March 27th, 2025

Alison Manugian
Community Development Director
Town of Dracut
62 Arlington Street
Dracut, MA 01826
978-453-4557

RE: Peer Review of Bridge Street Landing – Modification
Application #PB23-08
Stormwater Management
5 Arlington Street and 1327 Bridge Street, Dracut, MA
Project Number: 22203701

Dear Ms. Manugian,

On behalf of the Owner and Applicant, Twin Coast Properties, LLC, Solli Engineering is pleased to respond to the comments received via the Stormwater Management Peer Review, conducted by Ms. Janet Bernardo, P.E. with Horsley Witten Group, Inc. A response to each comment / question is provided in bold where applicable.

COMPLIANCE WITH MASSACHUSETTS STORMWATER STANDARDS:

2. Standard 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

   d. HW recommends that the Applicant provides a cross section of the proposed infiltration basin that includes the headwall with the 12-inch HDPE outlet pipe, the riprap spillway at elevation 145.50, the riprap level spreader, and the elevations of the various storm events modeled. HW recommends that the Applicant provides an elevation for the level spreader and detail how it will be constructed to maintain a level elevation for 30 feet.

   Solli Response 03/05/25: A cross section of the proposed infiltration basin with the requested information has been included on Sheet 2.22 of the permitting plan set, included in this submission.

   Horsley Witten Response 03/13/25: The Applicant has provided a profile of the infiltration basin on Sheet 2.22. The elevations listed do not appear to be accurate. HW recommends that the Applicant review the elevations and revise accordingly. Furthermore, HW recommends that the Applicant add the peak elevations of the various storm events to the profile. The Applicant has also added an enlargement of the proposed level spreader on Sheet 2.22. HW notes that a level spreader is typically a hard edge set at a specific elevation. The detail provided indicates a downgradient slope to the south and to the west. HW recommends that the Applicant revisit the measures to reduce velocity.

   Solli Response 03/27/25: The infiltration basin cross section has been revised to show the accurate elevations and the peak elevations for the 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year storm events have been added to the profile. Additionally, the level spreader has been revised to eliminate the downgradient slope to further reduce discharge velocities.

f. The Applicant has requested a waiver from Section 4.6.1 for Use of Buffer Zones. The Applicant has requested that the stormwater infiltration basin be located within the side buffer area given the site and redevelopment constraints. The top of the proposed infiltration basin is within 10 feet of the southern property line. If the Planning Board agrees to grant this waiver, HW recommends that the Applicant install an impermeable barrier below the 146.50 berm of the basin. The Applicant has included a callout on Sheet 2.21 requiring low permeable materials be installed.

Solli Response 03/05/25: The design includes a trench with impermeable materials along the basin's berm that is within fill conditions. This impermeable trench will traverse the entire length of the fill berm and be compacted in 6" lifts. The trench will be excavated two feet below the existing grade.

Horsely Witten Response 03/13/25: The Applicant has added a note to the profile on Sheet 2.22 requiring impervious material to be installed in 6-inch lifts. HW notes that the detail of the level spreader still references low permeable material compared to impermeable material.

Solli Response 03/27/25: Details, notes and callouts have been revised to call out material as impermeable fill.

4. Standard 4 *requires that the stormwater system shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS) and to treat 1-inch of volume from the impervious area for water quality.*

b. The Applicant has provided deep sump catch basins and one Contech hydrodynamic separator (CDS2015-4G) to provide TSS removal prior to discharging to the infiltration basin. The Index of the Stormwater Report indicates that the TSS Removal Worksheets and the Water Quality Unit sizing were included in Appendix C. The documents reviewed by HW did not have this information. HW recommends that the Applicant provide the TSS worksheets, the water quality sizing calculations, and the third-party documentation for review. HW further notes that the narrative references two water quality units, however it appears that only one is proposed.

Solli Response 03/05/25: A copy of the TSS Removal Worksheets and Water Quality Unit sizing has been included as part of this submission. The Narrative has been revised to reflect the correct amount of water quality units.

Horsely Witten Response 03/20/25: The Applicant has provided additional information regarding the water quality unit proposed. HW recommends that the Applicant provide documentation from a third party, separate from the Contech vendor, that confirms that the proposed unit provides 88% TSS removal as listed on the worksheet.

Solli Response 03/27/25: The MassDEP Treatment Train worksheet has been revised to show the Contech CDS Unit providing 50% TSS removal in accordance with the certifications this unit has received. The total treatment train will still achieve a 92.5% (>90%) TSS removal, satisfying the Town of Dracut stormwater regulations. The applicable materials have been revised and third party certifications have been enclosed within this response.

9. Standard 9 *requires a long-term operation and maintenance plan (O&M Plan) shall be developed and implemented to ensure that stormwater management systems function as designed.*

    a. The Applicant has provided a Long-Term Operation & Maintenance Manual as part of the Stormwater Report. HW recommends that the manual becomes a stand-alone document to be reviewed and signed by the property owner prior to land disturbance.

    Solli Response 03/05/25: Acknowledged, Solli has provided a stand-alone Long-Term Operation & Maintenance Manual as part of this submission.

    Horsely Witten Response 03/13/25: The Applicant has provided a standalone Operation & Maintenance Manual. The Planning Board may choose to require receipt of signed document as a condition of approval

    Solli Response 03/27/25: Acknowledged.

10. Standard 10 *requires an Illicit Discharge Compliance Statement be provided*.

    Solli Response 03/05/25: An Illicit Discharge Compliance Statement has been included as part of this submission.

    Horsely Witten Response 03/13/25: Suggested condition of approval.

    Solli Response 03/27/25: Acknowledged.

Please review the responses and enclosed material at your earliest convenience and let us know if you have any questions or further comments

Respectfully,

Solli Engineering, LLC	Solli Engineering, LLC	Solli Engineering, LLC
Sam T. Malafronte, P.E.	Casey J. Burch	Kevin Solli, P.E., PTOE
Asst. Project Manager	Sr. Project Manager	Principal / Owner

Enclosures:

- Revised Permitting Plan Set
- Revised Stormwater Report
- Third Party TSS Removal Certifications

CC:

- Chris Baker, President / Twin Coast Properties, LLC