



## Memorandum

To: New Bedford Conservation  
Commission  
Attn: Sarah Porter

Date: November 28, 2017

Project #: 12815.00

From: Richard H. Carey, P.E.

Re: South Coast Rail  
Proposed Layover Facility in New Bedford  
Responses to Comments

Based on the comments received by Nitsch Engineering (peer reviewer for the New Bedford Conservation Commission) dated November 20, 2017, the stormwater drainage design for the proposed layover facility has been revised. The design changes, backup calculations, and specific responses to the comments are hereby submitted for review.

### Response to Comments

The following are responses to the comments in the November 20, 2017 letter:

1. Comment: The stormwater calculations enclosed with the comment letter document the proposed water quality treatment and recharge for most of the proposed work. However, the calculations do not include the new Whale's Tooth station platform and associated site work located on the western side of the limit of work. This area should be included in the calculations since this is located within the overall limit of work and is subject to the Stormwater Management Standards.

*Response: The Whale's Tooth Station platform and associated site work is not part of the Wamsutta layover facility and will be included as part of the New Bedford Track Notice of Intent, filed separately. The south end of the facility that drains to the future Whale's Tooth system is nearly all pervious, with the exception of the drip pans, which are treated prior to discharge. The contribution from the track drainage and drip pans from this end of the facility will be included in the subsequent filing for the proposed station and main line track. A project limit notation has been added to the plans for clarity.*

2. Comment: The storage within the HydroCAD model for the Ballast Yard Stone should be reviewed for consistency with the plans. The multipliers noted in the model storage volume are inconsistent – i.e. there is a multiplier of two (2) for the stone storage, but a multiplier of three (3) for the 12-inch pipe.

*Response: The HydroCAD model has been corrected to provide a multiplier of two (2) for the 12-inch pipe. The updated stormwater, attached with this response includes this correction.*

3. Comment: Consistent with MassDEP requirements, sizing calculations should be provided for all water quality structures to demonstrate that they are sized appropriately to achieve the TSS removal credit taken for each structure, given the anticipated water quality flow rate.

*Response: Water Quality Inlet Sizing calculations have been performed and are included with the updated stormwater report.*

4. Comment: The pipe sizing calculations provided include a note that indicates that the pipe sizing for the outflow from DMH-6 is based on the HydroCAD model (6.3 CFS); however, the flow noted in the table (3.3 CFS) is not consistent with the HydroCAD Model. This information should be reviewed and clarified within the table.

*Response: The flow noted in the table (3.3 CFS) is the correct value based on the outflow of the Ballast Yard Stone in the 25-Year Storm event. The note has been corrected for consistency. The updated stormwater report includes this correction.*

5. Comment: The response letter clarified the scope of the proposed outfall improvements, including culvert size and inverts. Additionally, the new information provided by VHB indicates that the stormwater system design was modified so that the proposed peak runoff rates do not exceed the existing peak runoff rates. We generally agree with this design approach, but recommend that DPI review and confirm the proposed approach is consistent with the design assumptions for the proposed outfall and downstream system. In past conversations, the Applicant's engineer stated that the hydraulic report prepared by CDM regarding the municipal system's ability to handle additional stormwater flows from the proposed project would be submitted. We have not yet received a copy of that report and therefore have not had the opportunity to review it.

*Response: We have submitted our stormwater reports and plans to DPI for review. We will be meeting with DPI and their consultant (CDM) on November 28, 2017 and expect to have a comment letter back from them later this week regarding the acceptability of our proposed design for the Wamsutta Street outlet culvert. We have learned that the calculations previously mentioned were preliminary and not prepared for publication at this time.*

6. Comment: A Long-Term Pollution Prevention Plan and a Stormwater Operation and Maintenance (O&M) plan shall be provided, consistent with Standards 4 and 9 of the Stormwater Management Standards. The O&M plan should include all proposed stormwater best management practices, including catch basins, drip pans, water quality structures, grass channel, and stone infiltration areas.

*Response: The Long-Term Pollution Prevention Plan and Stormwater O&M plan were submitted with the original Notice of Intent as Appendix C of the Stormwater Report.*

7. Comment: The limit of the erosion control barrier should be extended to include any locations where runoff from the construction site has the potential to flow downgradient onto adjacent properties.

*Response: The erosion control limits have been extended as suggested and are shown in the revised Erosion Control Plan (attached). We have extended the limit of erosion control along the northerly most limit of work for the length of the existing wall within the 100' buffer. We have also added a silt*

*fence barrier along the easterly side of the limit of work. The land is flat and does not require additional control along this limit.*

8. Comment: Riprap sizing calculations should be provided to document that the size of the riprap material, and the proposed dimensions of the riprap limits, are adequate for the anticipated flow through the box culvert. This calculation is being requested to ensure the proposed stabilization measures will provide long-term protection of the directly adjacent wetland resource area.

*Response: Riprap outlet protection calculations based on the Virginia DCR Handbook have been performed and included in the updated stormwater report.*

*We have also updated the stormwater check list to be consistent with all of the revisions made through this review process.*

Attachments:

Comment Letter from Nitsch Engineering dated November 20, 2017

Revised Stormwater Report Dated November 28, 2017

Revised Plans dated November 28, 2017