APPENDIX A: STORMWATER MANAGEMENT CHECKLIST

Project Name:
Contact for Stormwater Design Questions:
Company/Organization:
Mailing Address:
Phone Number:
Email Address:
Projected Construction Start Date _____ MM/DD/YY Projected Construction Completion Date _____ MM/DD/YY

STW/WQC File No:_____

Date Received

APPLICABILITY (check all that apply)

There are Freshwater Wetlands on the property, AND the project proposes: ☐ New or increased impervious cover for property other than a single family home; or ☐ Disturbance of more than 10,000 sq. ft. of existing impervious cover; or ☐ To fill in any amount of floodplain or alter storm flowage to a river or stream or wetland on any lot.	**Requires FWW#**
The project requires an application to the CRMC, AND proposes: ☐ A residential development of 6 units or more: or ☐ A project that results in the disturbance or creation of 10,000 sq. ft. or more of impervious cover Date submitted CRMC Assent: _____ and the application # (if known):_____	**Requires WQC#**
The project proposes an infiltration system listed in Section 5.3 of the RISDISM (i.e. infiltration trench, infiltration basin, UIC chamber or drywell) that receives stormwater from: ☐ A residential impervious area that is more than 10,000 sq. ft; or ☐ A non-residential roof area greater than 10,000 sq.ft.; or ☐ A non-residential (commercial, industrial, institutional…) road or parking area of any size. Indicate if the treatment system discharges: ☐ Below the ground (UIC); or ☐ Above the ground and infiltrates (not UIC), but must be reviewed and compliant with the RISDISM to be protective of groundwater)	**If UIC is checked this project Requires UIC# #**
The project proposes discharge of stormwater, directed to a water of the State (including a Separate Storm Sewer System (MS4) and ☐ Disturbs less than 1 acre, but the activity is part of a larger common plan resulting in more than one acre of disturbance. If yes, list Name: _____; or ☐ Disturbance of more than 1 acre of property: Amount of Disturbance :_____(acres)	**Requires RIPDES #**

☐ YES ☐ NO Is there proposed or existing industrial activity that is subject to the Multi-Sector General Permit (MSGP) under Rule 31(b)15 of the RIPDES Regulations? If yes, What sector?_____ What is your MSGP Authorization # _____ , or ☐ an NOI for the MSGP is included with this application	**MSGP#**

REDEVELOPMENT (See definition in Section 3.2.6 and/or follow the calculations below in Minimum Standard 6)

☐ YES ☐ NO Does the project meet the Redevelopment Standard? Please use the equations in Section 6 of this document to determine whether or not the site meets the criteria for redevelopment.

Please note that for redevelopment sites, only Standards 2, 3 and 7-11 must be addressed. However, please note the permitting agency may require controls for peak flow or volume on a case-by case basis within a watershed with a history of flooding problems.

RECEIVING WATER INFORMATION

(use the following link as guidance to assist you with answering the questions below) http://www.dem.ri.gov/programs/benviron/water/permits/swcoord/pdf/maptutor.pdf)

☐ Groundwater Discharge of the Water Quality Volume (WQv) is:

To groundwater area identified as ☐ GB ☐ GA ☐ GAA; and

☐ Is not within a wellhead protection area (WHPA), or

☐ Is not within 200' of a drinking water well, or

☐ Extenuating Circumstances apply : _____

☐ Surface discharge of the WQv is to Isolated Unnamed stream or wetlands

If yes, provide location of discharge LAT _____ LONG _____

☐ Surface discharge of the WQv is to an unnamed stream that contributes to a named waterbody

☐ Separate Storm Sewer System **(MS4)** to Named Waterbody

If yes, MS4 is owned by: ☐ RIDOT or ☐ Other (please specify):_____

Provide the following information regarding the first named surface water body (you may duplicate this row when the site discharges to multiple waterbody ids)

Name: _____

Waterbody ID: _____

Is the waterbody identified (check all that apply):

☐ A waterbody that has a known history of repetitive flooding?

☐ A fourth-order stream or a pond of 50 acres or more (see Section 3.3.4) (**NOTE:** *The Pocassett River is listed as a 4th order stream but has a known history of repetitive flooding, volume limitations will apply*)?

☐ A Cold-Water Fishery ☐ Warm Water, or ☐ Unassessed (see Section 3.3.4)

☐ A public bathing beach or DEM-approved shellfish harvesting area

☐ A Special Resource Protection Water (SRPW)?

☐ Impaired (on 303d list)?

If yes, list impairment(s): _____

☐ Has a completed Total Maximum Daily Load (TMDL) ?

TMDL completed for; _____

If yes – does your site discharge to a priority outfall identified in the TMDL? ☐ YES ☐ NO

HISTORIC, EXISTING AND PROPOSED ACTIVITY

☐ YES ☐ NO Pre-application meeting for this project? If yes, ☐ pre-application meeting notes have been provided

☐ YES ☐ NO Does the project propose activities that meet the criteria for a Land Use with Higher Potential Pollutant Loads (LUHPPL) as defined by the RISISDM? If yes, please describe: _____

☐ YES ☐ NO Have there been any known or suspected releases of hazardous materials at the site?

☐ YES ☐ NO Is this site on the list of CERCLA and State Sites in RI? http://www.dem.ri.gov/programs/benviron/waste/pdf/cercstat.pdf

If yes, list any other RIDEM programs/contacts involved with this site and application or approval numbers:

_____

DEM Office of Waste Management (OWM) Contact Person: _____

☐ YES ☐ NO Is the proposed project associated with a previous permit application or enforcement action?

If yes, please describe: _____

Table 1-1 Site Summary (add or subtract rows as necessary)

Subwatershed (acres to each design point)	First Receiving Water ID or MS4	Area Disturbed (acres)	Existing Impervious (acres)	Proposed Impervious (acres)
DP-1:				
DP-2:				
DP-3:				
DP-4:				
Totals:				

☐ Indicate below where the subwatershed maps and the documentation for the above items are provided (i.e. name of report/document, page numbers). Guidance for preparing drainage area maps are found in Appendix K.

_____

MINIMUM STANDARD 1 – LOW IMPACT DEVELOPMENT ASSESSMENT

(**REQUIRED** for New Development and Pre-Application Meetings) – You may delete this section if you qualify for redevelopment

State Law requires the use of low impact-design techniques as the primary method of stormwater control to the maximum extent practicable. LID is intended to maintain or replicate predevelopment hydrology through the use of site planning, source control, and small-scale practices integrated throughout the site to prevent, infiltrate, and manage runoff as close to its source as possible. Non-structural LID techniques to Avoid and Reduce the stormwater impacts of development shall be explored as a first priority before LID structural practices are planned to Manage stormwater as part of a comprehensive LID approach.

The applicant must document specific LID Site Planning and Design Strategies applied for the project (see Manual Chapter Four and the *RI Low Impact Development (LID) Site Planning and Design Guidance Manual* for more details regarding each strategy). This checklist is designed to guide the required documentation of the site planning process, and to ensure that the proposed project is consistent with and taking advantage of LID strategies required or allowed in the municipality where the project is proposed. Included within this checklist are specific LID techniques (and practices) taken from the *RI Low Impact Development (LID) Site Planning and Design Guidance Manual* that a municipality may require or allow.

If a particular strategy is not used or not applicable, a written description of why a certain method is not used or applicable at the site must be provided. Appropriate answers may include such statements as:

- Town requires XXX (state the specific local requirement)
- Meets Town's dimensional requirement of XXXXX.
- Not practical for site because XXXXXX.
- Applying for waiver/variance to achieve this (pending; was approved; was denied)
- Applying for wavier/variance to seek relief from this (pending; approved; denied)

A) PRESERVATION OF UNDISTURBED AREAS, BUFFERS AND FLOODPLAINS	***IF NOT IMPLEMENTED - EXPLAIN HERE***
☐ Sensitive resource areas and site constraints are identified (required)	
☐ Local development regulations have been reviewed (required)	
☐ All vegetated buffers and coastal and freshwater wetlands have been designed to be protected during and after construction	
☐ Conservation Development or other site design technique to protect open space and pre-development hydrology; [NOTE: If this technique has been used, check box and skip to **c**.]	
☐ Maintain as much natural vegetation and pre-development hydrology as possible	

B) LOCATE DEVELOPMENT IN LESS SENSITIVE AREAS AND WORK WITH THE NATURAL LANDSCAPE CONDITIONS, HYDROLOGY, AND SOILS ☐ Building envelopes/ development sites directed away from wetlands/waterbodies ☐ Development and stormwater systems are located in areas with greatest infiltration capacity (e.g., soil groups A and B. ☐ Plans show measures to prevent soil compaction in areas designated as Qualified Pervious Areas (QPA's) ☐ Building envelopes/ development sites are directed away from floodplains ☐ Site designed to locate buildings, roadways and parking to avoid impacts to surface water features. ☐ Building envelopes/ development sites directed away from steep slopes (≥15%) ☐ Other:	***IF NOT IMPLEMENTED - EXPLAIN HERE***
C) MINIMIZE CLEARING AND GRADING ☐ Site clearing restricted to <u>minimum area needed</u> for building footprints, development activities, construction access and safety. ☐ Site designed to locate buildings, roadways and parking to minimize grading (cut and fill quantities) ☐ Protection for stands of trees and individual trees and their root zones to be preserved is specified and such protection extends at least to the drip line ☐ Notes on plan specify that public trees that are removed or damaged during construction shall be replaced with equivalent.	***IF NOT IMPLEMENTED - EXPLAIN HERE***
D) REDUCE IMPERVIOUS COVER ☐ Reduce roadway widths (≤22 feet for ADT ≤ 400; ≤ 26 feet for ADT 400-2,000) ☐ Reduce driveway areas (length minimized via reduced ROW width (≤ 45 ft.) and/or reduced (or absolute minimum) front yard setback; width minimized to ≤ 9 ft. wide one lane; ≤ 18 ft. wide two lanes; shared driveways; pervious surface) ☐ Reduced building footprint: Explain approach ☐ Reduce sidewalk area (≤ 4 ft. wide; one side of the street; unpaved path; pervious surface) ☐ Reduce cul-de-sacs (radius < 45 ft; vegetated island; alternative turn-around) ☐ Reduced parking lot area: Explain approach ☐ Pervious surfaces (driveways, sidewalks, parking areas/overflow parking area) ☐ Maximum Impervious Surface (project meets or is less than the maximum specified by the Zoning Ordinance ☐ Other (describe):	***IF NOT IMPLEMENTED - EXPLAIN HERE***

E) DISCONNECT IMPERVIOUS AREA ☐ Impervious surfaces have been disconnected and runoff has been diverted to QPAs to the maximum extent possible ☐ Residential street edges allow side-of-the-road drainage into vegetated open swales ☐ Parking lot landscaping breaks up impervious expanse AND accepts runoff ☐ Other:	***IF NOT IMPLEMENTED - EXPLAIN HERE***
F) MITIGATE RUNOFF AT THE POINT OF GENERATION ☐ Small-scale BMPs have been designated to treat runoff as close as possible to the source	***IF NOT IMPLEMENTED - EXPLAIN HERE***
G) PROVIDE LOW-MAINTENANCE NATIVE VEGETATION ☐ Low-maintenance landscaping is proposed using native species and cultivars ☐ Plantings of native trees and shrubs in areas previously cleared of native vegetation are shown on the site plan ☐ Lawn areas have been limited and/or minimized and yards have been kept undisturbed to the maximum extent on residential lots	***IF NOT IMPLEMENTED - EXPLAIN HERE***
H) RESTORE STREAMS/WETLANDS ☐ Historic drainage patterns have been restored by removing closed drainage systems, daylighting buried streams, and/or restoring degraded stream channels and/or wetlands. ☐ Removal of invasive species ☐ Other	***IF NOT IMPLEMENTED - EXPLAIN HERE***

Minimum Standard 2: Groundwater Recharge

☐ YES ☐ NO The project has been designed to meet the groundwater recharge standard.

If No, please explain the justification for groundwater recharge criterion waiver (i.e. threat of groundwater contamination, or physical limitation), if applicable (see Section 3.3.2);

Please describe your waiver request

☐ YES ☐ NO Is this site listed as a CERCLA or contaminated site?, if yes?

☐ YES ☐ NO Has any part of the site been approved for infiltration by the Office of Waste Management? (see Subsurface Contamination Guidance)

☐ YES ☐ NO Is there an ELUR on the property?

TABLE 2-1: Summary of Recharge (see Manual section 3.3.2)

Subwatershed	Total Re_v Required (Acre-ft)	LID Stormwater Credits (Manual see Section 4.6.1)		Recharge Required by Remaining BMPs (acre-ft)	Recharge Provided by BMPs (acre-ft)
		Impervious volume directed to a QPA (acre-ft)	Recharge Credit Applied (acre-ft)		
DP-1:					
DP-2:					
DP-3:					
DP-4:					
Totals:					

**Note: Only BMPs listed in Manual Table 3-5, List of BMPs Acceptable for Recharge may be used to meet the recharge requirement.*

☐ Indicate below where the pertinent calculations and/or information for the above items are provided (i.e. name of report/document, page numbers);

Minimum Standard 3: Water Quality

☐ YES ☐ NO Does this project meet or exceed the required water quality volume WQv (see section 3.3.3)?

☐ YES ☐ NO Is the proposed final impervious cover is greater than 20% of the disturbed area (see section 3.3.3)?

☐ If yes, the Spit Pervious/Impervious method in Hydro-Cad was used to calculate WQv, or

☐ If yes, TR-55 or TR-20 was used to calculate WQv, and

☐ If no, the project meets the minimum WQv of 0.2 watershed inches over the entire disturbed area.

☐ YES ☐ NO Does this project meet or exceed the ability to treat required water quality flow WQf(see section 3.3.3.2)?

☐ YES ☐ NO Is there an increase of impervious cover to a receiving water body with impairments?

If yes, please indicate below the method that was used to address the water quality requirements of no further degradation to a low quality water.

☐ RISDISM section H.3 Pollutant Loading Analysis

☐ The Water Quality Guidance Document (Water Quality Goals and Pollutant Loading Analysis Guidance for Discharges to Impaired Waters)

☐ YES ☐ NO BMPs are proposed that are on the approved technology list if yes, please provide all of the required worksheets from the manufacturer.

☐ YES ☐ NO Additional pollutant-specific requirements and/or pollutant removal efficiencies are applicable to the site as the result of a TMDL, SAMP or other watershed-specific requirements; If yes, please describe:

_____

_____

_____

TABLE 3-1: Summary of Water Quality (see Manual section 3.3.3)

Subwatershed	Total WQ_v Required (Acre-ft)	LID Stormwater Credits (Manual see Section 4.6.1)		Water Quality Treatment Remaining (acre-ft)	Water Quality Provided by BMPs (acre-ft)
		Impervious volume directed to a QPA (acre-ft)	Water Quality Credit Applied (acre-ft)		
DP-1:					
DP-2:					
DP-3:					
DP-4:					
Totals:					

**Note: Only BMPs listed in Chapter 5 of the Manual or the Approved Technologies List of BMPs is Acceptable for Water Quality treatment.*

☐ YES ☐ NO This project has met the setback requirements for each BMP. If no, please explain

_____

_____

_____

☐ Indicate below where the pertinent calculations and/or information for the above items are provided (i.e. name of report/document, page numbers);

_____

_____

_____

Minimum Standard 4: Conveyance and Natural Channel Protection (3.3.4)

☐ YES ☐ NO Is this standard waived? If yes, please check indicate one or more of the reasons below:

☐ The project directs discharge to a large river (i.e., 4th-order stream or larger. See Appendix I for State-wide list and map of stream order), bodies of water >50.0 acres in surface area (i.e., lakes, ponds, reservoirs), or tidal waters.

☐ The project directs is a small facility with impervious cover of less than or equal to 1 acre.

☐ The project has a post-development peak discharge rate from the facility that is less than 2 cfs for the 1-year, 24-hour Type III design storm event (prior to any attenuation). (**NOTE:** *LID design strategies can greatly reduce the peak discharge rate)*

☐ YES ☐ NO Conveyance and natural channel protection for the site have been met.

If no, explain why _____

_____

TABLE 4-1: Summary of Channel Protection Volumes (see Manual section 3.3.4)

Drainage Point	Receiving Water Body Name	Coldwater Fishery? Y/N	Total CPv Required (acre-ft)	Total CPv Provided (acre-ft)	Release Rate Modeled in the 2-yr storm (cfs)
DP-1:					
DP-2:					
DP-3:					
DP-4:					
Totals:					

☐ YES ☐ NO The CPv is released at roughly a uniform rate over a 24-hour duration (see example sizing calculations in Appendix D of the RISDISM).

☐ YES ☐ NO Do additional design restrictions apply resulting from any discharge to cold water fisheries;

If yes, please indicate restrictions and solutions

_____

_____

☐ Indicate below where the pertinent calculations and/or information for the above items are provided (i.e. name of report/document, page numbers);

_____

_____

Minimum Standard 5: Overbank Flood Protection (3.3.5) (and other potential high flows)

☐ YES ☐ NO Is this standard waived? If yes, please check indicate one or more of the reasons below:

☐ The project directs discharge to a large river (i.e., 4th-order stream or larger. See Appendix I for State-wide list and map of stream order), bodies of water >50.0 acres in surface area (i.e., lakes, ponds, reservoirs), or tidal waters.

☐ A Downstream Analysis (see section 3.3.6), indicates that peak discharge control would not be beneficial or would exacerbate peak flows in a downstream tributary of a particular site (i.e. through coincident peaks)

☐ YES ☐ NO Does the project flow to an MS4 system? If yes, indicate below:

☐ RIDOT ☐ Other _____

(**NOTE**: *your project could be approved by RIDEM but not meet RIDOT or Town standards. RIDOT's regulations indicate that post-volumes must be **less** than pre-volumes for the 10-yr storm at the design point entering the RIDOT system)*. If you have not already received approval for the discharge to an MS4, please explain your strategy to comply with RIDEM and the MS4.

_____
_____
_____

☐ YES ☐ NO Did you use a model for your analysis, if yes, indicate below

☐ TR-55 ☐ TR-20 ☐ Hydrocad ☐ Other _____

☐ YES ☐ NO Does the hydrologic model demonstrate that flows from the 100-year event will be safely conveyed to a control practice designed to manage the 100-year event? If no, please explain

_____
_____

☐ YES ☐ NO Do off-site areas contribute to the subwatersheds and design points? If yes,

☐ YES ☐ NO Are the areas modeled as "present condition" for both pre- and post-development analysis

☐ YES ☐ NO Are the off-site areas are shown on the subwatershed maps

☐ YES ☐ NO Does the hydrologic model confirm safe passage of the 100-year flow through the site for off-site runoff;

☐ YES ☐ NO Is a Downstream Analysis required? (see Manual Section 3.3.6):

Please calculate the following:

Area of disturbance within the sub-watershed (areas) _____

Impervious cover (%) _____

☐ YES ☐ NO Is a dam breach analysis required (earthen embankements over six (6) feet in height, or a capacity of 15 acre-feet or more, and contributes to a significant or high hazard dam?

☐ YES ☐ NO Does this project meet the overbank flood protection standard?

Table 5-1 Hydraulic Analysis Summary

Subwatershed (design point)	1.2" Peak Flow		1-yr Peak Flow		10-yr Peak Flow		100-yr Peak Flow	
	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)
DP-1:								
DP-2:								
DP-3:								
DP-4:								
Totals:								

☐ Indicate below where the pertinent calculations and/or information for the above items are provided (i.e. name of report/document, page numbers);

_____

☐ Existing condition analysis for each subwatershed, including (curve numbers, times of concentration, runoff rates, volumes, and water surface elevations showing methodologies used and supporting calculations);

_____
_____
_____

☐ Proposed condition analysis for each subwatershed, including (curve numbers, times of concentration, runoff rates, volumes, water surface elevations, and routing showing the methodologies used and supporting calculations);

_____
_____
_____

☐ Final sizing calculations for structural stormwater BMPs including, contributing drainage area, storage, and outlet configuration;

_____
_____
_____

☐ Stage-storage, inflow and outflow hydrographs for storage facilities (e.g., detention, retention, or infiltration facilities);

_____
_____
_____

Table 5-2 Summary of Best Management Practices

DP No.	BMP ID.	BMP Type (i.e. bioretention or tree filter)	BMP Functions (acre-ft)				Overbank Flood Reduction	Internal Bypass	Horizontal Setback Criteria Met	
			Pre-treatment (volume)	Re_v	WQ_v	CP_v	Y/N	Y/N	Distance (ft)	From constraint (i.e. private well or foundation)
		TOTAL:								

Table 5-3 Summary of Soils to evaluate each BMP

DP No.	BMP ID.	BMP Type (i.e. bioretention or tree filter)	Soils Analysis for Each BMP						
			Primary Test Pit ID #	Secondary Test Pit ID #	Top of Filter Elevation (ft)	SHWT Elevation (ft)	Separation Distance (ft)	Hydrologic Soil Group A,B,C or D	Exfiltration Rate Applied (in/hr)
		TOTAL:							

Minimum Standard 6: Redevelopment and Infill Projects

If you want to determine if the project qualifies for redevelopment, calculate the following, otherwise the project will be assumed to be new development:

Step #1: Determine the total pre-construction impervious area

Total Impervious area (TIA) =_____

Step #2: Calculate the Site Size

Total Site Area (TSA) =_____

Jurisdictional Wetlands (JW) =_____

Conservation Land (CL) =_____

Site Size (SS) = (TSA) – (JW) – (CL) =_____

Please note that the TSA is defined as one or more lots or parcels of land to be developed or redeveloped. If the construction project is located within a campus, then the Total Site Area needs to be based on the total area of the campus.

Step #3: Please determine whether or not the project meets the redevelopment criteria.

☐ YES ☐ NO is (TIA)/(SS) > 0.4?

If (TIA)/(SS) > 0.4, then the site meets the redevelopment criteria. Otherwise the project does not qualify for reduced treatment requirements for redevelopment and you must follow the requirements for new development.

Step #4: Please indicate New Development or Redevelopment in the table located on page A-1

☐ YES ☐ NO Approved off-site location within watershed where stormwater management requirements will be met, if applicable (see Manual Section 3.2.6);

Minimum Standard 7: (questions are now asked in Minimum Standard 10 and 11)

Minimum Standard 8: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

☐ YES ☐ NO Are there any existing activities or land uses proposed that would be considered LUHPPLs (see Manual Table 3-2)? If yes, please describe. If no, you may continue on to Minimum Standard 9:

_____

_____

☐ YES ☐ NO Are these activities already covered under an MSGP? If, no please explain if you have applied for an MSGP, or intend to do so?

_____

_____

☐ YES ☐ NO ☐ List the specific BMPs that are proposed for this project that receive stormwater from LUHPPL drainage areas. These BMP types must be listed in Manual Table 3-3, "Acceptable BMPs for Use at LUHPPLs";

Please list BMPs _____

☐ Additional BMPs, or additional pretreatment BMP's if any, that meet RIPDES MSGP requirements;

Please list BMPs _____

☐ Indicate below where the pertinent calculations and/or information for the above items are provided (i.e. name of report/document, page numbers);_____

_____

Minimum Standard 9: Illicit Discharges

☐ YES ☐ NO Have you checked for illicit discharges?

☐ YES ☐ NO Have any been found and/or corrected? If yes, please identify

_____

☐ YES ☐ NO Does your report explain preventative measures that keep non-stormwater discharges out of the Waters of the State (during and after construction)?

Minimum Standard 10 Soil Erosion and Sediment Control

☐ YES ☐ NO Have you included a Soil Erosion and Sediment Control Plan Set and/or Complete Construction Plan Set?

☐ YES ☐ NO Did you provide a separately bound document based upon the SESC Template? If yes, proceed to Minimum Standard 11 (the following items can be assumed to be addressed). If no, include a document with your submittal that addresses the following:

Elements of a SESC Plan:

☐ Soil Erosion and Sediment Control Plan project narrative including a description of how the fifteen (15) Performance Criteria have been met:

- ☐ Provide Natural Buffers and Maintain Existing Vegetation;
- ☐ Minimize Area of Disturbance;
- ☐ Minimize the Disturbance of Steep Slopes;
- ☐ Preserve Topsoil;
- ☐ Stabilize Soils;
- ☐ Protect Storm Drain Inlets;
- ☐ Protect Storm Drain Outlets;
- ☐ Establish Temporary Controls for the Protection of Post-Construction Stormwater Control Measures;
- ☐ Establish Perimeter Controls and Sediment Barriers;
- ☐ Divert or Manage Run-On from Up-Gradient Areas;
- ☐ Properly Design Constructed Stormwater Conveyance Channels;
- ☐ Retain Sediment On-Site;
- ☐ Control Temporary Increases in Stormwater Velocity, Volume, and Peak Flows;
- ☐ Apply construction Activity Pollution Prevention Control Measures;
- ☐ Install, Inspect, and Maintain Control Measures and Take Corrective Actions.

☐ Qualified SESC plan preparer's information and certification;

☐ Operator's information and certification; if not known at the time of application the operator must certify the SESC Plan upon selection and prior to initiating site activities;

☐ Description of control measures such as temporary sediment trapping and conveyance practices, including design calculations and supporting documentation, as required.

Minimum Standard 7&11: Stormwater Management System Operation, Maintenance and Pollution Prevention Plan (See section 3.2.11 and Appendices G and E for guidance)

☐ YES ☐ NO Have you minimized all sources of pollutant contact with stormwater runoff, to the maximum extent practicable?

☐ YES ☐ NO Have you provided a separately bound **Operations, Maintenance and Pollution Prevention Manual** for the site and for all of the BMPs?

The (O&M and PP Plan Contains):

☐ YES ☐ NO Contact name, address, and phone number of the responsible party for maintenance;

☐ YES ☐ NO 8.5" x 11" map indicating the location of all of the proposed stormwater BMPs that will require maintenance;

☐ YES ☐ NO Description of routine and non-routine maintenance tasks and their frequency for required elements for each BMP;

☐ YES ☐ NO A description and delineation of public safety features;

☐ YES ☐ NO An estimated operations and maintenance budget;

☐ YES ☐ NO Minimum vegetative cover requirements;

☐ YES ☐ NO Access and safety for maintenance?

☐ YES ☐ NO Lawn, Garden and Landscape Management meet the requirements of section G.7? If not, why not?

_____

_____

☐ YES ☐ NO Is the property owner or homeowners association is responsible for the stormwater maintenance of all BMP's?

If no, you must provide a legally binding and enforceable maintenance agreement (see Appendix E-page 26) that identifies the entity that will be responsible for maintenance of the stormwater. Please indicate where this agreement can be found in your report:_____

☐ YES ☐ NO Do you anticipate that you will need legal agreements related to the stormwater structures? (e.g. off-site easements, deed restrictions, and covenants).
If yes, have you obtained them? Or please explain your plan to obtain them:

_____

_____

☐ YES ☐ NO Is stormwater being directed from public areas to private property? If yes, *(***NOTE***: this is not allowed unless there is a funding mechanism in place to provide the finances for the long-term maintenance of the BMP and drainage unless there is a funding mechanism is demonstrated that can guarantee the long-term maintenance of a stormwater BMP by an individual homeowner*)

_____

_____

Pollution Prevention Section Contains:

☐ YES ☐ NO Designated snow stockpile locations?

☐ YES ☐ NO Trash racks to prevent floatables, trash and debris from discharging to waters of the state?

☐ YES ☐ NO Asphalt only based sealants?

☐ YES ☐ NO Pet waste stations? (**NOTE:** *if a receiving water has a bacterial impairment and the project involves housing units, this could be an important part your pollution prevention plan*)

☐ YES ☐ NO Regular sweeping? Please describe _____

☐ YES ☐ NO Deicing specifications in accordance with Appendix G of the Manual. (**NOTE***: if the groundwater is GAA or this area contributes to a drinking water supply, this could be an important part of your pollution prevention plan (see Appendix G):*

_____

☐ YES ☐ NO A prohibition of phosphate based fertilizers? (**NOTE**: *if the site discharges to a phosphorus impaired waterbody, this could be an important part of your pollution prevention plan*)?

Existing and Proposed Subwatershed Mapping (REQUIRED)

☐ Existing and proposed drainage area delineations

- ☐ Locations, cross sections, and profiles of all streams and drainage swales and their method of stabilization;
- ☐ Drainage flow paths, mapped according to the DEM *Guidance for Preparation of Drainage Area Maps* (included in Appendix K).
- ☐ Complete drainage area boundaries; include off-site areas in both mapping and analyses, as applicable;
- ☐ Logs of borings and/or test pit investigations along with supporting soils/geotechnical report.

☐ Mapped seasonal high water table,

☐ Mapped locations of the site-specific borings and/or test pits and soils information from the test pits at the locations of the BMPs

☐ Mapped locations of the BMPs with the BMPs consistently identified on the Site Construction Plans

☐ Mapping bedrock within 3' of any BMP

☐ YES ☐ NO Soils were logged by a:

- ☐ DEM-licensed Class IV soil evaluator Name: _____
- ☐ RI-registered PE. Name; _____

Site Construction Plans (the following applicable specifications are provided)

- ☐ Existing and proposed plans (scale not greater than 1" = 40') with North arrow
- ☐ Existing and proposed site topography (with 1 or 2-foot contours). 10-foot contours accepted for off-site areas
- ☐ Boundaries of existing predominant vegetation and proposed limits of clearing;
- ☐ Site Location clarification
- ☐ Location and field-verified boundaries of resource protection areas such as:
  - ► freshwater and coastal wetlands, lakes, ponds,

- coastal shoreline features
- Perennial and intermittent streams, in addition to areas subject to storm flowage (ASSFs);

☐ All required setbacks (e.g., buffers, water supply wells, septic systems);

☐ Representative cross-section and profile drawings, notes and details of structural stormwater management practices and conveyances (i.e., storm drains, open channels, swales, etc.), which include:

- Location and size of the stormwater treatment practices (type of practice, depth, area). Stormwater treatment practices (BMPs) must have labels that correspond to table 5-2;
- Design water surface elevations (applicable storms);
- Structural details of outlet structures, embankments, spillways, stilling basins, grade control structures, conveyance channels, etc.;
- Existing and proposed structural elevations (e.g., invert of pipes, manholes, etc.);
- Location of floodplain and, if applicable, floodway limits and relationship of site to upstream and downstream properties or drainage that could be affected by work in the floodplain;
- Planting plans for structural stormwater BMPs, including species, size, planting methods, and maintenance requirements of proposed planting;
- Logs of borings and/or test pit investigations along with supporting soils/geotechnical report and corresponding water tables.

☐ Mapping of any OWM approved activities related to current/former site use areas for any known contamination and/or remedial clean-up efforts.

☐ Location of existing and proposed roads, buildings, and other structures including limits of disturbance;

- Existing and proposed utilities (e.g., water, sewer, gas, electric) and easements;
- Location of existing and proposed conveyance systems such as grass channels, swales, and storm drains, as well as location(s) of final discharge point (wetland, waterbody);
- Cross sections of roadways, with edge details such as curbs and sidewalks;
- Location and dimensions of channel modifications, such as bridge or culvert crossings;
- Locations, cross sections, and profiles of all stream or wetland crossings and their method of stabilization