed within 24 hours after completing the inspection;
- See below for required information on the inspection reports; and
- Copies of all reports must be kept on site and available at the time of inspection or upon request by the EPA.

A copy of the general report form to be completed by the SWPPP inspector or monitor is provided in Appendix F of this SWPPP. Completed forms should be distributed to the owner and all recipients involved in the SWPPP. Completed forms will be maintained on-site during the entire construction project. Following construction, the completed forms will be retained at the construction manager's office for a minimum of three years.

SWPPP reports must include the following:

- Inspection date;
- Name and title of personnel conducting inspection;
- A summary of the inspection observations and findings, as outlined above;
- Include actual precipitation amounts, if applicable to a qualifying storm event, as measured from a rain gauge located on the project site, or from another acceptable source;
- Include date of initial disturbance, initiation of stabilization activities and time remaining for stabilization/completion of each work area shall be noted during each inspection visit on reports; and
- Include any required maintenance or corrective actions needed as a result of observations.

If construction activities or design modifications are made to the site plan, which could impact stormwater, this SWPPP must be amended appropriately. The amended SWPPP will have a description of the new activities that contribute to the increased pollutant loading and the planned source control activities.

Additional Inspection Recommendations: Visual inspections of all areas of the construction site should be performed daily by the SWPPP operator and prior to any upcoming rainfall events. The SWPPP operator should also verify that the on-site procedures required to prevent stormwater contamination from construction materials and petroleum products are effective and being implemented on a daily basis for all personnel on the site.

6.2 Maintenance of Controls

Minimum CGP Requirements that must be met:

- Per CGP Parts 2.1.1.4 and 2.3.2, all erosion and sediment controls, and pollution prevention controls on the site must be maintained in effective operating condition and protected from activities that might reduce their effectiveness;
- All erosion and sediment controls, and pollution prevention controls on the site must be maintained, repaired and/or replaced according to the following schedule:
 - For routine minor maintenance and/or repairs, work must be initiated to fix the problem immediately after the issue is discovered, and completed by the end of the next work day; and
 - For significant repair, replacement, or installation of new controls, work must be completed and the control operational within seven (7) days from the time of discovery.
- If infeasible to meet the routine maintenance and/or significant repair deadlines, the SWPPP, as well as inspection reports and/or corrective action logs should note reasons for this infeasibility and when the work was completed;
- Maintenance activities for individual BMPs must be recorded, including the date, BMP, location, and maintenance performed, in the inspection reports;
- If any changes to the SWPPP become necessary as a result of a significant repair, the SWPPP must be modified within seven (7) days following completion of the work; and
- Corrective Actions: See Section 6.3 for further requirements.

Additional Maintenance Considerations: Implementing a BMP maintenance program is essential to the success of the project. Inspection and maintenance is just as important as proper planning, design, and installation of controls. Without adequate maintenance, erosion and sediment controls will quickly fail, sometimes after just one rainfall, and cause significant sediment and/or pollution discharges, potential downstream water quality problems, and potential violations of the CGP or other project permits. This permit requires ongoing maintenance of the BMPs. Inspecting both prior to predicted storm events and after will help ensure that controls are working effectively. Maintenance and/or corrective action must be performed on a timely basis as soon as problems are noted in the inspection

reports or discovered on the site, to maintain compliance with the permit conditions.

Inspection and maintenance of erosion and sediment control measures is required more frequently in the winter and spring than in the summer. Careful attention must be given to weather predictions of precipitation or thaw cycles. Inspection and maintenance of all control measures must be ongoing to ensure that structures will manage the potentially heavy and intense runoff. Constant maintenance of critical control measures may be necessary during the winter and early spring to prevent failure or overloading of control measures. A second line of control must be quickly installed if problems occur. A substantial amount of time, equipment, and manpower must be devoted to erosion and sediment control.

The following shall be considered when conducting maintenance:

- Follow the designers or manufacturer's recommended maintenance procedures for all BMPs;
- Remove sediment from BMPs as appropriate and properly dispose of sediment into controlled areas to prevent soil from returning to the BMP during subsequent rain events;
- Remove sediment from paved roadways and from around BMPs protecting storm drain inlets;
- Silt fences should be inspected for depth of sediment, for 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;
- Built up sediment should be removed from silt fencing when it has reached one-third the height of the fence, and for other controls when it has reached on-half the height;
- Temporary sediment control structures surrounding catch basins should be inspected for sediment built up and removal as necessary;
- Temporary and permanent seeding should be inspected for bare spots, washouts, and healthy growth;
- The stabilized construction entrance should be inspected for sediment tracked on the road, for clean gravel, and to make sure that the culvert beneath the entrance is working and that all traffic use the stabilized entrance when leaving the site;
- Ensure that construction support activities, including borrow areas, waste areas, contractor work areas, stockpiles, material storage areas, and dedicated concrete and asphalt batch plants are clean and maintained;
- Replace damaged BMPs, such as silt fences, that no longer operate effectively; and
- Trash and debris should be cleaned-up, dumpsters should be checked and covered, nearby streets and sidewalks should be swept daily.

6.3 Corrective Actions

Minimum CGP Requirements that must be met:

- Per CGP Part 5.0, corrective actions include the following activities:
 - Repair, modify, or replace any stormwater control on the site;
 - Clean up and properly dispose of spills, releases or other deposits;and

- Remedy a permit violation.
- On this basis, any maintenance activities identified on the inspection reports not completed within the required time deadlines set forth in Section 6.2 of this SWPPP, also may constitute a corrective action, since these could be considered a violation of the permit conditions;
- Site operator(s) must immediately (i.e., same day) take all reasonable steps to minimize or prevent discharge of pollutants until a permanent solution is installed and operational;
- All corrective actions must be completed, installed, repaired, or made operational within seven (7) days from the time of discovery;
- If infeasible to meet the completion deadline, the SWPPP, as well as inspection reports and/or corrective action logs should note reasons for this infeasibility and when the work was completed;
- Corrective actions must be recorded, including the date, location, work performed, in a Corrective Action Log;
- The Corrective Action Log must be signed by appropriate parties upon completion of the work;
- Any separate notifications to the owner, regulatory agencies or other parties should be completed as part of the corrective action process;
- SWPPP must identify the specific personnel responsible for overseeing corrective actions; and
- If any changes to the SWPPP become necessary as a result of a corrective action, the SWPPP must be modified within seven (7) days following completion of the work.

Corrective action procedures are intended for resolving issues of a more serious nature than minor maintenance and/or repair activities, such as permit violations, non-compliance, spills, discharges, failure to provide timely completion of maintenance items, and failure to install required measures. Activities that meet this criteria must be recorded on the separate “Corrective Action Log” form, and any additional follow-up, notifications to other parties, and remedial work must be completed within the required timeframe.

The intent of the “Corrective Action Log” is to identify the nature of the corrective action, whether additional notifications and/or follow-up procedures need to be implemented, documenting all information relative to resolving the issue, and providing a signature line for the party certifying the completion of the corrective actions.

A corrective action log is provided as an attachment in Appendix F. The log should describe actions taken, dates completed, and note the person that completed the work.

Personnel Responsible for Corrective Actions:

<i>Name</i>			
<i>Title</i>			
<i>Company</i>			
<i>Qualifications</i>			

<i>Name</i>			
<i>Title</i>			
<i>Company</i>			
<i>Qualifications</i>			

6.4 Delegation of Authority

The following individual(s) has the delegated authority for the purposes signing inspection reports, certificates, or other information (See Appendix K).

Name: _____
 Position: _____
 Company: _____
 Address: _____
 Phone: _____
 Fax: _____
 Mobile: _____

7.0 TRAINING AND RECORDKEEPING

7.1 Training

Minimum CGP Requirements that must be met:

- The following personnel must receive training relating to the SWPPP:
 - Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
 - Personnel responsible for the application and storage of treatment chemicals (if applicable);
 - Personnel who are responsible for conducting inspections; and
 - Personnel who are responsible for taking corrective actions.
- The intent is to train required personnel to understand the following:
 - The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
 - The proper procedures to follow with respect to the permit's pollution prevention requirements; and
 - When and how to conduct inspections, record applicable findings, and take corrective actions.
- The SWPPP must be updated to provide documentation that the required personnel have completed the appropriate training.

An employee-training program must be developed and implemented to educate personnel about the requirements of the SWPPP and CGP. This education program should include background on the components, goals of the SWPPP and hands-on training in erosion and pollution controls. All required personnel must be trained prior to their first day on the site. Training staff and subcontractors in the basics of erosion control, good housekeeping, and pollution prevention is one of the most effective BMPs.

Basic training should include:

- Requirements and goals of the SWPPP and CGP;
- Hands-on training in erosion and pollution controls;
- Spill prevention and response;
- Good housekeeping procedures that must be implemented continuously;
- Proper material handling, disposal and control of waste;
- Equipment fueling;
- Proper storage, washing, and inspection procedures;
- Spill prevention and cleanup measures, including the prohibition of dumping any material into storm drains or waterways;
- Basic purpose of stormwater BMPs, including what common BMPs are on-site, what they should look like, and how to avoid damaging them;
- What to look for and who to notify; and
- Potential penalties associated with stormwater noncompliance.

Staff directly responsible for implementing the SWPPP should receive comprehensive stormwater training, including:

- The location and type of BMPs being implemented;
- The installation requirements and water quality purpose for each BMP;
- Maintenance procedures for each of the BMPs being implemented;
- Spill prevention and cleanup measures; and
- Inspection and maintenance recordkeeping requirements.

Training of staff and with subcontractors including dates, name of attendees, subjects covered, and length of training shall be documented. A form to document staff training is provided in Appendix J.

7.2 Recordkeeping

Copies of the SWPPP, inspection reports and corrective action logs, site maps and records of all data used to complete the NOI to be covered by the permit must be kept 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 SWPPP, with any modifications;
- A copy of the NOI and Notice of Termination (NOT), and any stormwater related correspondence with Federal, State, and local regulatory authorities;
- Inspection forms, including the date, place, and time of BMP 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 (Corrective Action Log);
- Any documentation and correspondence related to receiving waters, 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; and
- Date(s) when an area is either temporarily or permanently stabilized.

7.3 Log of Changes to the SWPPP

The SWPPP is a document that must be amended to reflect changes occurring at the site. Additions of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures, and updates to site maps shall be reflected in this SWPPP. Document all revisions to the SWPPP in the revision documentation form provided in the beginning of this plan. A form to document additional revisions to the SWPPP is provided in Appendix G.

7.4 Notice of Termination

Once construction activity has been completed and disturbed areas are fully and adequately stabilized, the contractor is required to submit a NOT, to end coverage under the CGP. Before terminating permit coverage, the following should be completed:

- Remove any construction debris and trash;
- Remove temporary BMPs (such as silt fence). Remove any residual sediment as needed. Seed and mulch any small bare spots. BMPs that will decompose, including some fiber rolls and blankets, may be left in place;
- Check areas where erosion-control blankets or matting were installed. Cut away and remove all loose, exposed material, especially in areas where walking or mowing will occur. Reseed all bare soil areas;
- Ensure that 70 percent of background native vegetation coverage or equivalent stabilization measures have been applied for final soil stabilization of disturbed areas;
- Repair any remaining signs of erosion;
- Ensure that post-construction BMPs are in place and operational. Provide written maintenance requirements for all post-construction BMPs to the appropriate party;
- Check all drainage conveyances and outlets to ensure they were installed correctly and are operational. Inspect inlet areas to ensure complete stabilization and remove any brush or debris that could clog inlets. Ensure banks and ditch bottoms are well vegetated. Reseed bare areas and replace rock that has become dislodged;
- Seed and mulch or otherwise stabilize any areas where runoff flows might converge or high velocity flows are expected;
- Remove temporary stream crossings. Grade, seed, or re-plant vegetation damaged or removed; and
- Ensure subcontractors have repaired their work areas before final closeout.

8.0 CERTIFICATION AND NOTIFICATION

8.1 Owner and Site Operator Certification

State of New Hampshire Department of Transportation (NHDOT)
7 Hazen Drive
Concord, New Hampshire 03302

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision for the **New Hampshire Department of Transportation’s Keene-Swanzey X-A000(458), 10309P project** in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained herein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Name: _____ Title: _____

Signature: _____ Date: _____

8.2 Site Operator Certification (General Contractor)

CPM Constructors
30 Bonney Street
Post Office Box B
Freeport, Maine 04032

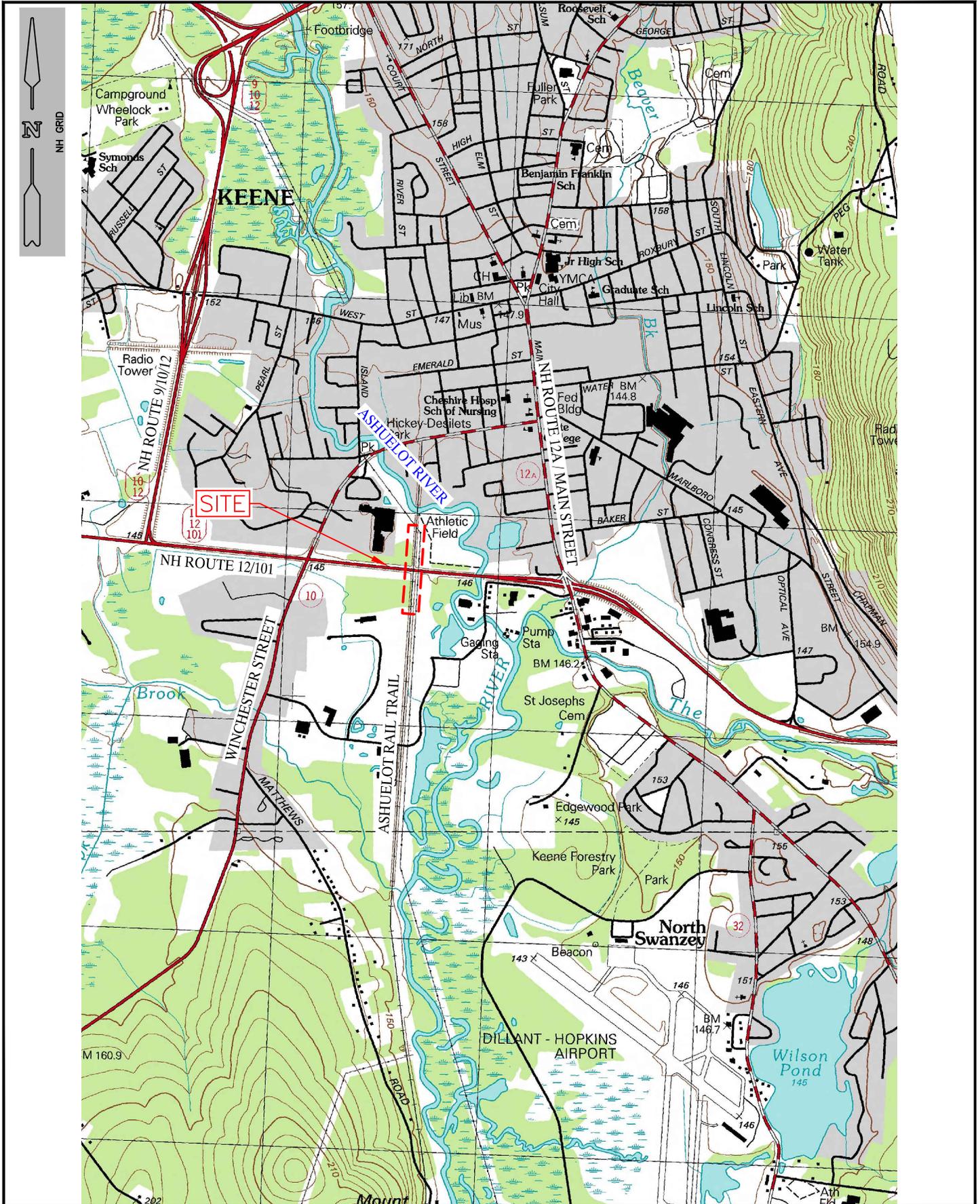
“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision for the **New Hampshire Department of Transportation’s Keene-Swanzey X-A000(458), 10309P project** in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained herein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Name: _____ Title: _____

Signature: _____ Date: _____

APPENDICES

APPENDIX A
SITE LOCATION MAPS



Pathways Consulting, LLC
 240 Mechanic Street, Suite 100
 Lebanon, New Hampshire 03766
 (603) 448-2200 FAX: (603) 448-1221

SITE LOCATION MAP FOR
NHDOT KEENE/SWANZEY X-A000(458), 10309P
 MULTI-USE-TRAIL OVER NH ROUTE 12 & 101, KEENE, NH

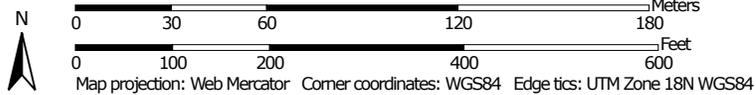
SCALE: AS SHOWN
 DESIGNED BY: SAW
 DRAWN BY: SAW
 CHECKED BY: RJF
 DATE: 03/11/16
 PROJ. NO. 12689

APPENDIX B
SOIL CHARACTERISTICS

Hydrologic Soil Group—Cheshire County, New Hampshire



Map Scale: 1:2,360 if printed on A portrait (8.5" x 11") sheet.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cheshire County, New Hampshire
 Survey Area Data: Version 18, Sep 18, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 9, 2011—May 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Cheshire County, New Hampshire (NH005)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
218	Raynham-Wareham complex, occasionally flooded	C/D	2.8	78.0%
401	Occum fine sandy loam	A	0.8	22.0%
Totals for Area of Interest			3.6	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX C
SITE PLANS

KEY TO EROSION CONTROL SYMBOLS:

-  INLET PROTECTION
-  SILT FENCE
-  EROSION CONTROL SOCK
-  CONSTRUCTION FENCE
-  STONE CHECK DAM
-  DIRECTION OF FLOW ARROW
-  TURBIDITY BARRIER
-  HATCHING DENOTES TEMPORARY STAGING AREAS
-  HATCHING DENOTES MULCH OR MULCH NETTING
-  HATCHING DENOTES STABILIZED CONSTRUCTION ENTRANCE
-  HATCHING DENOTES INVASIVE SPECIES AREAS THAT MAY BE DISTURBED

SWPPP PLAN UPDATES DURING FIELD CONSTRUCTION:

- SITE OPERATOR AND/OR SWPPP MONITOR SHALL BE RESPONSIBLE FOR UPDATING THESE SWPPP PLANS IN ACCORDANCE WITH THE CGP AND SWPPP REQUIREMENTS, AND THE FOLLOWING GUIDELINES:
1. PLANS SHOULD BE UPDATED ON A DAILY BASIS, AND AT A MINIMUM ONCE EVERY SEVEN (7) DAYS DURING WEEKLY SWPPP MONITORING VISITS.
 2. NOTE LOCATIONS FOR ALL STORMWATER, SEDIMENT AND EROSION CONTROL MEASURES INSTALLED DURING FIELD WORK.
 3. NOTE DATE OF INITIAL GROUND DISTURBANCE IN EACH WORK AREA.
 4. NOTE DATE WHEN TEMPORARY STABILIZATION MEASURES ARE INSTALLED.
 5. NOTE DATE WHEN FINAL STABILIZATION MEASURES ARE INSTALLED, AND WHEN AREA HAS BEEN FULLY STABILIZED.

NOTE:

1. REFERENCE MADE TO PLANS BY NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "CONSTRUCTION PLANS, MULTI-USE-TRAIL OVER N.H. ROUTE 12/N.H. ROUTE 101, FEDERAL AID PROJECT, X-A000(458), NH PROJECT NO. 10309P, SHEETS NO. 9, AND 10, DATED SEPTEMBER, 2015, BY NHDOT.
2. IN THE EVENT OF CONFLICT BETWEEN DETAILS, EROSION CONTROLS AND/OR RELATED NOTES SHOWN ON PATHWAYS SWPPP PLANS AND NHDOT CONTRACT DOCUMENTS, CONTRACT DOCUMENTS SHALL GOVERN EXCEPT WHERE MORE STRINGENT REGULATORY REQUIREMENTS APPLY.

**STATION 201+00 TO 207+00 SWPPP PLAN SHEET 1
(NHDOT OVERALL SHEET 9)**



50' NATURAL BUFFER OFFSET:

COMPLIANCE ALT. #1 - A 50' BUFFER WILL BE MAINTAINED IN THE FOLLOWING AREAS:
STA. 203+90 TO 205+10 LT

COMPLIANCE ALT. #2 - A REDUCED BUFFER OF 0-50' WILL BE MAINTAINED IN THE FOLLOWING AREAS, WITH WORK CONTAINED WITH EROSION AND SEDIMENT CONTROL MEASURES:
STA. 201+00 TO 203+90 LT
STA. 201+00 TO 202+00 RT
STA. 205+10 TO 206+50 LT
STA. 205+80 TO 206+50 RT

COMPLIANCE ALT. #3 - NO BUFFER WILL BE MAINTAINED DUE TO DISTURBANCES WITHIN WETLANDS AND/OR SURFACE WATERS. AREAS ADJACENT TO DISTURBANCES SHALL BE CONTAINED WITH EROSION AND SEDIMENT CONTROLS, AND STABILIZED THE SAME DAY WORK IS COMPLETED:
STA. 202+00 TO 205+80 RT

INVASIVE SPECIES AREAS: INVASIVE AREAS TO BE REMOVED/REMIATED PRIOR TO WORK IN ACCORDANCE WITH THE INVASIVE SPECIES MANAGEMENT PLAN. ALL CLEARING, GRUBBING, STRIPING, EXCAVATION OR OTHER DISTURBANCE SHALL BE COMPLETED IN A SINGLE CONTAINED OPERATION TO LIMIT TRACKING AND SPREADING OF INVASIVE PLANT DEBRIS. DISTURBANCE OF THIS AREA SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROVED INVASIVE SPECIES CONTROL AND MANAGEMENT PLAN AND RELATED REQUIREMENTS.

*****GENERAL STABILIZATION OF WORK AREAS:** RESTABILIZE VEGETATED AREAS DISTURBED DURING WORK ON TEMPORARY AND/OR PERMANENT BASIS WITH SEED AND MULCH, AT A MINIMUM, AND EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1. PLACE PERIMETER CONTROLS, SUCH AS SILT FENCE OR EROSION SOCKS, DOWN-GRADE OF DISTURBANCE AREA OR AT TOE OF SLOPE WHEN NECESSARY AND AS DETERMINED IN FIELD. PERIMETER CONTROLS SHOULD BE IN PLACE PRIOR TO DISTURBANCES. SILT FENCE NOT NECESSARY DOWN-GRADE OF DISTURBED AREAS WHERE ONLY STONE AGGREGATE MATERIALS USED ON SHOULDER OR SLOPE, AND WHEN AREAS ARE IMMEDIATELY STABILIZED (BY END OF EACH WORK DAY), WITH MULCH NETTING OR EROSION CONTROL BLANKETS.

ON-SITE CONSTRUCTION STAGING AREA: STAGING FOR BRIDGE WORK ANTICIPATED BETWEEN THE PROPOSED ABUTMENT AND EDGE OF ROADWAY. STAGING AREA SHALL HAVE PERIMETER EROSION CONTROLS (SILT FENCE OR EROSION SOCKS) AND CRUSHED STONE ON SURFACE. SEPARATE PERIMETER EROSION CONTROLS MAY BE NEEDED FOR ANY EARTHEN MATERIAL STORAGE/STOCKPILING THAT WILL OCCUR WITHIN THIS AREA (TYP.)

DEWATERING TREATMENT AREA (IF NEEDED): USE APPROVED FILTER BAG AND/OR SETTLING BASIN, PER DETAIL ON SHEET 4, TO TREAT CONTAMINATED FLOW FROM WITHIN WORK AREA. LOCATE A MINIMUM OF 20 FEET FROM WETLANDS AND SURFACE WATERS, INSTALL ADDITIONAL FLOW CONTROLS DOWNSTREAM OF TREATMENT AREA AS NECESSARY.

INSTALL STONE CHECK DAMS IN DITCH AS NECESSARY TO CONTROL SEDIMENT DURING DRAINAGE WORK (TYP.)

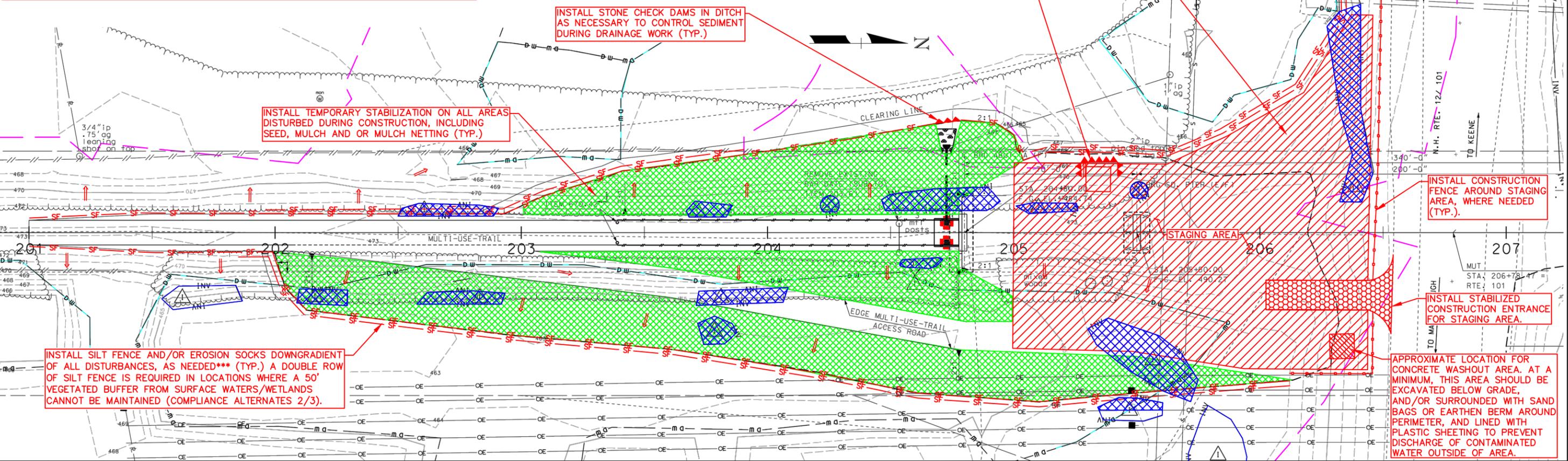
INSTALL TEMPORARY STABILIZATION ON ALL AREAS DISTURBED DURING CONSTRUCTION, INCLUDING SEED, MULCH AND OR MULCH NETTING (TYP.)

INSTALL SILT FENCE AND/OR EROSION SOCKS DOWNGRADIENT OF ALL DISTURBANCES, AS NEEDED*** (TYP.) A DOUBLE ROW OF SILT FENCE IS REQUIRED IN LOCATIONS WHERE A 50' VEGETATED BUFFER FROM SURFACE WATERS/WETLANDS CANNOT BE MAINTAINED (COMPLIANCE ALTERNATES 2/3).

INSTALL CONSTRUCTION FENCE AROUND STAGING AREA, WHERE NEEDED (TYP.)

INSTALL STABILIZED CONSTRUCTION ENTRANCE FOR STAGING AREA.

APPROXIMATE LOCATION FOR CONCRETE WASHOUT AREA. AT A MINIMUM, THIS AREA SHOULD BE EXCAVATED BELOW GRADE, AND/OR SURROUNDED WITH SAND BAGS OR EARTHEN BERM AROUND PERIMETER, AND LINED WITH PLASTIC SHEETING TO PREVENT DISCHARGE OF CONTAMINATED WATER OUTSIDE OF AREA.



STORMWATER POLLUTION PREVENTION PLANS FOR CPM CONSTRUCTORS FOR
NHDOT KEENE-SWANZEY X-A000(458), 10309P
NEW HAMPSHIRE ROUTE 12 AND 101, KEENE, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY
1	03/17/16	EXPANSION OF SOUTH STAGING AREA ALONG NH ROUTE 12/101	SAW	SAW	RJF
1	03/15/16	REVISIONS PER NHDOT BUREAU OF ENVIRONMENT REVIEW	SAW	SAW	RJF

SCALE: 1" = 40'	1
DESIGNED BY: SAW	
DRAWN BY: JDD	
CHECKED BY: RJF	
DATE: 03/11/16	
PROJ. NO. 12689	SHEET 1 OF 4

DEWATERING TREATMENT AREA (IF NEEDED): USE APPROVED FILTER BAG AND/OR SETTLING BASIN, PER DETAIL ON SHEET 4, TO TREAT CONTAMINATED FLOW FROM WITHIN WORK AREA. LOCATE A MINIMUM OF 20 FEET FROM WETLANDS AND SURFACE WATERS, INSTALL ADDITIONAL FLOW CONTROLS DOWNSTREAM OF TREATMENT AREA AS NECESSARY.

INSTALL STONE CHECK DAMS IN DITCH AS NECESSARY TO CONTROL SEDIMENT DURING DRAINAGE WORK (TYP.)

INSTALL TEMPORARY STABILIZATION ON ALL AREAS DISTURBED DURING CONSTRUCTION, INCLUDING SEED, MULCH AND OR MULCH NETTING (TYP.)

INSTALL CONSTRUCTION FENCE AROUND STAGING AREA, OR WHERE NEEDED TO PREVENT DISTURBANCE IN INVASIVE AREAS (TYP.)

INSTALL STABILIZED CONSTRUCTION ENTRANCE FOR STAGING AREA.

APPROXIMATE LOCATION FOR CONCRETE WASHOUT AREA. AT A MINIMUM, THIS AREA SHOULD BE EXCAVATED BELOW GRADE, AND/OR SURROUNDED WITH SAND BAGS OR EARTHEN BERM AROUND PERIMETER, AND LINED WITH PLASTIC SHEETING TO PREVENT DISCHARGE OF CONTAMINATED WATER OUTSIDE OF AREA.

ON-SITE CONSTRUCTION STAGING AREA: STAGING FOR BRIDGE WORK ANTICIPATED BETWEEN THE PROPOSED ABUTMENT AND EDGE OF ROADWAY. STAGING AREA SHALL HAVE PERIMETER EROSION CONTROLS (SILT FENCE OR EROSION SOCKS) AND CRUSHED STONE ON SURFACE. SEPARATE PERIMETER EROSION CONTROLS MAY BE NEEDED FOR ANY EARTHEN MATERIAL STORAGE/STOCKPILING THAT WILL OCCUR WITHIN THIS AREA (TYP.)

INSTALL SILT FENCE AND/OR EROSION SOCKS DOWNGRADIENT OF ALL DISTURBANCES, AS NEEDED*** (TYP.) A DOUBLE ROW OF SILT FENCE IS REQUIRED IN LOCATIONS WHERE A 50' VEGETATED BUFFER FROM SURFACE WATERS/WETLANDS CANNOT BE MAINTAINED (COMPLIANCE ALTERNATES 2/3).

INVASIVE SPECIES AREAS: INVASIVE AREAS TO BE REMOVED/REMIEDIATED PRIOR TO WORK IN ACCORDANCE WITH THE INVASIVE SPECIES MANAGEMENT PLAN. ALL CLEARING, GRUBBING, STRIPING, EXCAVATION OR OTHER DISTURBANCE SHALL BE COMPLETED IN A SINGLE CONTAINED OPERATION TO LIMIT TRACKING AND SPREADING OF INVASIVE PLANT DEBRIS. DISTURBANCE OF THIS AREA SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROVED INVASIVE SPECIES CONTROL AND MANAGEMENT PLAN AND RELATED REQUIREMENTS.



*****GENERAL STABILIZATION OF WORK AREAS:** RESTABILIZE VEGETATED AREAS DISTURBED DURING WORK ON TEMPORARY AND/OR PERMANENT BASIS WITH SEED AND MULCH, AT A MINIMUM, AND EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1. PLACE PERIMETER CONTROLS, SUCH AS SILT FENCE OR EROSION SOCKS, DOWN-GRADE OF DISTURBANCE AREA OR AT TOE OF SLOPE WHEN NECESSARY AND AS DETERMINED IN FIELD. PERIMETER CONTROLS SHOULD BE IN PLACE PRIOR TO DISTURBANCES. SILT FENCE NOT NECESSARY DOWN-GRADE OF DISTURBED AREAS WHERE ONLY STONE AGGREGATE MATERIALS USED ON SHOULDER OR SLOPE, AND WHEN AREAS ARE IMMEDIATELY STABILIZED (BY END OF EACH WORK DAY), WITH MULCH NETTING OR EROSION CONTROL BLANKETS.

50' NATURAL BUFFER OFFSET:
COMPLIANCE ALT. #1 - A 50' BUFFER WILL BE MAINTAINED IN THE FOLLOWING AREAS:
 STA. 207+00 TO 207+30 LT
COMPLIANCE ALT. #2 - A REDUCED BUFFER OF 0-50' WILL BE MAINTAINED IN THE FOLLOWING AREAS, WITH WORK CONTAINED WITH EROSION AND SEDIMENT CONTROL MEASURES:
 STA. 207+30 TO 208+40 LT
 STA. 207+00 TO 207+55 RT
 STA. 209+30 TO 212+50 LT
 STA. 210+40 TO 212+50 RT
COMPLIANCE ALT. #3 - NO BUFFER WILL BE MAINTAINED DUE TO DISTURBANCES WITHIN WETLANDS AND/OR SURFACE WATERS. AREAS ADJACENT TO DISTURBANCES SHALL BE CONTAINED WITH EROSION AND SEDIMENT CONTROLS, AND STABILIZED THE SAME DAY WORK IS COMPLETED:
 STA. 207+55 TO 210+40 RT
 STA. 208+40 TO 209+30 LT

KEY TO EROSION CONTROL SYMBOLS:

- INLET PROTECTION
- SILT FENCE
- EROSION CONTROL SOCK
- CONSTRUCTION FENCE
- STONE CHECK DAM
- DIRECTION OF FLOW ARROW
- TURBIDITY BARRIER

- HATCHING DENOTES TEMPORARY STAGING AREAS
- HATCHING DENOTES MULCH OR MULCH NETTING
- STABILIZED CONSTRUCTION ENTRANCE
- HATCHING DENOTES INVASIVE SPECIES AREAS THAT MAY BE DISTURBED

NOTE:

1. REFERENCE MADE TO PLANS BY NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "CONSTRUCTION PLANS, MULTI-USE-TRAIL OVER N.H. ROUTE 12/N.H. ROUTE 101, FEDERAL AID PROJECT, X-A000(458), NH PROJECT NO. 10309P, SHEETS NO. 9, AND 10, DATED SEPTEMBER, 2015, BY NHDOT.
2. IN THE EVENT OF CONFLICT BETWEEN DETAILS, EROSION CONTROLS AND/OR RELATED NOTES SHOWN ON PATHWAYS SWPPP PLANS AND NHDOT CONTRACT DOCUMENTS, CONTRACT DOCUMENTS SHALL GOVERN EXCEPT WHERE MORE STRINGENT REGULATORY REQUIREMENTS APPLY.

SWPPP PLAN UPDATES DURING FIELD CONSTRUCTION:

SITE OPERATOR AND/OR SWPPP MONITOR SHALL BE RESPONSIBLE FOR UPDATING THESE SWPPP PLANS IN ACCORDANCE WITH THE CGP AND SWPPP REQUIREMENTS, AND THE FOLLOWING GUIDELINES:

1. PLANS SHOULD BE UPDATED ON A DAILY BASIS, AND AT A MINIMUM ONCE EVERY SEVEN (7) DAYS DURING WEEKLY SWPPP MONITORING VISITS.
2. NOTE LOCATIONS FOR ALL STORMWATER, SEDIMENT AND EROSION CONTROL MEASURES INSTALLED DURING FIELD WORK.
3. NOTE DATE OF INITIAL GROUND DISTURBANCE IN EACH WORK AREA.
4. NOTE DATE WHEN TEMPORARY STABILIZATION MEASURES ARE INSTALLED.
5. NOTE DATE WHEN FINAL STABILIZATION MEASURES ARE INSTALLED, AND WHEN AREA HAS BEEN FULLY STABILIZED.

STATION 207+00 TO 212+50 SWPPP PLAN SHEET 2 (NHDOT OVERALL SHEET 10)

REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY
1	03/15/16	REVISIONS PER NHDOT BUREAU OF ENVIRONMENT REVIEW	SAW	SAW	RJF

STORMWATER POLLUTION PREVENTION PLANS FOR CPM CONSTRUCTORS FOR
NHDOT KEENE-SWANZEY X-A000(458), 10309P
 NEW HAMPSHIRE ROUTE 12 AND 101, KEENE, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC
 240 MECHANIC STREET, SUITE 100
 LEBANON, NEW HAMPSHIRE 03766
 (603) 448-2200

SCALE: 1" = 40'
DESIGNED BY: SAW
DRAWN BY: JDD
CHECKED BY: RJF
DATE: 03/11/16
PROJ. NO. 12689

EROSION CONTROL SPECIFICATIONS

- SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH "NEW HAMPSHIRE STORMWATER MANAGEMENT" VOLUMES 1, 2, & 3, DECEMBER 2008 (OR LATEST EDITION). THE CONTRACTOR SHALL HAVE REFERENCE TO THESE PUBLICATIONS.
- IMMEDIATE ATTENTION TO EROSION CONTROL PRACTICES DRAMATICALLY IMPROVES SOIL AND MOISTURE CONSERVATION AND REDUCES NEGATIVE IMPACTS ON WATER QUALITY. THE CONTRACTOR SHALL GIVE PRIORITY TO THE TIMELY INSTALLATION OF BOTH TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES.
- THE EROSION AND SEDIMENT CONTROL PRACTICES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIRED FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE PRACTICES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THE PLANS SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT SHALL NOT EXCEED 5 ACRES AT ANY ONE TIME BEFORE STABILIZATION, UNLESS OTHERWISE APPROVED BY NHDOT AND ADDRESSED ADEQUATELY IN THE SWPPP AND EROSION CONTROL PLANS. A CONSTRUCTION SEQUENCE HAS BEEN DEVELOPED TO FACILITATE INSTALLATION OF EROSION CONTROL MEASURES AND THE COMPLETION OF GRADING, SEEDING, AND LANDSCAPING AS SOON AS POSSIBLE WITHIN A DISTURBED AREA.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT. ANY SEDIMENT TRACKED ONTO PAVED AREAS SHALL BE REMOVED BY THE END OF THE SAME WORK DAY IT IS NOTED, AND IF NOTED ON A NON-WORK DAY, NOT LATER THAN THE END OF THE NEXT WORK DAY.
- EARTH STOCKPILES SHALL BE SEEDED AND MULCHED AND HAVE A SILT FENCE INSTALLED ON THE DOWN-SLOPE SIDE AT A MINIMUM. STOCKPILES SHALL BE COVERED WITH IMPERVIOUS TARPS AND/OR STABILIZED WITH TEMPORARY SEED AND MULCH TO PROTECT MATERIALS IN THE EVENT THAT THEY WILL REMAIN FOR LONGER THAN 1 MONTH.
- INSTALL EROSION CONTROL MEASURES AS SHOWN. CLEAN ACCUMULATED SEDIMENT AS NECESSARY. LEAVE IN PLACE UNTIL DISTURBED AREAS HAVE BEEN ADEQUATELY STABILIZED. DISTURBED AREAS RESULTING FROM SILT FENCE REMOVAL SHALL BE PERMANENTLY SEEDDED.
- CUT AND FILL SLOPES CALL FOR INTENSIVE EROSION CONTROL MEASURES. INSTALL MULCH NETTING OR OTHER SLOPE STABILIZATION MEASURES AS SHOWN ON NHDOT CONSTRUCTION PLANS FOR ALL SLOPES 3:1 (1 RISE ON 3 RUN) AND STEEPER.
- ALL DISTURBED AREAS SHALL BE TEMPORARILY STABILIZED WITH MULCH AND/OR MULCH NETTING BEFORE THE END OF EACH WORK DAY.
- ROADWAYS SHALL BE STABILIZED WITH BASE COURSE AND BINDER WITHIN 3 WEEKS OF INITIAL DISTURBANCE OF THE SLOPES ON A SECTION OF ROADWAY, IN ADDITION TO COMPLETING DISTURBED SLOPES TO FINAL GRADE WITH FINAL SEEDING OR OTHER PRESCRIBED STABILIZATION.
- WHEN WORK IS SUSPENDED WITHIN THE GROWING SEASON, ALL DISTURBED AREAS SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH WITHIN 14 DAYS. OUTSIDE THE GROWING SEASON, ALL DISTURBED AREAS SHALL BE TEMPORARILY STABILIZED WITH MULCH; MULCH AND TACK ON SLOPES STEEPER THAN 3:1; OR EROSION MATTING ON SLOPES STEEPER THAN 2:1.
- TEMPORARY STABILIZATION OF DISTURBED AREAS:

- SEED BED PREPARATION: TILL THREE INCHES DEEP MIXING IN FERTILIZER. APPLY 2 TONS/ACRE (100#/1,000 SQ. FT.)
- FERTILIZER: UNIFORMLY APPLY NOT LESS THAN 300#/ACRE (7#/1,000 SQ. FT.) OF 10-20-20 OR EQUIVALENT.
- SEEDING: SELECT APPROPRIATE SEEDING MIXTURE FROM TABLE 1 BELOW. SPREAD SEED UNIFORMLY. FIRM SOIL BY ROLLING OR PACKING; IF NOT FEASIBLE, THEN RAKE LIGHTLY TO COVER SEEDS.
- MULCHING: MULCH ALL DISTURBED AREAS WITH 1-1/2 TO 2 TONS OF HAY OR STRAW PER ACRE (70-90#/1,000 SQ. FT.). ANCHOR ON ALL SLOPES 3:1 OR STEEPER AND ON SLOPES SUBJECT TO WASH OR WIND BLOWN CONDITIONS. JUTE OR OTHER BIODEGRADABLE NETTING, STAKING AND STABLING MAY BE REQUIRED.

TABLE 1
PLANT SELECTION AND SEEDING RATES

SPECIES	PER ACRE	PER 1,000 SQ.FT.	REMARKS
WINTER RYE	2 BU OR 112 LBS.	2.5 LBS.	BEST FOR FALL SEEDING. SEED AUGUST 15 TO SEPTEMBER 15 FOR BEST COVER. SEED TO DEPTH OF ONE INCH.
OATS	2 1/2 BU OR 80 LBS.	2 LBS.	BEST FOR SPRING SEEDINGS. LATER THAN MAY 15 FOR SUMMER PROTECTION. SEED TO DEPTH OF ONE INCH.
ANNUAL RYE	40 LBS.	1 LB.	GROWS QUICKLY, BUT IS OF SHORT GRASS DURATION. USE WHERE APPEARANCES ARE IMPORTANT. COVER SEED WITH NO MORE THAN 1/4 INCH OF SOIL. WITH MULCH, SEEDING MAY BE DONE THROUGHOUT GROWING SEASON. OTHERWISE SEED EARLY SPRING OR BETWEEN AUGUST 15 & SEPTEMBER 15.

- PERMANENT STABILIZATION OF DISTURBED AREAS:
- SEED BED PREPARATION: TOPSOIL (SANDY LOAM, LOAM, OR SILT LOAM), FRIABLE, FREE OF STUMPS, WOOD, AND ROOTS. STONES MORE THAN 1-1/2 INCHES IN DIAMETER OR LENGTH SHALL BE PLACED OVER ALL DISTURBED AREAS IN A 4" (MINIMUM) THICK LAYER. TOPSOIL SHALL BE FREE OF HERBICIDES AND TOXIC MATERIALS. TILL THREE INCHES DEEP, MIXING IN THE FERTILIZER AND LIME.
- FERTILIZER: UNIFORMLY APPLY NOT LESS THAN 500#/ACRE (12#/1,000 SQ. FT.) OF 10-20-20 OR EQUIVALENT.
- SEEDING: SPREAD SEED UNIFORMLY. FIRM SOIL BY ROLLING OR PACKING; IF NOT FEASIBLE, THEN RAKE LIGHTLY TO COVER SEEDS.
- MULCHING: MULCH ALL DISTURBED AREAS WITH 1-1/2 TO 2 TONS OF HAY OR STRAW PER ACRE (70-90#/1,000 SQ. FT.). ANCHOR ON ALL SLOPES 3:1 OR STEEPER AND ON SLOPES SUBJECT TO WASH OR WIND BLOWN CONDITIONS. JUTE OR OTHER BIODEGRADABLE NETTING, STAKING AND STABLING MAY BE REQUIRED.

GRASS MATERIALS (SHADY GENERAL LAWN MIX)

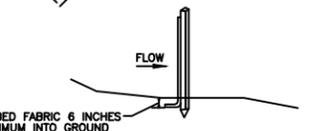
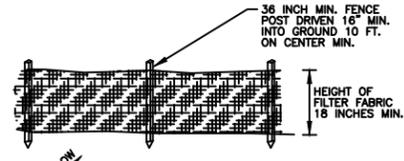
GRASS SEED SHALL BE FRESH, CLEAN, NEW-CROP SEED AND SHALL MEET THE PROVISIONS OF THE NEW HAMPSHIRE AGRICULTURAL AND VEGETABLE SEEDS LAW. SEED SPECIFIED IN THIS SECTION SHALL MEET THE FOLLOWING ANALYSIS:

	LBS./ACRE
CHEWING FESCUE 'SR 5000'	40
CHAMPION PERENNIAL RYE GRASS	30
HARD FESCUE 'SR 3000'	25
RED FESCUE - 'PENNLAWN'	25
BLUEGRASS - 'GLADE'	10
	130 LBS./ACRE

OTHER SEED MIXTURES AND SEEDING RATES AS RECOMMENDED BY THE USDA - SOIL CONSERVATION SERVICE AND APPROVED BY OWNER MAY BE UTILIZED ONLY UPON PRIOR WRITTEN PERMISSION FROM THE ENGINEER.

- MAINTENANCE: REGULAR MAINTENANCE SHALL OCCUR DURING THE CONSTRUCTION PERIOD UNTIL SUCH TIME AS PERMANENT STABILIZATION IS ESTABLISHED. MINOR MAINTENANCE ACTIVITIES RECOMMENDED ON REGULAR INSPECTION REPORTS SHALL BE ADDRESSED BY THE END OF THE NEXT WORK DAY. ADDITIONAL MAINTENANCE MAY INCLUDE:
 - DISTURBED AREAS WILL BE FERTILIZED AND RESEEDED, WHERE NECESSARY.
 - CATCH BASINS WILL BE CHECKED AND CLEANED AS NECESSARY.
 - DRAINAGE AND GRASS TREATMENT SWALES SHALL BE CHECKED FREQUENTLY AND CLEANED AS REQUIRED.
 - THE SILT FENCES AND HAYBALE DIKES WILL BE CHECKED ON A REGULAR BASIS AND REPAIRED AS NECESSARY TO CORRECT ANY DAMAGE, DETERIORATION, AND SHORT CIRCUITING. SEDIMENT WILL BE REMOVED WHEN IT REACHES ON-THIRD OF THE HEIGHT OF SILT FENCE AND ONE-HALF THE HEIGHT OF OTHER BMP'S SUCH AS EROSION CONTROL SOCKS.
 - THE BOTTOM OF SEDIMENT BASINS SHALL BE PERIODICALLY CLEANED, WITH THE SEDIMENT REMOVED TO A SECURE LOCATION.
- SITE VISITS: THE SWPPP MONITOR SHALL BE CONTACTED ON A REGULAR BASIS TO OBSERVE THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL PRACTICES, AND IN THE EVENT OF ANY EROSION, SEDIMENTATION OR TURBIDITY ISSUES THAT ARISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE APPROVED SWPPP AND EROSION CONTROL PLANS ARE KEPT UPDATED REGULARLY.
- ALL PERMANENT DITCHES, SWALES AND DRAINAGE STRUCTURES SHALL BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMP'S PRIOR TO DIRECTING RUNOFF TO THEM.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROLS DAILY AND PRIOR TO ANY ANTICIPATED RAIN EVENTS. THE SWPPP MONITOR SHALL INSPECT ALL EROSION CONTROLS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.25" OR GREATER RAINFALL THAT OCCURS WITHIN A 24 HOUR PERIOD. ALL DAMAGED SILT FENCES SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL BE REMOVED AS NECESSARY.
- THE MAXIMUM AMOUNT OF TIME ANY AREA MAY BE DISTURBED WITHOUT STABILIZATION SHALL BE 14 DAYS.
- AN AREA SHALL BE CONSIDERED PERMANENTLY STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED; OR
 - NON-VEGETATIVE COVER, SUCH AS HYDROMULCH AND EROSION CONTROL BLANKETS, RIPRAP, STONE FILL, GABIONS AND/OR GEOTEXTILES HAVE BEEN PROPERLY INSTALLED.
- WINTER CONSTRUCTION NOTES:
 - TEMPORARY SEEDING SHALL OCCUR PRIOR TO SEPTEMBER 15TH
 - ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH NETTING SHALL OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
 - ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS; AND
 - AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

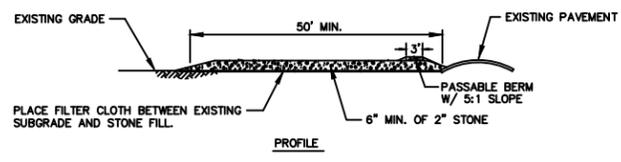
***SEE SEPARATE SWPPP NARRATIVE FOR DETAILED WORK PHASES, CONSTRUCTION SEQUENCING AND RELATED EROSION CONTROLS.



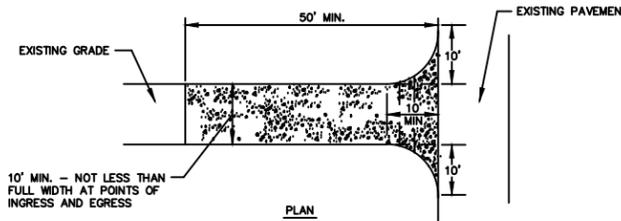
CONSTRUCTION SPECIFICATIONS

- SILT FENCE MAY BE EITHER PREMANUFACTURED OR PREPARED ON SITE. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- SILT FENCE SHALL BE LOCATED AS SHOWN ON THE PLAN AND WHEREVER CONSTRUCTION ACTIVITIES MAY RESULT IN A TEMPORARY RUNOFF TO A STREAM OR WETLAND WHICH MAY CARRY SILT OR SEDIMENT.
- THE TRENCH SHALL BE TOED IN PLACE BY PLACING IN A 6 INCH TRENCH AND BACKFILLING WITH A SUITABLE MATERIAL.
- WHEN A TRENCH CANNOT BE CONSTRUCTED, THE FABRIC MAY BE FOLDED AT THE BASE IN A MANNER SUCH THAT A MINIMUM OF 6 INCHES OF FABRIC LIES ON THE GROUND TOWARD THE DIRECTION OF FLOW. THE FOLDED FABRIC SHALL BE COVERED TO A DEPTH OF 4 INCHES WITH SUITABLE MATERIAL EXTENDING A MINIMUM OF 4 INCHES BEYOND THE FABRIC.
- SUPPORTING STAKES SHALL BE PLACED NO MORE THAN 10 FEET APART.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED. FENCING SHALL BE REPLACED WHEN TORN, WHEN TRENCHING IS DISTURBED, WHEN THE FENCE DISPLAYS PILING AS EVIDENCED BY SILT-LADEN APPEARANCE, WHEN WATER IS EXCESSIVELY RETARDED BY THE FENCE, OR WHENEVER "BULGES" APPEAR.

SILT FENCE
N.T.S.



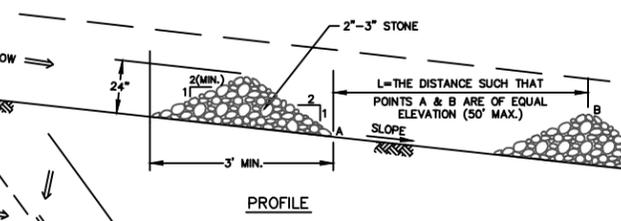
PROFILE



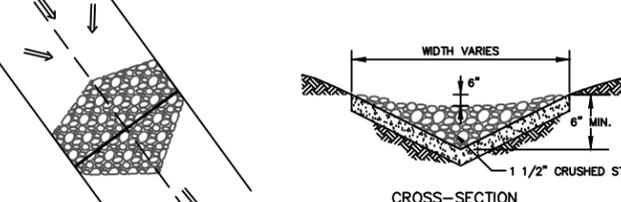
PLAN

- NOTES:
- MAINTAIN ENTRANCE TO PREVENT TRACKING OF SEDIMENT INTO PUBLIC R.O.W. REDUCE TRACKING OF SILTS ONTO PUBLIC R.O.W. BY CLEANING OR TOP DRESSING STONE FILL.
 - PROVIDE SEPARATE WHEEL CLEANING AREA WITH SUITABLE SEDIMENTATION BASIN.

STABILIZED CONSTRUCTION ENTRANCE
N.T.S.

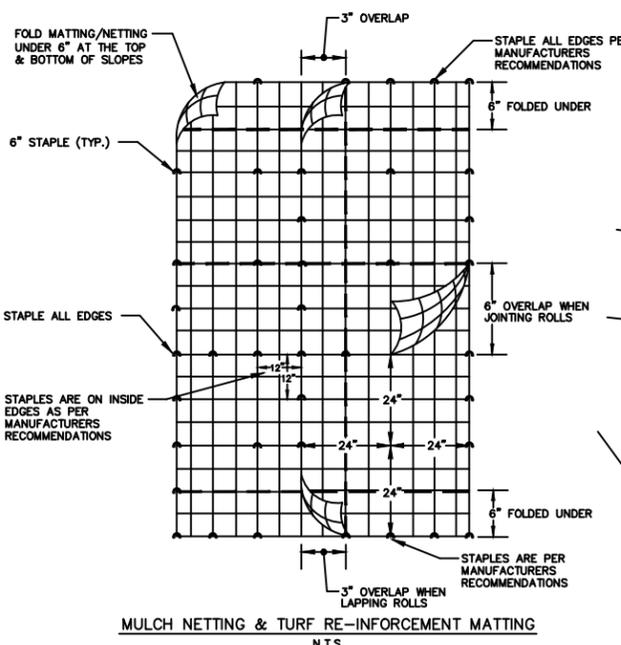


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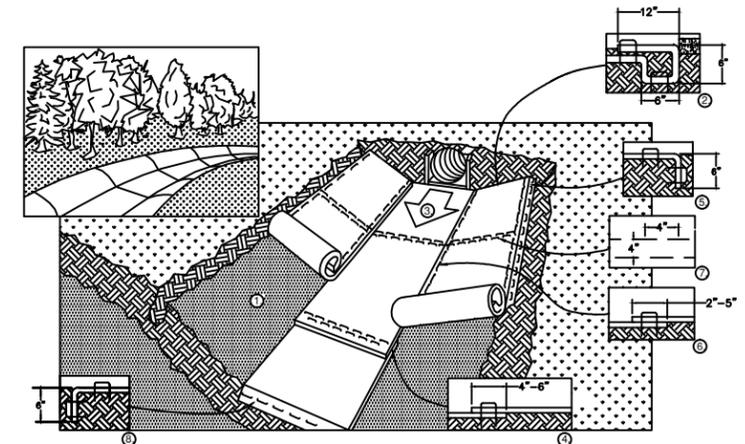


CROSS-SECTION

STONE CHECK DAMS
N.T.S.

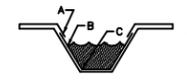


MULCH NETTING & TURF RE-INFORCEMENT MATTING
N.T.S.



- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (REC'P'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE REC'P'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF REC'P'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE REC'P'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF REC'P'S BACK OVER SEED AND COMPACTED SOIL. SECURE REC'P'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE REC'P'S.
- ROLL CENTER REC'P'S IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. REC'P'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL REC'P'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- PLACE CONSECUTIVE REC'P'S END OVER END (SHINGLE STYLE) WITH A 4" - 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE REC'P'S.
- FULL LENGTH EDGE OF REC'P'S AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ADJACENT REC'P'S MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (DEPENDING ON REC'P'S TYPE) AND STAPLED.
- IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- THE TERMINAL END OF THE REC'P'S MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

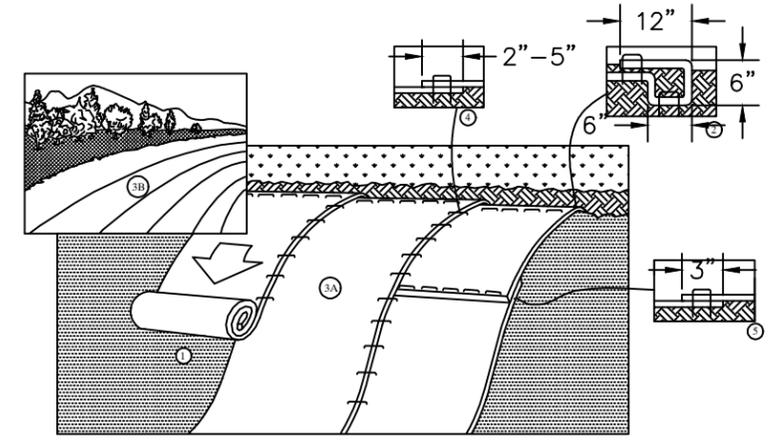
NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE REC'P'S.



CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROTECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

- NOTE:
- HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
 - IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE REC'P'S.

EROSION CONTROL BLANKETS - CHANNEL/DITCH/SWALE INSTALLATION
N.T.S.



SLOPE INSTALLATION

- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (REC'P'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE REC'P'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF REC'P'S BACK OVER SEED AND COMPACTED SOIL. SECURE REC'P'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE REC'P'S.
- ROLL THE REC'P'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. REC'P'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL REC'P'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL REC'P'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON REC'P'S TYPE.
- CONSECUTIVE REC'P'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP, STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE REC'P'S WIDTH.

NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE REC'P'S.

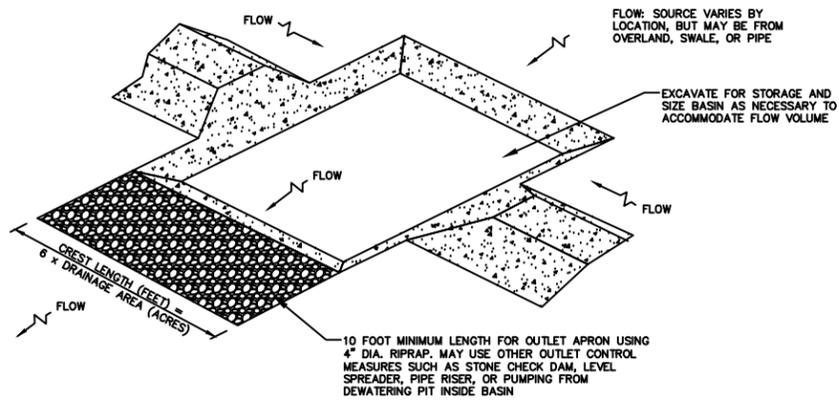
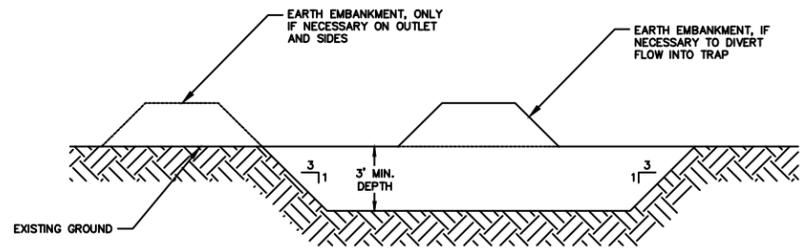
EROSION CONTROL BLANKETS - SLOPE INSTALLATION
N.T.S.

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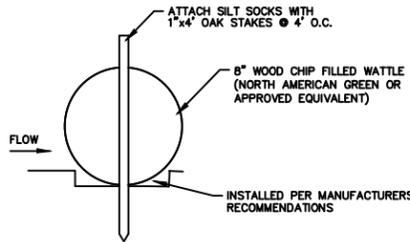
STORMWATER POLLUTION PREVENTION DETAILS FOR CPM CONSTRUCTORS FOR
NHDOT KEENE-SWANZEY X-A000(458), 10309P
NEW HAMPSHIRE ROUTE 12 AND 101, KEENE, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

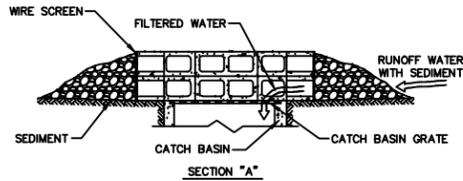
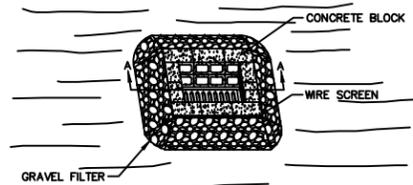
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DRAWN BY: JDD
CHECKED BY: RJF
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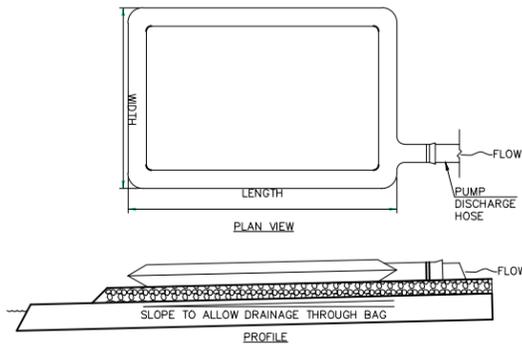
TEMPORARY SEDIMENT BASIN (TYP.)
N.T.S.



EROSION CONTROL SOCK DETAIL
N.T.S.



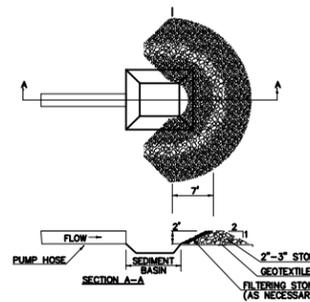
BLOCK & STONE INLET SEDIMENT FILTER DETAIL
N.T.S.



CONSTRUCTION SPECIFICATIONS

1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE SWPPP PLAN OR AS DIRECTED BY THE ENGINEER.

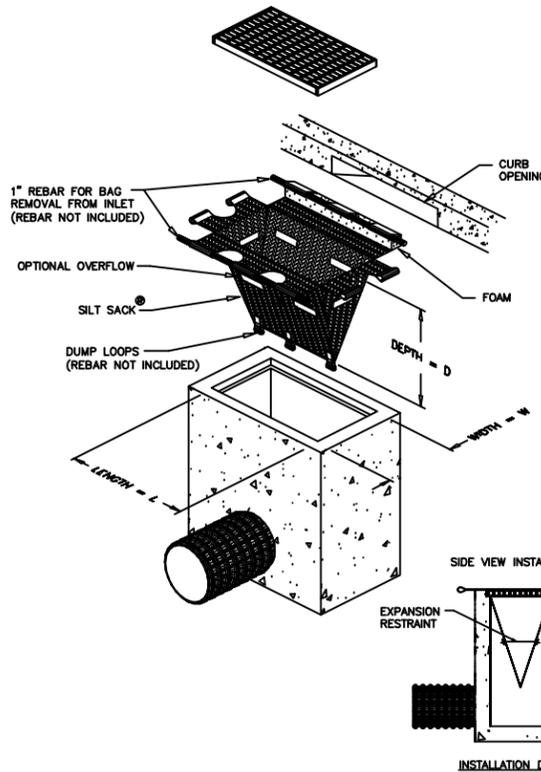
FILTER BAG
N.T.S.



CONSTRUCTION SPECIFICATIONS

1. USE 2" TO 3" STONE. FILTERING STONE SHALL BE 3/4".
2. PLACE STONE OVER GEOTEXTILE.
3. ONCE PUMPING IS COMPLETE FOR THE PROJECT, THE SEDIMENT TRAPPED BEHIND THE DAM SHALL BE DISPOSED OF IN AN APPROVED WASTE AREA.
4. THE CHECK DAM(S) SHALL BE REMOVED AND THE AREA STABILIZED AND RESTORED TO NEAR PRE-CONSTRUCTION CONDITION.

CHECK DAM FOR HOSE OUTLET PROTECTION
N.T.S.



SILTSACK® SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW SILTSACK

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

HI-FLOW SILTSACK

(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

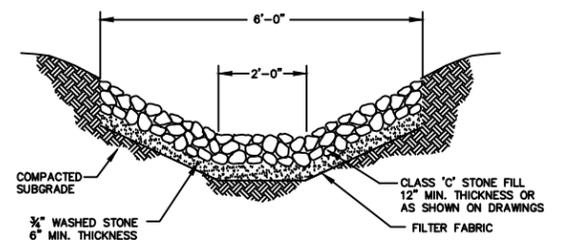
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

OIL-ABSORBANT SILTSACK

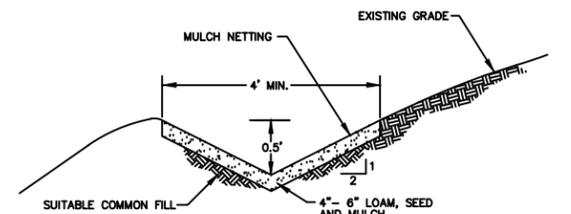
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLow INSERT OR MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK®, WITH A WOVEN PILLow INSERT.

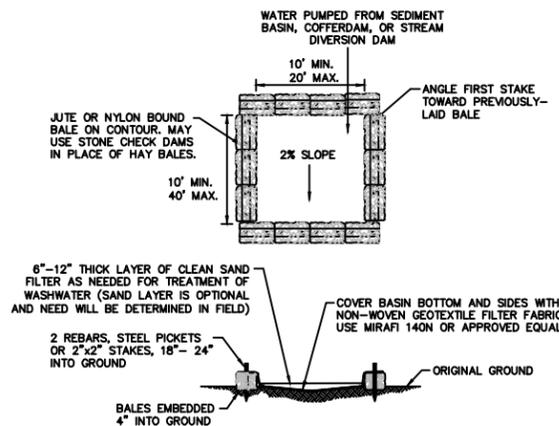
SILT SACK - INLET FILTER BAG
N.T.S.



STONE LINED DITCH
N.T.S.

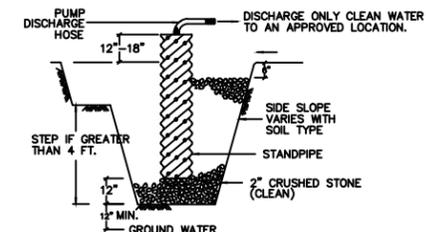


DIVERSION DITCH
N.T.S.



- NOTE:
1. GOAL IS FOR ALL CONTAMINATED WATER TO FLOW THROUGH NON-WOVEN FABRIC, AND SAND LAYER AS DEEMED NECESSARY, PRIOR TO EXITING BASIN.
 2. BASIN SIZE TO VARY BASED ON EXPECTED VOLUME OF WASHWATER, BUT SHOULD NOT EXCEED LIMITS INDICATED ABOVE.
 3. CONTRACTOR MAY USE MULTIPLE CELLS TO INCREASE TREATMENT CAPACITY.
 4. DETAIL AS SHOWN IS INTENDED TO PROMOTE INFILTRATION INTO GROUND BELOW BASIN. WHERE INFILTRATION IS NOT DESIRED DUE TO UNSUITABLE SOIL CONDITIONS, CLOSE PROXIMITY TO SENSITIVE RESOURCES, OR OTHER CONDITIONS, CONTRACTOR SHALL USE IMPERVIOUS PLASTIC LINER ON BOTTOM AND THREE SIDES WITH NON-WOVEN FABRIC ON DOWNGRADIENT END TO ALLOW WATER TO EXIT BASIN IN DESIRED DIRECTION AWAY FROM SENSITIVE RESOURCES.
 5. LOCATE BASIN A MINIMUM OF 20 FEET FROM ANY SURFACE WATERS, WETLANDS, DRAINAGE FEATURES WITH A MINIMUM OF 50 FEET OF UNDISTURBED VEGETATED BUFFER DOWN-GRADIENT OF DISCHARGE POINT.

SETTLING BASIN/SAND FILTER FOR DEWATERING CONTROL
N.T.S.



INSTALLATION NOTES

1. PIT DIMENSIONS ARE VARIABLE.
2. THE STANDPIPE SHOULD BE A PERFORATED 12" TO 24" DIAMETER CORRUGATED METAL, PVC OR HDPE PIPE.
3. A BASE OF 2" CLEAN CRUSHED 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 2" CRUSHED STONE.
4. THE STANDPIPE SHOULD EXTEND 12" - 18" ABOVE THE LIP OF THE PIT.
5. IF DISCHARGE WILL BE PUMPED DIRECTLY INTO THE WETLAND OR STREAM CHANNEL, THE STANDPIPE SHOULD BE WRAPPED WITH FILTER FABRIC BEFORE INSTALLATION. IF DESIRED, 1/4" - 1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE, PRIOR TO ATTACHING THE FILTER FABRIC, THIS WILL INCREASE THE RATE OF WATER SEEPAGE INTO THE PIPE.

DEWATERING STRUCTURE
N.T.S.

STORMWATER POLLUTION PREVENTION DETAILS FOR CPM CONSTRUCTORS FOR
NHDOT KEENE-SWANZEY X-A000(458), 10309P
NEW HAMPSHIRE ROUTE 12 AND 101, KEENE, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: SAW
DRAWN BY: JDD
CHECKED BY: RJF
DATE: 03/11/16
PROJ. NO. 12689

4

SHEET 4 OF 4

REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

APPENDIX D
COPY OF CONSTRUCTION GENERAL PERMIT

**National Pollutant Discharge Elimination System
General Permit for Discharges from
Construction Activities**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*, (hereafter CWA or the Act), as amended by the Water Quality Act of 1987, P.L. 100-4, "operators" of construction activities (defined in Part 1.1.a and Appendix A) that meet the requirements of Part 1.1 of this National Pollutant Discharge Elimination System (NPDES) general permit, are authorized to discharge pollutants in accordance with the effluent limitations and conditions set forth herein. Permit coverage is required from the "commencement of earth-disturbing activities" (see Appendix A) until "final stabilization" (see Part 2.2).

This permit becomes effective on **February 16, 2012**. For the State of Idaho (except for Indian country), this permit becomes effective on **April 9, 2012**. For areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, this permit becomes effective on **April 13, 2012**. For projects located in the following areas, this permit becomes effective on **May 9, 2012**: Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

This permit and the authorization to discharge expire at midnight, **February 16, 2017**.

Signed and issued this 16 th day of February, 2012 H. Curtis Spalding Regional Administrator, Region 1	Signed and issued this 16 th day of February, 2012 William K. Honker, P.E. Acting Director, Water Quality Protection Division, Region 6
---	---

Signed and issued this 16 th day of February, 2012 John Filippelli Director, Division of Environmental Planning & Protection, Region 2	Signed and issued this 16 th day of February, 2012 Karen Flournoy Director, Wetlands and Pesticides Division, Region 7
--	---

Signed and issued this 16 th day of February, 2012 José C. Font Acting Division Director, Caribbean Environmental Protection Division, Region 2, Caribbean Office	Signed and issued this 16 th day of February, 2012 Melanie L. Pallman Acting Assistant Regional Administrator, Office of Partnerships and Regulatory Assistance, Region 8
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Signed and issued this 16 th day of February, 2012 Catherine A. Libertz Assistant Director, Water Protection Division, Region 3	Signed and issued this 16 th day of February, 2012 Nancy Woo Deputy Director, Water Division, Region 9
--	---

Signed and issued this 16 th day of February, 2012 James D. Giattina Director, Water Protection Division, Region 4	Signed and issued this 16 th day of February and 9 th day of April, 2012 Michael J. Lidgard Acting Director, Office of Water and Watersheds, Region 10
---	--

Signed and issued this 16 th day of February and 9 th day of May, 2012 Tinka G. Hyde Director, Water Division, Region 5	Signed and issued this 13 th day of April, 2012 Christine Fytk Associate Director, Office of Water and Watersheds, Region 10
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The signatures are for the permit conditions in Parts 1 through 9 and Appendices A through K.

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1. HOW TO OBTAIN PERMIT COVERAGE UNDER THE CGP.

To be covered under this permit, you must meet the eligibility conditions and follow the requirements for applying for permit coverage in this Part.

1.1. ELIGIBILITY CONDITIONS REQUIRED OF ALL PROJECTS.

Only those projects that meet all of the following eligibility conditions may be covered under this permit:

- a. You are an "operator" of the construction project for which discharges will be covered under this permit:

Note: For the purposes of this permit, an "operator" is any party associated with a construction project that meets either of the following two criteria:

- 1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or*
- 2. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).*

Subcontractors generally are not considered operators for the purposes of this permit.

Note: Where there are multiple operators associated with the same project, all operators are required to obtain permit coverage. The following applies in these situations:

- 1. If one operator has control over plans and specifications and a different operator has control over activities at the project site, they may divide responsibility for compliance with the terms of this permit as long as they develop a group SWPPP (see Part 7.1.1), which documents which operator has responsibility for each requirement of the permit.*
- 2. If an operator only has operational control over a portion of a larger project (e.g., one of four homebuilders in a subdivision), the operator is responsible for compliance with all applicable effluent limits, terms, and conditions of this permit as it relates to the activities on their portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP in the areas under their control.*
- 3. You must ensure either directly or through coordination with other permittees, that your activities do not render another party's pollutant discharge controls ineffective.*
- 4. If the operator of a "construction support activity" (see Part 1.3.c) is different than the operator of the main construction site, that operator is also required to obtain permit coverage.*

- b. Your project:

- Will disturb 1 or more acres of land, or will disturb less than 1 acre of land but is part of a common plan of development or sale that will ultimately disturb 1 or more acres of land; or
 - Your project's discharges have been designated by EPA as needing a permit under § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);
- c. Your project is located in an area where EPA is the permitting authority (see Appendix B):

- Discharges from your project are not:
 - Already covered by a different NPDES permit for the same discharge; or
 - In the process of having coverage under a different NPDES permit for the same discharge denied, terminated, or revoked.^{1, 2}
- You are able to demonstrate that you meet one of the criteria listed in Appendix D with respect to the protection of species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or federally-designated critical habitat;
- You have completed the screening process in Appendix E relating to the protection of historic properties and places; and
- You have complied with all requirements in Part 9 imposed by the applicable state, Indian tribe, or territory in which your construction activities will occur.

1.2. ELIGIBILITY CONDITIONS THAT APPLY DEPENDING ON TYPE OF PROJECT.

You must also satisfy, if applicable, the conditions in Parts 1.2.1 through 1.2.4 in order to obtain coverage under this permit.

1.2.1. Eligibility for Emergency-Related Construction Activities.

If you are conducting earth-disturbing activities in response to a public emergency (e.g., natural disaster, widespread disruption in essential public services), and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish essential public services, you are authorized to discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing earth-disturbing activities (see Table 1) establishing that you are eligible under this permit. You are also required to provide documentation in your SWPPP to substantiate the occurrence of the public emergency.

1.2.2. Water Quality Standards – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are not eligible for coverage under this permit for discharges that EPA, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, EPA may notify you that an individual permit application is necessary in accordance with Part 1.4.5. However, EPA may authorize your coverage under this permit after you have included appropriate controls and implementation procedures designed to bring your discharges into compliance with water quality standards. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

¹ Parts 1.1.d.i and 1.1.d.ii do not include sites currently covered under the 2003 or 2008 CGPs, which are in the process of obtaining coverage under this permit, and sites covered under this permit, which are transferring coverage to a different operator.

² Notwithstanding a project being made ineligible for coverage under this permit because it falls under the description of Parts 1.1.d.i or 1.1.d.ii, above, EPA may waive the applicable requirement after specific review if it determines that coverage under this permit is appropriate.

1.2.3. Discharging to Waters with High Water Quality – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are eligible to discharge to a Tier 2, Tier 2.5, or Tier 3 water only if your discharge will not lower the water quality of the applicable water. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not lower the water quality of the applicable water. See list of Tier 2, Tier 2.5, and Tier 3 waters in Appendix F.

Note: Your project will be considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as a Tier 2, Tier 2.5, or Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

1.2.4. Use of Cationic Treatment Chemicals.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

1.3. Types of Discharges Authorized Under the CGP.

The following is a list of discharges that are allowed under the permit provided that appropriate stormwater controls are designed, installed, and maintained:

- Stormwater discharges, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity under 40 CFR § 122.26(b)(14) or § 122.26(b)(15)(i);
- Stormwater discharges designated by EPA as needing a permit under 40 CFR § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);
- Stormwater discharges from construction support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:
 - The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;
 - The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects;
 - The support activity does not continue to operate beyond the completion of the construction activity at the project it supports; and
 - Stormwater controls are implemented in accordance with Part 2 and, if applicable, Part 3, for discharges from the support activity areas.
- The following non-stormwater discharges from your construction activity, provided that, with the exception of water used to control dust and to irrigate areas to be vegetatively stabilized, these discharges are not routed to areas of exposed soil on your site and you comply with any applicable requirements for these discharges in Part 2:
 - Discharges from emergency fire-fighting activities;

- Fire hydrant flushings;
 - Landscape irrigation;
 - Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
 - Water used to control dust;
 - Potable water including uncontaminated water line flushings;
 - Routine external building washdown that does not use detergents;
 - Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used. You are prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;
 - Uncontaminated air conditioning or compressor condensate;
 - Uncontaminated, non-turbid discharges of ground water or spring water;
 - Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and
 - Construction dewatering water that has been treated by an appropriate control under Part 2.1.3.4; and
- e. Discharges of stormwater listed above in Parts a, b, and c, or authorized non-stormwater discharges in Part d above, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

1.4. SUBMITTING YOUR NOTICE OF INTENT (NOI).

To be covered under this permit, you must submit to EPA a complete and accurate NOI prior to commencing construction activities. The NOI certifies to EPA that you are eligible for coverage according to Part 1.1 and 1.2, and provides information on your construction operation and discharge.

Note: All "operators" (as defined in Appendix A) associated with your construction project, who meet the Part 1.1 eligibility requirements, and who elect to seek coverage under this permit, are required to submit an NOI.

Note: There are two exceptions to the requirement to submit the NOI prior to the commencement of construction activities: (1) for emergency-related projects, and (2) for new projects scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012.³ For these two types of projects, the NOI

³ For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

must be submitted within 30 calendar days after the commencement of earth-disturbing activities (see Part 1.4.2).

Note: You must complete the development of a Stormwater Pollution Prevention Plan (SWPPP) consistent with Part 7 prior to submitting your NOI for coverage under this permit.

1.4.1. How to Submit Your NOI.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOI. Go to www.epa.gov/npdes/stormwater/cgpenoi to access the eNOI system and file an NOI. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOI, and you elect to use it, you must complete the form in Appendix J.

1.4.2. Deadlines for Submitting Your NOI and Your Official Date of Permit Coverage.

Table 1 provides the deadlines for submitting your NOI and your official start date of permit coverage, which differ depending on when you commence construction activities. The following terms are used in Table 1 to establish NOI deadlines:

- a. New project – a construction project that commences construction activities on or after February 16, 2012, or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.
- b. Existing project – a construction project that commenced construction activities prior to February 16, 2012, or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.
- c. New operator of a new or existing project – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

Table 1 NOI Submittal Deadlines and Official Start Date for Permit Coverage.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
New project	You must submit your NOI at least 14 calendar days prior to commencing earth-disturbing activities. <i>Exception:</i> If your project qualifies as an "emergency-related project" under Part 1.2.1, you must submit your NOI by no later than 30 calendar days after commencing	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpenoi), unless EPA notifies you that your authorization has been delayed or denied. <i>Exception:</i> If your project qualifies as

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
	earth-disturbing activities. <i>Exception:</i> If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. ⁴	an "emergency-related project" under Part 1.2.1, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. <i>Exception:</i> If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. ⁵

⁴ For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

⁵ For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
Existing project	You must submit your NOI by no later than May 16, 2012. ⁶ However, if you have not previously obtained coverage under an NPDES permit, you must submit your NOI immediately.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpenoi), unless EPA notifies you that your authorization has been delayed or denied. ⁷
New operator of a new or existing project	You must submit your NOI at least 14 calendar days before the date the transfer to the new operator will take place.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpenoi), unless EPA notifies you that your authorization has been delayed or denied.

Note: If you have missed the deadline to submit your NOI, any and all discharges from your construction activities will continue to be unauthorized under the Clean Water Act until they are covered by this or a different NPDES permit. EPA may take enforcement action for any unpermitted discharges that occur between the commencement of earth-disturbing activities and discharge authorization.

Note: Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

1.4.3. Your Official End Date of Permit Coverage

Once covered under this permit, your coverage will last until the date that:

- You terminate permit coverage consistent with Part 8; or
- Your discharges are permitted under a different NPDES permit or a reissued or replacement version of this permit after expiring on February 16, 2017; or
- For existing projects that continue after this permit has expired, the deadline has passed for the submission of an NOI for coverage under a reissued or replacement version of this permit and you have failed to submit an NOI by the required deadline.

1.4.4. Continuation of Coverage for Existing Permittees After the Permit Expires.

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and

⁶ For existing projects located in the State of Idaho (except Indian country), NOIs must be submitted by no later than July 8, 2012. For existing projects located in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, NOIs must be submitted by no later than July 12, 2012. For existing projects located in the following areas, NOIs must be submitted no later than August 7, 2012: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

⁷ Note that if you are currently covered under the 2003 or 2008 CGP, this coverage continues until your coverage under this permit begins, provided you have submitted an NOI by the deadline.

remain in force and effect for discharges that were covered prior to expiration. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by this permit until the earliest of:

- Your authorization for coverage under a reissued or replacement version of this permit following your timely submittal of a complete and accurate NOI requesting coverage under the new permit; or
- Note: If you fail to submit a timely NOI for coverage under the reissued or replacement permit, your coverage will terminate on the date that the NOI was due.
- Your submittal of a Notice of Termination; or
- Issuance or denial of an individual permit for the project's discharges; or
- A final permit decision by EPA not to reissue a general permit, at which time EPA will identify a reasonable time period for covered discharges to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will terminate at the end of this time period.

EPA reserves the right to modify or revoke and reissue this permit under 40 CFR 122.62 and 63, in which case you will be notified of any relevant changes or procedures to which you may be subject.

1.4.5. Procedures for Denial of Coverage.

Following your submittal of a complete and accurate NOI, you may be notified in writing by EPA that you are not covered, and that you must either apply for and/or obtain coverage under an individual NPDES permit or an alternate general NPDES permit. This notification will include a brief statement of the reasons for this decision and will provide application information. Any interested person may request that EPA consider requiring an individual permit under this paragraph.

If you are already a permittee with coverage under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual NPDES permit or alternate general NPDES permit, as it applies to you, coverage under this general permit will terminate. EPA may grant additional time to submit the application if you request it. If you are covered under this permit and fail to submit an individual NPDES permit application or an NOI for an alternate general NPDES permit as required by EPA, then the applicability of this permit to you is terminated at the end of the day specified by EPA as the deadline for application submittal. EPA may take appropriate enforcement action for any unpermitted discharge. If you submit a timely permit application, then when an individual NPDES permit is issued to you or you are provided with coverage under an alternate general NPDES permit, your coverage under this permit is terminated on the effective date of the individual permit or date of coverage under the alternate general permit.

1.5. REQUIREMENT TO POST A NOTICE OF YOUR PERMIT COVERAGE.

You must post a sign or other notice conspicuously at a safe, publicly accessible location in close proximity to the project site. At a minimum, the notice must include the NPDES Permit tracking number and a contact name and phone number for obtaining additional project information. The notice must be located so that it is visible from the public road that is nearest to the active part of the construction site, and it must use a font large enough to be readily viewed from a public right-of-way.

2. EFFLUENT LIMITATIONS APPLICABLE TO ALL DISCHARGES FROM CONSTRUCTION SITES

You are required to comply with the following effluent limitations in this Part for discharges from your site and/or from construction support activities (see Part 1.3.c).

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a "new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part because (1) the requirement was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior, Chippewa in Minnesota, and the Bad River Band and Lac du Flambeau Band of Lake Superior, Chippewa in Wisconsin), or because you are unable to comply with the requirement due to the manner in which stormwater controls have already been installed or were already designed prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior, Chippewa in Minnesota, and the Bad River Band and Lac du Flambeau Band of Lake Superior, Chippewa in Wisconsin), you are required to document this fact in your SWPPP and are waived from complying with that requirement. This flexibility applies only to the requirements in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3.c.i, and 2.3.3.4). This only applies to those portions of your site that have already commenced earth-disturbing activities or where stormwater controls implemented in compliance with the previous permit have already been installed.

Part 2 includes the following types of requirements:

- Erosion and Sediment Control Requirements (Part 2.1)
- Stabilization Requirements (Part 2.2)
- Pollution Prevention Requirements (Part 2.3)

2.1. EROSION AND SEDIMENT CONTROL REQUIREMENTS.

You must design, install, and maintain erosion and sediment controls that minimize the discharge of pollutants from earth-disturbing activities. To meet this requirement, you must comply with the following provisions.

2.1.1. General Requirements Applicable to All Construction Sites.

- 2.1.1.1 Area of Disturbance.** You are required to minimize the amount of soil exposed during construction activities. You are also subject to the deadlines for temporarily and/or permanently stabilizing exposed portions of your site pursuant to Part 2.2.
- 2.1.1.2 Design Requirements.**
- a. You must account for the following factors in designing your stormwater controls:
 - i. The expected amount, frequency, intensity, and duration of precipitation;

- ii. The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. If any stormwater flow will be channeled at your site, you must design stormwater controls to control both peak flow rates and total stormwater volume to minimize erosion at outlets and to minimize downstream channel and streambank erosion; and
- iii. The range of soil particle sizes expected to be present on the site.

- b. You must direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers established under Part 2.1.2.1, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

2.1.1.3 Installation Requirements.

- a. **Complete installation of stormwater controls by the time each phase of earth-disturbance has begun, unless infeasible.** By the time earth-disturbing activities in any given portion of your site have begun, unless infeasible, you must install and make operational any downgradient sediment controls (e.g., buffers or equivalent sediment controls, perimeter controls, exit point controls, storm drain inlet protection) that control discharges from the initial site clearing, grading, excavating, and other land-disturbing activities.

Note: Where it is infeasible to install stormwater controls prior to the initial earth disturbance, it is EPA's expectation that it will be a rare circumstance that will prevent the operator from installing such controls immediately following the initial earth disturbance.

Following the installation of these initial controls, all other stormwater controls planned for this portion of your site and described in your SWPPP must be installed and made operational as soon as conditions on the site allow.

Note: The requirement to install stormwater controls prior to earth-disturbance for each phase of the project does not apply to the earth disturbance associated with the actual installation of these controls.

- b. **Use good engineering practices and follow manufacturer's specifications.** You must install all stormwater controls in accordance with good engineering practices, including applicable design specifications.

Note: Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or ordinances. Any departures from such specifications must reflect good engineering practice and must be explained in your SWPPP.

2.1.1.4 Maintenance Requirements.

- a. You must ensure that all erosion and sediment controls required in this Part remain in effective operating condition during permit coverage and are protected from activities that would reduce their effectiveness.
- b. You must inspect all erosion and sediment controls in accordance with the applicable requirements in Part 4.1, and document your findings in accordance with Part 4.1.7. If you find a problem (e.g., erosion and sediment controls need to be replaced, repaired, or maintained), you must make the necessary repairs or modifications in accordance with the following schedule:

- i. Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.
- ii. When installation of a new erosion or sediment control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7-day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe. Where these actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.1.2. Erosion and Sediment Control Requirements Applicable to All Sites.

- 2.1.2.1 Provide Natural Buffers or Equivalent Sediment Controls.** (These requirements only apply when a surface water is located within 50 feet of your project's earth disturbances).

Note: EPA does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute "surface waters" for the purposes of triggering the requirement to comply with this Part.

Note: Areas that you do not own or that are otherwise outside your operational control may be considered areas of undisturbed natural buffer for purposes of compliance with this part.

You must ensure that any discharges to surface waters through the area between the disturbed portions of the property and any surface waters located within 50 feet of your site are treated by an area of undisturbed natural buffer and/or additional erosion and sediment controls in order to achieve a reduction in sediment load equivalent to that achieved by a 50-foot natural buffer. Refer to Appendix G (Buffer Guidance) for information to assist you in complying with this requirement, and to Part 2.1.2.1e for exceptions to this requirement.

- a. **Compliance Alternatives.** You can comply with this requirement in one of the following ways:
 - i. Provide and maintain a 50-foot undisturbed natural buffer; or

Note: If your earth disturbances are located 50 feet or further from a surface water, then you have complied with this alternative.
 - ii. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or
 - iii. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment

controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Note: For the compliance alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2.1.2.1a.ii and 2.1.2.1a.iii, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Appendix G for a discussion of how to determine equivalent reductions.

You must document the compliance alternative you have selected in your SWPPP, and comply with the applicable additional requirements described in Parts 2.1.2.1b and 2.1.2.1c below.

The compliance alternative selected above must be maintained throughout the duration of permit coverage, except that you may select a different compliance alternative during your period of permit coverage, in which case you must modify your SWPPP to reflect this change.

- b. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.i or 2.1.2.1a.ii above, throughout your period of coverage under this permit, you must comply with the following additional requirements:
 - i. Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;
 - ii. Document in your SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and
 - iii. Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas.
- c. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii, you must document in your SWPPP the erosion and sediment control(s) you will use to achieve an equivalent sediment reduction, and any information you relied upon to demonstrate the equivalency.
- d. **Additional Requirement for the Compliance Alternative in Part 2.1.2.1a.iii.** If you choose the compliance alternative in Part 2.1.2.1a.iii, you must also

include in your SWPPP a description of why it is infeasible for you to include and maintain an undisturbed natural buffer of any size.

e. **Exceptions.**

- i. If there is no discharge of stormwater to surface waters through the area between your site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented control measures, such as a berm or other barrier, that will prevent such discharges.
- ii. Where no natural buffer exists due to preexisting development disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part, unless you will remove portions of the preexisting development.

Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you are required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either Part 2.1.2.1.a.ii or 2.1.2.1.a.iii above, you are not expected to compensate for the reduction in buffer function from the area covered by these preexisting disturbances. See Appendix G for further information on how to comply with the compliance alternatives in Part 2.1.2.1.a.ii or 2.1.2.1.a.iii above.

If during your project, you will disturb any portion of these preexisting disturbances, the area disturbed will be deducted from the area treated as natural buffer.
- iii. For "linear construction projects" (see Appendix A), you are not required to comply with the requirements in this Part if site constraints (e.g., limited right-of-way) prevent you from meeting any of the compliance alternatives in Part 2.1.2.1.a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale as to why it is infeasible for you to comply with the requirements in Part 2.1.2.1.a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.
- iv. For "small residential lot" construction (i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre), you have the option of complying with the requirements in Appendix G (Part G.2.3).
- v. The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:
 - Construction approved under a CWA Section 404 permit; or
 - Construction of a water-dependent structure or water access area (e.g., pier, boat ramp, trail).

Note: For the purposes of this permit, sediment or soil stockpiles are defined as the storage for multiple days of soil or other sediment material to be used in the construction project.

- a. Locate the piles outside of any natural buffers established under Part 2.1.2.1.a and physically separated from other stormwater controls implemented in accordance with Part 2.1.
 - b. Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier.¹¹
 - c. Where practicable, provide cover or appropriate temporary stabilization to avoid direct contact with precipitation or to minimize sediment discharge.
 - d. Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water; and
 - e. Unless infeasible, contain and securely protect from wind.
- 2.1.2.5 **Minimize Dust.** In order to avoid pollutants from being discharged into surface waters, to the extent feasible, you must minimize the generation of dust through the appropriate application of water or other dust suppression techniques.
- 2.1.2.6 **Minimize the Disturbance of Steep Slopes.** You must minimize the disturbance of "steep slopes" (see definition in Appendix A).
- Note: The permit does not prevent or prohibit disturbance on steep slopes. For some projects, disturbance on steep slopes may be necessary for construction (e.g., a road cut in mountainous terrain). If a disturbance to steep slopes is required for the project, EPA would recognize that it is not economically achievable to avoid the disturbance to steep slopes. However, in cases where steep slope disturbances are required, minimizing the disturbances to steep slopes consistent with this requirement can be accomplished through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances to these areas and using stabilization practices designed to be used on steep grades.*
- 2.1.2.7 **Preserve Topsoil.** You must preserve native topsoil on your site, unless infeasible.
- Note: Some projects may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain. In these cases, preserving topsoil at the site would not be feasible. Some sites may not have space to stockpile topsoil on site for later use, in which case, it may also not be feasible to preserve topsoil.*
- Note: Stockpiling of topsoil at off-site locations, or transfer of topsoil to other locations, is an example of a practice that is consistent with the requirements in this Part.*
- 2.1.2.8 **Minimize Soil Compaction.** In areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed, you must either:

You must document in your SWPPP if any of the above disturbances will occur within the buffer area on your site.

2.1.2.2 **Install Perimeter Controls.**

- a. **Installation Requirements:** You must install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities.⁸

For linear projects with rights-of-way that restrict or prevent the use of such perimeter controls, you must maximize the use of these controls where practicable and document in your SWPPP why it is impracticable in other areas of the project.
- b. **Maintenance Requirements:** You must remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control.

2.1.2.3 **Minimize Sediment Track-Out.** You must minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting your construction site. To comply with this requirement, you must:

- a. Restrict vehicle use to properly designated exit points;
- b. Use appropriate stabilization techniques⁹ at all points that exit onto paved roads so that sediment removal occurs prior to vehicle exit;
- c. Where necessary, use additional controls¹⁰ to remove sediment from vehicle tires prior to exit; and
- d. Where sediment has been tracked-out from your site onto the surface of off-site streets, other paved areas, and sidewalks, you must remove the deposited sediment by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. You must remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

Note: EPA recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of Part 2.1.2.3.

2.1.2.4 **Control Discharges from Stockpiled Sediment or Soil.** For any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil, you must comply with the following requirements:

⁸ Examples of perimeter controls include, but are not limited to, filter berms, silt fences, and temporary diversion dikes.

⁹ Examples of appropriate stabilization techniques include the use of aggregate stone with an underlying geotextile or non-woven filter fabric, or turf mats.

¹⁰ Examples of additional controls to remove sediment from vehicle tires include, but are not limited to, wheel washing, rumble strips, and rattle plates.

- a. **Restrict vehicle / equipment use.** Restrict vehicle and equipment use in these locations to avoid soil compaction; or
- b. **Use soil conditioning techniques.** Prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible.

2.1.2.9 **Protect Storm Drain Inlets.** If you discharge to any storm drain inlet that carries stormwater flow from your site directly to a surface water (and it is not first directed to a sediment basin, sediment trap, or similarly effective control), and you have authority to access the storm drain inlet, you must:

- a. **Installation Requirements.** Install inlet protection measures¹² that remove sediment from your discharge prior to entry into the storm drain inlet.

Note: Inlet protection measures can be removed in the event of flood conditions or to prevent erosion.

- b. **Maintenance Requirements.** Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, you must remove the deposited sediment by the end of the same work day in which it is found or by the end of the following work day if removal by the same work day is not feasible.

2.1.3 **Requirements Applicable Only to Sites Using These Specific Stormwater Controls.**

You are required to comply with the following requirements if you will install any of the following stormwater controls at your site:

- 2.1.3.1 **Constructed Stormwater Conveyance Channels.** Design stormwater conveyance channels to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. Minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices¹³ within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.
- 2.1.3.2 **Sediment Basins.** If you install a sediment basin, you must comply with the following:
 - a. **Design requirements.**
 - i. Provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm (see Appendix H), or (2) 3,600 cubic feet per acre drained;
 - ii. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge of pollutants, unless infeasible;

¹² Examples of inlet protection measures include fabric filters, sandbags, concrete blocks, and gravel barriers.

¹³ Examples of velocity dissipation devices include check dams, sediment traps, riprap, or grouted riprap at outlets.

¹¹ Examples include berms, dikes, fiber rolls, silt fences, sandbag, gravel bags, or straw bale.

Note: EPA believes that the circumstances in which it is infeasible to design outlet structures in this manner are rare. Exceptions may include areas with extended cold weather, where surface outlets may not be feasible during certain time periods (although it is expected that they would be used during other periods). If you have determined that it is infeasible to meet this requirement, you must provide documentation in your SWPPP to support your determination.

- iii. Prevent erosion of (1) the sediment basin using stabilization controls (e.g., erosion control blankets), and (2) the inlet and outlet using erosion controls and velocity dissipation devices; and
 - iv. Sediment basins must be situated outside of surface waters and any natural buffers established under Part 2.1.2.1a, and must be designed to avoid collecting water from wetlands.
- b. **Maintenance requirements.** Keep in effective operating condition and remove accumulated sediment to maintain at least ½ of the design capacity of the sediment basin at all times.
- 2.1.3.3 **Use of Treatment Chemicals.** If you are using polymers, flocculants, or other treatment chemicals at your site, you must comply with the following minimum requirements:
- a. **Use conventional erosion and sediment controls prior to and after the application of treatment chemicals.** Use conventional erosion and sediment controls prior to chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control (e.g., sediment basin, perimeter control) prior to discharge.
 - b. **Select appropriate treatment chemicals.** Chemicals must be selected that are appropriately suited to the types of soils likely to be exposed during construction and discharged to locations where chemicals will be applied, and to the expected turbidity, pH, and flow rate of stormwater flowing into the chemical treatment system or area.
 - c. **Minimize discharge risk from stored chemicals.** Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), or provide equivalent measures, designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means (e.g., storing chemicals in covered area or having a spill kit available on site).
 - d. **Comply with state/local requirements.** Comply with relevant state and local requirements affecting the use of treatment chemicals.
 - e. **Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier.** You must also use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document specific departures from these practices or specifications and how they reflect good engineering practice.

Note: For the purposes of this permit, "exposed portions of your site" means areas of exposed soil that are required to be stabilized. Note that EPA does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left unvegetated or unstabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

2.2.1. Deadlines for Initiating and Completing Stabilization.

- 2.2.1.1 **Deadline to Initiate Stabilization.** You must initiate soil stabilization measures immediately whenever earth-disturbing activities have permanently or temporarily ceased on any portion of the site.

Note: Earth-disturbing activities have permanently ceased when clearing and excavation within any area of your construction site that will not include permanent structures has been completed.

Note: Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.

The 14 calendar day timeframe above begins counting as soon as you know that construction work on a portion of your site will be temporarily ceased. In circumstances where you experience unplanned or unanticipated delays in construction due to circumstances beyond your control (e.g., sudden work stoppage due to unanticipated problems associated with construction labor, funding, or other issues related to the ability to work on the site: weather conditions rendering the site unsuitable for the continuation of construction work) and you do not know at first how long the work stoppage will continue, your requirement to immediately initiate stabilization is triggered as soon as you know with reasonable certainty that work will be stopped for 14 or more additional calendar days. At that point, you must comply with Parts 2.2.1.1 and 2.2.1.2.

Note: For the purposes of this permit, EPA will consider any of the following types of activities to constitute the initiation of stabilization:

1. prepping the soil for vegetative or non-vegetative stabilization;
2. applying mulch or other non-vegetative product to the exposed area;
3. seeding or planting the exposed area;
4. starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and
5. finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization in Parts 2.2.1.2 and 2.2.1.3.

This list of examples is not exhaustive.

Note: The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this provision, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

- 2.2.1.2 **Deadline to Complete Stabilization Activities.** As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures consistent with Part 2.2.1.1¹⁵, you are required to have completed:

¹⁵ EPA may determine, based on an inspection carried out under Part 4.2 and corrective actions required under Part 5.3, that the level of sediment discharge on the site makes it necessary to require a faster schedule for completing stabilization. For instance, if sediment discharges from an area of exposed soil

- f. **Ensure proper training.** Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.
- g. **Comply with additional requirements for the approved use of cationic chemicals.** If you have been authorized to use cationic chemicals at your site pursuant to Part 1.2.4, and the authorization is conditioned on your compliance with additional requirements necessary to ensure that the use of such chemicals will not cause an exceedance of water quality standards, you are required to comply with all such requirements.
- h. **Provide proper SWPPP documentation.** You must include documentation in your SWPPP consistent with Parts 7.2.6.9 and 7.2.10.2 on the specific chemicals and chemical treatment systems you will use, and how you will comply with the requirements in this Part.

- 2.1.3.4 **Dewatering Practices.** You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls.¹⁴ Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

You must also meet the following requirements for dewatering activities:

- a. **Discharge requirements.**
 - i. Do not discharge visible floating solids or foam;
 - ii. Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;
 - iii. To the extent feasible, utilize vegetated, upland areas of the site to infiltrate dewatering water before discharge. In no case will surface waters be considered part of the treatment area;
 - iv. At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part 2.1.3.1;
 - v. With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and
 - vi. Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.
- b. **Treatment chemical restrictions.** If you are using polymers, flocculants, or other treatment chemicals to treat dewatering water, you must comply with the requirements in Parts 2.1.3.3.

2.2. STABILIZATION REQUIREMENTS.

You are required to stabilize exposed portions of your site in accordance with the requirements of this Part.

¹⁴ Examples of appropriate controls include, but are not limited to, sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems (e.g., bag or sand filters) that are designed to remove sediment.

- a. For vegetative stabilization, all activities¹⁶ necessary to initially seed or plant the area to be stabilized; and/or
- b. For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

2.2.1.3 Exceptions to the Deadlines for Initiating and Completing Stabilization.

- a. **Deadlines for projects occurring in arid or semi-arid areas, or drought-stricken areas.** These requirements apply if (1) your site is located in an arid area, a semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, (2) construction will occur during the seasonally dry period or during a period in which drought is predicted to occur, and (3) you are using vegetative cover for temporary or permanent stabilization. You may also comply with the deadlines in Part 2.2.1.1 instead. The deadlines for these types of projects are as follows:
 - i. Immediately initiate, and within 14 calendar days of a temporary or permanent cessation of work in any portion of your site complete, the installation of temporary non-vegetative stabilization measures to the extent necessary to prevent erosion;
 - ii. As soon as practicable, given conditions or circumstances on your site, complete all activities necessary to initially seed or plant the area to be stabilized; and
 - iii. If construction is occurring during the seasonally dry period, indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions. You must also include the schedule you will follow for initiating and completing vegetative stabilization.
- b. **Deadlines for projects that are affected by circumstances beyond the control of the permittee that delay the initiation and/or completion of vegetative stabilization as required in Parts 2.2.1.1 and/or 2.2.1.2.** If you are unable to meet the deadlines in Parts 2.2.1.1 and/or 2.2.1.2 due to circumstances beyond your control¹⁷, and you are using vegetative cover for temporary or permanent stabilization, you may comply with the following stabilization deadlines instead:
 - i. Immediately initiate, and within 14 calendar days complete, the installation of temporary non-vegetative stabilization measures to prevent erosion;
 - ii. Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on your site; and

that is required to be stabilized are compromising the performance of existing stormwater controls, EPA may require stabilization to correct this problem.

¹⁶ For example, such activities might include, but are not limited to, soil conditioning, application of seed or sod, planting of seedlings or other vegetation, application of fertilizer, and, as deemed appropriate, watering.

¹⁷ Examples include problems with the supply of seed stock or with the availability of specialized equipment, unsuitability of soil conditions due to excessive precipitation and/or flooding.

Note: You are required to have stabilized the exposed portions of your site consistent with Part 2.2.2 prior to terminating permit coverage under Part 8.2.

- iii. Document the circumstances that prevent you from meeting the deadlines required in Parts 2.2.1.1 and/or 2.2.1.2 and the schedule you will follow for initiating and completing stabilization.
- c. **Deadlines for sites discharging to sensitive waters.** For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Note: If you qualify for the deadlines for initiating and completing stabilization in Part 2.2.1.3a or b, you may comply with the stabilization deadlines in Part 2.2.1.3a or b for any portion of your site that discharges to a sensitive water.

2.2. Criteria for Stabilization.

To be considered adequately stabilized, you must meet the criteria below depending on the type of cover you are using, either vegetative or non-vegetative.

2.2.1 Vegetative Stabilization.

- a. **For all sites, except those located in arid or semi-arid areas or agricultural lands.**
 - i. If you are vegetatively stabilizing any exposed portion of your site through the use of seed or planted vegetation, you must provide established uniform vegetation (*e.g., evenly distributed without large bare areas*), which provides 70 percent or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. You should avoid the use of invasive species;
 - ii. For final stabilization, vegetative cover must be perennial; and
 - iii. Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, you must select, design, and install non-vegetative erosion controls that provide cover (*e.g., mulch, rolled erosion control products*) to the area while vegetation is becoming established.
- b. **For sites located in arid or semi-arid areas, or drought-stricken areas.** If you are located in an arid or semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, you are considered to have completed final stabilization if both of the following criteria are met:
 - i. The area you have seeded or planted must within 3 years provide established vegetation that covers 70 percent or more of the density of vegetation prior to commencing earth-disturbing activities; and
 - ii. In addition to seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded

or planted area, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

- c. **For sites located on land used for agriculture.** Disturbed areas on land used for agricultural purposes (*e.g., pipelines across crop or range land, staging areas for highway construction*) that are restored to their pre-construction agricultural use are not subject to these final stabilization criteria. Areas disturbed that were not previously used for agricultural activities, and areas that are not being returned to pre-construction agricultural use, must meet the conditions for stabilization in this Part.

2.2.2.2 Non-Vegetative Stabilization. If you are using non-vegetative controls to stabilize exposed portions of your site, or if you are using such controls to temporarily protect areas that are being vegetatively stabilized, you must provide effective non-vegetative cover¹⁸ to stabilize any such exposed portions of your site.

2.3. POLLUTION PREVENTION REQUIREMENTS.

You are required to design, install, and maintain effective pollution prevention measures in order to prevent the discharge of pollutants. Consistent with this requirement, you must:

- Eliminate certain pollutant discharges from your site (see Part 2.3.1);
- Properly maintain all pollution prevention controls (see Part 2.3.2); and
- Comply with pollution prevention standards for pollutant-generating activities that occur at your site (see Part 2.3.3).

These requirements apply to all areas of your construction site and any and all support activities covered by this permit consistent with Part 1.3.c.

2.3.1. Prohibited Discharges.

You are prohibited from discharging the following from your construction site:

- 2.3.1.1 Wastewater from washout of concrete, unless managed by an appropriate control as described in Part 2.3.3.4;
- 2.3.1.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, unless managed by an appropriate control as described in Part 2.3.3.4;
- 2.3.1.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- 2.3.1.4 Soaps, solvents, or detergents used in vehicle and equipment washing; and
- 2.3.1.5 Toxic or hazardous substances from a spill or other release.

2.3.2. General Maintenance Requirements.

You must ensure that all pollution prevention controls installed in accordance with this Part remain in effective operating condition and are protected from activities that would reduce their effectiveness. You must inspect all pollutant-generating activities and

¹⁸ For temporary stabilization, examples of temporary non-vegetative stabilization methods include, but are not limited to, hydromulch and erosion control blankets. For final stabilization, examples of permanent non-vegetative stabilization methods include, but are not limited to, riprap, gabions, and geotextiles.

pollution prevention controls in accordance with your inspection frequency requirements in Parts 4.1.2 or 3.2.2.1 to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharges to receiving waters, and must document your findings in accordance with Part 4.1.7. If you find that controls need to be replaced, repaired, or maintained, you must make the necessary repairs or modifications in accordance with the following:

- 2.3.2.1 Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.
- 2.3.2.2 When installation of a new pollution prevention control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7 calendar day timeframe. Where these actions result in changes to any of the pollution prevention controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.3.3. Pollution Prevention Standards

You are required to comply with the pollution prevention standards in this Part if you conduct any of the following activities at your site or at any construction support activity areas covered by this permit (see Part 1.3.c):

- Fueling and maintenance of equipment or vehicles;
- Washing of equipment and vehicles;
- Storage, handling, and disposal of construction materials, products, and wastes; and
- Washing of applicators and containers used for paint, concrete, or other materials.

The pollution prevention standards are as follows:

- 2.3.3.1 **Fueling and Maintenance of Equipment or Vehicles.** If you conduct fueling and/or maintenance of equipment or vehicles at your site, you must provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where these activities will take place.¹⁹ To comply with the prohibition in Part 2.3.1.3, you must:
 - a. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR 112 and Section 311 of the CWA;
 - b. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;

¹⁹ Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances, providing secondary containment (*e.g., spill berms, decks, spill containment pallets*) and cover where appropriate, and/or having spill kits readily available.

- c. Use drip pans and absorbents under or around leaky vehicles;
- d. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements;
- e. Clean up spills or contaminated surfaces immediately, using dry clean up measures where possible, and eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and
- f. Do not clean surfaces by hosing the area down.

2.3.3.2 Washing of Equipment and Vehicles.

- a. You must provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing.²⁰ and
- b. To comply with the prohibition in Part 2.3.1.4, for storage of soaps, detergents, or solvents, you must provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these detergents from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

2.3.3.3 Storage, Handling, and Disposal of Construction Products, Materials, and Wastes. You must minimize the exposure to stormwater of any of the products, materials, or wastes specified below that are present at your site by complying with the requirements in this Part.

Note: These requirements do not apply to those products, materials, or wastes that are not a source of stormwater contamination or that are designed to be exposed to stormwater.

To ensure you meet this requirement, you must:

- a. **For building products²¹:** In storage areas, provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these products from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.
- b. **For pesticides, herbicides, insecticides, fertilizers, and landscape materials:**
 - i. In storage areas, provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these chemicals from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas; and
 - ii. Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label.
- c. **For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:**

²⁰ Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.

²¹ Some examples of building products that are typically stored at construction sites include, but are not limited to, asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures.

- i. To comply with the prohibition in Part 2.3.1.3, store chemicals in water-tight containers, and provide either (1) cover (e.g., plastic sheeting or temporary roofs) to prevent these containers from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., spill kits) or provide secondary containment (e.g., spill berms, decks, spill containment pallets); and
 - ii. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.
- d. For hazardous or toxic waste²²:
- i. Separate hazardous or toxic waste from construction and domestic waste;
 - ii. Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;
 - iii. Store all containers that will be stored outside within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in covered area or having a spill kit available on site);
 - iv. Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements; and
 - v. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.
- e. For construction and domestic waste²³: Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes. In addition, you must:
- (1) On work days, clean up and dispose of waste in designated waste containers; and
 - (2) Clean up immediately if containers overflow.

²² Examples of hazardous or toxic waste that may be present at construction sites include, but are not limited to, paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.

²³ Examples of construction and domestic waste include, but are not limited to, packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.

- 2.3.5.4 Never apply to frozen ground;
- 2.3.5.5 Never apply to stormwater conveyance channels with flowing water; and
- 2.3.5.6 Follow all other federal, state, tribal, and local requirements regarding fertilizer application.

- f. For sanitary waste: Position portable toilets so that they are secure and will not be tipped or knocked over.
- 2.3.3.4 **Washing of Applicators and Containers used for Paint, Concrete, or Other Materials.** To comply with the prohibition in Parts 2.3.1.1 and 2.3.1.2, you must provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. To comply with this requirement, you must:
- a. Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation;
 - b. Handle washout or cleanout wastes as follows:
 - i. Do not dump liquid wastes in storm sewers;
 - ii. Dispose of liquid wastes in accordance with applicable requirements in Part 2.3.3.3; and
 - iii. Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part 2.3.3.3; and
 - c. Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and, to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

2.3.4. Emergency Spill Notification.

You are prohibited from discharging toxic or hazardous substances from a spill or other release, consistent with Part 2.3.1.5. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge. You must also, within 7 calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

2.3.5. Fertilizer Discharge Restrictions.

You are required to minimize discharges of fertilizers containing nitrogen or phosphorus. To meet this requirement, you must comply with the following requirements:

- 2.3.5.1 Apply at a rate and in amounts consistent with manufacturer's specifications, or document departures from the manufacturer specifications where appropriate in Part 7.2.7.2 of the SWPPP;
- 2.3.5.2 Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;
- 2.3.5.3 Avoid applying before heavy rains that could cause excess nutrients to be discharged;

3. WATER QUALITY-BASED EFFLUENT LIMITATIONS.

3.1. GENERAL EFFLUENT LIMITATION TO MEET APPLICABLE WATER QUALITY STANDARDS

Your discharge must be controlled as necessary to meet applicable water quality standards. You must also comply with any additional requirements that your state or tribe requires you to meet in Part 9.

In the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, or EPA determines, that your discharge is not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Part 5.2.1, and document the corrective actions as required in Part 5.2.2 and Part 5.4.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI, or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA established or approved TMDL.

3.2. DISCHARGE LIMITATIONS FOR IMPAIRED WATERS

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorus, you are required to comply with the requirements in Part 3.2.2.

Note: For the purposes of this Part, "impaired waters" are waters identified as impaired on the appropriate CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first surface water to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

If you discharge to an impaired water that is impaired for a parameter other than a sediment-related parameter or nutrients, EPA will inform you if any additional limits or controls are necessary for your discharge to be controlled as necessary to meet water quality standards, including for it to be consistent with the assumptions of any available wasteload allocation in any applicable TMDL, or if coverage under an individual permit is necessary in accordance with Part 1.4.5.

If during your coverage under a previous permit, you were required to install and maintain stormwater controls specifically to meet the assumptions and requirements of an EPA-approved or established TMDL (for any parameter) or to otherwise control your discharge to meet water quality standards, you must continue to implement such controls as part of this permit.

3.2.1. Identify If You Discharge To An Impaired Water.

If you discharge to an impaired water, you must provide the following information in your NOI:

- A list of all impaired waters to which you discharge;
- The pollutant(s) for which the surface water is impaired; and

- Whether a TMDL has been approved or established for the waters to which you discharge.

3.2.2. Requirements for Discharges to Sediment or Nutrient-Impaired Waters.

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter (e.g., total suspended solids (TSS) or turbidity) and/or (2) nutrients (e.g., nitrogen and/or phosphorus), including impaired waters for which a TMDL has been approved or established for the impairment, you are required to comply with the following stormwater control requirements, which supplement the requirements applicable to your site in other corresponding parts of the permit

- 3.2.2.1 **Frequency of Site Inspection.** You must conduct inspections at the frequency specified in Part 4.1.3.
- 3.2.2.2 **Deadline to Complete Stabilization.** You must comply with the deadlines for completing site stabilization as specified in Part 2.2.1.3c.
- 3.2.2.3 **State and Tribal Requirements.** You must comply with any additional state or tribal impairment-related requirements included in Part 9.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if it is determined that the controls in the Part will not be sufficient to control discharges consistent with the assumptions and requirements of an applicable wasteload allocation of an approved or established TMDL or to prevent the site from contributing to the impairment.

3.3. DISCHARGES TO WATERS IDENTIFIED AS TIER 2, TIER 2.5, OR TIER 3.

3.3.1. Identify if You Discharge to a Tier 2, Tier 2.5, or Tier 3 Water.

If you discharge to a water identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 water, you must provide on your NOI a list of waters identified as Tier 2, Tier 2.5, or Tier 3 to which you discharge. See Appendix F for a list of Tier 2 and 3 waters.

Note: For the purposes of this permit, you are considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3. Tiers 2, 2.5 and 3 refer to waters either identified by the state as high quality waters or Outstanding National Resource Waters under 40 CFR §131.12(a)(2) and (3). For discharges that enter a storm sewer system prior to discharge, the surface water to which you discharge is the first surface water that receives the stormwater discharge from the storm sewer system.

3.3.2. Requirements for New Projects Discharging to Tier 2, Tier 2.5, or Tier 3 Waters.

For new projects, if you will discharge to a Tier 2, Tier 2.5, or Tier 3 water, you are required to comply with the requirements in Parts 4.1.3 (inspection frequencies) and 2.2.1.3c (stabilization deadlines), and, if applicable, Part 9 (relevant state or tribal requirements). In addition, on a case-by-case basis, EPA may notify operators of such new projects or operators of existing projects with increased discharges that additional analyses, stormwater controls, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary in accordance with Part 1.4.5.

4. INSPECTIONS.

4.1. SITE INSPECTIONS.

4.1.1. Person(s) Responsible for Inspecting Site.

The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a "qualified person."

Note: A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

4.1.2. Frequency of Inspections.

At a minimum, you must conduct a site inspection in accordance with one of the two schedules listed below, unless you are subject to Part 4.1.3 or Part 4.1.4:

- 4.1.2.1 At least once every 7 calendar days; or
- 4.1.2.2 Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in accordance with Part 4.1.2.2 and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.3. Increase in Inspection Frequency for Sites Discharging to Sensitive Waters.

For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), instead of the inspection frequency specified in Part 4.1.2, you must conduct inspections in accordance with the following inspection frequencies:

- 4.1.3.1 Once every 7 calendar days; and
- 4.1.3.2 Within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that

measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

Note: If you qualify for any of the reduced inspection frequencies in Part 4.1.4, you may conduct inspections in accordance with Part 4.1.4 for any portion of your site that discharges to a sensitive water.

4.1.4. Reductions in Inspection Frequency.

Your inspection frequency may be reduced as follows:

- 4.1.4.1 **For Stabilized Areas.** You may reduce the frequency of inspections to once per month in any area of your site where the stabilization steps in Parts 2.2.1.2a and 2.2.1.2b have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to that required in Parts 4.1.2 or 4.1.3, if applicable. You must document the beginning and ending dates of this period in your records.

- 4.1.4.2 **For Arid, Semi-Arid, or Drought-Stricken Areas.** You may reduce the frequency of inspections to once per month and within 24 hours of the occurrence of a storm event of 0.25 inches or greater if your site is located in an arid, semi-arid, or drought-stricken area, as these terms are defined in Appendix A, and construction is occurring during the seasonally dry period or during a period in which drought is predicted to occur. You must document that you are using this reduced schedule and the beginning and ending dates of the seasonally dry period in your SWPPP. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.4.3 For Frozen Conditions.

- a. If you are suspending earth-disturbing activities due to frozen conditions, you may temporarily suspend inspections on your site until thawing conditions (see Appendix A) begin to occur if:

- i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3, if applicable;
- ii. Land disturbances have been suspended; and
- iii. All disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.
- b. If you are still conducting earth-disturbing activities during frozen conditions, you may reduce your inspection frequency to once per month if:
- i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3 if applicable; and
- ii. Except for areas in which you are actively conducting earth-disturbing activities, disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.

You must document the beginning and ending dates of this period in your SWPPP.

4.1.5. Areas that Need to Be Inspected.

During your site inspection, you must at a minimum inspect the following areas of your site:

- 4.1.5.1 All areas that have been cleared, graded, or excavated and that have not yet completed stabilization consistent with Part 2.2;
- 4.1.5.2 All stormwater controls (including pollution prevention measures) installed at the site to comply with this permit;
- 4.1.5.3 Material, waste, borrow, or equipment storage and maintenance areas that are covered by this permit;
- 4.1.5.4 All areas where stormwater typically flows within the site, including drainageways designed to divert, convey, and/or treat stormwater;
- 4.1.5.5 All points of discharge from the site; and
- 4.1.5.6 All locations where stabilization measures have been implemented.

You are not required to inspect areas that, at the time of the inspection, are considered unsafe to your inspection personnel.

4.1.6. Requirements for Inspections.

During your site inspection, you must at a minimum:

- 4.1.6.1 Check whether all erosion and sediment controls and pollution prevention controls are installed, appear to be operational, and are working as intended to minimize pollutant discharges. Determine if any controls need to be replaced, repaired, or maintained in accordance with Parts 2.1.1.4 and 2.3.2;

- 4.1.6.2 Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;
- 4.1.6.3 Identify any locations where new or modified stormwater controls are necessary to meet the requirements of Parts 2 and/or 3;
- 4.1.6.4 At points of discharge and, if applicable, the banks of any surface waters flowing within your property boundaries or immediately adjacent to your property, check for signs of visible erosion and sedimentation (*i.e.*, *sediment deposits*) that have occurred and are attributable to your discharge; and
- 4.1.6.5 Identify any and all incidents of noncompliance observed.
- 4.1.6.6 If a discharge is occurring during your inspection, you are required to:
- Identify all points of the property from which there is a discharge;
 - Observe and document the visual quality of the discharge, and take note of the characteristics of the stormwater discharge, including color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollutants; and
 - Document whether your stormwater controls are operating effectively, and describe any such controls that are clearly not operating as intended or are in need of maintenance.
- 4.1.6.7 Based on the results of your inspection, initiate corrective action under Part 5.
- 4.1.7. Inspection Report.**
- 4.1.7.1 **Requirement to Complete Inspection Report.** You must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:
- The inspection date;
 - Names and titles of personnel making the inspection;
 - A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part 4.1.6;
 - If you are inspecting your site at the frequency specified in Part 4.1.2.2, Part 4.1.3, or Part 4.1.4.2, and you conducted an inspection because of rainfall measuring 0.25 inches or greater, you must include the applicable rain gauge or weather station readings that triggered the inspection; and
 - If you have determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations that this condition applied to.
- 4.1.7.2 **Signature Requirements.** Each inspection report must be signed in accordance with Appendix I, Part I.11 of this permit.
- 4.1.7.3 **Recordkeeping Requirements.** You are required to keep a current, copy of all inspection reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your inspection reports may be kept electronically if the records are:
- In a format that can be read in a similar manner as a paper record;
 - Legally dependable with no less evidentiary value than their paper equivalent; and

- Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All inspection reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

4.2. INSPECTIONS BY EPA.

You must allow EPA, or an authorized representative of the EPA, to conduct the following activities at reasonable times:

- Enter onto areas of your site, including any construction support activity areas covered by this permit (see Part 1.3.c), and onto locations where records are kept under the conditions of this permit;
- Access and copy any records that must be kept under the conditions of this permit;
- Inspect your construction site, including any construction support activity areas covered by this permit (see Part 1.3.c) and any stormwater controls installed and maintained at the site; and
- Sample or monitor for the purpose of ensuring compliance.

5. CORRECTIVE ACTIONS.

5.1. "CORRECTIVE ACTIONS" DEFINED.

Corrective actions are actions you take in compliance with this Part to:

- Repair, modify, or replace any stormwater control used at the site;
- Clean up and properly dispose of spills, releases, or other deposits; or
- Remedy a permit violation.

5.2. REQUIREMENTS FOR TAKING CORRECTIVE ACTION.

You must complete the following corrective actions in accordance with the deadlines specified in this Part. In all circumstances, you must immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

Note: In this context, the term "immediately" requires construction operators to, on the same day a condition requiring corrective action is found, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if the problem is identified at a time in the work day when it is too late to initiate corrective action, the initiation of corrective action must begin on the following work day.

- For any of the following conditions on your site, you must install a new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe.
 - A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Parts 2 and/or 3; or
 - You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1. In this case, you must notify your EPA Regional Office by the end of the next work day. You are required to submit your notification through EPA's electronic NOI system, or "eNOI", at www.epa.gov/npdes/cgpenoi; or
 - One of the prohibited discharges in Part 2.3.1 is occurring or has occurred.
 - Where your corrective actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing corrective action work.
- 5.3. CORRECTIVE ACTION REQUIRED BY EPA.**
- You must comply with any corrective actions required by EPA as a result of permit violations found during an inspection carried out under Part 4.2.
- 5.4. CORRECTIVE ACTION REPORT.**
- For each corrective action taken in accordance with this Part, you must complete a corrective action report, which includes the applicable information in Parts 5.4.1 and 5.4.2. Note that these reports must be maintained in your records but do not need to be provided to EPA except upon request.

- Within 24 hours of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:
 - Which condition was identified at your site;
 - The nature of the condition identified; and
 - The date and time of the condition identified and how it was identified.

- Within 7 calendar days of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:
 - Any follow-up actions taken to review the design, installation, and maintenance of stormwater controls, including the dates such actions occurred;
 - A summary of stormwater control modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed; and
 - Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action.

- Signature Requirements.** Each corrective action report must be signed and certified in accordance with Appendix I, Part I.11 of this permit.

- Recordkeeping Requirements.** You are required to keep a current copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your corrective action reports may be kept electronically if the records are:
 - In a format that can be read in a similar manner as a paper record;
 - Legally dependable with no less evidentiary value than their paper equivalent; and
 - Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All corrective action reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

6. STAFF TRAINING REQUIREMENTS.

Prior to the commencement of earth-disturbing activities or pollutant-generating activities, whichever occurs first, you must ensure that the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
- Personnel responsible for the application and storage of treatment chemicals (if applicable);
- Personnel who are responsible for conducting inspections as required in Part 4.1.1; and
- Personnel who are responsible for taking corrective actions as required in Part 5.

Notes: (1) If the person requiring training is a new employee, who starts after you commence earth-disturbing or pollutant-generating activities, you must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit.

(2) For emergency-related construction activities, the requirement to train personnel prior to commencement of earth-disturbing activities does not apply, however, such personnel must have the required training prior to NOI submission.

You are responsible for ensuring that all activities on the site comply with the requirements of this permit. You are not required to provide or document formal training for subcontractors or other outside service providers, but you must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

7. STORMWATER POLLUTION PREVENTION PLAN (SWPPP).**7.1. GENERAL REQUIREMENTS.****7.1.1. Requirement to Develop a SWPPP Prior to Submitting Your NOI.**

All operators associated with a construction project to be covered under this permit must develop a SWPPP.

Note: You have the option of developing a group SWPPP where you are one of several operators who will be engaged in construction activities at your site. For instance, if both the owner and the general contractor of the construction site are permitted, the owner may be the party responsible for SWPPP development, and the general contractor can choose to use this same SWPPP, as long as the SWPPP addresses the general contractor's scope of construction work and obligations under this permit.

You are required to develop your site's SWPPP prior to submitting your NOI. At a minimum, your SWPPP must include the information required in Part 7.2 and as specified in other parts of the permit.²⁴ You must also update the SWPPP as required in Part 7.4.

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part or in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3c.i, and 2.3.3.4) because (1) the provision was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), you are required to include documentation of the reasons why it is infeasible for you to meet the specific requirement, and then you may be waived from complying with this requirement. You must include a separate justification why it is infeasible for you to meet each of the applicable requirements.

If you prepared a SWPPP for coverage under a previous version of this NPDES permit, you must review and update your SWPPP to ensure that this permit's requirements are addressed prior to submitting your NOI.

7.2. SWPPP CONTENTS.

Your SWPPP must include the following information, at a minimum.

²⁴ The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts 2 and 3.

7.2.1. Stormwater Team.

Each operator, or group of multiple operators, must assemble a "stormwater team," which is responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the requirements in this permit.

The SWPPP must identify the personnel (by name or position) that are part of the stormwater team, as well as their individual responsibilities. Each member of the stormwater team must have ready access to an electronic or paper copy of applicable portions of this permit, the most updated copy of your SWPPP, and other relevant documents or information that must be kept with the SWPPP.

7.2.2. Nature of Construction Activities.

The SWPPP must describe the nature of your construction activities, including the size of the property (in acres) and the total area expected to be disturbed by the construction activities (in acres), construction support activity areas covered by this permit (see Part 1.3.c), and the maximum area expected to be disturbed at any one time.

7.2.3. Emergency-Related Projects.

If you are conducting earth-disturbing activities in response to a public emergency (see Part 1.2), you must document the cause of the public emergency (e.g., natural disaster, extreme flooding conditions, etc.), information substantiating its occurrence (e.g., state disaster declaration or similar state or local declaration), and a description of the construction necessary to reestablish affected public services.

7.2.4. Identification of Other Site Operators.

The SWPPP must include a list of all other operators who will be engaged in construction activities at your site, and the areas of the site over which each operator has control.

7.2.5. Sequence and Estimated Dates of Construction Activities.

The SWPPP must include a description of the intended sequence of construction activities, including a schedule of the estimated start dates and the duration of the activity, for the following activities:

- 7.2.5.1 Installation of stormwater control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of stormwater control measures complies with Part 2.1.1.3a and of any departures from manufacturer specifications pursuant to Part 2.1.1.3b;
- 7.2.5.2 Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
- 7.2.5.3 Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;
- 7.2.5.4 Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject in Part 2.2.1; and
- 7.2.5.5 Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.

Note: If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant

to "lock in" the operator to meeting these projections. When departures from initial projections are necessary, this should be documented in the SWPPP itself or in associated records, as appropriate.

7.2.6. Site Map.

The SWPPP must include a legible site map, or series of maps, showing the following features of your project:

Note: Included in the project site are any construction support activities covered by this permit (see Part 1.3.c).

- 7.2.6.1 Boundaries of the property and of the locations where construction activities will occur, including:
 - a. Locations where earth-disturbing activities will occur, noting any phasing of construction activities;
 - b. Approximate slopes before and after major grading activities. Note areas of steep slopes, as defined in Appendix A;
 - c. Locations where sediment, soil, or other construction materials will be stockpiled;
 - d. Locations of any crossings of surface waters;
 - e. Designated points on the site where vehicles will exit onto paved roads;
 - f. Locations of structures and other impervious surfaces upon completion of construction; and
 - g. Locations of construction support activity areas covered by this permit (see Part 1.3.c).
- 7.2.6.2 Locations of all surface waters, including wetlands, that exist within or in the immediate vicinity of the site. Indicate which waterbodies are listed as impaired, and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters;
- 7.2.6.3 The boundary lines of any natural buffers provided consistent with Part 2.1.2.1a;
- 7.2.6.4 Areas of federally-listed critical habitat for endangered or threatened species;
- 7.2.6.5 Topography of the site, existing vegetative cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of stormwater and authorized non-stormwater flow onto, over, and from the site property before and after major grading activities;
- 7.2.6.6 Stormwater and allowable non-stormwater discharge locations, including:
 - a. Locations of any storm drain inlets on the site and in the immediate vicinity of the site; and

Note: The requirement to show storm drain inlets in the immediate vicinity of the site on your site map only applies to those inlets that are easily identifiable from your site or from a publicly accessible area immediately adjacent to your site.

 - b. Locations where stormwater or allowable non-stormwater will be discharged to surface waters (including wetlands) on or near the site.
- 7.2.6.7 Locations of all potential pollutant-generating activities identified in Part 7.2.7;
- 7.2.6.8 Locations of stormwater control measures; and

- 7.2.6.9 Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

7.2.7. Construction Site Pollutants.

The SWPPP must include the following:

- 7.2.7.1 A list and description of all the pollutant-generating activities²⁵ on your site.
- 7.2.7.2 For each pollutant-generating activity, an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers and/or pesticides, paints, solvents, fuels) associated with that activity, which could be exposed to rainfall, or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges. You must also document any departures from the manufacturer's specifications for applying fertilizers containing nitrogen and phosphorus, as required in Part 2.3.5.1.

7.2.8. Non-Stormwater Discharges.

The SWPPP must also identify all sources of allowable non-stormwater discharges listed in Part 1.3.d.

7.2.9. Buffer Documentation.

If you are required to comply with Part 2.1.2.1 because a surface water is located within 50 feet of your project's earth disturbances, you must describe which compliance alternative you have selected for your site, and comply with any additional requirements to provide documentation in Part 2.1.2.1.

7.2.10. Description of Stormwater Control Measures.

- 7.2.10.1 **Stormwater Control Measures to be Used During Construction Activity.** The SWPPP must describe all stormwater control measures that are or will be installed and maintained at your site to meet the requirements of Part 2. For each stormwater control measure, you must document:
- Information on the type of stormwater control measure to be installed and maintained, including design information;
 - What specific sediment controls will be installed and made operational prior to conducting earth-disturbing activities in any given portion of your site to meet the requirement of Part 2.1.2.2a;
 - For exit points on your site, document stabilization techniques you will use and any additional controls that are planned to remove sediment prior to vehicle exit consistent with Part 2.1.2.3; and
 - For linear projects, where you have determined that the use of perimeter controls in portions of the site is impracticable, document why you believe this to be the case (see Part 2.1.2.2a).
- 7.2.10.2 **Use of Treatment Chemicals.** If you will use polymers, flocculants, or other treatment chemicals at your site, the SWPPP must include:
- A listing of all soil types²⁶ that are expected to be exposed during construction and that will be discharged to locations where chemicals

²⁵ Examples of pollutant-generating activities include, but are not limited to: paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations.

will be applied. Also include a listing of soil types expected to be found in fill material to be used in these same areas, to the extent you have this information prior to construction.

- A listing of all treatment chemicals to be used at the site, and why the selection of these chemicals is suited to the soil characteristics of your site;
- If you have been authorized by your applicable EPA Regional Office to use cationic treatment chemicals, include the specific controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards;
- The dosage of all treatment chemicals you will use at the site or the methodology you will use to determine dosage;
- Information from any applicable Material Safety Data Sheets (MSDS);
- Schematic drawings of any chemically-enhanced stormwater controls or chemical treatment systems to be used for application of the treatment chemicals;
- A description of how chemicals will be stored consistent with Part 2.1.3.3b;
- References to applicable state or local requirements affecting the use of treatment chemicals, and copies of applicable manufacturer's specifications regarding the use of your specific treatment chemicals and/or chemical treatment systems; and
- A description of the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to use of the treatment chemicals at your site.

7.2.10.3 **Stabilization Practices.** The SWPPP must describe the specific vegetative and/or non-vegetative practices that will be used to comply with the requirements in Part 2.2, including:

- If you will be complying with the stabilization deadlines specified in Part 2.2.1.3a, you must indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions; and
- If you will be complying with the stabilization deadlines specified in Part 2.2.1.3b, you must document the circumstances that prevent you from meeting the deadlines specified in Parts 2.2.1.1 and/or 2.2.1.2.

7.2.11. Pollution Prevention Procedures.

7.2.11.1 **Spill Prevention and Response Procedures.** The SWPPP must describe procedures that you will follow to prevent and respond to spills and leaks consistent with Part 2.3, including:

- Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and

²⁶ Information on soils may be obtained at <http://websoilsurvey.nrcs.usda.gov/app/>.

- Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.4 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.

You may also reference the existence of Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an NPDES permit for the construction activity, provided that you keep a copy of that other plan onsite.

Note: Even if you already have an SPCC or other spill prevention plan in existence, your plans will only be considered adequate if they meet all of the requirements of this Part, either as part of your existing plan or supplemented as part of the SWPPP.

- 7.2.11.2 **Waste Management Procedures.** The SWPPP must describe procedures for how you will handle and dispose of all wastes generated at your site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

7.2.12. Procedures for Inspection, Maintenance, and Corrective Action.

The SWPPP must describe the procedures you will follow for maintaining your stormwater control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part 2.1.1.4, Part 2.3.2, Part 4, and Part 5 of the permit. The following information must also be included in your SWPPP:

- 7.2.12.1 Personnel responsible for conducting inspections:
- 7.2.12.2 The inspection schedule you will be following, which is based on whether your site is subject to Part 4.1.2 or Part 4.1.3, and whether your site qualifies for any of the allowances for reduced inspection frequencies in Part 4.1.4. If you will be conducting inspections in accordance with the inspection schedule in Part 4.1.2.2 or Part 4.1.3, the location of the rain gauge on your site or the address of the weather station you will be using to obtain rainfall data:
- 7.2.12.3 If you will be reducing your inspection frequency in accordance with Part 4.1.4.2, the beginning and ending dates of the seasonally-defined arid period for your area or the valid period of drought. If you will be reducing your inspection frequency in accordance with Part 4.1.4.3, the beginning and ending dates of frozen conditions on your site; and
- 7.2.12.4 Any inspection or maintenance checklists or other forms that will be used.

7.2.13. Staff Training.

The SWPPP must include documentation that the required personnel were trained in accordance with Part 6.

7.2.14. Documentation of Compliance with Other Federal Requirements.

- 7.2.14.1 **Endangered Species Act.** The SWPPP must include documentation supporting your determination with respect to Part 1.1.e and Appendix D.

7.2.14.2 **Historic Properties.** The SWPPP must include documentation required by Appendix E in relation to potential impacts to historic properties.

7.2.14.3 **Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Stormwater Controls.** If you are using any of the following stormwater controls at your site, as they are described below, you must document any contact you have had with the applicable state agency or EPA Regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR Parts 144 -147. Such controls would generally be considered Class V UIC wells:

- Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);
- Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow; and
- Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

Note: For state UIC program contacts, refer to the following EPA website: <http://water.epa.gov/type/groundwater/uic/wherelyoulive.cfm>

7.2.15. SWPPP Certification.

You must sign and date your SWPPP in accordance with Appendix I, Part 1.11.

7.2.16. Post-Authorization Additions to the SWPPP.

Once you are notified of your coverage under this permit, you must include the following documents as part of your SWPPP:

- A copy of your NOI submitted to EPA along with any correspondence exchanged between you and EPA related to coverage under this permit;
- A copy of the acknowledgment letter you receive from the NOI Processing Center or eNOI system assigning your permit tracking number;
- A copy of this permit (an electronic copy easily available to the stormwater team is also acceptable).

7.3. ON-SITE AVAILABILITY OF YOUR SWPPP.

You are required to keep a current copy of your SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by EPA: a state, tribal, or local agency approving stormwater management plans; the operator of a storm sewer system receiving discharges from the site; or representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS).

EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) will be withheld from the public, but may not be withheld from EPA, USFWS, or NMFS.

Note: Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may

be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the CWA. The authorized representatives, including employees of other executive branch agencies, may review CBI during the course of reviewing draft regulations.

If an onsite location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of your construction site.

7.4. REQUIRED SWPPP MODIFICATIONS.

7.4.1. List of Conditions Requiring SWPPP Modification.

You must modify your SWPPP, including the site map(s), in response to any of the following conditions:

- 7.4.1.1 Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater control measures, pollution prevention measures, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.2.5 change during the course of construction;
- 7.4.1.2 To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
- 7.4.1.3 If inspections or investigations by site staff, or by local, state, tribal, or federal officials determine that SWPPP modifications are necessary for compliance with this permit;
- 7.4.1.4 Where EPA determines it is necessary to impose additional requirements on your discharge, the following must be included in your SWPPP:
 - a. A copy of any correspondence describing such requirements; and
 - b. A description of the stormwater control measures that will be used to meet such requirements.
- 7.4.1.5 To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater control measures implemented at the site; and
- 7.4.1.6 If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

7.4.2. Deadlines for SWPPP Modifications.

You must complete required revisions to the SWPPP within 7 calendar days following the occurrence of any of the conditions listed in Part 7.4.1.

7.4.3. SWPPP Modification Records.

You are required to maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part 7.2.15 above) and a brief summary of all changes.

7.4.4. Certification Requirements.

All modifications made to the SWPPP consistent with Part 7.4 must be authorized by a person identified in Appendix I, Part I.11.b.

7.4.5. Required Notice to Other Operators.

Upon determining that a modification to your SWPPP is required, if there are multiple operators covered under this permit, you must immediately notify any operators who may be impacted by the change to the SWPPP.

8. HOW TO TERMINATE COVERAGE.

Until you terminate coverage under this permit, you are required to comply with all conditions and effluent limitations in the permit. To terminate permit coverage, you must submit to EPA a complete and accurate Notice of Termination (NOT), which certifies that you have met the requirements for terminating in Part 8.

8.1. MINIMUM INFORMATION REQUIRED IN NOT.

You will be required to provide the following in your NOT:

- 8.1.1. NPDES permit tracking number provided by EPA when you received coverage under this permit;
- 8.1.2. Basis for submission of the NOT (see Part 8.2);
- 8.1.3. Operator contact information;
- 8.1.4. Name of project and address (or a description of location if no street address is available); and
- 8.1.5. NOT certification.

8.2. CONDITIONS FOR TERMINATING PERMIT COVERAGE.

You may terminate permit coverage only if one of the following conditions occurs at your site:

8.2.1. You have completed all earth-disturbing activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.3.c), and you have met the following requirements:

- 8.2.1.1 For any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities, you have met the requirements for final vegetative or non-vegetative stabilization in Part 2.2.2;
- 8.2.1.2 You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;
- 8.2.1.3 You have removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and
- 8.2.1.4 You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or

8.2.2. You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or

8.2.3. Coverage under an individual or alternative general NPDES permit has been obtained.

8.3. HOW TO SUBMIT YOUR NOT.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOT. The electronic NOT form you are required to complete is found at www.epa.gov/npdes/stormwater/cgpenoi. You will use your NOI tracking number (i.e., the EPA number you were assigned upon authorization under the permit) to upload the

fillable NOT form, which will ensure that EPA properly records your termination of coverage. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOT, you must complete the form in Appendix K.

8.4. DEADLINE FOR SUBMITTING NOTS.

You must submit your NOT within 30 calendar days after any one of the triggering conditions in Part 8.2 occur.

8.5. EFFECTIVE DATE OF TERMINATION OF COVERAGE.

Your authorization to discharge under this permit terminates at midnight of the calendar day that a complete NOT is processed and posted on EPA's website (www.epa.gov/npdes/stormwater/cgpnosearch).

9. PERMIT CONDITIONS APPLICABLE TO SPECIFIC STATES, INDIAN COUNTRY LANDS, OR TERRITORIES

The provisions in this Part provide modifications or additions to the applicable conditions of this permit to reflect specific additional conditions required as part of the state or tribal CWA Section 401 certification process, or the Coastal Zone Management Act (CZMA) certification process, or as otherwise established by the permitting authority. The specific additional revisions and requirements only apply to activities in those specific states, Indian country, and areas in certain states subject to construction projects by Federal Operators. States, Indian country, and areas subject to construction by Federal Operators not included in this Part do not have any modifications or additions to the applicable conditions of this permit

9.1. Region 1**9.1.1. MAR120000: Commonwealth of Massachusetts (except Indian country).**

- 9.1.1.1 You must comply with the Massachusetts Clean Waters Act (Ch. 21, ss. 26-53).
- 9.1.1.2 You must comply with the conditions in 314 CMR 4.00- Massachusetts Surface Water Quality Standards.
- 9.1.1.3 You must comply with the conditions in 314 CMR 3.00- Massachusetts Surface Water Discharge Permit Program.
- 9.1.1.4 You must comply with the Wetlands Protection Act (Ch. 131 s. 40) and its regulations, 310 CMR 10.00 and any Order of Conditions issued by a Conservation Commission or a Superseding Order of Conditions issued by the Massachusetts Department of Environmental Protection.
- 9.1.1.5 You must comply with the Massachusetts Storm Water Performance Standards, as prescribed by state regulations promulgated under the authority of the Massachusetts Clean Waters Act, MGL Ch. 21, ss 26-53 and the Wetlands Protection Act, Ch. 131, s. 40.
- 9.1.1.6 You must comply with the conditions in 314 CMR 9.00 - Water Quality Certification for Discharges of Dredged or Fill Material, Dredging, and Dredged Material Disposal in Waters of the United States within the Commonwealth.
- 9.1.1.7 You must comply with the Massachusetts Endangered Species Act (MESA), MGL Ch. 313A and regulations at 321 CMR 10.00 and any actions undertaken to comply with this stormwater general permit shall not result in non-compliance with the MESA.
- 9.1.1.8 Activities covered under this general permit shall not interfere with the implementation of mosquito control work conducted in accordance with Chapter 252 including s. 5A thereunder and MassDEP Guideline Number BRP G01-02, West Nile Virus Application of Pesticides to Wetland Resource Areas and Buffer Zones, and Public Water Supplies.
- 9.1.1.9 The Department may request a copy of the Stormwater Pollution Prevention Plan (SWPPP) and the permittee is required to submit the SWPPP to the Department within 14 days of such request. The Department may conduct an inspection of any facility covered by this permit to ensure compliance with state law requirements, including state water quality standards. The Department may enforce its certification conditions.

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- 9.1.1.10 The Department may require the permit holder to perform water quality monitoring during the permit term if monitoring is necessary for the protection of public health or the environment as designated under the authority at 314 CMR 3.00.
- 9.1.1.11 The Department may require the permit holder to provide measurable verification of the effectiveness of Best Management Practices (BMPs) and other control measures used in the stormwater management program, including water quality monitoring.
- 9.1.1.12 The Department has determined that compliance with this permit does not protect the permit holder from enforcement actions deemed necessary by the Department under its associated regulations to address an imminent threat to public health or a significant adverse environmental impact which results in a violation of the Massachusetts Clean Waters Act, Ch. 21, ss. 26-53.
- 9.1.1.13 The Department reserves the right to modify this 401 Water Quality Certification if any changes, modifications, or deletions are made to this general permit. In addition, the Department reserves the right to add and/or alter the terms and conditions of this 401 Water Quality Certification to carry out its responsibilities during the term of this general permit with respect to water quality, including any revisions to 314 CMR 4.00, Massachusetts Surface Water Quality Standards.
- 9.1.1.14 Should any violation of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, or the conditions of this 401 Water Quality Certification occur, the Department will direct the permit holder to correct the violation(s). The Department has the right to take any action as authorized by the General Laws of the Commonwealth to address the violation(s) of this permit or the Massachusetts Clean Waters Act and the regulations promulgated thereunder. Substantial civil and criminal penalties are authorized under MGL Ch. 21, s. 42 for discharging into Massachusetts' waters in violation of an order or permit issued by this Department. This 401 Water Quality Certification does not relieve the permit holder of the duty to comply with other applicable Massachusetts statutes and regulations.

9.1.2. NHR120000: State of New Hampshire.

- 9.1.2.1 If you disturb 100,000 square feet or more of contiguous area, you must also apply for an Alteration of Terrain (AOT) permit from DES pursuant to RSA 485-A:17 and Env-Ws 1500. This requirement also applies to a lower disturbance threshold of 50,000 square feet or more when construction occurs within the protected shoreline under the Shoreland Water Quality Protection Act (see RSA 483-B and Env-Ws 1400). A permit application must also be filed if your project disturbs an area of greater than 2,500 square feet, is within 50 feet of any surface water, and has a flow path of 50 feet or longer disturbing a grade of 25 percent or greater. Project sites with disturbances smaller than those discussed above, that have the potential to adversely affect state surface waters, are subject to the conditions of an Aot General Permit by Rule.
- 9.1.2.2 You must determine that any excavation dewatering discharges are not contaminated before they will be authorized as an allowable non-stormwater discharge under this permit (see Part 1.3.d). The water is considered uncontaminated if there is no groundwater contamination within 1,000 feet of the source of the groundwater to be treated and discharged.

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Information on groundwater contamination can be generated over the internet via the NHDES web site <http://des.nh.gov/> at the OneStop Web Geographic Information System at <http://www2.des.state.nh.us/gis/onestop>. If it is determined that the groundwater to be dewatered is near a remediation or other waste site you must apply for the Remediation General Permit (see <http://www.epa.gov/region1/npdes/rgp.html>).

- 9.1.2.3 You must treat any uncontaminated excavation dewatering discharges as necessary to remove suspended solids and turbidity. The discharges must be sampled at a location prior to mixing with stormwater at least once per week during weeks when discharges occur. Samples must be analyzed for total suspended solids (TSS) and must meet monthly average and daily maximum TSS limits of 50 milligrams per liter (mg/L) and 100 mg/L, respectively. TSS (a.k.a. Residue, Nonfilterable) sampling and analysis must be performed in accordance with Tables IB and II in 40 CFR 136.3 (see: http://www.access.gpo.gov/mara/cfr/waisidx_02/40cfr136_02.html). Records of any sampling and analysis must be maintained and kept with the SWPPP for at least three years after final site stabilization.
- 9.1.2.4 Construction site owners and operators must consider opportunities for post-construction groundwater recharge using infiltration best management practices (BMPs) during site design and preparation of the stormwater pollution prevention plan (SWPPP). If your construction site is in a town that is required to obtain coverage under the NPDES General Permit for discharges from Municipal Separate Storm Sewer Systems (MS4) you may be required to use such practices. The SWPPP must include a description of any on-site infiltration that will be installed as a post-construction stormwater management measure or reasons for not employing such measures such as 1) The facility is located in a wellhead protection area as defined in RSA 485-C:2; or 2) The facility is located in an area where groundwater has been reclassified to GAA, GAI or GA2 pursuant to RSA 485-C and Env-Ws 420; or 3) Any areas that would be exempt from the groundwater recharge requirements contained in Env-Ws 1507.04(e), including all land uses or activities considered to be a "High-load Area" (see Env-Wq 1502.26). For design considerations for infiltration measures see Volume II of the [NH Stormwater Manual](#).
- 9.1.2.5 Appendix F contains a list of Tier 2, or high quality waters. Although there is no official list of tier 2 waters, it can be assumed that all NH surface waters are tier 2 for turbidity unless 1) the surface water that you are proposing to discharge into is listed as impaired for turbidity in the states listing of impaired waters (see Surface Water Quality Watershed Report Cards at http://des.nh.gov/organization/divisions/water/wmbb/swqa/report_cards.htm or 2) sampling upstream of the proposed discharge location shows turbidity values greater than 10 NTU. A single grab sample collected during dry weather (no precipitation within 48 hours) is acceptable.
- 9.1.2.6 To ensure compliance with RSA 485-C, RSA 485-A, RSA 485-A:13, (a), Env-Wq 1700 and Env-Wq 302, the following information may be requested by NHDES. This information must be kept on site unless you receive a written request from NHDES that it be sent to the address shown in Part 9.1.2.7.
 - a. A site map required in Part 7.2.6, showing the type and location of all post-construction infiltration BMPs utilized at the facility or the reason(s) why none were installed;

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- b. A list of all non-stormwater discharges that occur at the facility, including their source locations and the control measures being used (see Part 1.3.d).
- c. Records of sampling and analysis of TSS required for construction dewatering discharges (see Part 9.1.2.3).

9.1.2.7 All required or requested documents must be sent to:

- NH Department of Environmental Services, Wastewater Engineering Bureau, Permits & Compliance Section
P.O. Box 95
Concord, NH 03302-0095
- 9.1.2.8 When NHDES determines that additional water quality certification requirements are necessary to protect water quality, it may require individual discharges to meet additional conditions to obtain or continue coverage under the CGP. Any such conditions must be supplied to the permittee in writing. Any required pollutant loading analyses and any designs for structural best management practices necessary to protect water quality must be prepared by a civil or sanitary engineer registered in New Hampshire.

9.2. Region 4**9.2.1. FLR120000: Indian country within the State of Florida.**

- 9.2.1.1 **Seminole Tribe of Florida.** The following conditions apply only for discharges on federal trust lands of the Seminole Tribe of Florida (Big Cypress, Brighton, Hollywood, Immokalee, and Tampa Reservations):
 - a. Any discharges into waters of the Seminole Tribe of Florida shall not cause an exceedance in Turbidity of 29 NTU above natural background conditions.
 - b. Unless otherwise specified by previous permits or criteria, a storm event of three (3) day duration and twenty five (25) year return frequency shall be used in computing off-site discharge on Seminole Lands as agreed upon in the Water Rights Compact agreement attached to Public Law 100-228 (December 31, 1987), Seminole Indian Land Claims Settlement Act of 1987.
 - c. The Seminole Tribe of Florida accepts a 20' X 20' stabilization at entry/exit points.

9.3. Region 5**MNR120000: Indian country within the State of Minnesota.**

- 9.3.1.1 **Fond du Lac Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Fond du Lac Band of Lake Superior Chippewa Reservation.
 - a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:
Fond du Lac Reservation
Office of Water Protection
1720 Big Lake Road
Cloquet, MN 55720

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CGP applicants are encouraged to work with the FDL Office of Water Protection in the identification of all proposed receiving waters.

- b. Copies of the Notice of Intent (NOI) and the Notice of Termination (NOT) must be sent to the Fond du Lac Office of Water Protection at the same time they are submitted to EPA.
- c. The turbidity limit shall NOT exceed 10% of natural background as determined by the Office of Water protection staff.
- d. Turbidity sampling must take place within 24 hours of a ½ -inch or greater rainfall event. The results of the sampling must be reported to the Office of Water Protection staff within 7 days of sample collection. All sample reporting must include the date and time, location (GPS:UTM/Zone 15), and NTU.
- e. Discharges to receiving waters with open water must be sampled for turbidity prior to any authorized discharge as determined by Office of Water Protection staff.
- f. This certification does not pertain to any new discharge to Outstanding Reservation Resource Waters (ORRW) as described in §105 b.3 of the Fond du Lac Water Quality Standards (Ordinance #12/98). Although additional waters may be designated in the future, currently Perch Lake, Rice Portage Lake, Miller Lake, Deadfish Lake and Jaskari Lake are designated as ORRWs. New dischargers wishing to discharge to an ORRW must obtain an individual permit for stormwater discharges from large and small construction activities.
- g. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Fond du Lac Reservation, Ordinance 12/98 as amended. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Fond du Lac Reservation for any of the uses designated in the Water Quality Standards of the Fond du Lac Reservation. These uses include wildlife, aquatic life, warm and cold water fisheries, subsistence fishing (netting), primary contact recreation, cultural, wild rice areas, aesthetic waters, agriculture, navigation and commercial.
- h. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Fond du Lac Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Fond du Lac reservation, including groundwater.
- i. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

9.3.1.2 **Grand Portage Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Grand Portage Band of Lake Superior Chippewa Reservation.

- a. The CGP authorization is for construction activities that may occur within the exterior boundaries of the Grand Portage Reservation in

- a. Only those activities specifically authorized by the CGP are authorized by this Certification. This Certification does not authorize impacts to cultural properties, or historical sites, or properties that may be eligible for listing as such.^{27, 28}
- b. Operators are not eligible to obtain authorization under the CGP for all new discharges to an Outstanding Tribal Resource Water (or Tier 3 water).²⁹ Outstanding Tribal Resource Waters, or Tier 3 waters, include the following: Kakagon Slough and the lower wetland reaches of its tributaries that support wild rice, Kakagon River, Bad River Slough, Honest John Lake, Bog Lake, a portion of Bad River, from where it enters the Reservation through the confluence with the White River, and Potato River.³⁰
- c. Projects utilizing cationic treatment chemicals³¹ within the Bad River Reservation boundaries are not eligible for coverage under the CGP.³²
- d. All projects which are eligible for coverage under the CGP and are located within the exterior boundaries of the Bad River Reservation shall be implemented in such a manner that is consistent with the Tribe's Water Quality Standards (WQS).³³
- e. An operator proposing to discharge to an Outstanding Resource Water (or Tier 2.5 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Outstanding Resource Waters, or Tier 2.5 waters, include the following: a portion of Bad River, from downstream the confluence with the White River to Lake Superior, White River, Marengo River, Graveyard Creek, Bear Trap Creek, Wood Creek, Brunsweller River, Tyler Forks, Bell Creek, and Vaughn Creek.³⁴ The antidegradation demonstration materials described in provision E.4.iii. must be submitted to the following address:
Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861
- f. An operator proposing to discharge to an Exceptional Resource Water (or Tier 2 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Exceptional Resource Waters, or Tier 2 waters, include the following: any surface water within the exterior boundaries of the Reservation that is not specifically classified as an Outstanding Resource Water (Tier 2.5 water) or an Outstanding Tribal

accordance to the Grand Portage Land Use Ordinance. The CGP regulates stormwater discharges associated with construction sites of one acre or more in size. Only those activities specifically authorized by the CGP are authorized by this certification (the "Certification"). This Certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for listing as such.

- b. All construction stormwater discharges authorized by the CGP must comply with the Water Quality Standards and Water Resources Ordinance, as well as Applicable Federal Standards (as defined in the Water Resources Ordinance). As such, appropriate steps must be taken to ensure that petroleum products or other chemical pollutants are prevented from entering the Waters of the Reservation (as defined in the Water Resources Ordinance). All spills must be reported to the appropriate emergency-management agency, and measures must be taken to prevent the pollution of the Waters of the Reservation, including groundwater.
- c. A copy of the Storm Water Pollution Prevention Plan (the "Plan") required by the CGP must be submitted to the Board at least 30 days in advance of sending the requisite Notice of Intent to EPA. The Board may require monitoring of storm-water discharges as determined on a case-by-case basis. If the Board determines that a monitoring plan is necessary, the monitoring plan must be prepared and incorporated into the Plan before the Notice of Intent is submitted to the EPA. The Plan should be sent to:
Grand Portage Environmental Resources Board
P.O. Box 428
Grand Portage, MN 55605
Copies of the Notice of Intent and Notice of Termination required under the General Permit must be submitted to the Board at the address above at the same time they are submitted to the EPA.
- d. If requested by the Grand Portage Environmental Department, the permittee must provide additional information necessary for a case-by-case eligibility determination to assure compliance with the Water Quality Standards and any Applicable Federal Standards.
- e. Discharges that the Board has determined to be or that may reasonably be expected to be contributing to a violation of Water Quality Standards or Applicable Federal Standards are not authorized by this Certification.
- f. The Board retains full authority provided by the Water Resources Ordinance to ensure compliance with and to enforce the provisions of the Water Resource Ordinance and Water Quality Standards, Applicable Federal Standards, and these Certification conditions.
- g. Appeals related to Board actions taken in accordance with any of the preceding conditions may be heard by the Grand Portage Tribal Court.

9.3.2. **WIR12000: Indian country within the State of Wisconsin.**

- 9.3.2.1 **Bad River Band of the Lake Superior Tribe of Chippewa Indians.** The following conditions apply only to discharges on the Bad River Band of the Lake Superior Tribe of Chippewa Indians Reservation.

Resource Water (Tier 3 water).³⁵ The antidegradation demonstration materials described in provision E.4.ii. must be submitted to the following address:

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

- g. A discharge to a surface water within the Bad River Reservation boundaries shall not cause or contribute to an exceedance of the turbidity criterion included in the Tribe's WQS, which states: Turbidity shall not exceed 5 NTU over natural background turbidity when the background turbidity is 50 NTU or less, or turbidity shall not increase more than 10% when the background turbidity is more than 50 NTU.³⁶
- h. All projects which are eligible for coverage under the CGP within the exterior boundaries of the Bad River Reservation must comply with the Bad River Reservation Wetland and Watercourse Protection Ordinance, or Chapter 323 of the Bad River Tribal Ordinances, including the erosion and sedimentation control, natural buffer, and stabilization requirements. Questions regarding Chapter 323 and requests for permit applications can be directed to the Wetlands Specialist in the Tribe's Natural Resources Department at (715) 682-7123 or wetlands@badriver-nsn.gov.
- i. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must notify the Tribe prior to the commencing earth-disturbing activities.³⁷ The operator must submit a copy of the Notice of Intent (NOI) to the following addresses at the same time it is submitted to the U.S. EPA:
Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861
Bad River Tribe's Natural Resources Department
Attn: Tribal Historic Preservation Officer (THPO)
P.O. Box 39
Odanah, WI 54861
The operator must also submit a copy of the Notice of Termination (NOT) to the above addresses at the same time it is submitted to the U.S. EPA.
- j. The THPO must be provided 30 days to comment on the project.³⁸
- k. The operator must obtain THPO concurrence in writing. This written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties. For more information regarding the specifics

²⁷ Bad River Band of Lake Superior Tribe of Chippewa Indians Water Quality Standards adopted by Resolution No. 7-6-11-441 (hereafter, Tribe's WQS).

²⁸ 36 C.F.R. §800.16(i)(2).

²⁹ Tribe's WQS: See provisions E.3.ii and E.4.iv.

³⁰ Tribe's WQS: See provision E.2.iii.

³¹ See definition of cationic treatment chemicals in Appendix A of the CGP

³² Tribe's WQS: See provisions E.6.ii.a and E.6.ii.c.

³³ See Footnote 27.

³⁴ Tribe's WQS: See provision E.2.ii.

³⁵ Tribe's WQS: See provision E.2.i.

³⁶ Tribe's WQS: See provision E.7.iii.

³⁷ See footnotes 27 and 28.

³⁸ 36 C.F.R. § 800.3(c)(4).

of the cultural resources process, see 36 CFR Part 800. A best practice for an operator is to consult with the THPO during the planning stages of an undertaking.³⁹

- l. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the following address at the same time as submitting the NOI:⁴⁰

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

- m. Any corrective action reports that are required under the CGP must be submitted to the following address within one (1) working day of the report completion:⁴¹

Bad River Tribe's Natural Resources Department
P.O. Box 39
Odanah, WI 54861

- n. An operator shall be responsible for meeting any additional permit requirements imposed by the U.S. EPA necessary to comply with the Tribe's antidegradation policies if the discharge point is located upstream of waters designated by the Tribe.⁴²

9.3.2.2 **Lac du Flambeau Band of Lake Superior Chippewa Indians.** The following conditions apply only to discharges on the Lac du Flambeau Band of Lake Superior Chippewa Indians Reservation.

- a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Lac du Flambeau
Tribal Land Management
P. O. Box 279
Lac du Flambeau, WI 54538

CGP applicants are encouraged to work with the LdF Office of Water Protection in the identification of all proposed receiving waters.

- b. Copies of the NOI and the Notice of Termination (NOT) must be sent to the LdF Water Resource Program at the same time they are submitted to EPA.

- c. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Lac du Flambeau Reservation. This includes, but is not limited to, the

³⁹ 36 C.F.R. § 800.3(b).

⁴⁰ See footnote 27.

⁴¹ See footnote 27.

⁴² See footnote 27.

prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Lac du Flambeau Reservation for any of the uses designated in the Water Quality Standards of the Lac du Flambeau Reservation.

- d. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Lac du Flambeau Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Lac du Flambeau Reservation, including groundwater.
- e. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

Note: Facilities within the Sokaogon Chippewa Community are not eligible for stormwater discharge coverage under this permit. Contact the Region 5 office for an individual permit application.

9.4. Region 6

9.4.1. NMR120000: State of New Mexico, except Indian country.

- 9.4.1.1 In addition to all other provisions of this permit, operators who intend to obtain authorization under this permit for all new and existing stormwater discharges must satisfy the following condition:

The SWPPP must include site-specific interim and permanent stabilization, managerial, and structural solids, erosion, and sediment control best management practices (BMPs) and/or other controls that are designed to prevent to the maximum extent practicable an increase in the sediment yield and flow velocity from pre-construction, pre-development conditions to assure that applicable standards in 20.6.4 NMAC, including the antidegradation policy, or waste load allocations (WLAs) are met. This requirement applies to discharges both during construction and after construction operations have been completed. The SWPPP must identify, and document the rationale for selecting these BMPs and/or other controls. The SWPPP must also describe design specifications, construction specifications, maintenance schedules (including a long term maintenance plan), criteria for inspections, and expected performance and longevity of these BMPs. BMP selection must be made based on the use of appropriate soil loss prediction models (e.g., SEDCAD 4.0, RUSLE, SEDIMOT II, MULTISED, etc.), or equivalent, generally accepted (by professional erosion control specialists), soil loss prediction tools. The operator(s) must demonstrate, and include documentation in the SWPPP, that implementation of the site-specific practices will assure that the applicable standards or WLAs are met, and will result in sediment yields and flow velocities that, to the maximum extent practicable, will not be greater than the sediment yield levels and flow velocities from pre-construction, pre-development conditions. The SWPPP must be prepared in accordance with good engineering practices by qualified (e.g., CPESC certified, engineers with appropriate training, etc.) erosion control specialists familiar with the use of soil loss prediction models and design of erosion and sediment control systems based on these models (or equivalent soil loss prediction tools). Qualifications of the preparer (e.g., professional certifications, description of appropriate training) must be

documented in the SWPPP. The operator(s) must design, implement, and maintain BMPs in the manner specified in the SWPPP.

- 9.4.1.2 Operators are not eligible to obtain authorization under this permit for all new and existing stormwater discharges to outstanding national resource waters (ONRWs) (also referred to as "Tier 3" waters).

- 9.4.1.3 For temporary stabilization, instead of the deadline for initiating and completing stabilization in Part 2.2.1.3a, operators must comply with the deadlines in Parts 2.2.1.1 and 2.2.1.2.

- 9.4.1.4 Instead of the criteria for vegetative stabilization in Part 2.2.2.1.a, operators must provide a uniform vegetation (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures. The adjustment to allow for less than 100 % native vegetative cover (e.g., 50 % native vegetative cover x 70 % = 35 %) is acceptable.

- 9.4.1.5 The following replaces the criteria for final vegetative stabilization in Part 2.2.2.1.b:

- The area you have seeded and planted must within 3 years provide established vegetation that achieves 70% of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures; and
- In addition to seeding or planting the area to be vegetatively stabilized, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

In addition, permittees are only authorized to use this option as a method for final vegetative stabilization for purposes of filing a Notice of Termination (NOT) under the following conditions:

If this option is selected, you must notify NMED at the address listed in Part 9.4.1.6 at the time the NOT is submitted to EPA. The information to be submitted includes:

- A copy of the NOT;
- Contact information, including individual name or title, address, and phone number for the party responsible for implementing the final stabilization measures; and
- The date that the permanent vegetative stabilization practice was implemented and the projected timeframe that the 70 % native vegetative cover requirements are expected to be met. (Note that if more than three years is required to establish 70 % of the natural vegetative cover, this technique cannot be used or cited for fulfillment of the final stabilization requirement – you remain responsible for establishment of final stabilization).

NMED also requires that operators periodically (minimum once/year) inspect and properly maintain the area until the criteria for final stabilization, as specified in Part 2.2 of the CGP, have been met. Operators must prepare an inspection report documenting the findings of these inspections and signed in accordance with Appendix I, Part I.11. This inspection record must be

retained along with the SWPPP for three years after the NOT is submitted for the site and additionally submitted to NMED at the address listed in Part 9.4.1.6. The inspections at a minimum must include the following:

- Observations of all areas of the site disturbed by construction activity;
- Best Management Practices (BMPs)/post-construction stormwater controls must be observed to ensure they are effective;
- An assessment of the status of vegetative re-establishment; and
- Corrective actions required to ensure vegetative success within three years, and control of pollutants in stormwater runoff from the site, including Implementation dates.

- 9.4.1.6 Copies of all documents submitted to EPA in non-electronic format must be sent to the following address:

Program Manager
Point Source Regulation Section
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico 87502

9.4.2. NMR120000: Indian country within the State of New Mexico.

- 9.4.2.1 **Pueblo of Sandia.** The following conditions apply only to discharges on the Pueblo of Sandia Reservation:

- a. Copies of all Notices of Intent submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address. Discharges are not authorized by this permit unless an accurate and complete NOI has been submitted to the Pueblo of Sandia.

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

- b. The Pueblo of Sandia will not allow the Rainfall Erosivity Waivers (see Appendix C) to be granted for any small construction activities.
- c. The Stormwater Pollution Prevention Plan (SWPPP) must be available to the Pueblo of Sandia Environment either electronically or hard copy upon request for review. The SWPPP must be made available at least fourteen (14) days before construction begins. The fourteen (14) day period will give Tribal staff time to become familiar with the project site, prepare for construction inspections, and determine compliance with the Pueblo of Sandia Water Quality Standards. Failure to provide a SWPPP to the Pueblo of Sandia may result in denial of the discharge or construction delay.
- d. An "Authorization to Proceed Letter" with site specific mitigation, site and project requirements will be sent out to the permittee when a review of the NOI and SWPPP is completed by the Pueblo of Sandia

Environment Department. This approval will allow the construction to proceed if all applicable requirements are met.

- e. Before submitting a Notice of Termination (NOT), permittees must clearly demonstrate to the Pueblo of Sandia Environment Department through a site visit or documentation that requirements for site stabilization have been met and any temporary erosion control structures have been removed. A short letter stating the stabilization requirements have been met will be sent to the permittee to add to the permittees NOT submission to EPA.
- f. Copies of all NOT submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address:

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

9.4.3. OKR12000F: Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).

In accordance with Section 303 of the Clean Water Act and Oklahoma's Water Quality Standards (OAC 785: 45):

- 9.4.3.1 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, this permit may only be used to authorize discharges from temporary construction activities. Certification is denied for any on-going activities such as sand and gravel mining or any mineral mining.
- 9.4.3.2 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, certification is denied for any discharges originating from support activities, including concrete and asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, or borrow areas.

9.5. Region 8

9.5.1. MTR12000I: Indian country within the State of Montana

- 9.5.1.1 **The Confederated Salish and Kootenai Tribes of the Flathead Nation.** The following conditions apply only to discharges on the Confederated Salish and Kootenai Tribes of the Flathead Nation Reservation:
 - a. Permittees must send the Stormwater Pollution Prevention Plan (SWPPP) to the Tribes at least 30 days before construction starts.

- b. Before submitting the Notice of Termination (NOT), permittees must clearly demonstrate to an appointed tribal staff person during an on-site inspection that requirements for site stabilization have been met.
- c. The permittee must send a copy of the Notice of Intent (NOI) and the Notice of Termination (NOT) to the tribes.
- d. Permittees may submit their SWPPPs and NOTs electronically to clintf@cst.org.

Written NOIs, SWPPPs and NOTs may be mailed to:
Clint Falden, Water Quality Regulatory Specialist
Confederated Salish and Kootenai Tribes
Natural Resources Department
P.O. Box 278
Pablo, MT 59855

9.5.1.2 Fort Peck Tribes. The following conditions apply only to discharges on the Fort Peck Reservation:

Permittees must notify the Fort Peck Office of Environmental Protection (OEP) two weeks prior to commencing construction.

9.6. Region 9

9.6.1. AZR12000I: Indian country within the State of Arizona.

9.6.1.1 Hualapai Tribal Lands. The following condition applies only for discharges on the Hualapai Reservation:

All notices of intent for proposed stormwater discharges under the CGP and all pollution prevention plans for stormwater discharges on Hualapai Tribal lands shall be submitted to Water Resources Program through the Tribal Chairman for review and approval, P.O. Box 179, Peach Springs, AZ 86434.

9.6.2. CAR12000I: Indian country within the State of California.

9.6.2.1 Big Pine Paiute Tribe of the Owens Valley. Big Pine Tribal Water Quality Standards Section VII(e): If a proposed action has the possibility to adversely affect the water quality of Big Pine Creek, an application must be filed with the Tribal Environmental Office. The application must describe the action proposed and its effects on the creek, how this information was derived, and a justification for the action. Upon satisfying these requirements, the Tribal Environmental Office will recommend or not recommend this proposal to be considered by the Tribal Council. Tribal Council will make a determination whether to consider the proposal further. If the Tribal Council wishes to consider the application further, the public participation process will take place (see paragraph VII(d)). The Tribal Council has the sole authority in permitting degradation to Big Pine Creek. If the Tribal Council makes the decision to allow degradation, they will submit their decision to the USEPA for review and approval.

9.6.3. GUR120000: The Island of Guam. Permittees must adhere with imposed conditions for the project, in accordance with section 307(c)(1), of the Coastal Zone Management Act, 15 CFR part 930.

9.6.4. MPR120000: Commonwealth of the Northern Mariana Islands (CNMI).

9.6.4.1 An Earthmoving and Erosion Control Permit must be obtained from DEQ prior to any construction activity covered under the NPDES General Permit.

9.6.4.2 All conditions and requirements set forth in the United States Environmental Protection Agency (USEPA), National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities must be complied with.

9.6.4.3 A stormwater pollution prevention plan (SWPPP) for stormwater discharges from construction activities must be approved by the Director of DEQ prior to submission of the Notice of Intent (NOI).

9.6.4.4 A NOI to be covered by the General Permit for Discharges from Construction Activities must be submitted to DEQ and USEPA, Region IX, in the form prescribed by USEPA, accompanied by a SWPPP approval letter from DEQ.

9.6.4.5 The NOI must be postmarked fourteen (14) calendar days prior to any stormwater discharges and a copy is submitted to the Director of DEQ no later than seven (7) calendar days prior to any stormwater discharges.

9.6.4.6 Copies of all monitoring reports required by the NPDES General Permit are submitted to DEQ.

9.6.4.7 In accordance with Section 10.3(h) and (i) of the CNMI Water Quality Standards, DEQ reserves the right to deny coverage under this permit and require submittal of an application for an individual NPDES permit based on review of the NOI or other information made available to the Director.

9.6.5. NVR12000I: Indian country within the State of Nevada.

9.6.5.1 Pyramid Lake Paiute Tribe. The following conditions apply only for discharges on the Pyramid Lake Paiute Reservation:

- a. A SWPPP for stormwater discharges from project construction activities must be submitted to, and approved by, the PLPT Environmental Department director, prior to the submission of a Notice of Intent (NOI or eNOI) to EPA.
- b. The applicant is to submit a hard copy of the Notice of Intent (NOI or eNOI) and a draft or final copy of the Stormwater Pollution Prevention Plan (SWPPP) by U.S. Mail to the Pyramid Lake Environmental Department at the address below:

Pyramid Lake Tribe Environmental Department
P.O. Box 256
Nixon, NV 89424
- c. The applicant is to concurrently submit to the PLPT Environmental Department, hard copies of any other forms submitted to the EPA, including waivers, reporting, and Notice of Termination (NOT).

9.7. Region 10

9.7.1. IDR120000: The State of Idaho, except those located on Indian country.

For the complete text of Idaho's certification including the full anti-degradation analysis, please visit the IDEQ website at <http://www.deq.idaho.gov/media/821491-usepa-npdes-general-permit-storm-water-discharges-401-certification-final-0412.pdf>

- 9.7.1.1 The Idaho Department of Environmental Quality's (DEQ) certification of this permit does not constitute authorization of your permitted activities by any other state or federal agency or private person or entity. DEQ's certification does not excuse you from the obligation to obtain any other necessary

approvals, authorizations or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

9.7.1.2 Idaho's Antidegradation Policy. Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- a. Tier 1 Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01: 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.05).
- b. Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02: 58.01.02.052.06).
- c. Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03: 58.01.02.052.07).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (Idaho Code § 39-3603(2)(b)(i)). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (Idaho Code § 39-3603(2)(b)(iii)). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (Idaho Code § 39-3603(2)(b)). The primary pollutants of concern associated with stormwater discharges from construction activities are sediment and turbidity (as Total Suspended Solids). Other potential pollutants include the following: phosphorus, nitrogen and other nutrients from fertilizers; pesticides; petroleum products; construction chemicals; and solid wastes.

9.7.1.3 Protection and Maintenance of Existing Uses (Tier 1 Protection). In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The permittee must notify the appropriate DEQ Regional Office (see table in Part 9.7.1.8 below for contact information) of any potential discharges to impaired waters - water bodies identified as "impaired" for sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or nutrients, including impairments for nitrogen and/or phosphorus.

To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: <http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx>. Impaired waters are identified in Categories 4 and 5 of the Integrated Report. Category 4(a) reflects impaired waters for which a TMDL has been approved by EPA. Category 5

contains waters which have been identified as "impaired" but do not yet have an EPA-approved TMDL.

DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: <http://mapcase.deq.idaho.gov/wq2010/>

In addition to complying with the Part 3.2.2 requirements for any sediment or nutrient-impaired waters, permittee(s) must also comply with Idaho's numeric turbidity criteria, developed to protect aquatic life uses. The criterion states, "Turbidity shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days" (IDAPA 58.01.02250.02.e). For Waters of the State which have been identified as impaired due to sedimentation/siltation, the permittee must conduct turbidity monitoring as described below in Part 9.7.1.6

- 9.7.1.4 **Protection of High-Quality Waters (Tier 2 Protection).** To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: <http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx>. DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: <http://mapcase.deq.idaho.gov/wq2010/>

DEQ retains the authority to determine that a 303(d) listed water body is actually a high quality water body if there is biological, chemical or physical data to support such a determination. In cases where information submitted with the NOI, or available from other sources, indicates that further Tier 2 analysis is necessary and/or additional conditions are needed, either for a new project or an existing project with a significantly increased discharge, EPA and DEQ will conduct a review and require any appropriate additional controls. If during this review, EPA and DEQ decide that an additional Tier 2 protection is warranted, then EPA may either change the terms of coverage or terminate coverage under the CGP and require an individual permit.

- 9.7.1.5 **Protection of Outstanding Resource Waters (Tier 3 Protection).** Idaho's antidegradation policy requires that the quality of outstanding resource waters (ORWs) be maintained and protected from the impacts of point source discharges. No water bodies in Idaho have been designated as outstanding resource waters to date; however, it is possible that waters may become designated during the term of the CGP. Any applicant proposing to discharge to an ORW must obtain an individual NPDES permit from EPA.

- 9.7.1.6 **Turbidity Monitoring.** For Waters of the State which are identified in the Integrated Report as impaired for sedimentation/siltation, the permittee must conduct turbidity monitoring each day during construction activities when the project is not stabilized per Part 2.2 or shut down per Part 4.1.4.3 of the CGP. A properly and regularly calibrated turbidimeter is required.

A sample must be taken twice daily at an undisturbed area immediately upstream of the project area to establish background turbidity levels for each monitoring event. Background turbidity, location, date and time must be recorded prior to monitoring downstream of the project area.

A sample must also be taken twice daily immediately downstream from any point of discharge, and within any visible plume. The turbidity, location, date

and time must be recorded. The downstream sample(s) must be taken immediately following the upstream sample(s) in order to obtain meaningful and representative results.

Results from the compliance point sampling or observation must be compared to the background levels to determine whether project activities are causing an exceedance of state WQS. If the downstream turbidity is 50 NTUs or more than the upstream turbidity, or a plume is observed, then the project is causing an exceedance of the WQS. The permittee must inspect the condition of project BMPs. If the BMPs are functioning to their fullest capability, then the permittee must modify project activities and/or BMPs to correct the violation.

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedances and subsequent actions taken, including the effectiveness of the action.

- 9.7.1.7 **Equivalent Analysis Waiver.** Use of the "Equivalent Analysis Waiver" in Appendix C (Part C.3) of the CGP is not authorized.

- 9.7.1.8 **Reporting of Discharges Containing Hazardous Materials or Petroleum Products.** Any spill of hazardous materials must be immediately reported to the appropriate DEQ regional office (see table of contacts, below) (IDAPA 58.01.02.850.03). Spills of petroleum products that exceed 25 gallons or that cause a visible sheen on nearby surface waters should be reported to DEQ within 24-hours. Petroleum product spills of less than 25 gallons or spills that do not cause a sheen on nearby surface waters shall only be reported to DEQ if clean-up cannot be accomplished within 24-hours (IDAPA 58.01.02.851.04).

DEQ Regional Office	Contact Name	Phone Number
Boise	Lance Holloway	208-373-0550
Coeur d'Alene	June Bergquist	208-769-1422
Idaho Falls	Troy Saffle	208-528-2650
Lewiston	John Cardwell	208-799-4370
Pocatello	Greg Mladenka	208-236-6160
Twin Falls	Balthasar Buhidar	208-736-2190

Outside of regular business hours, qualified spills shall be reported to the State Communications Center (1-800-632-8000 or 208-846-7610).

9.7.2. ORR12000f: Indian country within the State of Oregon.

- 9.7.2.1 **Confederated Tribes of the Umatilla Indian Reservation.** The following conditions apply only to discharges on the Umatilla Indian Reservation:

- The operator shall be responsible for achieving compliance with the Confederated Tribes of the Umatilla Indian Reservations (CTUIR) Water Quality Standards.
- The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTUIR Water Resources Program at the address below, at the same time it is submitted to EPA.

- The operator shall be responsible for submitting all Stormwater Pollution Prevention Plans (SWPPP) required under this permit to the CTUIR Water Resources Program for review and determination that the SWPPP is sufficient to meet Tribal Water Quality Standards, prior to the beginning of any discharge activities taking place.
- The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the CTUIR Water Resources Program at the same time it is reported to EPA.
Confederated Tribes of the Umatilla Indian Reservation
Water Resources Program
46411 Timine Way
Pendleton, OR 97801
- The CTUIR Tribal Historic Preservation Office (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).
- The THPO must be provided 30 days to comment on the APE as defined in the permit application.
- If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines: http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://eqov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.
- The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.
- For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.
Confederated Tribes of the Umatilla Indian Reservation
Cultural Resources Protection Program
Tribal Historic Preservation Office
46411 Timine Way
Pendleton, OR 97801

- 9.7.2.2 **Confederated Tribes of the Warm Springs Reservation of Oregon.** The following conditions apply only for discharges on the Warm Springs Reservation:

- All activities covered by this NPDES general permit occurring within a designated riparian buffer zone as established in Ordinance 74 (Integrated Resource Management Plan or IRMP) must be reviewed, approved and permitted through the Tribe's Hydraulic Permit Application process, including payment of any applicable fees.

- All activities covered by this NPDES permit must follow all applicable land management and resource conservation requirements specified in the IRMP.
- Operators of activities covered by this NPDES general permit must submit a Storm Water Pollution Prevention Plan to the Tribe's Water Control Board at the following address for approval at least 30 days prior to beginning construction activity:
Chair, Warm Springs Water Control Board
P.O. Box C
Warm Springs, Oregon 97761
- The operator shall be responsible for achieving compliance with the Water Quality Standards of the Confederated Tribes of the Warm Springs Reservation of Oregon. The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the Water Control Board at the address above.
- The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTWS, Branch of Natural Resources, Tribal Environmental Office at the address above, at the same time it is submitted to EPA.
- The CTWS Tribal Historic Preservation Officer (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).
- The THPO must be provided 30 days to comment on the APE as defined in the permit application.
- If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines: http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://eqov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.
- The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.
- For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.

9.7.3. WAR12000f: Areas in the State of Washington, except those located on Indian country, subject to construction by Federal Operators.

- 9.7.3.1 Discharges shall not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges that are not in compliance with these standards are not authorized.

9.7.3.2 Prior to the discharge of stormwater and non-stormwater to waters of the state, the permittee shall apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate Stormwater Pollution Prevention Plan (SWPPP), with all appropriate best management practices (BMPs) installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.

9.7.3.3 Sampling & Numeric Effluent Limitations – For Sites Discharging to Certain Waterbodies on the 303(d) List

a. Permittees that discharge to water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH or phosphorus, shall conduct water quality sampling according to the requirements of this subsection.

Parameter identified in 303(d) listing	Parameter/Units	Analytical Method	Sampling Frequency	Water Quality Standard
Turbidity Fine Sediment Phosphorus	Turbidity/NTU	SM2130 or EPA180.1	Weekly, if discharging	If background is 50 NTU or less: 5 NTU over background; or If background is more than 50 NTU: 10% over background
High pH	pH/Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

b. The operator must retain all monitoring results required by this section as part of the SWPPP. All data and related monitoring records must be provided to EPA or the Washington State Department of Ecology (Ecology) upon request.

c. The operator must notify EPA when the discharge turbidity or discharge pH exceeds the water quality standards as defined in 5.b and 6.b below. All such reports must be submitted within 30 days of measurement to EPA at the following address:
USEPA – Region 10
NPDES Compliance Unit - Attn: Federal Facilities Compliance Officer
1200 6th Avenue, Suite 900
OCE-133
Seattle, WA 98101
(206) 553-1846

d. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current EPA approved listing of impaired waters that exists on January 29, 2009, or the date when the operator's complete NOI is received by EPA, whichever is later. The most

recent EPA approved 303(d) list is available on Ecology's website at www.ecy.wa.gov/programs/wq/303d/2008/index.html.

e. Discharges to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus

i. Permittees which discharge to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus shall conduct turbidity sampling at the following locations to evaluate compliance with the water quality standard for turbidity:

- (1) Background turbidity shall be measured in the 303(d) listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.
- (2) Discharge turbidity shall be measured at the point of discharge into the 303(d) listed receiving waterbody, inside the area of influence of the discharge; or
- (3) Alternatively, discharge turbidity may be measured at the point where the discharge leaves the construction site, rather than in the receiving waterbody.

Based on sampling, if the discharge turbidity ever exceeds the water quality standard for turbidity (more than 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or more than a 10% increase in turbidity when the background turbidity is more than 50 NTU), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for turbidity. If the receiving water background turbidity is 50 NTU or less, the water quality standard is 5 NTU over background. If the receiving water background turbidity is more than 50 NTU, the water quality standard is 10% over background.

If a future discharge exceeds the water quality standard for turbidity, the permittee shall:

- (1) Review the SWPPP for compliance with the permit and make appropriate revisions within seven days of the discharge that exceeded the standard.
- (2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than ten days of the discharge that exceeded the standard.
- (3) Document BMP implementation and maintenance in the site log book.
- (4) Continue to sample daily until discharge turbidity meets the water quality standard for turbidity.

f. Discharges to waterbodies on the 303(d) list for High pH

i. Permittees which discharge to waterbodies on the 303(d) list for high pH shall conduct sampling one of the following locations to evaluate compliance with the water quality standard for pH (in the range of 6.5 – 8.5):

- (1) pH shall be measured at the point of discharge into the 303(d) listed waterbody, inside the area of influence of the discharge; or,
 - (2) Alternatively, pH may be measured at the point where the discharge leaves the construction site, rather than in the receiving water.
- ii. Based on the sampling set forth above, if the pH ever exceeds the water quality standard for pH (in the range of 6.5 – 8.5), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for pH. If a future discharge exceeds the water quality standard for pH, the permittee shall:
- (1) Review the SWPPP for compliance with the permit and make appropriate revisions within 7 days of the discharge.
 - (2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than 10 days of the discharge that exceeded the standards.
 - (3) Document BMP implementation and maintenance in the site log book.
 - (4) Continue to sample daily until discharge meets the water quality standard for pH (in the range of 6.5 – 8.5).

9.7.3.4 Sampling & Limitations – For Sites Discharging to TMDLs

a. Discharges to a waterbodies subject to an applicable Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus, shall be consistent with the assumptions and requirements of the TMDL.

i. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges shall be consistent with any specific waste load allocations or requirements established by the applicable TMDL.

- (1) Discharges shall be sampled weekly, or as otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.
- (2) Analytical methods used to meet the monitoring requirements shall conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.

ii. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but no specific requirements have been identified, compliance with this permit will be assumed to be consistent with the approved TMDL.

iii. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with this permit will be assumed to be consistent with the approved TMDL.

iv. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

b. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which has been completed and approved by EPA prior to February 16, 2012, or prior to the date the operator's complete NOI is received by EPA, whichever is later.

Completed TMDLs are available on Ecology's website at www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html, or by phone at (360) 407-6460.

9.7.4. **WAR120001: Indian country within the State of Washington**

9.7.4.1 **Kalispel Tribe.** The following conditions apply only for discharges on the Kalispel Reservation:

- a. The operator shall be responsible for achieving compliance with the Kalispel Tribe's Water Quality Standards, and:
- b. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Kalispel Tribe Natural Resources Department (KNRD) at the same time as it is submitted to the EPA, and:
- c. The operator shall submit all Storm Water Pollution Prevention Plans (SWPPP) to KNRD thirty (30) days prior to beginning any discharge activities for review, and:
- d. The operator shall be responsible for reporting any exceedance of Tribal Water Quality Standards to KNRD at the same time it is reported to EPA, and:
- e. Prior to any land disturbing activities on the Kalispel Indian Reservation and its dependent communities, the operator shall attain a cultural resource clearance letter from KNRD.
- f. All tribal correspondence pertaining to the General Permit for Discharges from Construction Activities shall be sent to:

Kalispel Tribe Natural Resources Department
Water Resources Program
PO Box 39
Usk, WA 99180

9.7.4.2 **Lummi Nation.** The following conditions apply only for discharges on the Lummi Reservation:

- a. Pursuant to Lummi Code of Laws (LCL) 17.05.020(a), the operator must also obtain a land use permit from the Lummi Planning Department as provided in Title 15 of the Lummi Code of Laws and regulations adopted thereunder.
- b. Pursuant to LCL 17.05.020(a), each operator shall develop and submit a Stormwater Pollution Prevention Plan to the Lummi Water Resources Division for review and approval by the Water Resources Manager prior to beginning any discharge activities.
- c. Pursuant to LCL Title 17, each operator shall be responsible for achieving compliance with the Water Quality Standards for Surface Waters of the Lummi Indian Reservation (Lummi Administrative Regulations [LAR] 17 LAR 07.010 together with supplements and amendments thereto).

- d. Each operator shall submit a signed hard copy of the Notice of Intent (NOI) to the Lummi Water Resources Division at the same time it is submitted electronically to the Environmental Protection Agency (EPA) and shall provide the Lummi Water Resources Division the acknowledgement of receipt of the NOI from the EPA and the associated NPDES tracking number provided by the EPA within 7 calendar days of receipt by EPA.
- e. Each operator shall submit a signed hard copy of the Notice of Termination (NOT) to the Lummi Water Resources Division at the same time it is submitted electronically to the EPA and shall provide the Lummi Water Resources Division the EPA acknowledgement of receipt of the NOI.
- f. Stormwater Pollution Prevention Plans, Notice of Intent, Notice of Termination and associated correspondence with the EPA shall be submitted to:
- Lummi Natural Resources Department
ATTN: Water Resources Manager
2616 Kwina Road
Bellingham, WA 98226-9298
- g. Please see the Lummi Nation website (www.lummi-nsn.gov) and/or the Lummi Natural Resources Department website (<http://lnnr.lummi-nsn.gov/LummiWebsite/Website.php?PageID=53>) to review a copy of Title 17 of the Lummi Code of Laws, associated regulations, and the references upon which the conditions identified above are based.

9.7.4.3 **Makah Tribe.** The following conditions apply only for discharges on the Makah Reservation:

- a. The operator shall be responsible for achieving compliance with the Makah Tribe's Water Quality Standards.
- b. The operator shall submit a Storm Water Pollution Prevention Plan to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division for review and approval at least thirty (30) days prior to beginning any discharge activities.
- c. The operator shall submit a copy of the Notice of Intent to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division at the same time it is submitted to EPA.
- d. Storm Water Pollution Prevention Plans and Notices of Intent shall be submitted to:
- Ray Colby
Makah Tribal Water Quality
Water Quality Specialist
(360) 645-3162
colby.ray@centurytel.net
PO Box 115
Neah Bay, WA 98357

Appendix A - Definitions and Acronyms

Definitions

"Action Area" – all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. See 50 CFR 402. For the purposes of this permit and for application of the Endangered Species Act requirements, the following areas are included in the definition of action area:

- The areas on the construction site where stormwater discharges originate and flow toward the point of discharge into the receiving waters (including areas where excavation, site development, or other ground disturbance activities occur) and the immediate vicinity. (Example: Where bald eagles nest in a tree that is on or bordering a construction site and could be disturbed by the construction activity or where grading causes stormwater to flow into a small wetland or other habitat that is on the site that contains listed species.)
- The areas where stormwater discharges flow from the construction site to the point of discharge into receiving waters. (Example: Where stormwater flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as listed amphibians) are found in the ditch, swale, or gully.)
- The areas where stormwater from construction activities discharge into receiving waters and the areas in the immediate vicinity of the point of discharge. (Example: Where stormwater from construction activities discharges into a stream segment that is known to harbor listed aquatic species.)
- The areas where stormwater controls will be constructed and operated, including any areas where stormwater flows to and from the stormwater controls. (Example: Where a stormwater retention pond would be built.)
- The areas upstream and/or downstream from the stormwater discharge into a stream segment that may be affected by these discharges. (Example: Where sediment discharged to a receiving stream settles downstream and impacts a breeding area of a listed aquatic species.)

"Agricultural Land" - cropland, grassland, rangeland, pasture, and other agricultural land, on which agricultural and forest-related products or livestock are produced and resource concerns may be addressed. Agricultural lands include cropped woodland, marshes, incidental areas included in the agricultural operation, and other types of agricultural land used for the production of livestock.

"Antidegradation Policy" or "Antidegradation Requirements" - the water quality standards regulation that requires States and Tribes to establish a three-tiered antidegradation program:

1. Tier 1 maintains and protects existing uses and water quality conditions necessary to support such uses. An existing use can be established by demonstrating that fishing, swimming, or other uses have actually occurred since November 28, 1975, or that the water quality is suitable to allow such uses to occur. Where an existing use is established, it must be protected even if it is not listed in the water quality standards as a designated use. Tier 1 requirements are applicable to all surface waters.
2. Tier 2 maintains and protects "high quality" waters -- water bodies where existing conditions are better than necessary to support CWA § 101(a)(2) "fishable/swimmable"

9.7.4.4 **Puyallup Tribe of Indians.** The following conditions apply only for discharges on the Puyallup Reservation:

- a. Each permittee shall be responsible for achieving compliance with the Puyallup Tribe's Water Quality Standards, including antidegradation provisions. The Puyallup Natural Resources Department will conduct an antidegradation review for permitted activities that have the potential to lower water quality. The antidegradation review will be consistent with the Tribe's Antidegradation Implementation Procedures.
- b. The permittee shall be responsible for meeting any additional permit requirements imposed by EPA necessary to comply with the Puyallup Tribe's antidegradation policies if the discharge point is located within 1 linear mile upstream of waters designated by the Tribe.
- c. Each permittee shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Puyallup Tribal Natural Resources Department at the address listed below at the same time it is submitted to EPA.
- Puyallup Tribe of Indians
3009 E. Portland Avenue
Tacoma, WA 98404
ATTN: Natural Resources Department – Bill Sullivan and Char Naylor
- d. All supporting documentation and certifications in the NOI related to coverage under the general permit for Endangered Species Act purposes shall be submitted to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review.
- e. If EPA requires coverage under an individual or alternative permit, the permittee shall submit a copy of the permit to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department at the address listed above.
- f. The permittee shall submit all stormwater pollution prevention plans to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review and approval prior to beginning any activities resulting in a discharge to tribal waters.
- g. The permittee shall conduct benchmark monitoring for turbidity and nutrients, complying with Section 3 monitoring requirements.
- h. The permittee shall notify Bill Sullivan and Char Naylor prior to conducting inspections at construction sites generating stormwater discharged to tribal waters.

uses. Water quality can be lowered in such waters. However, State and Tribal Tier 2 programs identify procedures that must be followed and questions that must be answered before a reduction in water quality can be allowed. In no case may water quality be lowered to a level which would interfere with existing or designated uses.

3. Tier 3 maintains and protects water quality in outstanding national resource waters (ONRWs). Except for certain temporary changes, water quality cannot be lowered in such waters. ONRWs generally include the highest quality waters of the United States. However, the ONRW classification also offers special protection for waters of exceptional ecological significance, i.e., those which are important, unique, or sensitive ecologically. Decisions regarding which water bodies qualify to be ONRWs are made by States and authorized Indian Tribes.

"Arid Areas" – areas with an average annual rainfall of 0 to 10 inches.

"Bank" (e.g., stream bank or river bank) – the rising ground bordering the channel of a water of the U.S.

"Bluff" – a steep headland, promontory, riverbank, or cliff.

"Borrow Areas" – the areas where materials are dug for use as fill, either onsite or off-site.

"Bypass" – the intentional diversion of waste streams from any portion of a treatment facility. See 40 CFR 122.41(m)(1)(i).

"Cationic Treatment Chemical" – polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in stormwater discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.

"Commencement of Earth-Disturbing Activities" - the initial disturbance of soils (or "breaking ground") associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material).

"Commencement of Pollutant-Generating Activities" – at construction sites (for the purposes of this permit) occurs in any of the following circumstances:

- Clearing, grubbing, grading, and excavation has begun;
- Raw materials related to your construction activity, such as building materials or products, landscape materials, fertilizers, pesticides, herbicides, detergents, fuels, oils, or other chemicals have been placed at your site;
- Use of authorized non-stormwater for washout activities, or dewatering activities, have begun; or
- Any other activity has begun that causes the generation of or the potential generation of pollutants.

"Construction Activities" – earth-disturbing activities, such as the clearing, grading, and excavation of land.

"Construction and Development Effluent Limitations and New Source Performance Standards" (C&D Rule) – as published in 40 CFR § 450 is the regulation requiring effluent limitations guidelines

(ELG's) and new source performance standards (NSPS) for controlling the discharge of pollutants from construction sites.

Construction Site – the land or water area where construction activities will occur and where stormwater controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether. The construction site is often a smaller subset of the lot or parcel within which the project is taking place.

Construction Support Activities – a construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own, and can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.

Construction Waste – discarded material (such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and styrofoam).

Conveyance Channel – a temporary or permanent waterway designed and installed to safely convey stormwater flow within and out of a construction site.

Corrective Action – for the purposes of the permit, any action taken to (1) repair, modify, or replace any stormwater control used at the site; (2) clean up and dispose of spills, releases, or other deposits found on the site; and (3) remedy a permit violation.

Critical Habitat – as defined in the Endangered Species Act at 16 U.S.C. 1531 for a threatened or endangered species, (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

CWA – the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.

Dewatering – the act of draining rainwater and/or groundwater from building foundations, vaults, and trenches.

Discharge – when used without qualification, means the "discharge of a pollutant."

Discharge of a Pollutant – any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

Discharge Point – for the purposes of this permit, the location where collected and concentrated stormwater flows are discharged from the construction site.

Discharge-Related Activity – activities that cause, contribute to, or result in stormwater and allowable non-stormwater point source discharges, and measures such as the siting, construction, and operation of stormwater controls to control, reduce, or prevent pollutants from being discharged.

Discharge to an Impaired Water – for the purposes of this permit, a discharge to an impaired water occurs if the first water of the U.S. to which you discharge is identified by a State, Tribe, or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the water of the U.S. to which you discharge is the first water of the U.S. that receives the stormwater discharge from the storm sewer system.

Domestic Waste – for the purposes of this permit, typical household trash, garbage or rubbish items generated by construction activities.

Drainage – an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.

Drought-Stricken Area – for the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1)

"Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif.

Earth-Disturbing Activity or "Land-Disturbing Activity" – actions taken to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, cutting, and filling), soil compaction, and movement and stockpiling of top soils.

Effective Operating Condition – for the purposes of this permit, a stormwater control is kept in effective operating condition if it has been implemented and maintained in such a manner that it is working as designed to minimize pollutant discharges.

Effluent Limitations – for the purposes of this permit, any of the Part 2 or Part 3 requirements.

Effluent Limitations Guideline (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

Electronic Notice of Intent (eNOI) – EPA's online system for submitting electronic Construction General Permit forms.

Eligible – for the purposes of this permit, refers to stormwater and allowable non-stormwater discharges that are authorized for coverage under this general permit.

Emergency-Related Project – a project initiated in response to a public emergency (e.g., natural disaster, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services.

Endangered Species – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose

protection under the provisions of this Act would present an overwhelming and overriding risk to man.

Excursion – a measured value that exceeds a specified limit.

Existing Project – a construction project that commenced construction activities prior to February 16, 2012 (April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

Exit Points – any points of egress from the construction site to be used by vehicles and equipment during construction activities.

Exposed Soils – for the purposes of this permit, soils that as a result of earth-disturbing activities are left open to the elements.

Federal Operator – an entity that meets the definition of "Operator" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

Final Stabilization – on areas not covered by permanent structures, either (1) vegetation has been established, or for arid or semi-arid areas, will be established that provides a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the natural background vegetative cover, or (2) non-vegetative stabilization methods have been implemented to provide effective cover for exposed portions of the site.

Hazardous Materials or "Hazardous Substances" or "Hazardous or Toxic Waste" – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

Historic Property – as defined in the National Historic Preservation Act regulations means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

Impaired Water or "Water Quality Impaired Water" or "Water Quality Limited Segment" – for the purposes of this permit, waters identified as impaired on the CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first water of the U.S. to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

Impervious Surface – for the purpose of this permit, any land surface with a low or no capacity for soil infiltration including, but not limited to, pavement, sidewalks, parking areas and driveways, packed gravel or soil, or rooftops.

Indian Country or "Indian Country Lands" – defined at 40 CFR §122.2 as:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
2. All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

Infeasible – for the purpose of this permit, infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. EPA notes that it does not intend for any permit requirement to conflict with state water rights law.

Install or "Installation" – when used in connection with stormwater controls, to connect or set in position stormwater controls to make them operational.

Intermittent (or Seasonal) Stream – one which flows at certain times of the year when groundwater provides water for stream flow, as well as during and immediately after some precipitation events or snowmelt.

Jar test – a test designed to simulate full-scale coagulation/flocculation/sedimentation water treatment processes by taking into account the possible conditions.

Landward – positioned or located away from a waterbody, and towards the land.

Level Spreader – a temporary stormwater control used to spread stormwater flow uniformly over the ground surface as sheet flow to prevent concentrated, erosive flows from occurring.

Linear Project – includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

Minimize – to reduce and/or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System or "MS4" – defined at 40 CFR §122.26(b)(8) as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designated or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and

4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

National Pollutant Discharge Elimination System (NPDES) – defined at 40 CFR §122.2 as the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA. The term includes an “approved program.”

Native Topsoil – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

Native Vegetation – the species of plants that have developed for a particular region or ecosystem and are considered endemic to that region or ecosystem.

Natural Buffer – for the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

Natural Vegetation – vegetation that occurs spontaneously without regular management, maintenance or species introductions, removals, and that generally has a strong component of native species.

New Operator of a New or Existing Project – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

New Project – a construction project that commences construction activities on or after February 16 (or on or after April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

New Source – for the purpose of this permit, a construction project that commenced construction activities after February 1, 2010.

New Source Performance Standards (NSPS) – for the purposes of this permit, NSPS are technology-based standards that apply to construction sites that are new sources under 40 CFR 450.24.

Non-Stormwater Discharges – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

Non-Turbid – a discharge that does not cause or contribute to an exceedence of turbidity-related water quality standards.

Notice of Intent (NOI) – the form (electronic or paper) required for authorization of coverage under the Construction General Permit.

Notice of Termination (NOT) – the form (electronic or paper) required for terminating coverage under the Construction General Permit.

Operational – for the purpose of this permit, stormwater controls are made “operational” when they have been installed and implemented, are functioning as designed, and are properly maintained.

Operator – for the purpose of this permit and in the context of stormwater discharges associated with construction activity, any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
2. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).

This definition is provided to inform permittees of EPA’s interpretation of how the regulatory definitions of “owner or operator” and “facility or activity” are applied to discharges of stormwater associated with construction activity.

Ordinary High Water Mark – the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris.

Outfall – see “Discharge Point.”

Permitting Authority – for the purposes of this permit, EPA, a Regional Administrator of EPA, or an authorized representative.

Point(s) of Discharge – see “Discharge Point.”

Point Source – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant – defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

Pollutant-Generating Activities – at construction sites (for the purposes of this permit), those activities that lead to or could lead to the generation of pollutants, either as a result of earth-disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are:

- sediment;
- nutrients;
- heavy metals;
- pesticides and herbicides;
- oil and grease;
- bacteria and viruses;

- trash, debris, and solids;
- treatment polymers; and
- any other toxic chemicals.

Pollution Prevention Measures – stormwater controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

Polymers – for the purposes of this permit, coagulants and flocculants used to control erosion on soil or to enhance the sediment removal capabilities of sediment traps or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum.

Prohibited Discharges – discharges that are not allowed under this permit, including:

1. Wastewater from washout of concrete;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
4. Soaps or solvents used in vehicle and equipment washing;
5. Toxic or hazardous substances from a spill or other release; and
6. Waste, garbage, floatable debris, construction debris, and sanitary waste from pollutant-generating activities.

Provisionally Covered Under this Permit – for the purposes of this permit, EPA provides temporary coverage under this permit for emergency-related projects prior to receipt of a complete and accurate NOI. Discharges from earth-disturbing activities associated with the emergency-related projects are subject to the terms and conditions of the permit during the period of temporary coverage.

Receiving Water – a “Water of the United States” as defined in 40 CFR §122.2 into which the regulated stormwater discharges.

Run-On – sources of stormwater that drain from land located upslope or upstream from the regulated site in question.

Semi-Arid Areas – areas with an average annual rainfall of 10 to 20 inches.

Site – for construction activities, the land or water area where earth-disturbing activities take place, including construction support activities.

Small Construction Activity – defined at 40 CFR §122.26(b)(15) and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

Small Residential Lot – for the purpose of this permit, a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

Snowmelt – the conversion of snow into overland stormwater and groundwater flow as a result of warmer temperatures.

Spill – for the purpose of this permit, the release of a hazardous or toxic substance from its container or containment.

Stabilization – the use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas exposed through the construction process.

Steep Slopes – where a state, Tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a “steep slope”, this permit’s definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

Storm Sewer System – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying stormwater.

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Control Measure – refers to any stormwater control, BMP, or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

Stormwater Controls – see “Stormwater Control measure.”

Stormwater Discharge Associated with Construction Activity – as used in this permit, a discharge of pollutants in stormwater to waters of the United States from areas where land-disturbing activities (e.g., clearing, grading, or excavation) occur, or where construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute washdown, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants), are located.

Stormwater Inlet – a structure placed below grade to conduct water used to collect stormwater runoff for conveyance purposes.

Stormwater Team – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the “Stormwater Team” must be identified in the SWPPP.

Storm Event – a precipitation event that results in a measurable amount of precipitation.

Storm Sewer – a system of pipes (separate from sanitary sewers) that carries stormwater runoff from buildings and land surfaces.

Subcontractor – for the purposes of this permit, an individual or company that takes a portion of a contract from the general contractor or from another subcontractor.

Surface Water – a “Water of the United States” as defined in 40 CFR §122.2.

"SWPPP" (Stormwater Pollution Prevention Plan) – a site-specific, written document that, among other things: (1) identifies potential sources of stormwater pollution at the construction site; (2) describes stormwater control measures to reduce or eliminate pollutants in stormwater discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

"Temporary Stabilization" – a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

"Thawing Conditions" – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32°F. This date can be determined by looking at historical weather data. Note: the estimation of thawing conditions is for planning purposes only. During construction the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

"Threatened Species" – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

"Tier 2 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(2), those waters that are characterized as having water quality that exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

"Tier 2.5 Waters" – for antidegradation purposes, those waters designated by States or Tribes as requiring a level of protection equal to and above that given to Tier 2 waters, but less than that given Tier 3 waters. Some States have special requirements for these waters.

"Tier 3 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(3), Tier 3 waters are identified by states as having high quality waters constituting an Outstanding Natural Resource Water (ONRW), such as waters of National Parks and State Parks, wildlife refuges, and waters of exceptional recreational or ecological significance.

"Total Maximum Daily Load" or "TMDL" – the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

"Toxic Waste" – see "Hazardous Materials."

"Turbidity" – a condition of water quality characterized by the presence of suspended solids and/or organic material.

"Uncontaminated Discharge" – a discharge that does not cause or contribute to an exceedance of applicable water quality standards.

"Upland" – the dry land area above and 'landward' of the ordinary high water mark.

"Wetland" – those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. On-site evaluations are typically required to confirm the presence and boundaries of wetlands.

"Work day" – for the purposes of this permit, a work day is a calendar day on which construction activities will take place.

Acronyms

C&D – Construction & Development
 CGP – Construction General Permit
 CFR – Code of Federal Regulations
 CWA – Clean Water Act
 eNOI – Electronic Notice of Intent
 EPA – United States Environmental Protection Agency
 ESA – Endangered Species Act
 FWS – United States Fish and Wildlife Service
 MS4 – Municipal Separate Storm Sewer System
 MSGP – Multi-Sector General Permit
 NMFS – United States National Marine Fisheries Service
 NOI – Notice of Intent
 NOT – Notice of Termination
 NPDES – National Pollutant Discharge Elimination System
 NRC – National Response Center
 NRCS – National Resources Conservation Service
 POTW – Publicly Owned Treatment Works
 SPCC – Spill Prevention Control and Countermeasure
 SWPPP – Stormwater Pollution Prevention Plan
 TMDL – Total Maximum Daily Load
 USGS – United States Geological Survey
 WQS – Water Quality Standard

"Upset" – Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

"Water-Dependent Structures" – structures or facilities that are required to be located directly adjacent to a waterbody or wetland, such as a marina, pier, boat ramp, etc.

"Water Quality Standards" – defined in 40 CFR § 131.3, and are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States, water quality criteria for such waters based upon such uses, and an antidegradation policy to protect high-quality waters. Water quality standards protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

"Waters of the United States" – defined at 40 CFR §122.2 as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (1) through (4) of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

In applying this definition, EPA will consider applicable Court cases and current guidance.

Appendix B - Permit Areas Eligible for Coverage

Permit coverage for stormwater discharges from construction activity occurring within the following areas is provided by legally separate and distinctly numbered permits:

B.1 EPA Region 1: CT, MA, ME, NH, RI, VT

US EPA, Region 01
 Office of Ecosystem Protection
 NPDES Stormwater Program
 5 Post Office Square
 Boston, MA 02109-3912

The States of Connecticut, Maine, Rhode Island, and Vermont are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
CTR12000I	Indian country within the State of Connecticut
MAR120000	Commonwealth of Massachusetts (except Indian country)
MAR12000I	Indian country within the State of Massachusetts
NHR120000	State of New Hampshire
RIR12000I	Indian country within the State of Rhode Island
VTR12000F	Areas in the State of Vermont subject to construction by a Federal Operator

B.2 EPA Region 2: NJ, NY, PR, VI

For NJ, NY, and VI:
 US EPA, Region 02
 NPDES Stormwater Program
 290 Broadway, 24th Floor
 New York, NY 10007-1866

For PR:
 US EPA, Region 02
 Caribbean Environmental Protection Division
 NPDES Stormwater Program
 1492 Ponce de Leon Ave
 Central Europa Building, Suite 417
 San Juan, PR 00907-4127

The State of New York is the NPDES Permitting Authority for the majority of discharges within its state. The State of New Jersey and the Virgin Islands are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
NYR12000I	Indian country within the State of New York
PRR120000	Commonwealth of Puerto Rico

B.3 EPA Region 3: DE, DC, MD, PA, VA, WV

US EPA, Region 03
NPDES Stormwater Program
1650 Arch St
Philadelphia, PA 19103

The State of Delaware is the NPDES Permitting Authority for the majority of discharges within its state. Maryland, Pennsylvania, Virginia, and West Virginia are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
DCR120000	District of Columbia
DER12000F	Areas in the State of Delaware subject to construction by a Federal Operator

B.4 EPA Region 4: AL, FL, GA, KY, MS, NC, SC, TN

US EPA, Region 04
Water Protection Division
NPDES Stormwater Program
61 Forsyth St SW
Atlanta, GA 30303-3104

The States of Alabama, Florida, Mississippi, and North Carolina are the NPDES Permitting Authority for the majority of discharges within their respective States. EPA Region 4 is the NPDES Permitting Authority for all Indian country lands within any other Region 4 State except Catawba lands in South Carolina.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ALR12000I	Indian country within the State of Alabama
FLR12000I	Indian country within the State of Florida
MSR12000I	Indian country within the State of Mississippi
NSR12000I	Indian country within the State of North Carolina
RE412000I	Indian country within any other Region 4 State (except Catawba lands in South Carolina)

B.5 EPA Region 5: IL, IN, MI, MN, OH, WI

US EPA, Region 05
NPDES & Technical Support
NPDES Stormwater Program
77 W Jackson Blvd
(WN-16J)
Chicago, IL 60604-3507

The States of Michigan, Minnesota, and Wisconsin are the NPDES Permitting Authority for the majority of discharges within their respective states. The States of Illinois, Indiana, and Ohio are the NPDES Permitting Authorities for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
MIR10000I	Indian country within the State of Michigan
MNR10000I	Indian country within the State of Minnesota
WIR10000I	Indian country within the State of Wisconsin, except the Sokaogon Chippewa (Mole Lake) Community

B.6 EPA Region 6: AR, LA, OK, TX, NM (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands)

US EPA, Region 06
NPDES Stormwater Program
1445 Ross Ave, Suite 1200
Dallas, TX 75202-2733

The States of Louisiana, Oklahoma, and Texas are the NPDES Permitting Authority for the majority of discharges within their respective state. The State of Arkansas is the NPDES Permitting Authority for all discharges within its respective state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
LAR12000I	Indian country within the State of Louisiana
NMR120000	State of New Mexico, except Indian country
NMR12000I	Indian country within the State of New Mexico, except Navajo Reservation Lands that are covered under Arizona permit AZR10000I and Ute Mountain Reservation Lands that are covered under Colorado permit COR10000I.
OKR12000I	Indian country within the State of Oklahoma
OKR12000F	Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).
TXR12000F	Discharges in the State of Texas that are not under the authority of the Texas Commission on Environmental Quality (formerly TNRCC), including activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline.
TXR12000I	Indian country within the State of Texas

B.7 EPA Region 7: IA, KS, MO, NE (except see Region 8 for Pine Ridge Reservation Lands)

US EPA, Region 07
NPDES Stormwater Program
901 N 5th St
Kansas City, KS 66101

The States of Iowa, Kansas, and Nebraska are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Missouri is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
IAR12000I	Indian country within the State of Iowa
KSR12000I	Indian country within the State of Kansas
NER12000I	Indian country within the State of Nebraska, except Pine Ridge Reservation lands (see Region 8)

B.8 EPA Region 8: CO, MT, ND, SD, WY, UT (except see Region 9 for Goshute Reservation and Navajo Reservation Lands), the Ute Mountain Reservation in NM, and the Pine Ridge Reservation in NE.

US EPA, Region 08
NPDES Stormwater Program
999 18th St, Suite 300
(EPR-EP)
Denver, CO 80202-2466

The States of Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
COR12000F	Areas in the State of Colorado, except those located on Indian country, subject to construction activity by a Federal Operator
COR12000I	Indian country within the State of Colorado, as well as the portion of the Ute Mountain Reservation located in New Mexico
MTR12000I	Indian country within the State of Montana
NDR12000I	Indian country within the State of North Dakota, as well as that portion of the Standing Rock Reservation located in South Dakota (except for the portion of the lands within the former boundaries of the Lake Traverse Reservation which is covered under South Dakota permit SDR10000I listed below)
SDR12000I	Indian country within the State of South Dakota, as well as the portion of the Pine Ridge Reservation located in Nebraska and the portion of the lands within the former boundaries of the Lake Traverse Reservation located in North Dakota (except for the Standing Rock Reservation which is covered under North Dakota permit NDR10000I listed above)
UTR12000I	Indian country within the State of Utah, except Goshute and Navajo Reservation lands (see Region 9)
WYR12000I	Indian country within the State of Wyoming

B.9 EPA Region 9: CA, HI, NV, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in ID, and the Fort McDermitt Reservation in OR.

US EPA, Region 09
NPDES Stormwater Program
75 Hawthorne St
San Francisco, CA 94105-3901

The States of Arizona, California and Nevada are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Hawaii is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ASR120000	Island of American Samoa
AZR12000I	Indian country within the State of Arizona, as well as Navajo Reservation lands in New Mexico and Utah
CAR12000I	Indian country within the State of California
GUR120000	Island of Guam
JAR120000	Johnston Atoll
MPR120000	Commonwealth of the Northern Mariana Islands
MWR120000	Midway Island and Wake Island
NVR12000I	Indian country within the State of Nevada, as well as the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Goshute Reservation in Utah

B.10 EPA Region 10: AK, WA, ID (except see Region 9 for Duck Valley Reservation Lands), and OR (except see Region 9 for Fort McDermitt Reservation).

US EPA, Region 10
NPDES Stormwater Program
1200 6th Ave (OW-130)
Seattle, WA 98101-1128
Phone: (206) 553-6650

The States of Oregon and Washington are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
AKR12000I	Indian country within the State of Alaska
AKR12-000F	Areas in the Denali National Park and Preserve subject to construction by a Federal Operator
IDR120000	State of Idaho, except Indian country
IDR12000I	Indian country within the State of Idaho, except Duck Valley Reservation lands (see Region 9)
ORR12000I	Indian country within the State of Oregon, except Fort McDermitt Reservation lands (see Region 9)
WAR12000F	Areas in the State of Washington, except those located on Indian country, subject to construction activity by a Federal Operator
WAR12000I	Indian country within the State of Washington

Appendix C - Small Construction Waivers and Instructions

These waivers are only available to stormwater discharges associated with small construction activities (i.e., 1-5 acres). As the operator of a small construction activity, you may be able to qualify for a waiver in lieu of needing to obtain coverage under this general permit based on: (A) a low rainfall erosivity factor, (B) a TMDL analysis, or (C) an equivalent analysis that determines allocations for small construction sites are not needed. Each operator, otherwise needing permit coverage, must notify EPA of its intention for a waiver. It is the responsibility of those individuals wishing to obtain a waiver from coverage under this general permit to submit a complete and accurate waiver certification as described below. Where the operator changes or another is added during the construction project, the new operator must also submit a waiver certification to be waived.

C.1 Rainfall Erosivity Waiver

Under this scenario the small construction project's rainfall erosivity factor calculation ("R" in the Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity. The operator must certify to EPA that construction activity will occur only when the rainfall erosivity factor is less than 5. The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a stabilization practice that will provide interim non-vegetative stabilization can be used for the end of the construction period, provided the operator commits (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the construction general permit have been met. If use of this interim stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with its certification statement constitutes acceptance of and commitment to complete the final stabilization process. The operator must submit a waiver certification to EPA prior to commencing construction activities.

Note: The rainfall erosivity factor "R" is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21-64, dated January 1997; United States Department of Agriculture (USDA), Agricultural Research Service.

EPA has developed an online rainfall erosivity calculator to help small construction sites determine potential eligibility for the rainfall erosivity waiver. You can access the calculator from EPA's website at www.epa.gov/npdes/stormwater/lew. The R factor can easily be calculated by using the construction site latitude/longitude or address and estimated start and end dates of construction. This calculator may also be useful in determining the time periods during which construction activity could be waived from permit coverage. You may find that moving your construction activity by a few weeks or expediting site stabilization will allow you to qualify for the waiver. Use this online calculator or the Construction Rainfall Erosivity Waiver Fact Sheet (www.epa.gov/npdes/pubs/fact3-1.pdf) to assist in determining the R Factor for your small construction site.

If you are the operator of the construction activity and eligible for a waiver based on low erosivity potential, you can submit a rainfall erosivity waiver electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) or provide the following information on the waiver certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The rainfall erosivity factor calculation that applies to the active construction phase at your project site; and
5. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, which certifies that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five.

You can access the waiver certification form from EPA's website at: (http://www.epa.gov/npdes/pubs/construction_waiver_form.pdf). Paper copies of the form must be sent to one of the addresses listed in Part C.4 of this section.

Note: If the R factor is 5 or greater, you cannot apply for the rainfall erosivity waiver, and must apply for NPDES permit coverage, unless you qualify for the Water Quality Waiver as described in section B below.

If your small construction project continues beyond the projected completion date given on the waiver certification, you must recalculate the rainfall erosivity factor for the new project duration. If the R factor is below five (5), you must update all applicable information on the waiver certification and retain a copy of the revised waiver as part of your records. The new waiver certification must be submitted prior to the projected completion date listed on the original waiver form to assure your exemption from permitting requirements is uninterrupted. If the new R factor is 5 or above, you must obtain NPDES permit coverage.

C.2 TMDL Waiver

This waiver is available if EPA has established or approved a TMDL that addresses the pollutant(s) of concern for the impaired water and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by EPA is available from EPA online at <http://www.epa.gov/owow/tmdl/> and from state and tribal water quality agencies.

If you are the operator of the construction activity and eligible for a waiver based on compliance with an EPA-established or approved TMDL, you must provide the following information on the Waiver Certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;

3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. The name and approval date of the TMDL;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the TMDL.

C.3 Equivalent Analysis Waiver

This waiver is available for non-impaired waters only. The operator can develop an equivalent analysis that determines allocations for his/her small construction site for the pollutant(s) of concern or determines that such allocations are not needed to protect water quality. This waiver requires a small construction operator to develop an equivalent analysis based on existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

If you are a construction operator who wants to use this waiver, you must develop your equivalent analysis and provide the following information to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. Your equivalent analysis;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the equivalent analysis.

C.4 Waiver Deadlines and Submissions

1. Waiver certifications must be submitted prior to commencement of construction activities.
2. If you submit a TMDL or equivalent analysis waiver request, you are not waived until EPA approves your request. As such, you may not commence construction activities until receipt of approval from EPA.
3. Late Notifications: Operators are not prohibited from submitting waiver certifications after initiating clearing, grading, excavation activities, or other construction activities. The Agency reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and waiver authorization is granted.

Submission of a waiver certification is an optional alternative to obtaining permit coverage for discharges of stormwater associated with small construction activity, provided you qualify for the waiver. Any discharge of stormwater associated with small construction activity not covered by either a permit or a waiver may be considered an unpermitted discharge under the Clean Water Act. As mentioned above, EPA reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and either discharge authorization is granted or a complete and accurate waiver certification is submitted. EPA may notify any operator covered by a waiver that they must apply for a permit. EPA may notify any operator who has been in non-compliance with a waiver that they may no longer use the waiver for future projects. Any member of the public may petition EPA to take action under this provision by submitting written notice along with supporting justification.

Complete and accurate Rainfall Erosivity waiver certifications not otherwise submitted electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) must be sent to one of the following addresses:

Regular U.S. Mail Delivery

EPA Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Overnight/Express Mail Delivery

EPA Stormwater Notice Processing Center
Room 7420
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Complete and accurate TMDL or equivalent analysis waiver requests must be sent to the applicable EPA Region office specified in Appendix B.

Appendix D - Endangered Species Act Requirements

The purpose of this guidance is to assist you in complying with the requirements in Part 1.1.e of the permit requiring you to demonstrate that you meet one of the criteria listed in this appendix with respect to the protection of any and all species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or of habitat that is federally-designated as "critical habitat" under the ESA in order to be eligible for coverage under this permit.

This guidance provides you information on the following:

- **Section D.1:** ESA Eligibility Criteria
- **Section D.2:** Guidance for Determining Which ESA Criteria Applies

D.1 ESA Eligibility Criteria

You must certify in your NOI that you meet one of the eligibility criteria listed below in order to be eligible for coverage under this permit. You must also specify in the NOI the basis for your selection of the applicable eligibility criterion.

Note: (1) Regardless of the criterion selected, you must provide documentation in your SWPPP that is sufficient to support your determination that you satisfy the requirements of the particular criterion. (2) While coordination between you and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (together, the "Services") is not necessarily required in all cases, EPA encourages you to coordinate with the Services and to do so early in the planning process prior to submitting your NOI.

- Criterion A.** No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.
- Criterion B.** The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.

- Criterion C.** Federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area," and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.
- Criterion D.** Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.
- Criterion E.** Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded. The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:
- a biological opinion that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or
 - written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally-designated habitat.
- You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.
- Criterion F.** Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally-designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

You must comply with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility criteria in this section to remain eligible for coverage under this permit. Documentation of these requirements must be kept as part of your SWPPP (see Part 7.2.14.1).

D.2 Guidance for Determining Which Criterion Applies

Part 1.1.5 of the permit requires that you meet one of the six criteria listed above in order to be eligible for coverage under the permit.

You must follow the procedures in Steps 1 through 6 to determine the ESA criterion under which your site is eligible for permit coverage.

D.2.1 Step 1 - Determine if Your Discharges and Discharge-Related Activities Were Already Addressed in Another Operator's Valid Certification that Included Your Action Area.

- **If your discharges and discharge-related activities were already addressed in another operator's valid certification that included your action area** (e.g., a general contractor or developer may have completed and filed an NOI for the entire action area with the necessary ESA certifications (Criterion A, C, D, E, or F)), you may select eligibility Criterion B on your Notice of Intent form.

By certifying eligibility under Criterion B, you must comply with any terms and conditions imposed under the eligibility requirements of Criterion A, C, D, E, or F to ensure that your discharges and discharge-related activities are protective of listed species and/or critical habitat.

Note: If you are unable to meet these eligibility requirements, then you may either establish eligibility under one of the other criterion, or you may consider applying to EPA for an individual permit.

Under Criterion B, you must provide documentation in your SWPPP of any of these terms and conditions, as well as the other operator's basis for establishing eligibility. You must also provide a description of the basis for your selection of Criterion B on your NOI form, including the eligibility criterion (A, C, D, E, or F) that was certified to by the previous operator, and must provide the Tracking Number from the other operator's notification of authorization under this permit.

If your certification is based on another operator's certification under criterion C, you must provide the documentation required in the NOI for criterion C, namely: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).

- **If discharges and discharge-related activities from your site were not addressed in another operator's valid certification that included your action area**, you must follow the applicable procedures in Steps 2 through 5 below.

D.2.2 Step 2 - Determine if Listed Threatened or Endangered Species or their Designated Critical Habitat(s) are Likely to Occur in your Site's Action Area

You must determine, to the best of your knowledge, whether species listed as either threatened or endangered, or their critical habitat(s) (see definitions of these terms in Appendix A), are located in your site's action area. To make this determination, you should first determine if listed species and/or critical habitat are expected to exist in your county or township. The local offices of the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and State or Tribal Heritage Centers often maintain lists of federally listed endangered or threatened species on their internet sites. For FWS

terrestrial and aquatic species information, you can use FWS' on-line mapping tool, the Information, Planning, and Consultation (IPAC) System, located at <http://www.fws.gov/ipac/>.

Note: To determine the field office that corresponds to your project site, visit <http://www.fws.gov/endangered/regions/index.html> and <http://www.nmfs.noaa.gov/> (under the left tab for "Regions").

In most cases, species and/or critical habitat lists allow you to determine if any such species or habitat exists in your county or township. You can also find critical habitat designations and associated requirements at 50 CFR Parts 17 and 226. <http://www.access.gpo.gov>.

- **If there are listed species and/or critical habitat in your county or township**, you should contact your local FWS, NMFS, or State or Tribal Heritage Center to determine if the listed species are known to exist in your action area and if any critical habitat areas have been designated that overlap your action area.

- If your local FWS, NMFS, or State or Tribal Heritage Center indicates that these species and/or critical habitat could exist in your action area, you must:

- **Do one or more of the following:**

- **Conduct visual inspections.** This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or in industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal stormwater collection systems.
- **Conduct a formal biological survey.** In some cases, particularly for larger construction sites with extensive stormwater discharges, biological surveys may be an appropriate way to assess whether species are located in the action area and whether there are likely to be adverse effects to such species. Biological surveys are frequently performed by environmental consulting firms. A biological survey may in some cases be useful to conduct in conjunction with Steps Two, Three, or Four of these instructions.
- **If required, conduct an environmental assessment under the National Environmental Policy Act (NEPA).** Some construction activities might require review under NEPA for specific reasons, such as federal funding or other federal involvement in the project. Note: Coverage under the CGP does not trigger such a review for individual projects/sites. EPA has complied with NEPA in the issuance of the CGP.

and

- Follow the instructions in Steps 3 – 5 below, as applicable. Note that many but not all measures imposed to protect listed species under these steps will also protect critical habitat. Thus, meeting the eligibility requirements of this CGP may require measures to protect critical habitat that are separate from those to protect listed species.
- If there are no listed species in your county or township and no critical habitat areas in your action area, you may check eligibility criterion A on your NOI form.** You must also provide a description of the basis for the criterion selected on your NOI form and provide documentation supporting the criterion selected in your SWPPP.

D.2.3 Step 3 - Determine if the Construction Activity's Discharges or Discharge-Related Activities Are Likely to Adversely Affect Listed Threatened or Endangered Species or Designated Critical Habitat

If in Step 2 you determine based on communication with your local FWS, NMFS, or State or Tribal Heritage Center, or other determination, that listed species and/or critical habitat could exist in your action area, you must next assess whether your discharges or discharge-related activities are likely to adversely affect listed threatened or endangered species or designated critical habitat.

Potential adverse effects from discharges and discharge-related activities include:

- Hydrological.** Stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely. Construction activity itself may also alter drainage patterns on a site where construction occurs that can impact listed species or critical habitat.
- Habitat.** Excavation, site development, grading, and other surface disturbance activities from construction activities, including the installation or placement of stormwater controls, may adversely affect listed species or their habitat. Stormwater may drain or inundate listed species habitat.
- Toxicity.** In some cases, pollutants in stormwater may have toxic effects on listed species.

The scope of effects to consider will vary with each site. If you are having difficulty determining whether your project is likely to adversely affect listed species or critical habitat, or one of the Services has already raised concerns to you, you should contact the appropriate office of the FWS, NMFS or Natural Heritage Center for assistance.

- If adverse effects to listed threatened or endangered species or their critical habitat are not likely, then you may select eligibility criterion C on the NOI form.** You must provide the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or

- Criterion E:** Formal or informal ESA section 7 consultation is performed with the FWS and/or NMFS and that consultation addresses the effects of your discharges and discharge-related activities on federally-listed and threatened species and designated critical habitat. In order to be eligible for coverage under this permit, consultation must result in a "no jeopardy opinion" or a written concurrence by the Service(s) on a finding that your stormwater discharge(s) and stormwater discharge-related activities are not likely to adversely affect listed species or critical habitat (For more information on consultation, see 50 CFR §402). If you receive a "jeopardy opinion," you may continue to work with the FWS and/or NMFS and your permitting authority to modify your project so that it will not jeopardize listed species or designated critical habitat.

Note that most consultations are accomplished through informal consultation. When conducting informal ESA section 7 consultation as a non-federal representative, you must follow the procedures found in 50 CFR Part 402 of the ESA regulations. You must notify FWS and/or NMFS of your intention and agreement to conduct consultation as a non-federal representative.

Consultation may occur in the context of another federal action at the construction site (e.g., where ESA section 7 consultation was performed for issuance of a wetlands dredge and fill permit for the project or where a NEPA review is performed for the project that incorporates a section 7 consultation). Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators may, if they wish, initiate consultation with the Services at Step Four.

Whether ESA section 7 consultation must be performed with either the FWS, NMFS or both Services depends on the listed species that may be affected by the operator's activity. In general, NMFS has jurisdiction over marine, estuarine, and anadromous species. Operators should also be aware that while formal section 7 consultation provides protection from incidental takings liability, informal consultation does not.

If you have met the requirements of criterion E, you may select eligibility criterion E on the NOI form. You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

- Criterion F:** Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and that authorization addresses the effects of your discharge(s) and discharge-related activities on federally-listed species and designated critical habitat. You must follow FWS and/or NMFS procedures when applying for an ESA section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22 for NMFS). Application instructions for section 10 permits for FWS and NMFS can be obtained by accessing the FWS and NMFS websites (<http://www.fws.gov> and <http://www.nmfs.noaa.gov>) or by contacting the appropriate FWS and NMFS regional office.

If you have met the requirements of criterion F, you may select eligibility criterion F on the NOI form. You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

designated critical habitat (in miles). You must also provide a copy of your site map with your NOI.

- If adverse effects to listed threatened or endangered species or their critical habitat are likely, you must follow Step 4 below.**

D.2.4 Step 4 - Determine if Measures Can Be Implemented to Avoid Adverse Effects

If you make a preliminary determination in Step 3 that adverse effects from your construction activity's discharges or discharge-related activities are likely to occur, you can still receive coverage under eligibility criterion C of the CGP if appropriate measures are undertaken to avoid or eliminate the likelihood of adverse effects prior to applying for CGP coverage.

These measures may involve relatively simple changes to construction activities such as re-routing a stormwater discharge to bypass an area where species are located, relocating stormwater controls, or by modifying the "footprint" of the construction activity. If you are unable to ascertain which measures to implement to avoid the likelihood of adverse effects, you must coordinate or enter into consultation with the FWS and/or NMFS, in which case you would not be eligible for coverage under eligibility criterion C, but may instead be eligible for coverage under eligibility criterion D, E, or F (described in more detail in Step 5).

- If you are able to install and implement appropriate measures to avoid the likelihood of adverse effects, then you may check eligibility criterion C on the NOI form.** The measures you adopt to avoid or eliminate adverse effects must be implemented for the duration of the construction project and your coverage under the CGP. You must also provide a description of the basis for the criterion selected, and the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).
- If you cannot ascertain which measures to implement to avoid the likelihood of adverse effects, you must follow the procedures in Step 5.**

D.2.5 Step 5 - Determine if the Eligibility Requirements of Criterion D, E, or F Can Be Met

If in Step 4 you cannot ascertain which measures to implement to avoid the likelihood of adverse effects, you must contact the FWS and/or NMFS. You may still be eligible for CGP coverage if any likely adverse effects can be addressed through meeting criterion D, E, or F.

- Criterion D:** You have coordinated with the Services and have addressed the effects of your site's discharges on federally-listed threatened or endangered species and federally-designated critical habitat, which resulted in a written concurrence from the relevant Service(s) that your site's discharges are not likely to adversely affect listed species or critical habitat.

If you have met the requirements of criterion D, you may select eligibility criterion D on the NOI form. You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between you and the applicable Service in your SWPPP.

Appendix E – Historic Property Screening Process

Background

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal "undertakings", such as the issuance of this permit, on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. To address any issues relating to historic properties in connection with the issuance of this permit, EPA has developed the screening process in this appendix that enables construction operators to appropriately consider the potential impacts, if any, of their installation of stormwater controls on historic properties and to determine whether actions can be taken, if applicable, to mitigate any such impacts. Although the coverages of individual construction sites under this permit do not constitute separate Federal undertakings, the screening process in this appendix provides an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit.

Key Terms

Historic property: prehistoric or historic districts, sites, buildings, structures, or objects that are included in or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and remains that are related to and located within such properties

SHPO – The State Historic Preservation Officer for a particular state

THPO or Tribal representative – The Tribal Historic Preservation Officer for a particular Tribe or, if there is no THPO, the representative designated by such Tribe for NHPA purposes

Instructions for All Construction Operators

You are required to follow the screening process in this appendix to determine if your installation of stormwater controls on your site has the potential to cause effects to historic properties, and whether or not you need to contact your SHPO, THPO, or other tribal representative for further information. You may not submit your NOI until you have completed this screening process. The following four steps describe how applicants can meet the historic property requirements under this permit:

Step 1 Are you installing any stormwater controls that require subsurface earth disturbance?

The first step of the screening process is to determine if you will install stormwater controls that cause subsurface earth disturbance. The installation of the following types of stormwater controls require subsurface earth disturbance:

- Dikes
- Berms
- Catch Basins
- Ponds
- Ditches
- Trenches
- Culverts
- Channels
- Perimeter Drains

- Swales

Note: This list is not intended to be exhaustive. Other stormwater controls that are not on this list may involve earth-disturbing activities and must also be examined for the potential to affect historic properties.

Note: You are only required to consider earth-disturbing activities related to the installation of stormwater controls in the NHPA screening process. You are not required to consider other earth-disturbing activities at the site. If you are installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, your project has the potential to have an effect on historic properties. If this is the case, then you must proceed to Step 2.

If you are not installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, then you may indicate this on your NOI, and no further screening is necessary. During the 14-day waiting period after submitting your NOI, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

Step 2 Have prior professional cultural resource surveys or other evaluations determined that historic properties do not exist, or have prior disturbances precluded the existence of historic properties?

If you are installing a stormwater control that requires subsurface earth disturbance, you must next determine if it has already been determined that no historic properties exist on your site based on prior professional cultural resource surveys or other evaluations, or that the existence of historic properties has been precluded because of prior earth disturbances.

If prior to your project it has already been determined that no historic properties exist at your site based on available information, including information that may be provided by your applicable SHPO, THPO, or other tribal representative, then you may indicate this on your NOI, and no further screening steps are necessary. Similarly, if earth disturbances that have occurred prior to your project have eliminated the possibility that historic properties exist on your site, you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If neither of these circumstances exists for your project, you must proceed to Step 3.

Step 3 If you are installing any stormwater controls that require subsurface earth disturbance, you must determine if these activities will have an effect on historic properties.

If your answer to the questions in Steps 1 and 2 is "no", then you must assess whether your earth-disturbing activities related to the installation of stormwater controls will have an effect on historic properties. This assessment may be based on historical sources, knowledge of the area, an assessment of the types of earth-disturbing activities you are engaging in, considerations of

If you do not receive a response within 15 calendar days after receipt by the SHPO, THPO, or other tribal representative of your request, then you may indicate this on your NOI, and no further screening steps are necessary. Or, if the applicable SHPO, THPO, or other tribal representative responds to your request with an indication that no historic properties will be affected by the installation of stormwater controls at your site, then you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If within 15 calendar days of receipt of your request the applicable SHPO, THPO, or other tribal representative responds with a request for additional information or for further consultation regarding appropriate measures for treatment or mitigation of effects on historic properties caused by the installation of stormwater controls on your site, you must comply with this request and proceed to Step 5.

Step 5: Consultation with your applicable SHPO, THPO, or other tribal representative.

If, following your discussions with the appropriate historic preservation authorities in Step 4, the applicable SHPO, THPO, or other tribal representative requests additional information or further consultation, you must respond with such information or to consult to determine impacts to historic properties that may be caused by the installation of stormwater controls on your site and appropriate measures for treatment or mitigation of such impacts. If as a result of your discussions with the applicable SHPO, THPO, or tribal representative, you enter into, and comply with, a written agreement regarding treatment and/or mitigation of impacts on your site, then you may indicate this on your NOI, and no further screening steps are necessary.

If, however, agreement on an appropriate treatment or mitigation plan cannot be reached between you and the SHPO, THPO, or other tribal representative within 30 days of your response to the SHPO, THPO, or other tribal representative's request for additional information or further consultation, you may submit your NOI, but you must indicate that you have not negotiated measures to avoid or mitigate such effects. You must also include in your SWPPP the following documentation:

1. Copies of any written correspondence between you and the SHPO, THPO, or other tribal representative; and
2. A description of any significant remaining disagreements as to mitigation measures between you and the SHPO, THPO, or other tribal representative.

After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, ACHP or other tribal representative may request that EPA place a hold on authorization based upon concerns regarding potential adverse effects to historic properties. EPA, in coordination with the ACHP, will evaluate any such request and notify you if any additional measures to address adverse effects to historic properties are necessary.

any controls and/or management practices you will adopt to ensure that your stormwater control-related earth-disturbing activities will not have an effect on historic properties, and any other relevant factors. If you determine based on this assessment that earth disturbances related to the installation of your stormwater controls will not cause effects to historic properties, you may indicate this on your NOI, and document the basis for your determination in your SWPPP and no further screening steps are necessary. In this case you must also attach a copy of your site map to your NOI. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If none of the circumstances in Steps 1-3 exist for your project, you must proceed to Step 4.

Step 4: If you are installing any stormwater controls that require subsurface earth disturbance and you have not satisfied the conditions in Steps 1-3, you must contact and consult with the appropriate historic preservation authorities.

Where you are installing stormwater controls that require subsurface earth disturbance, and you cannot determine in Step 3 that these activities will not have effects on historic properties, then you must contact the relevant SHPO, THPO, or other tribal representative to request their views as to the likelihood that historic properties are potentially present on your site and may be impacted by the installation of these controls.

Note: Addresses for SHPOs and THPOs may be found on the Advisory Council on Historic Preservation's website (www.achp.gov/programs.html). In instances where a Tribe does not have a THPO you should contact the appropriate Tribal government office designated by the Tribe for this purpose when responding to this permit eligibility condition.

You must submit the following minimum information in order to properly initiate your request for information:

1. Project name (i.e., the name or title most commonly associated with your project);
2. A narrative description of the project;
3. Name, address, phone and fax number, and email address (if available) of the operator;
4. Most recent U.S. Geological Survey (USGS) map section (7.5 minute quadrangle) showing actual project location and boundaries clearly indicated; and
5. Sections of SWPPP site map (see Part 7.2.6) that show locations where stormwater controls that will cause subsurface earth disturbance will be installed (see Step 1).

Without submitting this minimum information, you will not have been considered to have properly initiated your request. You will need to provide the SHPO, THPO, or other tribal representative a minimum of 15 calendar days after they receive these materials to respond to your request for information about your project. You are advised to get a receipt from the post office or other carrier confirming the date on which your letter was received.

Appendix F - List of Tier 3, Tier 2, and Tier 2.5 Waters

EPA's CGP has special requirements for discharges to waters designated by a state or tribe as Tier 2/2.5 or Tier 3 for anti-degradation purposes under 40 CFR 131.12(a). See Parts 1.2.3 and 3.3.

The list below is provided as a resource for operators who must determine whether they discharge to a Tier 2/2.5 or Tier 3 water. Only Tier 2/2.5 or Tier 3 waters specifically identified by a water quality standard authority (e.g., a state, territory, or tribe) are identified in the table below. Many authorities evaluate the existing and protected quality of the receiving water on a pollutant-by-pollutant basis and determine whether water quality is better than the applicable criteria that would be affected by a new discharge or an increase in an existing discharge of the pollutant. In instances where water quality is better, the authority may choose to allow lower water quality, where lower water quality is determined to be necessary to support important social and economic development. Permittees are not required to identify those waters which are evaluated on an individual basis.

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
MAR120000	Commonwealth of Massachusetts, except Indian Country lands
	Tier 2 and Tier 2.5 waters are identified and listed in 314 CMR 4.06 Basin Classification. (314 CMR 4 can be found at DEP's web page at http://www.mass.gov/dep/service/regulations/314cmr04.pdf)
	Tier 2 Tier 2 waters are listed on a parameter-by-parameter basis.
NHR120000	Tier 2.5 Tier 2.5 waters are listed as "outstanding resource waters" on the website: http://www.mass.gov/dep/water/laws/tbifig.pdf .
	State of New Hampshire
PRR120000	Tier 2/2.5 There is no list of Tier 2/Tier 2.5 waters. New dischargers should contact Ken Edwardson at Kenneth.Edwardson@des.nh.gov .
	Tier 3 Env-Ws 1708.05(a) Surface waters of national forests and surface waters designated as "natural" under RSA 483:7-a, shall be considered outstanding resource waters (ORW). "Natural waters" are listed at http://www.gencourt.state.nh.us/rsa/html/L/483/483-15.htm . Surface waters of national forests are not included in an official list. For further questions, new dischargers should contact Thelma Murphy (EPA Region 1's stormwater coordinator) at murphy.thelma@epa.gov .
PRR120000	Commonwealth of Puerto Rico
	Tier 3 Tier III waters are those which are classified as either Class SA or Class SE. Class SA waters are defined as "Coastal waters and estuarine waters of high quality and/or exceptional ecological or recreational value whose existing characteristics shall not be altered, except by natural causes, in order to preserve the existing natural phenomena." Class SA waters include bioluminescent lagoons and bays such as La Parguera and Monsio José on the Southern Coast, Bahía de Mosquito in Vieques, and any other coastal or estuarine waters of exceptional quality of high ecological value or recreational which may be designated by Puerto Rico, through Resolution, as requiring this classification for protection of the waters. Class SE waters are defined

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
	as "Surface waters and wetlands of exceptional ecological value, whose existing characteristics should not be altered in order to preserve the existing natural phenomena." Class SE waters include Laguna Tortuguero, Laguna Cartagena and any other surface water bodies of exceptional ecological value as may be designated by Puerto Rico through Resolution.
DCR120000	District of Columbia Tier 2/2.5 Rock Creek and its tributaries and Battery Kemble Creek and its tributaries are considered Special Waters of the District of Columbia (SWDC) under its anti-degradation program.
MNR120001	Fond du Lac Band of MN Chippewa Tier 3 Six lakes are presently identified as Tier 3: (1) Dead Fish, (2) Jaskari, (3) Miller (Mud), (4) Perch, (5) Rice Portage, (6) Wild Rice. Grand Portage Band of MN Chippewa Tier 2/2.5 All waters, not already classified as Tier 3, are high quality Tier 2 waters. (see Grand Portage Reservation Water Quality Standards, Section VI & VII, Pages 14-16). Tier 3 "The portion of Lake Superior north of latitude 47 degrees, 57 minutes, 13 seconds, east of Hat Point, south of the Minnesota-Ontario boundary, and west of the Minnesota-Michigan boundary." (see Section VII, Page 16).
WIR120001	Lac du Flambeau Band of the Lake Superior Chippewa Tier 2 All named waters, including wetlands, not specified under an anti-degradation classification. Tier 2.5 Bills Lake, Birch Lake, Bobdosh Lake, Bog Lake (SE SE Sec. 31, T40NR6E), Bolton Lake, Broken Bow Lake, Chewalah Lake, Clear Lake (Sec. 2, T39NR4E), Corn Great, Great, Corn Lake, Little "Least/Lesser", Crawling Stone Lake, Big, Crawling Stone Lake, Little, Crescent Lake, Crooked Lake, Big, David Lake, Ellerson Lake, Middle, Ellerson Lake, West, Elsie Lake "Boundary Lake", Fat Lake, Fence Lake, Gresham Creek, Green Lake (NW NW Sec. 19, T41R6E), Grey Lake, Gunlock Lake, Haskell Lake, Headflyer Lake (Sec. 19, T41NR5E), Highway Lake (NW NW Sec. 19, T41NR5E), Horsehead Lake (SE SW Sec. 9, T40NR5E), Hutton's Creek, Ike Walton Lake, Lily Lake (SE SW Sec. 35, T40NR5E), Little Ten Lake, Lodge Lake "L. Rice" (NW NW Sec. 8, T41NR6E), Lucy Lake, Mindys Lake (Sec. 8, T40NR5E), Minette Lake, Mitten Lake, Monk's Lake (Sec. 13, T40NR5E), Moving Cloud Lake, Mud Creek, Muskesin Lake, Patterson Lake, Placid Twin Lake (North), Placid Twin Lake (South), Plummer Lake, Poupart Lake, Prairie Lake (NE SW Sec. 13, T40NR4E), Raven Lake, Ross Allen Lake, Sand Lake, Little, Scott Lake (Sec. 22, T40N, R4E), Shishebogama Lake, Signal Lake, Snort Lake (Sec. 5, T41N, R6E), Spring Lake "Jerms", Squirrel Lake, Statenaker Lake "Hollow", Stearns Lake "Hourglass", Sugarbush "Hidden Lake" (NW NW Sec. 17, T41NR5E), Sugarbush Creek, Sugarbush Lake, Little, Sugarbush Lake, Lower, Sugarbush Lake, Middle, Sugarbush Lake, Upper, Sunfish Lake, Tippecanoe Lake, Tomahawk River, To-To Tom Lake, Toulsh Lake, Trout River, Warrior Lake, White Sand Lake, Whitefish Lake

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
	"Cattail Lake" (Sec. 34, T40N5R), Wishow Lake, Wyandock Lake
Tier 3	Bear River (1st bridge to Reservation boundary), Big Springs (Sec. 25, T40NR4E), Black Lake, Cranberry Lake, Doud Lake, Eagle Lake, Gene Lake, Johnson Springs, Little Trout Lake, Lost Lake (Sec. 1, T41NR4E), Mishonagon Creek, Munnomin (Jesse, Duck) Lake, Negani (Hegani) Lake, Reservation Line Lake, Spring Creek, Tank Lake, Thomas Lake, Wild Rice Lake, Zee Lake
NMR120000	State of New Mexico Tier 3 (1) Rio Santa Barbara, including the west, middle and east forks from their headwaters downstream to the boundary of the Pecos Wilderness; and (2) the waters within the United States forest service Valle Vidal special management unit including: (a) Rio Costilla, including Comanche, La Cueva, Fernandez, Chuckwagon, Little Costilla, Holman, Gold, Grassy, LaBelle and Vidal creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; (b) Middle Ponil creek, including the waters of Greenwood Canyon, from their headwaters downstream to the boundary of the Elliott S. Barker wildlife management area; (c) Shuree lakes; (d) North Ponil creek, including McCrystal and Seally Canyon creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; and (e) Leandro creek from its headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit. (3) the named perennial surface waters of the state, identified in Subparagraph (a) below, located within United States department of agriculture forest service wilderness. Wilderness are those lands designated by the United States congress as wilderness pursuant to the Wilderness Act. Wilderness areas included in this designation are the Aldo Leopold wilderness, Apache Kid wilderness, Blue Range wilderness, Chama River Canyon wilderness, Cruces Basin wilderness, Dome wilderness, Gila wilderness, Latir Peak wilderness, Pecos wilderness, San Pedro Parks wilderness, Wheeler Peak wilderness, and White Mountain wilderness. (a) the following waters are designated in the Rio Grande basin: (i) in the Aldo Leopold wilderness: Byers Run, Circle Seven creek, Flower canyon, Holden Prong, Indian canyon, Las Animas creek, Mud Spring canyon, North Fork Palomas creek, North Secco creek, Pretty canyon, Sids Prong, South Animas canyon, Victoria Park canyon, Water canyon; (ii) in the Apache Kid wilderness Indian creek and Smith canyon; (iii) in the Chama River Canyon wilderness: Chavez canyon, Ojitos canyon, Rio Chama; (iv) in the Cruces Basin wilderness: Beaver creek, Cruces creek, Diablo creek, Escondido creek, Lobo creek, Osha creek; (v) in the Dome wilderness: Capulin creek, Medio creek, Sanchez

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
	canyon/creek: (vi) in the Latir Peak wilderness: Bull creek, Bull Creek lake, Heart lake, Lagunitas Fork, Lake Fork creek, Rito del Medio, Rito Primero, West Latir creek; (vii) in the Pecos wilderness: Agua Sarca, Hidden lake, Horseshoe lake (Alamitos), Jose Vigil lake, Nambé lake, Nat lake IV, No Fish lake, North Fork Rio Quemado, Rinconada, Rio Capulin, Rio de las Trampas (Trampas creek), Rio de Truchas, Rio Rijoles, Rio Medio, Rio Molino, Rio Nambé, Rio San Leonardo, Rito con Agua, Rito Gallina, Rito Jaroso, Rito Quemado, San Leonardo lake, Santa Fe lake, Santa Fe river, Serpent lake, South Fork Rio Quemado, Trampas lake (East), Trampas lake (West). (viii) in the San Pedro Parks wilderness: Agua Sarca, Cañon Madera, Cave creek, Cecilia Canyon creek, Clear creek (North SPP), Clear creek (South SPP), Corralitos creek, Dove creek, Jose Miguel creek, La Jara creek, Oso creek, Rio Capulin, Rio de las Vacas, Rio Gallina, Rio Puerco de Chama, Rito Anastacio East, Rito Anastacio West, Rito de las Palomas, Rito de las Perchas, Rito de los Pinos, Rito de los Utes, Rito Leche, Rito Redondo, Rito Resumidero, San Gregorio lake; (ix) in the Wheeler Peak wilderness: Black Copper canyon, East Fork Red river, Elk lake, Horseshoe lake, Lost lake, Sawmill creek, South Fork lake, South Fork Rio Hondo, Williams lake. (b) The following waters are designated in the Pecos River basin: (i) in the Pecos wilderness: Albright creek, Bear creek, Beatty creek, Beaver creek, Carpenter creek, Cascade canyon, Cave creek, El Porvenir creek, Hollinger creek, Holy Ghost creek, Horsethief creek, Jack's creek, Jarosa canyon/creek, Johnson lake, Lake Katherine, Lost Bear lake, Noisy brook, Panchuela creek, Pecos Baldy lake, Pecos river, Rio Mora, Rio Valdez, Rito Azul, Rito de los Chimayosos, Rito de los Esteros, Rito del Oso, Rito del Padre, Rito las Trampas, Rito Maestas, Rito Oscuro, Rito Perro, Rito Sebadilloses, South Fork Bear creek, South Fork Rito Azul, Spirit lake, Stewart lake, Truchas lake (North), Truchas lake (South), Winsor creek; (ii) in the White Mountain wilderness: Argentina creek, Aspen creek, Bonito creek, Little Bonito creek, Mills canyon/creek, Rodamaker creek, South Fork Rio Bonito, Turkey canyon/creek. (c) The following waters are designated in the Gila River basin: (i) in the Aldo Leopold wilderness: Aspen canyon, Black Canyon creek, Bonner canyon, Burnt canyon, Diamond creek, Falls canyon, Fisherman canyon, Running Water canyon, South Diamond creek; (ii) in the Gila wilderness: Apache creek, Black Canyon creek, Brush canyon, Canyon creek, Chicken Coop canyon, Clear creek, Cooper canyon, Cow creek, Cub creek, Diamond creek, East Fork Gila river, Gila river, Gilita creek, Indian creek, Iron creek, Langstroth canyon, Lilley canyon, Little creek, Little Turkey creek, Lookout canyon, McKenna creek, Middle Fork Gila river, Miller Spring canyon, Mogollon creek, Panther canyon, Prior creek, Rain creek, Raw Meat creek, Rocky canyon, Sacaton creek, Sapillo creek, Sheep Corral canyon, Skeleton canyon, Squaw creek, Sycamore canyon, Trail canyon, Trail creek, Trout creek, Turkey creek, Turkey Feather creek, Turbo canyon,

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
	West Fork Gila river, West Fork Mogollon creek, White creek, Willow creek, Woodrow canyon. (d) The following waters are designated in the Canadian River basin: in the Pecos wilderness Daily creek, Johns canyon, Middle Fork Lake of Rio de la Casa, Middle Fork Rio de la Casa, North Fork Lake of Rio de la Casa, Rito de Gascon, Rito San Jose, Sapello river, South Fork Rio de la Casa, Sparks creek (Manuelitas creek). (e) The following waters are designated in the San Francisco River basin: (i) in the Blue Range wilderness: Pueblo creek; (ii) in the Gila wilderness: Big Dry creek, Lipsey canyon, Little Dry creek, Little Whitewater creek, South Fork Whitewater creek, Spider creek, Spruce creek, Whitewater creek; (f) The following waters are designated in the Mimbres Closed basin: in the Aldo Leopold wilderness Corral canyon, Mimbres river, North Fork Mimbres river, South Fork Mimbres river. (g) The following waters are designated in the Tularosa Closed basin: in the White Mountain wilderness Indian creek, Nogal Arroyo, Three Rivers. (h) The wetlands designated are identified on the maps and list of wetlands within United States forest service wilderness areas designated as outstanding national resource waters published at the New Mexico state library and available on the department's website.

Appendix G – Buffer Guidance.

The purpose of this guidance is to assist you in complying with the requirements in Part 2.1.2.1 of the permit regarding the establishment of natural buffers or equivalent sediment controls. This guidance is organized as follows:

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Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

Note that EPA does not consider designed stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, stormwater basins) that direct storm water to surface waters more than 50 feet from the disturbance to constitute surface waters for the purposes of determining if the buffer requirements apply.

G.1.2 Step 2 - Determine if Any Exceptions to the Requirements in Part 2.1.2.1 Apply

The following exceptions apply to the requirements in Part 2.1.2.1:

- If there is no discharge of stormwater to surface waters through the area between the disturbed portions of the site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented controls measures, such as a berm or other barrier, that will prevent such discharges.
- Where no natural buffer exists due to preexisting development disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part.

Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you are required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either compliance alternative 2 or 3 below, you are not expected to compensate for the reduction in buffer function that would have resulted from the area covered by these preexisting disturbances. Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

If during your project, you will disturb any portion of these preexisting disturbances, the area removed will be deducted from the area treated as natural buffer.

- For “linear construction projects” (see Appendix A), you are not required to comply with this requirement if site constraints (e.g., limited right-of-way) prevent you from complying with the requirements of the alternatives in Part 2.1.2.1a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale for why it is infeasible for you to comply with the requirements in Part 2.1.2.1a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.
- For “small residential lot” construction (i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre), you have the option of complying with the requirements in Part G.2.3 of this appendix.
- The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:

- Construction approved under a CWA Section 404 permit; or

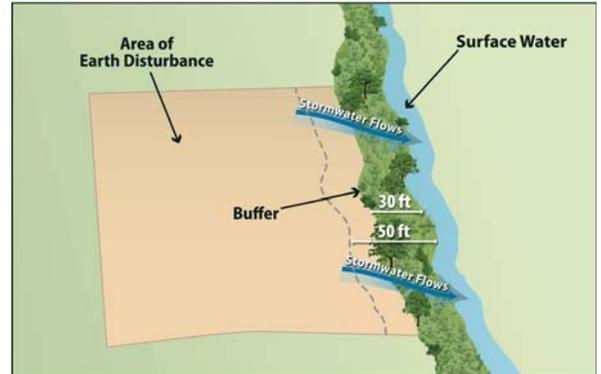
G.1 Sites That Are Required to Comply with Part 2.1.2.1

The purpose of this part is to help you determine if the requirements in Part 2.1.2.1 apply to your site.

G.1.1 Step 1 - Determine if Your Site is Within 50 Feet of a Surface Water

Part 2.1.2.1 applies to you only if your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site. Figure G – 1 illustrates when a site would be required to comply with the requirements in Part 2.1.2.1 due to their proximity to a surface water. If the surface water is not located within 50 feet of the earth-disturbing activities, Part 2.1.2.1 does not apply.

Figure G - 1. Example of earth-disturbing activities within 50 feet of a surface water.



If you determine that your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site, the requirements in Part 2.1.2.1 apply, except for certain circumstances that are described in Step 2.

Note that where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, or if a portion of area within 50 feet of the surface water is owned by another party and is not under your control, the buffer requirements in Part 2.1.2.1 still apply, but with some allowances.

- Construction of a water-dependent structure or water access areas (e.g., pier, boat ramp, trail).

Note that you must document in your SWPPP if any disturbances related to any of the above exceptions occurs within the buffer area on your site.

G.2 COMPLIANCE ALTERNATIVES GUIDANCE

If in Part G.1 of this guidance you determine that the buffer requirements apply to your site, you have three compliance alternatives from which you can choose:

1. Provide and maintain a 50-foot buffer undisturbed natural buffer (Part 2.1.2.1a.i).¹ or
2. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.ii).¹ or
3. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.iii).¹

The compliance alternative selected above must be maintained throughout the duration of permit coverage.

The following provides detailed guidance for how you can comply with each of the compliance alternatives. Part G.2.1 below provides guidance on how to provide and maintain natural buffers consistent with the alternatives 1 and 2, above. Part G.2.2 below provides guidance on how to comply with the requirement to provide a 50-foot buffer equivalent through erosion and sediment controls consistent with alternatives 2 and 3, above.

G.2.1 Guidance for Providing and Maintaining Natural Buffers

The following guidance is intended to assist you in complying with the requirements to provide and maintain a natural buffer during construction. This part of the guidance applies to you if you choose either alternative 1 (50-foot buffer) or alternative 2 (a buffer of < 50 feet supplemented by additional erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), or if you are providing a buffer in compliance with one of the small residential lot compliance alternatives in Part G.2.3 below.

¹ For the compliance alternatives in 1 and 2, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2 and 3, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Part G.2.2 of this Appendix for a discussion of how to determine equivalent reductions.

G.2.1.1 Buffer Width Measurement

Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:

1. The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
2. The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

Refer to Figure G - 2 and Figure G - 3. You may find that specifically measuring these points is challenging if the flow path of the surface water changes frequently, thereby causing the measurement line for the buffer to fluctuate continuously along the path of the waterbody. Where this is the case, EPA suggests that rather than measuring each change or deviation along the water's edge, it may be easier to select regular intervals from which to conduct your measurement. For instance, you may elect to conduct your buffer measurement every 5 to 10 feet along the length of the water.

Additionally, note that if earth-disturbing activities will take place on both sides of a surface water that flows through your site, to the extent that you are establishing a buffer around this water, it must be established on both sides. For example, if you choose alternative 1 above, and your project calls for disturbances on both sides of a small stream, you would need to retain the full 50 feet of buffer on both sides of the water. However, if your construction activities will only occur on one side of the stream, you would only need to retain the 50-foot buffer on the side of the stream where the earth-disturbance will occur.

Figure G - 2. This image shows buffer measurement from the ordinary high water mark of the water body, as indicated by a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter/debris.

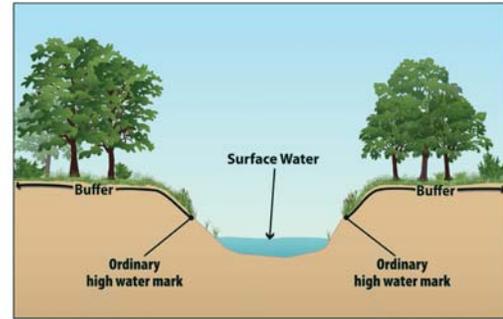
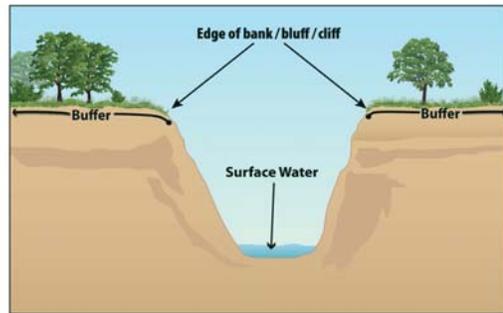


Figure G - 3. This image shows buffer measurement from the edge of the bank, bluff, or cliff, whichever is applicable.



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G.2.1.2 Limits to Disturbance Within the Buffer

You are considered to be in compliance with this requirement if you retain and protect from construction activities the natural buffer that existed prior to the commencement of construction. If the buffer area contains no vegetation prior to the commencement of construction (e.g., sand or rocky surface), you are not required to plant any additional vegetation. As noted above, any preexisting structures or impervious surfaces are allowed in the buffer provided you retain and protect from disturbance the vegetation in the buffer outside the preexisting disturbance.

To ensure that the water quality protection benefits of the buffer are retained during construction, you are prohibited from conducting any earth-disturbing activities within the buffer during permit coverage. In furtherance of this requirement, prior to commencing earth-disturbing activities on your site, you must delineate, and clearly mark off, with flags, tape, or a similar marking device, the buffer area on your site. The purpose of this requirement is to make the buffer area clearly visible to the people working on your site so that unintended disturbances are avoided.

While you are not required to enhance the quality of the vegetation that already exists within the buffer, you are encouraged to do so where such improvements will enhance the water quality protection benefits of the buffer. (Note that any disturbances within the buffer related to buffer enhancement are permitted and do not constitute construction disturbances.) For instance, you may want to consider targeted plantings where limited vegetation exists, or replacement of existing vegetation where invasive or noxious plant species (see <http://plants.usda.gov/java/noxiousDriver>) have taken over. In the case of invasive or noxious species, you may want to remove and replace them with a diversity of native trees, shrubs, and herbaceous plants that are well-adapted to the climatic, soil, and hydrologic conditions on the site. You are also encouraged to limit the removal of naturally deposited leaf litter, woody debris, and other biomass, as this material contributes to the ability of the buffer to retain water and filter pollutants.

If a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you are only required to retain and protect from construction activities the portion of the buffer area that is under your control. For example, if you elect alternative 1 above (provide and maintain a 50-foot buffer), but 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you must only retain and protect from construction activities the 40-foot buffer area that occurs on the property on which your construction activities are taking place. EPA would consider you to be in compliance with this requirement regardless of the activities that are taking place in the 10-foot area that is owned by a different party than the land on which your construction activities are taking place that you have no control over.

G.2.1.3 Discharges to the Buffer

You must ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls (for example, you must comply with the Part 2.1.2.2 requirement to establish sediment controls around the downslope perimeter of your site disturbances), and if necessary to prevent erosion caused by stormwater flows within the buffer, you must use velocity dissipation devices. The purpose of this requirement is to decrease the rate of stormwater flow and

encourage infiltration so that the pollutant filtering functions of the buffer will be achieved. To comply with this requirement, construction operators typically will use devices that physically dissipate stormwater flows so that the discharge entering the buffer is spread out and slowed down.

G.2.1.4 SWPPP Documentation

You are required to document in your SWPPP the natural buffer width that is retained. For example, if you are complying with alternative 1, you must specify in your SWPPP that you are providing a 50-foot buffer. Or, if you will be complying with alternative 2, you must document the reduced width of the buffer you will be retaining (and you must also comply with the requirements in Part 2.1.2.1c to describe the erosion and sediment controls you will use to achieve an equivalent sediment reduction, as described in Part G.2.2 below). Note that you must also show any buffers on your site plan in your SWPPP consistent with Part 2.1.2.6.3. Additionally, if any disturbances occur within the buffer area, you must document this in the SWPPP.

G.2.2 Guidance for Providing the Equivalent Sediment Reduction as the 50-foot Buffer

If you are selecting Alternative 2 (provide and maintain a buffer that is less than 50 feet that is supplemented by additional erosion and sediment controls that, together, achieve the equivalent sediment load reduction as the 50-foot buffer) or Alternative 3 (implement erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), the following guidance is intended to assist you in demonstrating that you will achieve the equivalent sediment reduction as the 50-foot buffer.

G.2.2.1 Determine Whether It Is Feasible to Provide a Reduced Buffer

EPA recognizes that there will be a number of situations in which it will be infeasible to provide and maintain a buffer of any width. While some of these situations may exempt you from the buffer requirement entirely (see G.1.2), if you do not qualify for one of these exemptions, there still may be conditions or circumstances at your site that make it infeasible to provide a natural buffer. For example, there may be sites where a significant portion of the property on which the earth-disturbing activities will occur is located within the buffer area, thereby precluding the retention of natural buffer areas. EPA believes there are likely to be other examples of situations that make it infeasible to provide any buffer area.

Therefore, in choosing between the 2 different compliance alternatives (Alternative 2 or 3), you should only elect to comply with Alternative 2 if it is feasible for you to retain any natural buffer on your site. (Note: For any buffer width retained, you are required to comply with the requirements in Part G.2.1, above, concerning the retention of vegetation and restricting earth disturbances.) Similarly, if you determine that it is infeasible to provide a natural buffer of any size during construction, you should elect to comply with Alternative 3. After making this determination, you should proceed to Part G.2.2.2 to determine how to provide controls that, together with any buffer areas that is being retained, if applicable, will achieve an equivalent sediment load reduction as the 50-foot buffer.

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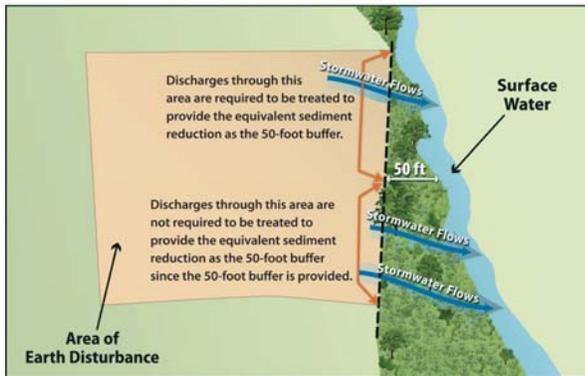
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G.2.2.2 Design Controls That Provide Equivalent Sediment Reduction as 50-foot Buffer

You must next determine what additional controls must be implemented on your site that, alone or in combination with any retained natural buffer, achieve a reduction in sediment equivalent to that achieved by a 50-foot buffer.

Note that if only a portion of the natural buffer is less than 50 feet, you are only required to implement erosion and sediment controls that achieve the sediment load reduction equivalent to the 50-foot buffer for discharges through that area. You would not be required to provide treatment of stormwater discharges that flow through 50 feet or more of natural buffer. See Figure G - 4.

Figure G - 4 Example of how to comply with the requirement to provide the equivalent sediment reduction when only a portion of your earth-disturbances discharge to a buffer of less than 50-feet.



To comply with this requirement, you are required to do the following:

Step 1 - Estimate the sediment reduction expected from your site if you had retained a 50-foot natural buffer.

Step 2 - Design controls that alone or in combination with any width of buffer retained achieve the equivalent sediment removal efficiency as that expected from the 50-foot buffer; and

Step 3 - Document in your SWPPP how your controls will achieve the equivalent sediment removal efficiency of the 50-foot buffer.

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Guidelines to help you work through these requirements are provided below.

a. Step 1 - Estimate the Sediment Reduction from the 50-foot Buffer

In order to design controls that match the sediment removal efficiency of a 50-foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of sediment controls used to reduce the discharge of sediment prior to the buffer. EPA has simplified this calculation by developing buffer performance tables covering a range of vegetation and soil types for the areas covered by the CGP. See Attachment 1, Tables G - 8 through G - 15. Note: buffer performance values in Tables G - 8 through G - 15 represent the percent of sediment captured through the use of perimeter controls (e.g., silt fences) and 50-foot buffers at disturbed sites of fixed proportions and slopes.²

Using Tables G - 8 through G - 15 (see Attachment 1), you can determine the sediment removal efficiency of a 50-foot buffer for your geographic area by matching the vegetative cover type that best describes your buffer area and the type of soils that predominate at your site. For example, if your site is located in Massachusetts (Table G - 9), and your buffer vegetation corresponds most closely with that of tall fescue grass, and the soil type at your site is best typified as sand, your site's sediment removal efficiency would be 81 percent.

In this step, you should choose the vegetation type in the tables that most closely matches the vegetation that would exist naturally in the buffer area on your site regardless of the condition of the buffer. However, because you are not required to plant any additional vegetation in the buffer area, in determining what controls are necessary to meet this sediment removal equivalency in Step 2 below, you will be able to take credit for this area as a fully vegetated "natural buffer."

Similarly, if a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you can treat the area of land not

² EPA used the following when developing the buffer performance tables:

- The sediment removal efficiencies are based on the U.S. Department of Agriculture's RUSLE2 ("Revised Universal Soil Loss Equation 2") model for slope profiles using a 100-foot long denuded slopes.
- Sediment removal was defined as the annual sediment delivered at the downstream end of the 50-foot natural buffer (tons/yr/acre) divided by the annual yield from denuded area (tons/yr/acre).
- As perimeter controls are also required by the CGP, sediment removal is in part a function of the reduction due to a perimeter control (i.e., silt fence) located between the disturbed portion of the site and the upstream edge of the natural buffer and flow traveling through a 50-foot buffer of undisturbed natural vegetation.
- It was assumed that construction sites have a relatively uniform slope without topographic features that accelerate the concentration for erosive flows.
- It was assumed that vegetation has been removed from the disturbed portion of the site and a combination of cuts and fills have resulted in a smooth soil surface with limited retention of near-surface root mass.

To represent the influence of soil, EPA analyzed 11 general soil texture classifications in its evaluation of buffer performance. To represent different types of buffer vegetation, EPA evaluated 4 or more common vegetative types for each state/territory covered under the permit. For each vegetation type evaluated, EPA considered only permanent, non-grazed and non-harvested vegetation, on the assumption that a natural buffer adjacent to the surface water will typically be undisturbed. EPA also evaluated slope steepness and found that sediment removal efficiencies present in Tables G - 8 through G - 15 are achievable for slopes that are less than nine percent.

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under control as having the equivalent vegetative cover and soil type that predominates on the portion of the property on which your construction activities are occurring.

For example, if your earth-disturbances occur within 50 feet of a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area adjacent to the stream as having the equivalent soil and vegetation type as predominates in the 40-foot area under your control. You would then make the same assumption in Step 2 for purposes of determining the equivalent sediment removal.

Alternatively, you may do your own calculation of the effectiveness of the 50-foot buffer based upon your site-specific conditions, and may use this number as your sediment removal equivalency standard to meet instead of using Tables G - 8 through G - 15. This calculation must be documented in your SWPPP.

b. Step 2 - Design Controls That Match the Sediment Removal Efficiency of the 50-foot Buffer

Once you have determined the estimated sediment removal efficiency of a 50-foot buffer for your site in Step 1, you will be required to select stormwater controls that will provide an equivalent sediment load reductions. These controls can include the installation of a single designed control, such as a sediment pond, additional perimeter controls, or other type of device. Alternatively, you may elect to install a combination of stormwater controls and to retain some amount of a buffer. Whichever control(s) you select, you must demonstrate in your SWPPP that the controls will provide at a minimum the same sediment removal capabilities as the 50-foot buffer (Step 1). You are allowed to take credit for the removal efficiencies of your required perimeter controls in your calculation of equivalency, because these were included in calculating the buffer removal efficiencies in Tables G - 8 through G - 15. (Note: You are reminded that the controls must be kept in effective operating condition until you have completed final stabilization on the disturbed portions of the site discharging to the surface water.)

To make the determination that your controls and/or buffer area achieve an equivalent sediment load reduction as the 50-foot buffer, you will need to use a model or other type of calculator. As mentioned above, there are a variety of models available that can be used to support your calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other models. A couple of examples are provided in Attachment 3 to help illustrate how this determination could be made.

If you are retaining a buffer of less than 50 feet, you may take credit for the removal that will occur from the reduced buffer and only need to provide additional controls to make up the difference between the removal efficiency of a 50-foot buffer and the removal efficiency of the narrower buffer. For example, if you are retaining a 30-foot buffer, you can account for the sediment removal provided by the 30-foot buffer retained, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided. To do this, you would plug the width of the buffer that is

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retained into RUSLE or another model, along with other stormwater controls that will together achieve a sediment reduction equivalent to a natural 50-foot buffer.

As described in Step 1 above, you can take credit for the area you have retained as a "natural buffer" as being fully vegetated, regardless of the condition of the buffer area.

For example, if your earth-disturbances occur 30 feet from a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area as a natural buffer, regardless of the activities that are taking place in the area. Therefore, you can assume (for purposes of your equivalency calculation) that your site is providing the sediment removal equivalent of a 30-foot buffer, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided.

c. Step 3 - Document How Site-Specific Controls Will Achieve the Sediment Removal Efficiency of the 50-foot Buffer

In Steps 1 and 2, you determined both the expected sediment removal efficiency of a 50-foot buffer at your site, and you used this number as a performance standard to design controls to be installed at your site, which alone or in combination with any retained natural buffer, achieves the expected sediment removal efficiency of a 50-foot buffer at your site. The final step is to document in your SWPPP the information you relied on to calculate the equivalent sediment reduction as an undisturbed natural buffer.

EPA will consider your documentation to be sufficient if it generally meets the following:

- For Step 1, refer to the table in Attachment 1 that you used to derive your estimated 50-foot buffer sediment removal efficiency performance. Include information about the buffer vegetation and soil type that predominate at your site, which you used to select the sediment load reduction value in Tables G - 8 through G - 15. Or, if you conducted a site-specific calculation for sediment removal efficiency, provide the specific removal efficiency, and the information you relied on to make your site-specific calculation.
- For Step 2: (1) Specify the model you used to estimate sediment load reductions from your site; and (2) the results of calculations showing how your controls will meet or exceed the sediment removal efficiency from Step 1.

If you choose Alternative 3, you must also include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

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G.2.3 Small Residential Lot Compliance Alternatives

In this part of Appendix G, EPA provides additional compliance alternatives for operators of small residential lots. In accordance with Part 2.1.2.1.e.iv, operators of small residential lots who do not provide a 50-foot buffer are not required to make the demonstration outlined in Part G.2.2.2. Instead, qualifying operators can comply with the buffer requirement by choosing to implement a set of traditional sediment and erosion controls from the menu of practices provided in Part G.2.3.2.

A small residential lot is a lot or grouping of lots being developed for residential purposes that will disturb less than 1 acre of land, but that is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

EPA has developed two different alternatives for compliance. The following steps describe how a small residential lot operator would achieve compliance with these 2 alternatives.

G.2.3.1 Step 1 – Determine if You are Eligible for the Small Residential Lot Compliance Alternatives

In order to be eligible for the small residential lot compliance alternatives, the following conditions must be met:

- a. The lot or grouping of lots meets the definition of “small residential lot”; and
- b. The operator must comply with all other requirements in Part 2.1.2.1, including:
 - i. Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site’s erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;
 - ii. Document in the SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and
 - iii. Delineate, and clearly mark off, with flags, tape, or other similar marking device, all natural buffer areas.

G.2.3.2 Step 2 – Implement the Requirements of the Small Residential Lot Compliance Alternative Selected

You must next choose from one of two small residential lot compliance alternatives and implement the stormwater control practices associated with that alternative.

Note: The compliance alternatives provided below are not mandatory. Operators of small residential lots can alternatively choose to comply with the any of the options that are available to other sites in Part 2.1.2.1a, described in Parts G.2.1 and G.2.2 in this appendix.

a. Small Residential Lot Compliance Alternative 1

Alternative 1 is a straightforward tiered- technology approach that specifies the controls that a small residential lot must implement based on the buffer width retained. To achieve compliance with Alternative 1, you must implement the

controls specified in Table G – 1 based on the buffer width to be retained. See footnote 3, below, for a description of the controls you must implement.

For example, if you are an operator of a small residential lot that will be retaining a 35-foot buffer and you choose Small Residential Lot Compliance Alternative 1, you must implement double perimeter controls between earth disturbances and the surface water.

In addition to implementing the applicable control, you must also document in your SWPPP how you will comply with Alternative 1.

Table G - 1. Alternative 1 Requirements³

Retain 50-foot Buffer	Retain <50 and >30 foot Buffer	Retain ≤ 30 foot Buffer
No Additional Requirements	Double Perimeter Controls	Double Perimeter Controls and 7-Day Site Stabilization

b. Small Residential Lot Compliance Alternative 2

Alternative 2 specifies the controls that a builder of a small lot must implement based on both the buffer width retained and their risk of sediment discharge. By incorporating the sediment risk, this approach may result in the implementation of controls that are more appropriate for the site’s specific conditions.

Step 1 – Determine Your Site’s Sediment Risk Level

To meet the requirements of Alternative 2, you must first determine your site’s sediment discharge “risk level” based on the site’s slope, location, and soil type. To help you to determine your site’s sediment risk level, EPA has developed five different tables for different slope conditions. You must select the table that most closely corresponds to your site’s average slope.

For example, if your site’s average slope is 7 percent, you would use Table G – 4 to determine your site’s sediment risk.

After you determine which table applies to your site, you must then use the table to determine the “risk level” (e.g., “low”, “moderate”, or “high”) that corresponds to your site’s location and predominant soil type.⁴

For example, based on Table G - 3, a site located in New Hampshire with a 4 percent average slope and with predominately sandy clay loam soils would fall into the “moderate” risk level.

³ Description of Additional Controls Applicable to Small Residential Lot Compliance Alternatives 1 and 2:

- **No Additional Requirements:** If you implement a buffer of 50 feet or greater, then you are not subject to any additional requirements. Note that you are required to install perimeter controls between the disturbed portions of your site and the buffer in accordance with Part 2.1.2.2.
- **Double Perimeter Control:** In addition to the reduced buffer width retained on your site, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart.
- **Double Perimeter Control and 7-Day Site Stabilization:** In addition to the reduced buffer width retained on your site and the perimeter control implemented in accordance with Part 2.1.2.2, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart, and you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities.

⁴ One source for determining your site’s predominant soil type is the USDA’s Web Soil Survey located at <http://websoilsurvey.nrcs.usda.gov/sgpp/WebSoilSurvey.aspx>

Table G - 2. Risk Levels for Sites with Average Slopes of ≤ 3 Percent

Location	Soil Type				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Low	Moderate	Low	Moderate	Moderate
American Samoa	Moderate	Moderate	Moderate	Moderate	High
Massachusetts and New Hampshire	Low	Moderate	Low	Low	Moderate
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Low
Washington D.C.	Low	Moderate	Low	Low	Moderate

Table G - 3. Risk Levels for Sites with Average Slopes of > 3 Percent and ≤ 6 Percent

Location	Soil Type				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	Moderate	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Low	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 4. Risk Levels for Sites with Average Slopes of > 6 Percent and ≤ 9 Percent

Location	Soil Type				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	High	Moderate	High	High
Puerto Rico	Moderate	High	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 5. Risk Levels for Sites with Average Slopes of > 9 Percent and ≤ 15 Percent

Location	Soil Type				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	Moderate	High	Moderate	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Moderate	Low	Moderate	Moderate
Washington D.C.	Moderate	High	Moderate	Moderate	High

Table G - 6. Risk Levels for Sites with Average Slopes of > 15 Percent

Location	Soil Type				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	High	High	High	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	High	High	Moderate	High	High
Idaho	Low	Low	Low	Low	Moderate
New Mexico	Moderate	Moderate	Moderate	Moderate	High
Washington D.C.	High	High	Moderate	High	High

Step 2 - Determine Which Additional Controls Apply

Once you determine your site's "risk level", you must next determine the additional controls you need to implement on your site, based on the width of buffer you plan to retain. Table G - 7 specifies the requirements that apply based on the "risk level" and buffer width retained. See footnote 3, above, for a description of the additional controls that are required.

For example, if you are the operator of a small residential lot that falls into the "moderate" risk level, and you decide to retain a 20-foot buffer, using Table G-7 you would determine that you need to implement double perimeter controls to achieve compliance with Part 2.1.2.1.

You must also document in your SWPPP your compliance with Alternative 2.

Table G - 7. Alternative 2 Requirements²

Risk Level Based on Estimated Soil Erosion	Retain ≥ 50' Buffer	Retain <50' and >30' Buffer	Retain ≤30' and >10' Buffer	Retain ≤ 10' Buffer
Low Risk	No Additional Requirements	No Additional Requirements	Double Perimeter Control	Double Perimeter Control
Moderate Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization
High Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization	Double Perimeter Control and 7-Day Site Stabilization

Table G - 10. Estimated 50-foot Buffer Performance in New Mexico*

Type of Buffer Vegetation **	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Tall Fescue grass	71	85	80	86	90
Medium-density Weeds	56	73	55	66	78
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	53	70	51	62	67
Southern Mixed Prairie Grass	53	71	52	63	50
Southern Range Cold Desert Shrubs	56	73	55	65	53

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

Table G - 11. Estimated 50-foot Buffer Performance in Washington, DC*

Type of Buffer Vegetation **	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	81	90	90	90	90
Tall Fescue Grass	79	90	83	89	90
Medium-density Weeds	71	79	66	75	74

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

Table G - 12. Estimated 50-foot Buffer Performance in American Samoa*

Type of Buffer Vegetation **	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Bahiagrass (Permanent cover)	82	90	90	90	83
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	85
Dense Grass	82	90	90	90	83
Tall Fescue Grass	82	89	82	89	79
Medium-density Weeds	70	73	62	75	59

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

ATTACHMENT 1

Sediment Removal Efficiency Tables⁵

EPA recognizes that very high removal efficiencies, even where theoretically achievable by a 50-foot buffer, may be very difficult to achieve in practice using alternative controls. Therefore in the tables below, EPA has limited the removal efficiencies to a maximum of 90%. Efficiencies that were calculated at greater than 90% are shown as 90%, and this is the minimum percent removal that must be achieved by alternative controls.

Table G - 8. Estimated 50-foot Buffer Performance in Idaho*

Type of Buffer Vegetation**	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Tall Fescue Grass	42	52	44	48	85
Medium-density Weeds	28	30	28	26	60
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	25	26	24	24	55
Northern Mixed Prairie Grass	28	30	28	26	50
Northern Range Cold Desert Shrubs	28	28	24	26	50

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

Table G - 9. Estimated 50-foot Buffer Performance in Massachusetts and New Hampshire*

Type of Buffer Vegetation**	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Warm-season Grass (i.e., Switchgrass, Lemongrass)	79	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	78	90	90	90	90
Tall Fescue Grass	76	90	81	89	90
Medium-density Weeds	66	76	60	72	66

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

⁵ The buffer performances were calculated based on a denuded slope upgradient of a 50-foot buffer and a perimeter controls, as perimeter controls are a standard requirement (see Part 2.1.2.2).

Table G - 13. Estimated 50-foot Buffer Performance in Guam*

Type of Buffer Vegetation **	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Bahiagrass (Permanent cover)	80	90	90	90	89
Warm-season Grass (i.e., Switchgrass, Lemongrass)	80	90	90	90	90
Dense Grass	79	90	90	90	89
Tall Fescue Grass	76	90	80	88	87
Medium-density Weeds	63	73	53	68	61

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

Table G - 14. Estimated 50-foot Buffer Performance in Puerto Rico*

Type of Buffer Vegetation**	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Bahiagrass (Permanent cover)	83	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	83	90	90	90	90
Dense Grass	83	90	90	90	90
Tall Fescue Grass	82	90	84	90	89
Medium-density Weeds	72	78	65	76	64

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

Table G - 15. Estimated 50-foot Buffer Performance in Virgin Islands*

Type of Buffer Vegetation**	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Bahiagrass (Permanent cover)	85	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	86	90	90	90	90
Dense Grass	85	90	90	90	90
Tall Fescue Grass	85	90	88	90	89
Medium-density Weeds	75	77	71	78	63

* Applicable for sites with less than nine percent slope
 ** Characterization focuses on the under-story vegetation

ATTACHMENT 2

Using the Sediment Removal Efficiency Tables – Questions and Answers

- *What if my specific buffer vegetation is not represented in Tables G - 8 through G - 15?* Tables G - 8 through G - 15 provide a wide range of factors affecting buffer performance; however, there may be instances where the specific buffer vegetation type on your site is not listed. If you do not see a description of the type of vegetation present at your site, you should choose the vegetation type that most closely matches the vegetation type on your site. You can contact your local Cooperative Extension Service Office (www.csees.usda.gov/Extension) for assistance in determining the vegetation type in Tables G - 8 through G - 15 that most closely matches your site-specific vegetation.
- *What if there is high variability in local soils?* EPA recognizes that there may be a number of different soil type(s) on any given construction site. General soil information can be obtained from USDA soil survey reports (<http://websoilsurvey.nrcs.usda.gov>) or from individual site assessments performed by a certified soil expert. Tables G - 8 through G - 15 present eleven generic soil texture classes, grouping individual textures where EPA has determined that performance is similar. If your site contains different soil texture classes, you should use the soil type that best approximates the predominant soil type at your site.
- *What if my site slope is greater than 9 percent after final grade is reached?* As indicated in the buffer performance tables, the estimated sediment removal efficiencies are associated with disturbed slopes of up to 9 percent grade. Where your graded site has an average slope of greater than 9 percent, you should calculate a site-specific buffer performance.
- *How do I calculate my own estimates for sediment reduction at my specific site?* If you determine that it is necessary to calculate your own sediment removal efficiency using site-specific conditions (e.g., slopes at your site are greater than 9 percent), you can do so by choosing from a range of available mathematical models that are available to facilitate this calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other equivalent models.
- *What is my estimated buffer performance if my site location is not represented by Tables G - 8 through G - 15?* If your site is located in an area not represented by Tables G - 8 through G - 15, you should use the table that most closely approximates conditions at your site. You may also choose to conduct a site-specific calculation of the buffer performance.
- *What if only a portion of my site drains to the buffer area?* If only a portion of your site drains to a surface water, where that water is within 50 feet of your construction activities, you are only required to meet the equivalency requirement for the stormwater flows corresponding to those portions of the site. See Example 2 below for an example of how this is expected to work.

ATTACHMENT 3

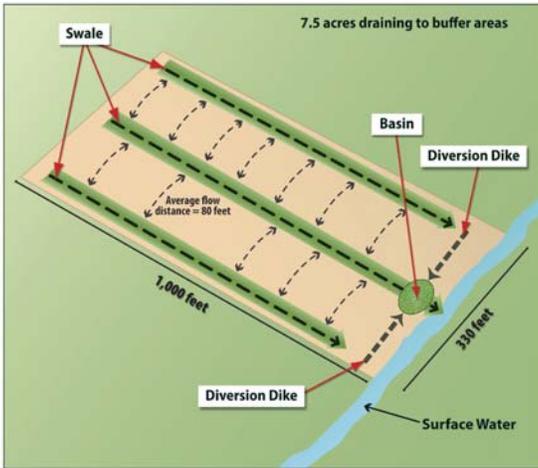
Examples of How to Use the Sediment Removal Efficiency Tables

Example 1. Comparatively Wet Location (7.5 acre site located in Massachusetts)

The operator of a 7.5-acre construction site in Massachusetts has determined that it is infeasible to establish a buffer of any size on their site, and is now required to select and install controls that will achieve an equivalent sediment load reduction as that estimated in G - 9 for their site conditions. The first step is to identify what percentage of eroded sediment is estimated to be retained from a 50-foot buffer. For this example, it is assumed that the site has a relatively uniform gentle slope (3 percent), so Table G - 9 can be used to estimate the 50-foot buffer sediment load reduction. If the site's buffer vegetation is best typified by cool-season dense grass and the underlying soil is of a type best described as loamy sand, the 50-foot buffer is projected to capture 90 percent of eroded sediment from the construction site.

The second step is to determine what sediment controls can be selected and installed in combination with the perimeter controls already required to be implemented at the site (see Part 2.1.2.2), which will achieve the 90 percent sediment removal efficiency from Table G - 9. For this example, using the RUSLE2 profile model, it was determined that installing a pair of shallow-sloped diversion ditches to convey runoff to a well-designed and maintained sediment basin provides 99 percent sediment removal. Because the estimated sediment reduction is greater than the required 90 percent that a 50-foot buffer provides, the operator will have met the buffer requirements. See Figure G - 5. The operator could also choose a different set of controls, as long as they achieve at least a 90 percent sediment removal efficiency.

Figure G - 5. Example 1 – Equivalent Sediment Load Reductions at a 7.5 ac Site in MA.



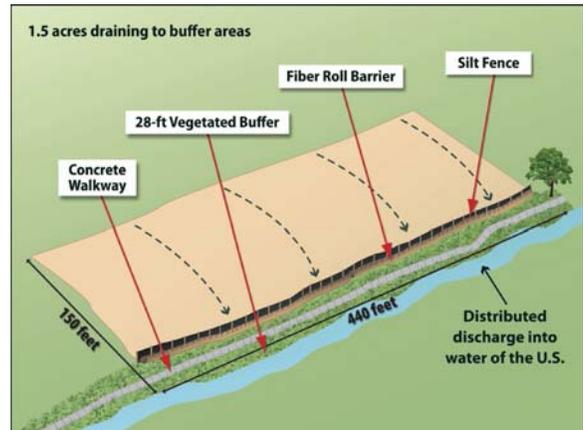
Example 2. Arid Location With Pre-existing Disturbances in the Natural Buffer (6.5 acre site located in New Mexico)

An operator of a site in New Mexico determines that it is not practicable to provide a 50-foot buffer, but a 28-foot buffer can be provided. Because the operator will provide a buffer that is less than 50 feet, the operator must determine which controls, in combination with the 28-foot buffer, achieve a sediment load reduction equivalent to the 50-foot buffer. In this example, the project will disturb 6.5 acres of land, but only 1.5 acres of the total disturbed area drains to the buffer area. Within the 28-foot buffer area is a preexisting concrete walkway. Similar to Example 1, the equivalence analysis starts with Step 1 (Part G.2.2.2) with a review of the New Mexico buffer performance (Table G - 10). The operator determines that the predominate vegetation type in the buffer area is prairie grass and the soil type is similar to silt, and that the site is of a uniform, shallow slope (e.g., 3 percent grade). Although the operator will take credit for the disturbance caused by the concrete walkway as a natural buffer in Step 2, here the operator can treat the entire buffer area as being naturally vegetated with prairie grass. Based on this information, the operator refers to Table G - 10 to estimate that the 50-foot buffer would retain 50 percent of eroded soil.

The second step is to determine, based on the 50 percent sediment removal efficiency found in Table G - 10, what sediment controls in combination with the 28-foot buffer area, can be

implemented to reduce sediment loads by 50 percent or more. The operator does not have to account the reduction in buffer function caused by the pre-existing walkway, and can take credit for the entire 28-foot buffer being fully vegetated in the analysis. For this example, using the RUSLE2 profile model, the operator determined that installing a fiber roll barrier between the silt fence (already required by Part 2.1.2.2) and the 28-foot buffer will achieve an estimated 84 percent sediment removal efficiency. See Figure G - 6. Note that this operator is subject to the requirement in Part 2.1.2.1b.1 to ensure that discharges through the silt fence, fiber roll barrier, and 28-foot buffer do not cause erosion within the buffer. The estimated sediment reduction is greater than the required 50 percent; therefore the operator will have met the buffer alternative requirement.

Figure G - 6. Example 2 – Equivalent Sediment Load Reductions at a 6.5 ac Site in NM.



Appendix H – 2-Year, 24-Hour Storm Frequencies

Part 2.1.3.2 of the permit indicates that if you install a sediment basin, one of the design requirements is to provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained. This appendix is intended to provide a guide to permittees to determine the volume of precipitation associated with their local 2-year, 24-hour storm event.

The permittee should start out by determining their local 2-year, 24-hour storm volume. The rainfall frequency atlases, technical papers, and the Precipitation Frequency Data Server (PFDS) developed by the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) serve as national standards for rainfall intensity at specified frequencies and durations in the United States. Operators of construction projects subject to the numeric effluent limits can use these standards to determine their local 2-year, 24-hour storm. Table H-1 identifies methods for determining precipitation frequency based on permit area. EPA notes that permittees may also use alternative peer-reviewed data sources not listed in Table H - 1 to determine the 2-year, 24-hour storm for their site.

Table H - 1 – Method to Determine Precipitation Frequency Based on Permit Area

PERMIT AREA	METHOD TO DETERMINE PRECIPITATION FREQUENCY
District of Columbia	PFDS: NOAA Atlas 14, Vol. 2
Idaho	NOAA Atlas 2, Vol. 5; Technical Paper 40
Massachusetts	Technical Paper 40
New Hampshire	Technical Paper 40
New Mexico	PFDS; Technical Paper 40
Selected Pacific Islands	PFDS; Technical Paper 40
Puerto Rico and the U.S. Virgin Islands	PFDS; Technical Paper 40
Other	PFDS; Technical Paper 40; NOAA Atlas 2 or 14

How to Determine Your Local 2-year, 24-hour Storm Size

Projects located in the **District of Columbia, New Mexico, Puerto Rico, U.S. Virgin Islands, or Pacific Islands** can use the PFDS at <http://hdsc.nws.noaa.gov/hdsc/pfds/index.html> or use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at <http://www.nws.noaa.gov/oh/hdsc/currentpf.htm> to determine their precipitation frequency.

The PFDS is an easy to use, point-and-click interface to official U.S. precipitation frequency estimates and intensities. The opening PFDS screen is a clickable map of the United States. Upon clicking on a state, a state-specific interface appears. From this page the user selects the following:

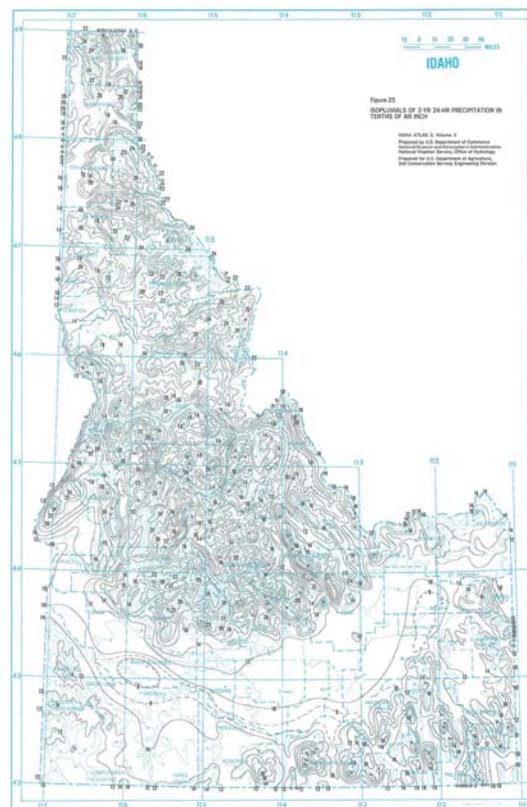
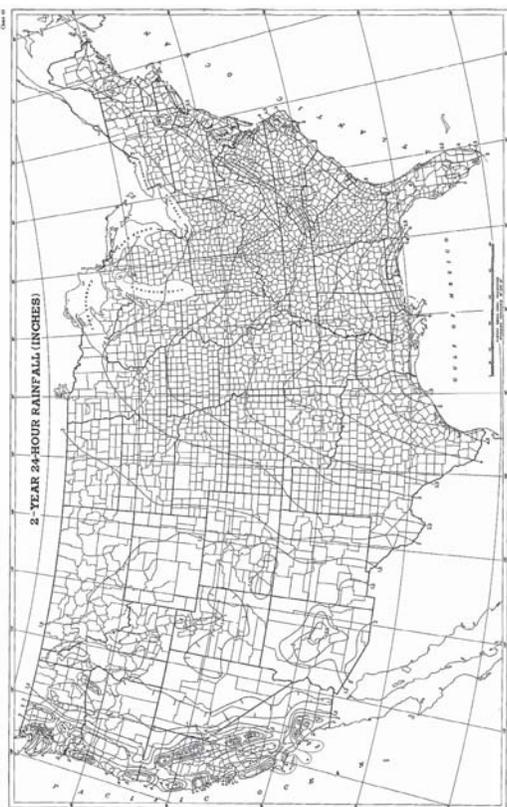
- A location: Either via clicking on the map or manually entering a longitude/latitude coordinate;
- Type of output: Depth-Duration Frequency (DDF) or Intensity-Duration-Frequency (IDF)
- Units: millimeters or inches; and
- Type of estimate: Point or areal.

Additionally, PFDS also serves as a tool for providing references and other information for other current precipitation frequency standards that are not yet updated.

Projects located in the **District of Columbia, Puerto Rico, U.S. Virgin Islands, or Pacific Islands** can use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at <http://www.nws.noaa.gov/oh/hdsc/currentpf.htm> or access the PFDS at <http://hdsc.nws.noaa.gov/hdsc/pfds/index.html> to determine their precipitation frequency.

Projects located in **Massachusetts and New Hampshire**, or other areas not covered by the PFDS or NOAA Atlases will need to use TP-40 to identify the precipitation frequency. TP-40 provides a map of the continental U.S. for the 2-year, 24-hour rainfall. TP40 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/TechnicalPaper_No40.pdf. (See also attached map of TP-40)

Projects located in **Idaho** can use the NOAA Atlas 2, Vol. 5 to determine their precipitation frequency. NOTE: Precipitation Frequencies on the NOAA Atlas 2, Vol. 5 are in tenths of an inch and will have to be converted to inches to determine precipitation frequency. NOAA Atlas 2, Vol. 5 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas2_Volume5.pdf. (See also attached map of NOAA Atlas 2, Vol. 5)



Appendix I - Standard Permit Conditions

Standard permit conditions in Appendix I are consistent with the general permit provisions required under 40 CFR 122.41.

I.1 Duty To Comply.

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action: for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

- I.1.1** You must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards, even if the permit has not yet been modified to incorporate the requirement.
- I.1.2** Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (61 FR 252, December 31, 1996, pp. 69359-69366, as corrected in 62 FR 54, March 20, 1997, pp.13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every 4 years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties following were adjusted for inflation starting in 1996.
- I.1.2.1 Criminal Penalties.**
- Negligent Violations.** The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than \$2,500 nor more than \$25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation or by imprisonment of not more than two years, or both.
 - Knowing Violations.** The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
 - Knowing Endangerment.** The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than \$250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon

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I.4 Duty to Mitigate.

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

I.5 Proper Operation and Maintenance.

You must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by you to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by you only when the operation is necessary to achieve compliance with the conditions of this permit.

I.6 Permit Actions.

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

I.7 Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privileges.

I.8 Duty to Provide Information.

You must furnish to EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), within a reasonable time, any information that EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to EPA or an authorized representative upon request, copies of records required to be kept by this permit.

I.9 Inspection and Entry.

You must allow EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), upon presentation of credentials and other documents as may be required by law, to:

- Enter upon your premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

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conviction of violating the imminent danger provision be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- False Statement.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- I.1.2.2 Civil Penalties.** The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$37,500 per day for each violation).
- I.1.2.3 Administrative Penalties.** The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:
- Class I Penalty.** Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500).
 - Class II Penalty.** Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$177,500).

I.2 Duty to Reapply.

If you wish to continue an activity regulated by this permit after the expiration date of this permit, you must apply for and obtain authorization as required by the new permit once EPA issues it.

I.3 Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for you in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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I.10 Monitoring and Records.

- I.10.1** Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.
- I.10.2** You must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date the permit expires or the date the permittee's authorization is terminated. This period may be extended by request of EPA at any time.
- I.10.3** Records of monitoring information must include:
- I.10.3.1 The date, exact place, and time of sampling or measurements;
 - I.10.3.2 The individual(s) who performed the sampling or measurements;
 - I.10.3.3 The date(s) analyses were performed
 - I.10.3.4 The individual(s) who performed the analyses;
 - I.10.3.5 The analytical techniques or methods used; and
 - I.10.3.6 The results of such analyses.
- I.10.4** Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the permit.
- I.10.5** The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

I.11 Signatory Requirements.

- I.11.1** All applications, including NOIs, must be signed as follows:
- I.11.1.1** For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- I.11.1.2** For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
- I.11.1.3** For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive

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officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

- 1.11.2** Your SWPPP, including changes to your SWPPP, inspection reports, and any other compliance documentation required under this permit, must be signed by a person described in Appendix I, Subsection 1.11.1 above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- 1.11.2.1** The authorization is made in writing by a person described in Appendix I, Subsection 1.11.1;
- 1.11.2.2** The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- 1.11.2.3** The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.
- 1.11.3** Changes to Authorization. If an authorization under Part 1.7 is no longer accurate because a different operator has responsibility for the overall operation of the construction site, a new NOI satisfying the requirements of Part 1.7 must be submitted to EPA. See Table 1 in Part 1.7.2 of the permit. However, if the only change that is occurring is a change in contact information or a change in the facility's address, the operator need only make a modification to the existing NOI submitted for authorization.
- 1.11.4** Any person signing documents in accordance with Appendix I, Subsections 1.11.1 or 1.11.2 above must include the following certification:
- "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- 1.11.5** For persons signing documents electronically, in addition to meeting other applicable requirements in Appendix I, Subsection 1.11, such signatures must meet the same signature, authentication, and identity-proofing standards set forth at 40 CFR § 3.2000(b) for electronic reports (including robust second-factor authentication).
- 1.11.6** The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- 1.12 Reporting Requirements.**
- 1.12.1** Planned changes. You must give notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- 1.12.1.1** The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- 1.12.1.2** The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
- 1.12.2** Anticipated noncompliance. You must give advance notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- 1.12.3** Transfers. This permit is not transferable to any person except after notice to EPA. Where a facility wants to change the name of the permittee, the original permittee (the first owner or operators) must submit a Notice of Termination pursuant to Part 8. The new owner or operator must submit a Notice of Intent in accordance with Part 1.7 and Table 1. See also requirements in Appendix I, Subsections 1.11.1 and 1.11.2.
- 1.12.4** Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.
- 1.12.4.1** Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by EPA for reporting results of monitoring of sludge use or disposal practices.
- 1.12.4.2** If you monitor any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.
- 1.12.5** Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.
- 1.12.6** Twenty-four hour reporting. In addition to reports required elsewhere in this permit:
- 1.12.6.1** You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances. A written submission must also be provided within five days of the time you become aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- 1.12.6.2** The following shall be included as information which must be reported within 24 hours under this paragraph.
- Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(m)(3)(ii))
 - Any upset which exceeds any effluent limitation in the permit
 - Violation of a maximum daily discharge limit for any numeric effluent limitation. (See 40 CFR 122.44(g).)
- 1.12.6.3** EPA may waive the written report on a case-by-case basis for reports under Appendix I, Subsection 1.12.6.2 if the oral report has been received within 24 hours.

- 1.12.7** Other noncompliance. You must report all instances of noncompliance not reported under Appendix I, Subsections 1.12.4, 1.12.5, and 1.12.6, at the time monitoring reports are submitted. The reports must contain the information listed in Appendix I, Subsection 1.12.6.
- 1.12.8** Other information. Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permitting Authority, you must promptly submit such facts or information.
- 1.13 Bypass.**
- 1.13.1** Definitions.
- 1.13.1.1** Bypass means the intentional diversion of waste streams from any portion of a treatment facility See 40 CFR 122.41(m)(1)(i).
- 1.13.1.2** Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. See 40 CFR 122.41(m)(1)(ii).
- 1.13.2** Bypass not exceeding limitations. You may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Appendix I, Subsections 1.13.3 and 1.13.4. See 40 CFR 122.41(m)(2).
- 1.13.3** Notice.
- 1.13.3.1** Anticipated bypass. If you know in advance of the need for a bypass, you must submit prior notice, if possible at least ten days before the date of the bypass. See 40 CFR 122.41(m)(3)(i).
- 1.13.3.2** Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Appendix I, Subsection 1.12.6 (24-hour notice). See 40 CFR 122.41(m)(3)(ii).
- 1.13.4** Prohibition of bypass. See 40 CFR 122.41(m)(4).
- 1.13.4.1** Bypass is prohibited, and EPA may take enforcement action against you for bypass, unless:
- Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - You submitted notices as required under Appendix I, Subsection 1.13.3.
- 1.13.4.2** EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in Appendix I, Subsection 1.13.4.1.

- 1.14 Upset.**
- 1.14.1** Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).
- 1.14.2** Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix I, Subsection 1.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. See 40 CFR 122.41(n)(2).
- 1.14.3** Conditions necessary for a demonstration of upset. See 40 CFR 122.41(n)(3). A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
- An upset occurred and that you can identify the cause(s) of the upset;
 - The permitted facility was at the time being properly operated; and
 - You submitted notice of the upset as required in Appendix I, Subsection 1.12.6.2.b (24 hour notice).
- 1.14.3.4** You complied with any remedial measures required under Appendix I, Subsection 1.4.
- 1.14.4** Burden of proof. In any enforcement proceeding, you, as the one seeking to establish the occurrence of an upset, have the burden of proof. See 40 CFR 122.41(n)(4).
- 1.15 Retention of Records.**
- Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.
- 1.16 Reopener Clause.**
- 1.16.1** Procedures for modification or revocation. Permit modification or revocation will be conducted according to 40 CFR §122.62, §122.63, §122.64 and §124.5.
- 1.16.2** Water quality protection. If there is evidence indicating that the stormwater discharges authorized by this permit cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standard, you may be required to obtain an individual permit in accordance with Part 1.7.5 of this permit, or the permit may be modified to include different limitations and/or requirements.
- 1.16.3** Timing of permit modification. EPA may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines that may be promulgated in the course of the current permit cycle.

I.17 Severability.

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. EPA's intent is that the permit is to remain in effect to the extent possible...

Appendix J - Notice of Intent (NOI) Form and Instructions

Part 1.7.1 requires you to use the electronic NOI system, or "eNOI" system, to prepare and submit your NOI. However, if you are given approval by the EPA Regional Office to use a paper NOI form, and you elect to use it, you must complete and submit the following form.

NPDES FORM 3510-9 EPA UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT Form Approved OMB No. 2040-0004

Project/Site Address: Street/Location: City: State: Zip Code: County or similar government subdivision: Latitude/Longitude: Horizontal Reference Datum: Is your project/site located in Indian Country lands... Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? Estimated Project Start Date: Estimated Project Completion Date: Estimated Area to be Disturbed: Have earth-disturbing activities commenced on your project/site? Have stormwater discharges from your project/site been covered previously under an NPDES permit? V. Discharge Information: Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? Are there any surface waters within 50 feet of your project's earth disturbances? Receiving Waters and Wetlands Information: Provide the names of any waters to which you discharge...

Impaired Waters
Describe the methods you used to complete the above table:

Are any of the surface waters to which you discharge designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding Natural Resource Water)? (See Appendix F).
 YES NO
 If yes, name(s) of receiving water(s) and its designation (Tier 2, Tier 2.5 or Tier 3): _____

VI. Chemical Treatment Information
 Will you use polymers, flocculants, or other treatment chemicals at your construction site? YES NO
 If yes, will you use cationic treatment chemicals at your construction site? YES NO
 If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI? YES NO
 If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.
 Please indicate the treatment chemicals that you will use: _____

* Note: You are ineligible for coverage under this permit unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

VII. Stormwater Pollution Prevention Plan (SWPPP) Information
 Has the SWPPP been prepared in advance of filing this NOI? YES NO

SWPPP Contact Information:
 First Name: _____ Middle Initial: _____ Last Name: _____
 Organization Name: _____
 Phone: _____ Ext.: _____ Fax (optional): _____
 E-mail: _____

VIII. Endangered Species Protection
 Using the instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit (only check 1 box)?
 A B C D E F
 Provide a brief summary of the basis for criterion selection listed in Appendix D (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service; specific study).
 If you select criterion B, provide the Tracking Number from the other operator's notification of authorization under this permit: _____
 If you select criterion C, you must attach a copy of your site map (see Part 7.2.6 of the permit), and you must answer the following questions:
 What federally-listed species or federally-designated critical habitat are located in your "action area": _____
 What is the distance between your site and the listed species or critical habitat (miles): _____
 If you select criterion D, E, or F, attach copies of any letters or other communications between you and the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

IX. Historic Preservation
 Are you installing any stormwater controls as described in Appendix E that require subsurface earth disturbance? (Appendix E, Step 1) YES NO
 If yes, have prior surveys or evaluations conducted on the site have already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E, Step 2) YES NO
 If no, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (Appendix E, Step 3) YES NO
 If no, did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? (Appendix E, Step 4) YES NO
 If yes, describe the nature of their response:
 Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions
 No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls
 Other: _____

X. Certification Information
 I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
 First Name: _____ Middle Initial: _____ Last Name: _____
 Title: _____
 Signature: _____ Date: ____/____/____
 Email: _____

Instructions for Completing EPA Form 3510-9
Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit
 NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Who Must File an NOI Form
 Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et. seq., the Act), federal law prohibits stormwater discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) permit. Operator of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with the permit conditions. If you have questions about whether you need a NPDES stormwater permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755.

Completing the Form
 Obtain and read a copy of the 2012 Construction General Permit, viewable at www.epa.gov/npdes/stormwater/cgp. To complete this form, type or print uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755. Please submit the original document with signature in ink - do not send a photocopied signature.

Section I. Approval to Use Paper NOI Form
 You must indicate whether you have been given approval by the EPA Regional Office to use a paper NOI. Note that you are not authorized to use this paper NOI form unless the Regional Office has approved its use. Verbal approval from the Regional Office is sufficient. Where you have obtained approval to use this form, indicate the reason you need to use this form, the name of the EPA Regional Office staff person who provided approval for use of this form, and the date that approval was provided. See www.epa.gov/npdes/stormwater/contacts for a list of EPA Regional Office contacts.

Section II. Permit Number
 Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

Section III. Operator Information
 Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application. Refer to Appendix A of the permit for the definition of "operator". Provide the employer identification number (EIN from the Internal Revenue Service; IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA"

in the space provided. Also provide a point of contact, the operator's mailing address, telephone number, fax number (optional) and e-mail address (to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.
 If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the full name, organization, phone number and email address of the NOI preparer.

Section IV. Project/ Site Information
 Enter the official or legal name and complete street address, including city, state, zip code, and county and similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.
 Provide the latitude and longitude of your facility in degrees, minutes, seconds; degrees, minutes, decimal; or degrees decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (USGS) topographic or quadrangle maps, and EPA's web-based staking tool, among others. Refer to www.epa.gov/npdes/stormwater/cgp for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used. If known, enter the horizontal reference datum for your latitude and longitude. The horizontal reference datum used on USGS topographic maps is shown on the bottom left corner of USGS topographic maps; it is also available for GPS receivers. If you use EPA's web staking tool or if you are unsure of the horizontal reference datum for your site, please check the "unknown" box.

Indicate whether the project is in Indian country lands or located on a property of religious or cultural significance to an Indian tribe, and if so, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property.
 Indicate whether you are seeking coverage under this permit as a "federal operator" as defined in Appendix A.
 Enter the estimated construction start and completion dates using four digits for the year (i.e., 10/06/2012). Indicate to the nearest quarter acre the estimated area to be disturbed.
 Indicate whether earth-disturbing activities have already commenced on your project/site. If earth-disturbing activities have commenced on your site because stormwater discharges from the site have been previously covered under a NPDES permit, you must provide the CGP Tracking Number or the NPDES permit number if coverage was under an individual permit.

Instructions for Completing EPA Form 3510-9
Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit
 NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Section V. Discharge Information
 Indicate whether discharges from the site will enter into a municipal separate storm sewer system (MS4), as defined in Appendix A.
 Also, indicate whether any surface waters (as defined in Appendix A) exist either on or within 50 feet from your site. Note that if "yes", you are required to comply with the requirement in Part 2.1.2.1 of the permit to provide natural buffers or equivalent sediment controls.
 You must specify the names of any surface waters that receive stormwater directly from your site and/or from the MS4 to which you discharge. You must also specify the names of any surface waters that you discharge to that are listed as "impaired" as defined in Appendix A, including any waters for which there is an approved or established TMDL, and the pollutants for which the water is impaired or for which there is a TMDL. This information will be used to determine if the site discharges to an impaired waterbody, which triggers additional requirements in Part 3.2.2 of the permit. Applicants must specify which method they used to determine whether or not their site discharges to impaired waters. Also, if a TMDL has been approved or established, identify the title or reference of the TMDL document.
 Indicate whether discharges from the site will enter into a surface water that is designated as a Tier 2, Tier 2.5, or Tier 3 water. A list of Tier 2, 2.5, and 3 waters is provided as Appendix F. If the answer is "yes", name all waters designated as Tier 2, Tier 2.5, or Tier 3 to which the site will discharge.

Section VI. Chemical Treatment Information
 Indicate whether the site will use polymers, flocculants, or other treatment chemicals. Indicate whether the site will employ cationic treatment chemicals. If the answer is "yes" to either question, indicate which chemical(s) you will use. Note that you are not eligible for coverage under this permit to use cationic treatment chemicals unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. Examples of cationic treatment chemicals include, but are not limited to, cationic polyacrylamide (C-PAM), PolyDADMAC (POLYDIALLYLDIMETHYLAMMONIUM CHLORIDE), and chitosan.

Section VII. Stormwater Pollution Prevention Plan (SWPPP) Information
 All sites eligible for coverage under this permit are required to prepare a SWPPP in advance of filing the NOI, in accordance with Part 7. Indicate whether the SWPPP has been prepared in advance of filing the NOI.
 Indicate the street, city, state, and zip code where the SWPPP can be found. Indicate the contact information (name, organization, phone, fax (optional), and email) for the person who developed the SWPPP for this project.

Section VIII. Endangered Species Information
 Using the instructions in Appendix D, indicate under which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible to request to protection of federally listed endangered and threatened species and designated critical habitat. A description of the basis for the criterion selected must also be provided.
 If criterion B is selected, provide the Tracking Number for the other operator who had previously certified their eligibility under criterion A, C, D, E, or F. The Tracking Number was assigned when the operator received coverage under this permit, and is included in the notice of authorization.
 If criterion C is selected, you must attach copies of your site map. See Part 7.2.6 of the permit for information about what is required to be in your site map. You must also specify the federally-listed species or federally-designated critical habitat that are located in the "action area" of the project, and provide the distance between the construction site and any listed endangered species or their critical habitat.
 If criterion D, E, or F is selected, attach copies of any communications between you and the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

Section IX. Historic Preservation
 Use the instructions in Appendix E to complete the questions on the NOI form regarding historic preservation.

Section X. Certification Information
 All applications, including NOIs, must be signed as follows:
 For a corporation: By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means:
 (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
 For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA). Include the name and title of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered eligible for permit coverage.

Notice of Termination (NOT) of Coverage Under an NPDES General Permit for Stormwater Discharges Associated with Construction Activity

NPDES Form Date (2/16) This Form Replaces Form 3510-13 (12/08) Form Approved OMB No. 2040-0004

Submitting Your Form:

Submit your NOI form by mail to one of the following addresses:

For Regular U.S. Mail Delivery:

Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Overnight/Express Mail Delivery:

Stormwater Notice Processing Center
EPA East Building - Room 7420
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Visit this website for instructions on how to submit electronically:

www.epa.gov/npdes/stormwater/capgeni

**APPENDIX E
COPY OF NOTICE OF INTENT
AND
ACKNOWLEDGEMENT FROM EPA**

Company: NH Department of Transportation
ATTN: Randy Talon
MUT bridge over NH 101
Keene NH 03431

Project/Site: Keene-Swanzey 10309P
MUT bridge over NH 101
Keene NH 03431

Permit Tracking Number: NHR12AJ58

Thank you for using the eNOI system to prepare your Construction General Permit (CGP) Notice of Intent (NOI).

This correspondence acknowledges that you have submitted a complete NOI form to be covered under EPA's 2012 CGP. Your NOI has been assigned permit tracking number NHR12AJ58. Coverage under this permit begins at the conclusion of your 14-day waiting period on Friday, March 25, 2016, unless you are otherwise notified that a hold has been placed on your permit authorization. You will receive an email informing you of the date your coverage under the CGP is active.

If you have any questions, please call the EPA NOI Processing Center at 1-866-352-7755 (toll free) or send an email to noi@avanticorporation.com.

EPA NOI Processing Center
Operated by Avanti Corporation
1200 Pennsylvania Ave., NW
Mail Code: 4203M
Washington, DC 20460



Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the operator identified in Section II of this form meets the eligibility requirements of Parts 1.1 and 1.2 of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOI Form

Have you been given approval from the Regional Office to use this paper NOI form*? Yes NO

If yes, provide the reason you need to use this paper form, the name of the EPA Regional Office staff person who approved your use of this form, and the date of approval:

Reason for using paper form:

Name of EPA staff person:

Date approval obtained:

*** Note: You are required to obtain approval from the applicable Regional Office prior to using this paper NOI form.**

II. Permit Information:

Tracking Number (EPA Use Only) NHR12AJ58

Permit Number: NHR120000 (see Appendix B of the CGP for the list of eligible permit numbers)

III. Operator Information

Name: NH Department of Transportation

Phone: 6032712571

Fax (Optional):

Email: mmoran@dot.state.nh.us

IRS Employer Identification Number (EIN): 02-0600618

Point of Contact (First Name, Middle Initial, Last Name): Mark Moran

Mailing Address:

Street: 7 Hazen Drive

City: Concord

State: NH

Zip: 03301

NOI Preparer (Complete if NOI was prepared by someone other than the certifier):

Prepared by (First Name, Middle Initial, Last Name): Amy Rook

Organization: NH Department of Transportation

Phone: (603) 271-3226

Fax (Optional):

E-mail: arook@dot.state.nh.us

IV. Project/Site Information

Project/Site Name: Keene-Swanzey 10309P

Project/Site Address:

Street/Location: MUT bridge over NH 101

City: Keene State: NH Zip: 03431

County or similar government subdivision: Cheshire

For the project/site for which you are seeking permit coverage, provide the following information:

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

Latitude 1. _____	N(degrees, minutes, seconds)	Longitude 1. _____	W(degrees, minutes, seconds)
2. _____	N(degrees, minutes, decimal)	2. _____	W(degrees, minutes, decimal)
3. <u>45.5520</u>	N(degrees, decimals)	3. <u>72.1705</u>	W(degrees, decimals)

Latitude/Longitude Data Source: U.S.G.S topographical map EPA Web Site GPS Other: NH GRANIT

If you used a U.S.G.S. topographic map, what was the scale?

Horizontal Reference Datum: NAD 27 NAD 83 or WGS 84 Unknown

Is your project located in Indian Country lands? Yes No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property:

Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? Yes No

Estimated Project Start Date: 12/15/2015 Estimated Project Completion Date: 10/28/2016

Estimated Area to be Disturbed (to the nearest quarter acre): 1.66

Have earth-disturbing activities commenced on your project/site? Yes No

If yes, is your project an emergency-related project? Yes No

Have stormwater discharges from your project/site been covered previously under an NPDES permit? Yes No

If yes, provide the Tracking Number if you had coverage under EPA's CGP or the NPDES permit number if you had coverage under an EPA individual permit:

V. Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? Yes No

Are there any surface waters within 50 feet of your project's earth disturbances? Yes No

Receiving Waters and Wetlands Information: (Attach a separate list if necessary)

Surface water(s) to which discharge	Impaired Water	Listed Water Pollutant(s)	Tier 2, 2.5 or 3	Source	TMDL Name and Pollutant
Wetlands	No		No	NHDES DATA	

Describe the methods you used to complete the above table: Please refer to the Source(s) in the above table.

VI. Chemical Treatment Information

Will you use polymers, flocculants, or other treatment chemicals at your construction site? Yes No

If yes, will you use cationic treatment chemicals* at your construction site? Yes No

If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI*? Yes No

If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

Please indicate the treatment chemicals that you will use:

* Note: You are ineligible for coverage under this permit unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

VII. Stormwater Pollution Prevention Plan (SWPPP) Information

Has the SWPPP been prepared in advance of filing this NOI? Yes No

SWPPP Contact Information:

First Name, Middle Initial, Last Name: Scott Williams

Organization: Pathways Consulting

Phone: 6034482200

Fax (Optional):

E-mail:

VIII. Endangered Species Protection

Using the instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit (only check 1 box)?

A B C D E F

Provide a brief summary of the basis for criterion selection listed in Appendix D (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service, specific study): US Fish and Wildlife Svc

If you select criterion B, provide the Tracking Number from the other operator's notification of authorization under this permit:

If you select criterion C, you must attach a copy of your site map (see Part 7.2.6 of the permit), and you must answer the following questions:

What federally-listed species or federally-designated critical habitat are located in your "action area":

What is the distance between your site and the listed species or critical habitat (miles):

If you select criterion D, E, or F, attach copies of any letters or other communications between you and the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

IX. Historic Preservation

Is your project/site located on a property of religious or cultural significance to an Indian tribe? Yes No

If yes, provide the name of the Indian tribe associated with the property:

Are you installing any stormwater controls as described in Appendix E that require subsurface earth disturbance? (Appendix E, Step 1) Yes No

If yes, have prior surveys or evaluations conducted on the site have already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E, Step 2) Yes No

If no, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (Appendix E, Step 3) Yes No

If no, did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? (Appendix E, Step 4) Yes No

If yes, describe the nature of their response:

<input type="checkbox"/>	Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions.
<input type="checkbox"/>	No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls.
<input type="checkbox"/>	Other: _____

X. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Randy Talon

Title: Environmental Coordinator

Signature: _____ Date: Friday, March 11, 2016

E-mail: rtalon@dot.state.nh.us

Company: CPM CONSTRUCTORS
ATTN: TIMOTHY OUELLETTE
NH ROUTE 12/101
KEENE & SWANZEY NH 03431

Project/Site: NHDOT KEENE-SWANZEY 10309P
NH ROUTE 12/101
KEENE & SWANZEY NH 03431

Permit Tracking Number: NHR12AL12

Thank you for using the eNOI system to prepare your Construction General Permit (CGP) Notice of Intent (NOI).

This correspondence acknowledges that you have submitted a complete NOI form to be covered under EPA's 2012 CGP. Your NOI has been assigned permit tracking number NHR12AL12. Coverage under this permit begins at the conclusion of your 14-day waiting period on Thursday, March 24, 2016, unless you are otherwise notified that a hold has been placed on your permit authorization. You will receive an email informing you of the date your coverage under the CGP is active.

If you have any questions, please call the EPA NOI Processing Center at 1-866-352-7755 (toll free) or send an email to noi@avanticorporation.com.

EPA NOI Processing Center
Operated by Avanti Corporation
1200 Pennsylvania Ave., NW
Mail Code: 4203M
Washington, DC 20460



Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the operator identified in Section II of this form meets the eligibility requirements of Parts 1.1 and 1.2 of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOI Form

Have you been given approval from the Regional Office to use this paper NOI form*? Yes NO

If yes, provide the reason you need to use this paper form, the name of the EPA Regional Office staff person who approved your use of this form, and the date of approval:

Reason for using paper form:

Name of EPA staff person:

Date approval obtained:

*** Note: You are required to obtain approval from the applicable Regional Office prior to using this paper NOI form.**

II. Permit Information:

Tracking Number (EPA Use Only) NHR12AL12

Permit Number: NHR120000 (see Appendix B of the CGP for the list of eligible permit numbers)

III. Operator Information

Name: CPM CONSTRUCTORS

Phone: 207-865-0000

Fax (Optional):

Email: mbois@cpmconstructors.com

IRS Employer Identification Number (EIN): 01-0413065

Point of Contact (First Name, Middle Initial, Last Name): MITCHELL BOIS

Mailing Address:

Street: 30 BONNEY STREET POST OFFICE BOX B

City: FREEPORT

State: ME

Zip: 04032

NOI Preparer (Complete if NOI was prepared by someone other than the certifier):

Prepared by (First Name, Middle Initial, Last Name): Scott A Williams

Organization: PATHWAYS CONSULTING

Phone: (603) 448-2200

Fax (Optional):

E-mail: scott.williams@pathwaysconsult.com

IV. Project/Site Information

Project/Site Name: NHDOT KEENE-SWANZEY 10309P

Project/Site Address:

Street/Location: NH ROUTE 12/101

City: KEENE & SWANZEY State: NH Zip: 03431

County or similar government subdivision: Cheshire

For the project/site for which you are seeking permit coverage, provide the following information:

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

Latitude 1. <u>42.55.20</u>	N(degrees, minutes, seconds)	Longitude 1. <u>72.17.05</u>	W(degrees, minutes, seconds)
2. _____	N(degrees, minutes, decimal)	2. _____	W(degrees, minutes, decimal)
3. _____	N(degrees, decimals)	3. _____	W(degrees, decimals)

Latitude/Longitude Data Source: U.S.G.S topographical map EPA Web Site GPS Other: UNHGRANIT

If you used a U.S.G.S. topographic map, what was the scale?

Horizontal Reference Datum: NAD 27 NAD 83 or WGS 84 Unknown

Is your project located in Indian Country lands? Yes No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property:

Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? Yes No

Estimated Project Start Date: 04/14/2016 Estimated Project Completion Date: 11/14/2016

Estimated Area to be Disturbed (to the nearest quarter acre): 1.75

Have earth-disturbing activities commenced on your project/site? Yes No

If yes, is your project an emergency-related project? Yes No

Have stormwater discharges from your project/site been covered previously under an NPDES permit? Yes No

If yes, provide the Tracking Number if you had coverage under EPA's CGP or the NPDES permit number if you had coverage under an EPA individual permit:

V. Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? Yes No

Are there any surface waters within 50 feet of your project's earth disturbances? Yes No

Receiving Waters and Wetlands Information: (Attach a separate list if necessary)

Surface water(s) to which discharge	Impaired Water	Listed Water Pollutant(s)	Tier 2, 2.5 or 3	Source	TMDL Name and Pollutant
WETLANDS	No		No	LOCATED ON NHDES ONE-STOP GIS SYSTEM AND SURFACE WATERS IDENTIFIED ON NHDES "LIST OF ORW AND IMPAIRED (4A AND 5) WATERS FOR CGP NOI'S"	NE REGIONAL MERCURY

Describe the methods you used to complete the above table: Please refer to the Source(s) in the above table.

VI. Chemical Treatment Information

Will you use polymers, flocculants, or other treatment chemicals at your construction site? Yes No

If yes, will you use cationic treatment chemicals* at your construction site? Yes No

If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI*? Yes No

If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

Please indicate the treatment chemicals that you will use:

* Note: You are ineligible for coverage under this permit unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

VII. Stormwater Pollution Prevention Plan (SWPPP) Information

Has the SWPPP been prepared in advance of filing this NOI? Yes No

SWPPP Contact Information:

First Name, Middle Initial, Last Name: JEFF MCGUIRE

Organization: CPM CONSTRUCTORS

Phone: 207-615-8547

Fax (Optional):

E-mail: jmcguire@cpmconstructors.com

VIII. Endangered Species Protection

Using the instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit (only check 1 box)?

A B C D E F

Provide a brief summary of the basis for criterion selection listed in Appendix D (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service, specific study): PROJECT REVIEWED BY NH NATURAL HERITAGE BUREAU (REPORT #NHB14-2784)

If you select criterion B, provide the Tracking Number from the other operator's notification of authorization under this permit: NHR12AJ58

If you select criterion C, you must attach a copy of your site map (see Part 7.2.6 of the permit), and you must answer the following questions:

What federally-listed species or federally-designated critical habitat are located in your "action area":

What is the distance between your site and the listed species or critical habitat (miles):

If you select criterion D, E, or F, attach copies of any letters or other communications between you and the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

IX. Historic Preservation

Is your project/site located on a property of religious or cultural significance to an Indian tribe? Yes No

If yes, provide the name of the Indian tribe associated with the property:

Are you installing any stormwater controls as described in Appendix E that require subsurface earth disturbance? (Appendix E, Step 1) Yes No

If yes, have prior surveys or evaluations conducted on the site have already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E, Step 2) Yes No

If no, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (Appendix E, Step 3) Yes No

If no, did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? (Appendix E, Step 4) Yes No

If yes, describe the nature of their response:

	Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions.
	No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls.
	Other: NO HISTORIC PROPERTIES AFFECTED PER REVIEW BY NHDOT ADVISORY COUNCIL ON HISTORIC PRESERVATION AND MEMORANDUM OF UNDERSTANDING, DATED MAY 1999

X. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: TIMOTHY OUELLETTE

Title: CHIEF FINANCIAL OFFICER

Signature:

Date: Thursday, March 10, 2016

E-mail: timo@cpmconstructors.com

**APPENDIX F
INSPECTION REPORTS
AND
CORRECTIVE ACTION LOGS**

Stormwater Construction Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		Location	
Date of Inspection		Start/End Time	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Describe present phase of construction			
Type of Inspection <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide: Storm Start Date & Time: Storm Duration (hrs): Approximate Rainfall (in):			
Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: Temperature:			
Do you suspect that discharges may have occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:			
Are there any discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:			

Site-specific BMPs

- Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of this numbered site map with you during your inspections. This list will help ensure that you are inspecting all required BMPs at your site.
- Describe maintenance and/or corrective actions initiated, dates noted and completed, and include corrective actions on Corrective Action Log.
- Use **BOLD TEXT** to indicate new or outstanding items noted during latest site visit.

	BMP Description	BMP Installed & Operating Properly?	BMP Maintenance Required?	Note Specific Site Location of BMP & Required Maintenance and/or Corrective Action	Date Completed & Responsible Person
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
8		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
9		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
10		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
11		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
12		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
13		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
14		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
15		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
16		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
17		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
18		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

	BMP Description	BMP Installed & Operating Properly?	BMP Maintenance Required?	Note Specific Site Location of BMP & Required Maintenance and/or Corrective Action	Date Completed & Responsible Person
19		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
20		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Overall Site Issues and/or Pollution Prevention:

Below are some general site issues that should be assessed during inspections. Please customize this list as needed for conditions and list specific locations and remedial work needed at your site.

Overall Site Issues

	BMP/activity	Implemented?	Maintained?	Note Specific Site Location & Required Maintenance and/or Corrective Action	Date Completed & Responsible Person
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4	Are discharge points and receiving waters free of sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5	Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6	Is there evidence of sediment being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7	Is trash/litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
10	Are materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
11	Are non-stormwater discharges (e.g., wash water, dewatering)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

	BMP/activity	Implemented?	Maintained?	Note Specific Site Location & Required Maintenance and/or Corrective Action	Date Completed & Responsible Person
	properly controlled?				
12	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Turbidity Sample Measurements

Below are the turbidity sample readings collected during our site visit with location and measurement in Nephelometric Turbidity Units (NTU). Use this section only as necessary.

#	Sample Location (Description)	Reading in (NTU)	Corrective Action Needed and Notes
1	No turbidity sampling needed.		

Certification statement:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Print name: _____

Signature: _____

Date: _____

SWPPP Corrective Action Report

Project Name: _____

Report Date: _____

SWPPP Contact: _____

Use the following form to list corrective action and any subsequent follow up actions:

I.D.	Action Start Date	SWPPP Inspector	BMP Location	BMP Description	Status of Action	Recommendation and/or Required Corrective Action	Responsible Party	Due Date	Date When Resolved	Checked By
1										

Certification Required Once Resolved:

Site Operator (NHDOT): _____
Date: _____

Site Operator (Contractor): _____
Date: _____

I.D.	Action Start Date	SWPPP Inspector	BMP Location	BMP Description	Status of Action	Recommendation and/or Required Corrective Action	Responsible Party	Due Date	Date When Resolved	Checked By
2										

Certification Required Once Resolved:

Site Operator (NHDOT): _____
Date: _____

Site Operator (Contractor): _____
Date: _____

APPENDIX G
SWPPP REVISION DOCUMENTATION LOG
(refer also to page i of SWPPP)

SWPPP Revision Documentation Log

Project Name: _____

SWPPP Contact: _____

Amendment No.	Date of Amendment	Description of the Amendment	Amendment Prepared by [Name(s) and Title]	Company Representative Signature
Preliminary Draft				
Final Draft				
1				
2				
3				
4				
5				
6				

APPENDIX H
SUBCONTRACTOR CERTIFICATIONS/AGREEMENTS

**SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN**

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the SWPPP for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

Signature: _____

Title: _____

Date: _____

APPENDIX I
GRADING AND STABILIZATION ACTIVITIES LOG

APPENDIX J
SWPPP TRAINING LOG

SWPPP Training Log

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- Erosion Control BMPs Emergency Procedures
- Sediment Control BMPs Good Housekeeping BMPs
- Non-Stormwater BMPs

Specific Training Objective: _____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

**APPENDIX K
DELEGATION OF AUTHORITY FORM**

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, SWPPP and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix G, Subsection 11.A of EPA's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix G, Subsection 11.B (1-3).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

APPENDIX L
COPIES OF ADDITIONAL PERMITS AND ENVIRONMENTAL
DOCUMENTATION

Memo



To: Kevin Ryan, FB Environmental
97A Exchange Street, Suite 305
Portland, ME 04101

From: Melissa Coppola, NH Natural Heritage Bureau

Date: 8/4/2014 (valid for one year from this date)

Re: Review by NH Natural Heritage Bureau

NHB File ID: NHB14-2784 Town: Keene

Location: Route 101 & 12

Description: At the request of the NHDOT, FB Environmental Associates (FBE) will be conducting wetland delineations at three areas that were proposed for wetland mitigation for the widening of the NH 101 Bypass through Keene, NH, and a fourth site at the proposed multi-use trail bridge over NH 12/101.

cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Vertebrate species	State ¹	Federal	Notes
Common Nighthawk (<i>Chordeiles minor</i>)	E	--	Contact the NH Fish & Game Dept (see below).
Northern Leopard Frog (<i>Rana pipiens</i>)	SC	--	Contact the NH Fish & Game Dept (see below).
Wood Turtle (<i>Glyptemys insculpta</i>)	SC	--	Contact the NH Fish & Game Dept (see below).

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

28

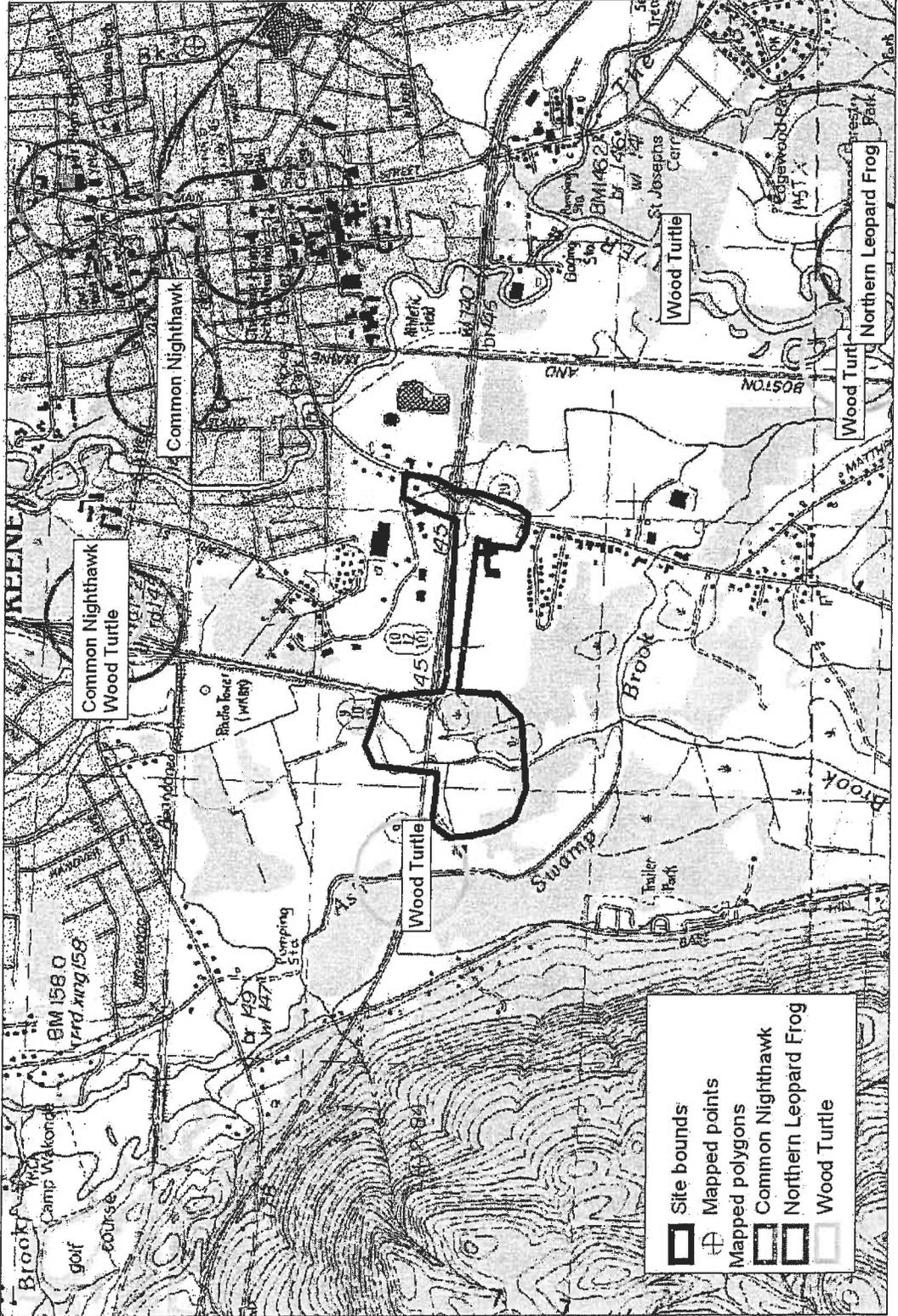
NHB14-2784



NH NATURAL HERITAGE BUREAU

Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



29

New Hampshire Natural Heritage Bureau - Animal Record

Common Nighthawk (*Chordeiles minor*)**Legal Status**

Federal: Not listed

State: Listed Endangered

Conservation Status

Global: Demonstrably widespread, abundant, and secure

State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked

Comments on Rank:

Detailed Description: 2002: 1 immature, sex unknown (Obs_id 1016). 2002: 1 adult, calling and flying at each of 10 locations on six dates (7/5 Obs_id 186; 7/6 Obs_id 187 & 8; 7/8 Obs_id 189, 190, 191 & 2; 7/9 Obs_id 193; 7/13 Obs_id 194; 7/24 Obs_id 199). 1990: 7 adult, sex unknowns, 2 immature, sex unknowns (Obs_id 964).

General Area: 2002, 1990: Terrestrial - urban / suburban (Obs_id 1016, 964). 2002: Terrestrial - urban / suburban.

General Comments: 2002: Young nighthawk resting on gravel/small cobble lot that surrounds gas tanks. Examined for injuries - seemed to be healthy. Approx. date. Lat./ long by Terrain Navigator (Obs_id 1016). 1990: Present at location from at least 1980 onward. High count of 8 in 1991. 1990 record includes nest with 2 chicks (Obs_id 964).

Management

Comments:

Location

Survey Site Name: Keene

Managed By:

County: Cheshire

Town(s): Keene

Size: 241.5 acres

USGS quad(s): Keene (4207283)

Lat, Long: 425807N, 0722030W

Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2002: Keene Gas Works at end of Emerald St. behind Colony Mill. On ground near tanks (Obs_id 1016). 2002: East of 176 Main Street (Obs_id 187). Behind Bank of New Hampshire, on Gilbo Avenue (Obs_id 186 & 1). Over Hannafords, on north side of West Street, just east of Rte. 9 (Obs_id 194 & 8). At Kmart, on south side of West Street, just east of Rte. 9 (Obs_id 192). St. Joseph (Obs_id 189). Above Keene Middle School, on Washington Street, across from Vernon Street (Obs_id 193). West and Federal Streets (Obs_id 190 & 9). 1990: Downtown Keene (Obs_id 964).

Dates documented

First reported: 1990-07-19

Last reported: 2002-08-01

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Wood Turtle (*Glyptemys insculpta*)**Legal Status**

Federal: Not listed
State: SC

Conservation Status

Global: Apparently secure but with cause for concern
State: Rare or uncommon

Description at this Location

Conservation Rank: Good quality, condition and landscape context ('B' on a scale of A-D).
Comments on Rank:

Detailed Description: 1999: Area 1656: 1 adult seen. Area 1660: 1 male adult seen.

General Area: 1999: Area 1656: Residential area, Langdon Place is set back, on the south side of White Brook. There is a small marshy fire pond between the buildings & brook. Turtle may have been coming from the fire pond. Trees heavily shade brook. 1999: Area 1660: Turtle in the middle of the road.

General Comments: 1999: Area 1656: Observer noted "I moved turtle out of driveway so it wouldn't get hit. Turtle had rough shell, each scute a sort of irregular pyramid in several layers. Shell was approximately 8" long; plain blackish on top; blackish with yellow spots around the edge underneath. Lovely beast. He (she?) pulled into shell as long as I was holding him, but popped right out and started walking toward brook as soon as I set him down."

Management
Comments:

Location

Survey Site Name: White Brook
Managed By: Roberts

County: Cheshire
Town(s): Keene
Size: 32.8 acres

USGS quad(s): Keene (4207283)
Lat, Long:
Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 1999: Area 1656: Just south White Brook, crossing driveway at Langdon Place (retirement home) 136 1/2 Arch Street. Area 1660: White Brook and Route 9, near Base Hill Road, Keene.

Dates documented

First reported: 1999-05-18 Last reported: 1999-07-28

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Wood Turtle (*Glyptemys insculpta*)

Legal Status	Conservation Status
Federal: Not listed	Global: Apparently secure but with cause for concern
State: SC	State: Rare or uncommon

Description at this Location
Conservation Rank: Good quality, condition and landscape context ('B' on a scale of A-D).
Comments on Rank:

Detailed Description: 2001: Area 6612A: 1 seen. 1999: Area 6612B: 1 seen. 1994: Area 6643: 1 male seen. Adult.
 General Area: 1994: Area 6643: Sidewalk near Ashuelot River.
 General Comments: 1994: Area 6643: Minimum 17 years old.
 Management
 Comments:

Location
Survey Site Name: Ashuelot River, Keene
Managed By: Ashuelot River Park

County: Cheshire	USGS quad(s): Keene (4207283)
Town(s): Keene	Lat, Long:
Size: 15.3 acres	Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 1999: Area 6612A, 6612B: Ashuelot River [Area is north of Cheshire Hospital and south of Rte. 12A and East Surry Road intersection.] 1994: Area 6643: Near Ashuelot River. On sidewalk on north side of West St. just east of ramp onto Rte. 9, 10, 12.

Dates documented	
First reported: 1994-05-30	Last reported: 2001

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Wood Turtle (*Glyptemys insculpta*)**Legal Status**

Federal: Not listed
State: SC

Conservation Status

Global: Apparently secure but with cause for concern
State: Rare or uncommon

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2009: Area 12314: 1 female observed, about 8-9" long and 6-7" wide. Area 12375: 1 observed. Area 12394: 1 observed, estimated 6 years old. 2002: Area 12215: 1 male observed.

General Area: 2009: Area 12314: Field. Area 12375: Bank of Ashuelot River. Area 12394: Roadside.
General Comments:
Management
Comments:

Location

Survey Site Name: Mount Cresson
Managed By: Yale-Toumey Forest

County: Cheshire USGS quad(s): Keene (4207283)
Town(s): Swanzey Lat, Long:
Size: 61.8 acres Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2009: Area 12314: Near 139 Matthews Road, Swanzey. Area 12375: In Ashuelot near Keene - Swanzey town line. Area 12394: Rte. 32, just east of bridge over Ashuelot (42.87664 / 72.27605. WGS 84). 2002: Area 12215: Cross-country trail behind Keene State College athletic fields, Krif Road.

Dates documented

First reported: 2002-08-17 Last reported: 2009-08-05

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

> DOT/FHWA Keene/Swanzey
F-011-1(4), 10309

LEON S. KENISON
COMMISSIONER

KEENE-SWANZEY
F-011-1(4)
10309

Pursuant to meetings and discussions from 1991 through 1997,* and for the purpose of compliance with regulations of the National Historic Preservation Act, as amended, and the Advisory Council on Historic Preservation's *Procedures for the Protection of Historic Properties* (36 CFR 800), the NH Division of Historical Resources and the NH Division of the Federal Highway Administration have coordinated the identification and evaluation of historic and archeological properties with plans to upgrade the NH Routes 9, 10, 12 and 101 transportation corridor in the town of Swanzey and the city of Keene, New Hampshire.

Based on a review pursuant to 36 CFR 800.4 of the properties in the project area, we agree that the following are eligible for the National Register of Historic Places: Main Street Historic District (Area A); Park-Fairview Historic District (Area C); A. Thomas Chilton's Granite Works, 555 Main Street (Inventory #286); Dickinson/Atwood House, 169 Ash Hill Road (Inventory #503); Smith/Wilder/Bardwell Farm, 5 W. Swanzey Road (Inventory #505); MacDonald/Bergeron House, 523 Winchester Street (Inventory #508); Inventory #509, 531 Winchester Street; Goodnow House, 332 Winchester Street (Inventory #526); Driscoll House and Farm, 158 Island Street (Inventory #539), and The Bounty, 73 Base Hill Road (Inventory #546).

Descriptions of these districts and individual properties are on file at the New Hampshire Division of Historical Resources in Concord, New Hampshire.

Applying the criteria of effect at 36 CFR 800.5 and 800.9, we have determined that the project will have an adverse effect on the Main Street Historic District, the MacDonald/Bergeron House, Goodnow House and the Driscoll House and Farm. The project will have an effect on the Park-Fairview Historic District, the Dickinson/Atwood House, the Smith/Wilder/Bardwell Farm and Inventory #509, but the effect will not be adverse. A. Thomas Chilton's Granite Works and The Bounty will not be effected by the project. These effects, as well as proposed mitigation, are described on the attached NHDHR Determination of Eligibility/Effect forms.

In accordance with the Advisory Council's regulations, consultation will continue, as appropriate, as this project proceeds.

Nancy C. Muller
Nancy C. Muller
State Historic Preservation Officer

Kathleen O. Laffey
Kathleen O. Laffey, Administrator
Federal Highway Administration

Concurred with by the New Hampshire Department of Transportation:

Date: 12/17/97 By: Elizabeth Kostutler
Elizabeth Kostutler, Historian

* 1/22/91, 4/14/94, 5/12/94, 1/12/95, 7/13/95, 2/11/97, 3/13/97, 4/30/97, 6/12/97, 7/30/97, 8/13/97, 8/27/97, 9/24/97, 10/22/97 and 11/13/97.

sefile



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

State of New Hampshire, Department of Cultural Resources 603-271-3483
19 Pillsbury Street, P.O. Box 2043, Concord, NH 03302-2043 603-271-3558
FAX 603-271-3493 preservation@nhdhr.state.nh.us Voice / TTY RELAY ACCESS 1-800-735-2964

TO: Elizabeth Hostutler
Historian
NHDOT

Marc G. Laurin
Senior Environmental Manager
NHDOT

FROM: Gary 2. Hume
NH State Archaeologist
Review & Compliance Coordinator

DATE: January 19, 1999

RE: Technical Report - Phase I-B
Archaeological Assessment
Keene-Swanzey 10309, NHS-STP-T-F-011-1(4)

The technical report prepared by Victoria Bunker, Inc., dated December 1998, is acceptable as written. I concur with the recommendation for no further archaeological study.

Gary W. Hume
State Archaeologist

**Advisory
Council On
Historic
Preservation**

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

ACT/INF	INITIALS/DATE
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MAY 11 1999

Ms. Kathleen O. Laffey
Division Administrator
Federal Highway Administration
279 Pleasant Street, Suite 204
Concord, NH 033011-7502

REF: Upgrading of Routes 9, 10, 12, and 101
Keene-Swanzey, New Hampshire

Dear Ms. Laffey:

The enclosed Memorandum of Agreement for the referenced project has been accepted by the Council. This acceptance completes the requirements of Section 106 of the National Historic Preservation Act and the Council's regulations. We recommend that you provide a copy of the fully-executed Agreement to the other signatories.

Should you have any questions, please contact me at (202) 606-8532.

Sincerely,



Druscilla J. Null
Program Analyst
Office of Planning and Review

Enclosure

MEMORANDUM OF AGREEMENT
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR PART 800.6(a)

WHEREAS, the Federal Highway Administration (FHWA) has determined that upgrading the NH Routes 9, 10, 12 and 101 transportation corridor in the town of Swanzey and the city of Keene will have an effect on the following properties that are eligible for the National Register of Historic Places:

Main Street Historic District, Keene (Area A),
Park-Fairview Historic District, Keene (Area C),
Dickinson/Atwood House, 169 Ash Hill Road, Swanzey (Inventory #503),
MacDonald/Bergeron House, 523 Winchester Street, Keene (Inventory #508),
531 Winchester Street, Keene (Inventory #509),
Goodnow House, 332 Winchester Street, Keene (Inventory #526), and
Driscoll House and Farm, 158 Island Street, Keene (Inventory #539),

and has consulted with the New Hampshire State Historic Preservation Officer (NHSPO) pursuant to regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the New Hampshire Department of Transportation (NHDOT) participated in the consultation, has solicited public comment through the public hearing process, and has been invited to concur in this Memorandum of Agreement; and

WHEREAS, following consultations with FHWA and NHSPO, NHDOT has avoided project impacts to The Bounty (Inv. #546) by retaining the existing driveway access, and to the Smith/Wilder/Bardwell Farm (Inv. #505) by eliminating all work along its NH Route 10/Winchester Street frontage,

NOW, THEREFORE, FHWA and the NHSPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

- I. Mitigation of Effects Through Highway Design
 - A. NHDOT will minimize slope impacts to Inventory #212c in the Main Street Historic District and design the fill slopes for the Island Street bridge over the Ashuelot River in a way that minimizes their impacts to the Driscoll House and Farm (Inv. #539).
 - B. The project will incorporate lane reductions on Winchester Street north of Matthews Road to lessen property acquisition at the MacDonald/Bergeron House (Inv. #508) and 531 Winchester Street (Inv. #509) and the removal of nearby mature street-side trees. The length of sidewalk along the west side of Winchester Street will end at Bergeron Avenue, lessening impacts to 531 Winchester Street (Inv. #509).
 - C. NHDOT will work with the property owners of the Dickinson/Atwood House (Inv. #503) to redesign the property's driveway access in a historically sensitive manner. To the extent possible, the location of abandoned portion of Ash Hill Road in front of the Dickinson/Atwood House will be delineated by leaving the base course in place.
- II. Mitigation of Effects Through Landscaping

NHDOT will design and implement landscaping plans to lessen the effects of street widening and tree removal in the Main Street Historic District, for Inventory #307 and #308 in the Park-Fairview Historic

District, and for the MacDonald/Bergeron House (Inv. #508). In addition, NHDOT will relocate the retaining wall, plaque and entry walls at Inventory #212a in the Main Street Historic District (Area A). These landscaping plans will be designed in consultation with and approved by NHHPO and FHWA.

III. Acquisition of Historic Properties

At the current owners' requests, NHDOT will acquire the Elisha Lane House (Inv. #212-a) in the Main Street Historic District and the Daniel Goodnow House (Inv. #526). In the event that the property owner requests acquisition due to a lack of access, NHDOT also will purchase the Elisha Lane Carriage House (Inv. #212-c) in the Main Street Historic District. If the owners of the Daniel Goodnow House elect, the house will be reconveyed to them with protective covenants for relocation. FHWA shall make funds up to the costs of demolishing the structure available for relocation. If said owners do not elect the reconveyance alternative the structure will be marketed to the public for relocation in accordance with Stipulation IV.

IV. Marketing of Historic Properties

A. The Elisha Lane House (Inv. #212-a)

1. Following the reconfiguration of the driveway, which will provide access to two properties in back of the Elisha Lane House, NHDOT will offer the house for sale with preservation and/or maintenance covenants (see Attachment A for draft covenants). NHDOT, in consultation with NHHPO, will develop a notice to include, at a minimum, the following information:
 - a. description of the building;
 - b. notice that the building is eligible for the National Register as a contributing element to the Main Street Historic District;
 - c. notice that NHDOT will transfer the structure with consideration for the offer that best protects the building's historical values;
 - d. notice of the requirement that the building will be transferred subject to covenants regarding its preservation and maintenance (Attachment A), and that it must be maintained in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.
2. The contents of the advertisements, the publications in which they appear, and the frequency of publication must be approved by NHHPO and FHWA. The advertising period will last a minimum of 60 days.
3. If marketing has not been successful after a period of 30 days from the first day of advertisement, the NHHPO may approve the conveyance of the house without the preservation and maintenance covenants provided for in Stipulation IV.A.1. Upon such approval, notice of the restrictive covenants may be removed from the advertisements.

B. Daniel Goodnow House (Inv. #526)

1. If the current owners of the Daniel Goodnow House do not elect the reconveyance alternative described in Stipulation III, NHDOT will offer the Daniel Goodnow House for sale to the public with preservation and/or maintenance covenants (see Attachment A for draft). NHDOT, in consultation with NHHPO, will develop a notice to include, at a minimum, the following:
 - a. description of the building;
 - b. notice that the building is eligible for the National Register for its architectural significance;
 - c. notice that NHDOT will transfer the structure with consideration for the offer that best protects the building's historical values;

- d. note that FHWA will make funds up to the cost of demolishing the structure available for moving the structure; and
 - e. notice of the requirement that the building will be transferred subject to covenants regarding its preservation and maintenance (Attachment A), and that it must be maintained in accordance with the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.
2. The contents of the advertisements, the publications in which they appear, and the frequency of publication must be approved by NESHPO and FHWA. The advertising period will last a minimum of 60 days.
 3. If marketing has not been successful after a period of 30 days from the first day of advertisement, the NESHPO may approve the conveyance of the house without the preservation and maintenance covenants provided for in Stipulation IV.B.1. Upon such approval, notice of the restrictive covenants may be removed from the advertisements. If efforts to market the house are unsuccessful, the structure may be demolished, following recordation as described in Stipulation V.

C. The Elisha Lane Carriage House (Inv. #212-c)

1. If NHDOT acquires the Elisha Lane Carriage House, following improvements to its driveway access, NHDOT will offer the building for sale with preservation and/or maintenance covenants (see Attachment A for draft). NHDOT, in consultation with NESHPO, will develop a notice to include, at a minimum, the following information:
 - a. description of the building;
 - b. notice that the building is eligible for the National Register as a contributing element to the Main Street Historic District;
 - c. notice that NHDOT will transfer the structure with consideration for the offer that best protects the building's historical values, with priority given to relocation within the Main Street Historic District;
 - d. note that FHWA will make funds up to the cost of demolishing the structure available for moving the structure; and
 - e. notice of the requirement that the building will be transferred subject to covenants regarding its preservation and maintenance (Attachment A), and that it must be maintained in accordance with the approved approaches in the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.
2. The contents of the advertisements, the publications in which they appear, and the frequency of publication must be approved by NESHPO and FHWA. The advertising period will last a minimum of 60 days.
3. If marketing has not been successful after a period of 30 days from the first day of advertisement, the NESHPO may approve the conveyance of the carriage house without the preservation and maintenance covenants provided for in Stipulation IV.C.1. Upon such approval, notice of the restrictive covenants may be removed from the advertisements. If efforts to market the carriage house are unsuccessful, NHDOT will offer the Carriage House to the city of Keene for municipal use.

V. Recordation of Historic Properties

Prior to any action addressed under this Memorandum of Agreement to the Elisha Lane House (Inv. #212-a), the Elisha Lane Carriage House (Inv. #212-c) and the Daniel Goodnow House (Inv. #526), NHDOT shall contact the Historic American Buildings Survey (HABS National Park Service (NPS), Chesapeake/Allegheny System Support Office, US Custom House, 200 Chestnut Street, Philadelphia

PA 19106) to determine what level and kind of recordation is required for the property. Unless otherwise agreed to by NPS, NHDOT shall ensure that all documentation is completed and accepted by HABS prior to any disturbance of the property, and that copies of this documentation are made available to NNSHPO and appropriate local archives designated by the NNSHPO.

VI. Protection of Historic Properties

The NHDOT shall ensure that upon acquisition of any historic properties, they are immediately secured and protected against damage, unauthorized occupancy and vandalism until the measures agreed upon in this agreement are implemented. These protective actions may include expedited marketing prior to transfer or leasing or renting the property until its transfer.

VII. Dispute Resolution

Should the NNSHPO object within 30 days to any plans or specifications provided for review or action proposed pursuant to this agreement, FHWA shall consult with the objecting party to resolve the objection. If FHWA determines that the objection cannot be resolved, FHWA shall request the further comments of the Council pursuant to 36 CFR Part 800.6(b). Any Council comment provided in response to such a request will be taken into account by FHWA in accordance with 36 CFR Part 800.6(c)(2) with reference only to the subject of the dispute; FHWA's responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

Execution of this Memorandum of Agreement by FHWA and NNSHPO, its subsequent acceptance by the Council, and implementation of its terms evidence that FHWA has afforded the Council an opportunity to comment on plans to upgrade the NH Routes 9, 10, 12 and 101 transportation corridor in Swanzey and Keene, New Hampshire, and that FHWA has taken into account the effects of the undertaking on historic properties.

FEDERAL HIGHWAY ADMINISTRATION

By: William O. Spey Date: 4/5/99
NH Division Administrator

NEW HAMPSHIRE STATE HISTORIC PRESERVATION OFFICE

By: Nancy A. Dutton Date: 4/2/1999
NH State Historic Preservation Officer

Concur:

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

By: Robert E. Smith Date: 3-31-99
Director of Project Development

ACCEPTED by the Advisory Council on Historic Preservation

By: [Signature] Date: 5/10/99
Executive Director

DRAFT HISTORIC PRESERVATION DEED COVENANTS
December, 1998

The Grantor, the State of New Hampshire, by and through its Department of Transportation, hereby conveys the above-described premises, subject to the terms of the following provisions that are hereby created by the Grantor hereby reserving the following provisions, under New Hampshire Revised Statutes Annotated RSA 477:45-47, and by the Grantor and Grantee hereby covenanting to abide by and enforce the following provisions.

The Grantee, *[name]*, covenants and agrees for himself or herself, his/her heirs, administrators, successors, and assigns, by accepting this deed, that the said herein conveyed premises shall be subject to the following preservation provisions, and to do or refrain from doing thereon or with respect thereto all acts required or prohibited by the said provisions.

1. **Applicability:** The provisions to which the herein conveyed premises are subjected are:
 - A. Grantor herein shall mean the State of New Hampshire, by and through its Department of Transportation, its successors or assigns.
 - B. Grantee herein shall mean the Grantee of this deed, its heirs, administrators, successors and assigns.
 - C. All preservation provisions contained herein shall be binding on both the Grantor and Grantee.
 - D. The provisions specified herein shall apply to the herein conveyed premises unless the Grantor provides the Grantee with a specific written waiver for any specific act in contravention thereof.
 - E. The burden of these provisions shall run with the land *[and/or buildings]* and shall be binding upon all owners of any interest therein. The right of enforcement of these provisions by the Grantor shall be as provided in New Hampshire Revised Statutes Annotated RSA 477:45-47 (Chapter 391, Laws of 1973, and Chapter 301, Laws of 1979), and as such statutes may be amended. The benefit of the provisions and the right to enforce them shall be assignable by the Grantor to any governmental body or any entity whose purposes include preservation of structures or sites of historical significance; and if the Grantor ceases to exist without having so assigned the benefit and right to enforce the provisions, then a qualified successor to the Grantor may be named by a New Hampshire court of competent jurisdiction.

2. **General Intent:** In the event the Grantor and Grantee have a difference of opinion about the meaning of a specific term or condition recited below, they shall be guided in interpretation by:
 - A. The purpose of these preservation provisions is to preserve the significance, integrity, and architectural and historical values that make the property eligible for the National Register of Historic Places.
 - B. All changes to the premises subject to these provisions will be in the spirit of contributing to the public purpose of protecting and preserving the premises in conformance with the Standards for Review (below), or as required by local, state, and federal legislation for the public benefit.
 - C. The provisions shall apply to the exterior of the building. Insofar as feasible, repair, replacement, alterations and additions should be made in-kind, with forms and materials

that match or are compatible with the historic forms and materials; except that exterior color choices are not subject to these provisions.

OR

- C. Interior features of architectural or historical interest shall be preserved and maintained.

OR

- C. The preservation provisions shall not apply to the interior of the buildings on the premises, unless change to the interior would cause change to the exterior; in which case only the exterior aspect of the changes would be subject to these provisions.
- D. Auxiliary buildings, such as a garage, barn, tool shed, greenhouse, etc., will be allowed on the property only as incidental to the main house.
- E. When requested, the Grantor, through its State Historic Preservation Office, shall give freely of advice pertaining to the maintenance, repair, restoration or rehabilitation of the house and grounds.

3. **Interpretation:** In the event of a disagreement between Grantor and Grantee as to the interpretation or application of these provisions, either party may request that the matter be submitted to binding arbitration, or in the event that either party does not wish to submit to binding arbitration, Grantor or Grantee may petition to the Cheshire County Superior Court for relief.
4. **Standards for Review:** The Grantor shall consider the following Standards for Review in exercising any authority created by these provisions to inspect the property subject to these provisions, and to review and approve any proposed construction, alteration, rehabilitation, relocation, demolition, change in use, subdivision, sale, or other transfer of property rights:
- A. [itemized list of photographs documenting the appearance and condition of the premises at the time of the execution of the preservation provisions].
- B. *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (1995)*, as they may be amended from time to time. Copies of the *Standards* are on file with the Grantor and the State Historic Preservation Office.
5. **Inspection and Compliance:** The Grantee agrees that the State of New Hampshire, by and through its Division of Historical Resources/State Historic Preservation Office, shall have the right to inspect the property subject to this easement at reasonable times, to ascertain whether these provisions are being met.
6. **Maintenance and Administration:** The Grantee agrees to assume the total costs of continued maintenance, repair, and administration of the property, in a manner that complies with *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (1995)* so as to preserve the architectural, historical and/or cultural integrity of the features, materials, appearance, workmanship and environment, in order to protect and enhance those significant characteristics that make it eligible for the National Register of Historic Places. The Grantee shall maintain the property at all times and keep it in a state of good repair, and shall not allow the appearance of the property to deteriorate in any material way. Nothing herein shall prohibit the Grantee from seeking financial assistance from any source.
7. **Alterations:** The Grantee agrees that no alterations shall be made to the existing structure and premises without the prior written consent of the Grantor, by and through its Division of Historical Resources/State Historic Preservation Office, its successors or assigns, except for:
- A. ordinary repair and maintenance to conserve architectural, historical and/or cultural values; or
- B. actions required to mitigate a casualty or other emergency promptly reported to the Division of Historical Resources/State Historic Preservation Office, its successors or assigns.

8. **Notification and Approval:** The Grantee shall notify the Grantor, by and through its Division of Historical Resources/State Historic Preservation Office, in writing, when proposing any of the activities described above, with the exception of 7.A. and 7.B., at least sixty (60) days in advance of the start of work, in sufficient detail for the Grantor to make a reasoned judgment as to their appropriateness. The Grantor shall review the proposal for work and approve, disapprove, or approve with modifications the work in writing within thirty (30) days of the receipt of the notice. Failure of Grantor to notify Grantee of approval, disapproval, or approval with modifications within thirty (30) days shall constitute approval. Only work approved by the Grantor shall be undertaken. The Grantee shall permit the Grantor access during such work to insure its proper performance.
9. **Change of Use, Subdivision, or Transfer:** The Grantee agrees that the use of the property subject to these preservation provisions, shall not be changed; nor shall it be subdivided; nor shall easements or other property rights be granted, sold, or transferred, without the prior written consent of the Grantor, by and through its Division of Historical Resources/State Historic Preservation Office, its successors or assigns. In the event a transfer of the property is proposed, the Grantee shall notify the Grantor in writing at least 90 days before such transfer. Said notice shall contain the identity of the proposed transferee, its intentions for use of the premises, and the agreed upon price. Should the Grantor so desire, Grantor in its sole discretion, may exercise its option to purchase the premises from Grantee at the price agreed upon between Grantee and its prospective transferee. Should Grantor fail to notify Grantee of its intention to repurchase within 45 days prior to the proposed sale, Grantor shall lose that right with regard to said Grantee, but retains the right to exercise such option upon subsequent conveyances.
10. **Enforcement:** This Historic Preservation Deed Easement shall be a binding servitude and run with the land and be binding upon the Grantee, its heirs, successors, transferees, and assigns, in perpetuity. These provisions shall be inserted by the Grantee, its heirs, successors, transferees, and assigns, verbatim or by express reference, in any deed or other legal instrument by which it divests itself of either the fee simple title or any lesser estate in the property, or any part thereof.
11. **Exclusion:** The Grantee agrees that the Grantor, by and through any of its agencies, in no way assumes any obligation whatsoever for maintaining, repairing or administering the property.
12. **Continuation:** In the event that the property is damaged or destroyed through the willful action or negligence of the Grantee, the Grantor shall initiate legal and appropriate administrative or judicial actions.
13. **Grantee Liability:** The Grantee covenants to indemnify and hold harmless the State of New Hampshire (Grantor) from and against any losses suffered by the Grantor and any claims, liabilities, or penalties asserted against the Grantor by or on behalf of any person on account of, based on, resulting from or arising out of (or which may be claimed to have arisen out of) acts or omissions of the Grantee relating to this easement. Nothing herein contained shall be construed to be a waiver of the sovereign immunity of the State of New Hampshire.
14. **Exercise of Rights and Remedies:** Failure of the Grantor to exercise any right or remedy granted under this Historic Preservation Deed Easement shall not have the effect of waiving or limiting the exercise by the Grantor of any other right or remedy or the invocation of such right or remedy at any other time.
15. **Reparability:** Any portion of this Historic Preservation Deed Easement found to be contrary to law shall not invalidate any other portions or the whole of this Easement.
16. **Other Conditions:** NONE.



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

October 09, 2015

NH Department of Transportation
PO Box 483
Concord, NH 03302

RE: NH Dept. Of Transportation - File # 2015-01505 - Keene

Dear Sir/Madam:

The Department of Environmental Services (DES) Wetlands Bureau has concluded its review of file #2015-01505. DES issues this approval notice for the application to construct a new multi-use trail bridge along the Ashuelot Rail Trail impacting 23,685 sq. ft. (3,509 temporary) of palustrine wetlands to elevate the approaches. Compensatory mitigation includes a one-time payment of \$89,440.67 to the Aquatic Resource Mitigation Fund. NHDOT project #10309P.

As part of this decision, the mitigation commitment for file #1999-1080 remains to be completed and includes the preservation of 80 acres of land (minus the amount of land adjacent to NH Routes 9/101 that will be required for the "T" intersection re-construction) of the undeveloped "NH Route 10 Bypass ROW" by NHDOT either through fee transfer to a conservation entity or deed restrictions as well as protection of an 8 acre parcel south of NH Route 10 Bypass ROW. In addition, the NHDOT shall provide floodplain compensation within the Ashuelot River watershed to fully compensate for the 19.9 acre-feet of impacts incurred by the Keene-Swanzey Interim projects (as outlined in NHDOT's October 7, 2015 Mitigation Commitment Summary Memo).

The decision to approve this application was based on the following conditions being met:

1. All work shall be in accordance with plans dated 5/27/2015 by NHDOT Bureau of Bridge Design, as received by the Department on June 17, 2015.
2. Dredged material shall be placed out of the DES Wetlands Bureau jurisdiction.
3. Construction equipment shall not be located within surface waters.
4. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; and c) set back as far as possible from wetlands and surface waters, in all cases with a minimum of 20 feet of undisturbed vegetated buffer.
5. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and shall remain until the area is stabilized.
6. Within three days of the last activity in an area, all exposed soil areas, where construction activities are complete, shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack on slopes steeper than 3:1 or netting /matting and pinning on slopes steeper than 2:1.
7. Where construction activities have been temporarily suspended within the growing season, all exposed soil areas shall be stabilized within 14 days by seeding and mulching or if temporarily suspended outside the growing season, all exposed areas shall be stabilized within 14 days by mulching, mulching with tack on slopes steeper than 3:1 and stabilized by matting and pinning on slopes steeper than 2:1.
8. The contractor responsible for completion of the work shall utilize techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).

DES Web site: www.des.nh.gov

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-6588 • TDD Access: Relay NH 1-800-735-2964

9. Extreme precautions to be taken within riparian areas to limit unnecessary removal of vegetation during road construction and areas cleared of vegetation to be revegetated as quickly as possible.
10. There shall be no further alteration to wetlands or surface waters without amendment of this permit.
11. Standard precautions shall be taken to prevent import or transport of soil or seed stock from nuisance, invading species such as purple loosestrife or Phragmites.
12. The impacts associated with the temporary work shall be restored immediately following construction.
13. The construction personnel shall be informed of and aware that Wood Turtles are in the vicinity especially from late May to the end of June and any encounters shall be resolved by a qualified environmental professional.
14. Fill within the floodplain of the Ashuelot River shall be mitigated in conjunction with the overall mitigation of the interim Keene-Swanzey project as required by permit #1999-1080 and outlined in October 7, 2015 Mitigation Commitment Summary Memo.
15. This approval is contingent on receipt by DES of a one-time payment of \$89,440.67 to the DES Aquatic Resource Mitigation (ARM) Fund. The payment shall be received by DES within 120 days of the date of the approval letter or the application will be denied.

The decision to approve this application was based on the following findings:

1. This is a major impact project per Administrative Rule Env-Wt 303.02(c), projects that alter more than 20,000 sq. ft. of nontidal wetlands.
2. The need for the proposed impacts has been demonstrated by the applicant per Env-Wt 302.01.
3. The NH Dept. of Transportation (NHDOT) has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per Env-Wt 302.03.
4. The NHDOT has demonstrated by plan and example that each factor listed in Env-Wt 302.04(a) Requirements for Application Evaluation, has been considered in the design of the project.
5. The project was discussed and coordinated through discussions at many monthly Natural Resource Agency Meetings held at the NH Dept. of Transportation with the most recent being on Aug. 21, 2013, Jan. 21, 2015 and May 20, 2015.
6. The application was received on June 17, 2015 and includes an Inter-Department memo noting the NHDOT will prepare and submit a mitigation package specific to this application and will follow up with a mitigation summary / proposal package for the outstanding mitigation required for the previously impacted and future interim Keene - Swanzey 10309 series of projects.
7. On July 21, 2015, a comment was received from the Ashuelot River Local Advisory Committee noting support for the project but is concerned with the outstanding mitigation from past impacts, the mitigation for flood storage and the need for timely mitigation due the frequency of flooding.
8. On October 7, 2015 the DES received a report from the NHDOT summarizing the outstanding mitigation for previous permitted projects.
9. In accordance with RSA 482-A:8, DES finds that the requirements for a public hearing do not apply as the permitted project is not of substantial public interest, and will not have a significant impact on or adversely affect the values of the riverine resource, as identified under RSA 482-A:1.
10. The department has determined that this specific project, application 2015-01505, is acceptable for a one-time payment to the Aquatic Resource Mitigation (ARM) Fund for the mitigation.
11. The payment calculated for the proposed wetland loss equals \$89,440.67.
12. The Department decision is issued in letter form and upon receipt of the ARM fund payment, the Department shall issue a posting permit in accordance with Env-Wt 803.08(f).
13. The payment into the ARM fund shall be deposited in the DES fund for the Lower Connecticut River watershed per RSA 482-A:29.

Any person aggrieved by this decision may appeal to the N.H. Wetlands Council ("Council") by filing an appeal that meets the requirements specified in RSA 482-A:10, RSA 21-O:14, and the rules adopted by the Council, Env-WtC 100-200. The appeal must be filed **directly with the Council within 30 days** of the date of this decision and must set forth fully every **ground** upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council. Information about the Council, including a link to the Council's rules, is available at <http://nhec.nh.gov/> (or more directly at <http://nhec.nh.gov/wetlands/index.htm>.) Copies of the rules also are available from the DES Public Information Center at (603) 271-2975.

This permit is contingent on receipt of a one-time payment of \$89,400.77 dollars to the DES Aquatic Resource Mitigation (ARM) Fund. **The payment should be received after the 30-day reconsideration period or after November 8, 2015. If the payment is not received by DES by February 8, 2016 or 120 days from the approval decision, DES will deny the application. Please include a copy of this letter with the payment.** If you have any questions please contact me at (603) 271-4059 or via e-mail, lori.sommer@des.nh.gov <<mailto:lori.sommer@des.nh.gov>>.

Sincerely,



Lori Sommer
Wetland Mitigation Coordinator
DES Wetlands Bureau

cc: Keene Conservation Commission
Keene Board of Selectmen
Keene Municipal Clerk