25% Design Water Quality Data Form

v. 08/2014

Project Information

The following questions should be filled out at the 25% design stage.

WARNING: Do not attempt to cut and paste cells. Form will malfunction.

1. Have you downloaded the most recent version of the Water Quality Data Form?

Yes

For questions 2-5, please use MassDOT's Project Information Look-Up Website to populate the yellow fields.

2. Project Number (From Project Info Website):

608940

3. Project Type (From Project Info Website):

Intersection

4. Project Name (From Project Info Website):

Intersection Improvements Route 20 at Boston Post Road and Wellesley Street

5. Location of Project (From Project Info Website):

Project Road(s): Route 20, Boston Post Road, Wellesley Street
Cities and/or Towns: Weston
District Number: 6

6. Project Designer:

Design Firm: VHB
Contact Person for Follow-Up: Alex Loncarevic
Email Address for Follow-Up: Aloncarevic@vhb.com
Phone Number for Follow-Up: 617-607-1891 **Extension:**

7. Who will have final ownership of the road or bridge this project is addressing?

MassDOT

Receiving Water Body Information

8. Does any runoff from the site enter a separate storm sewer system (MS4) operated by an organization other than MassDOT, such as a municipality?

No

9a. Is the project located in a watershed with one or more Draft or Final pollutant Total Maximum Daily Load(s) (TMDL)?

Yes

9b. Which Draft and/or Final pollutant TMDL(s) apply to the watershed?

- [x] **Bacteria/Pathogens**
- [ ] **Nitrogen**
- [ ] **Stormwater**
- [x] **Phosphorus**

10. How many water bodies on MassDEP's *Year 2012 Integrated List of Waters* receive stormwater runoff from the area impacted by this project (via any combination of piped or over land flow)?

1

25% Design Water Quality Data Form

v. 08/2014

Water Body #1

11. Segment ID of the receiving listed water body:

MA72135

Name of the receiving listed water body:

Weston Station Pond

Receiving water body status:

Not Impaired

Receiving water body impairments:

N/A

Final TMDLs for receiving water body:

N/A

12. Notes about conceptual BMPs that are planned to treat stormwater flowing to Water Body #1 (Weston Station Pond):

Stormwater discharging into the waterbody will be treated via hooded deep sump catch basins. Additional ROW on town land may be required to install additional BMPs. BMPs will be considered where practicable and finaliized at the 75% Design stage.

Recommendations and Requirements for BMPs Based on Status of Water Body #1

Ensure that any BMPs are recorded on the Water Quality Data Form for the 75% design stage. See the section of this form titled **Project Specific BMP Recommendations** for project-wide recommendations and contact information for MassDOT.

Recommendations Based on Receiving Water Body Impairment Status

This receiving water body is not impaired by a pollutant, and thus requirements under the Impaired Waters Program are fulfilled. BMPs should be implemented as required by MassDOT policy.

25% Design Water Quality Data Form

v. 08/2014

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v. 08/2014

Project Specific BMP Recommendations

Reference the MassDEP Storm Water Handbook for more detailed guidance on selecting BMPs.

Recommendations for Projects Located within TMDL Watershed(s)

BMPs must be implemented to ensure that stormwater discharge is consistent with any applicable Waste Load Allocation (WLA) for the TMDL(s) covering this watershed. Phosphorus is most effectively removed using infiltration BMPs. Consider proposing infiltration basins, infiltration swales, vegetated filter strips, and/or leaching catch basins as part of the project.

Recommendations for Projects with a Listed Receiving Water Body

When weighing the need for BMPs versus the feasibility of design and construction, consider the proximity of receiving water bodies on MassDEP's Year 2012 Integrated List of Waters. For example, if stormwater runoff from the project area flows through an expansive wetland or ephemeral stream prior to entering a water body on the list, take into account that many stormwater pollutants will be naturally treated. In such instances, pollutant-specific BMPs are suggested but not required under the Impaired Waters Program. It is more important to retain the integrity of the wetland or ephemeral stream and only implement additional BMPs to the maximum extent practicable in accordance with the Massachusetts Stormwater Standards.

At the other extreme, if stormwater runoff from the site is piped directly into a water body listed on the Year 2012 Integrated List of Waters, no pollutants are removed from stormwater prior to discharge, and it is more likely that stormwater runoff will negatively impact water quality. In this case, pollutant-specific BMPs need to be incorporated into the project. Consider all possibilities to overcome site limitations. This shall be a project by project determination.

Recommendations for Intersection Projects

Consider reconstructing existing outfalls so as to maximize the length of the flow path between the outfall and the receiving water body. This may involve moving the outfall further away from the receiving water body and/or positioning the outfall to discharge runoff at an angle. New outfalls should also incorporate protection against erosive discharge velocities. If land is available, consider incorporating an infiltration-style BMP at the new outfall. Otherwise, investigate the feasibility of re-routing stormwater to an area with more available space, such as within roadway interchanges and ramp systems. Leaching catch basins are also a good option for infiltrating in constrained spaces.

For project areas discharging to a cold water fishery, consider implementing infiltration BMPs to reduce the likelihood that the temperature of the stormwater will negatively impact the fishery habitat.

Consider reducing the amount of existing impervious cover in the project area while remaining in compliance with applicable safety standards.

Consider replacing concrete-lined swales and eroded ditches with vegetated swales. Vegetated swales should include check dams where possible to slow stormwater velocities, reduce erosion, and promote infiltration. Consideration should be given to the use of suitable subgrade materials, a geotextile liner, suitable vegetation, and/or an underdrain, depending on the characteristics of a site.

Consider using the highway median as an infiltration swale with check dams. In some instances, existing stormwater infrastructure can be re-routed to discharge to the median with an overflow outlet to a water body or the edge of the SHLO. In other instances, an existing trunk line may be day-lighted and retrofitted with an infiltration swale.

For parking lots, rest areas, and other similar areas, consider the use of porous or permeable pavements. Designs that include porous or permeable pavements should also incorporate suitable subgrade layers.

Recommendations for Non-Structural BMPs

Consider implementing as many of the following non-structural BMPs as possible:

- -Preserve as much of the pre-development vegetation as possible
- -Preserve natural drainage patterns and riparian buffers
- -Minimize disturbance to wetland resource areas
- -Reduce or eliminate curbing in well-vegetated areas that gently slope downward and away from the road
- -Use shallow, grassed roadside swales and parking lot islands with check dams instead of curb and gutter storm drainage systems
- -Reduce existing impervious cover or minimize the construction of additional impervious cover

Contact Bryan Cordeiro in the Environmental Section of MassDOT for guidance selecting appropriate BMPs.
He can be reached at 857-368-8813 or at Bryan.Cordeiro@state.ma.us

Form Submission

13. Submittal Type:
Original

Name of MassDOT Reviewer:
(For internal use only)

14. Date Submitted to MassDOT:
03/09/2020 *(mm/dd/yyyy)*

☑ **Check box once all entries have been filled out. Form can be submitted once box has been successfully checked.**