## CONNORSTONE ENGINEERING, INC.



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Town of Holliston 703 Washington Street Holliston, MA 01746

October 25, 2022

Attention:

Ms. Karen Sherman

Town Planner

Subject:

Peer Review #1

157-165 Lowland Street

Dear Ms. Sherman.

Connorstone Engineering, Inc. is in receipt of peer review comments provided by CMG in a letter dated July 8, 2022. Updated plans had been submitted on October 21, 2022 based upon the review, and a summary of each of the review comments is provided below.

## CMG Peer Review, dated July 8, 2022:

- As requested, the proposed building setbacks have been added to the plans.
- Other than an address, no new signage has been proposed.
- 3. The number of spaces would appear to fall under V-C.j "to be determined by the Planning Board." The updated plans have shown twenty (20) total parking spaces, which would be adequate for the use based upon owner information of the operational needs of the use. One ADA / AAB accessible space has been included on the updated plans located with access to the front of the building.
- 4. As recommended, all of the proposed parking has been located on paved surfaces.
- The FEMA FIRM map reference has been added to the site plans (#25017C0633E, June 4, 2010).
- 6. Additional spot grades have been included to define the 100 year flood plan limits, and the existing conditions plan has been stamped by a Massachusetts Land Surveyor. The existing topography verifies the flood plain is contained in the location shown. As noted in the comments, there may be some pockets within the interior of the site that are below 157, but none of these areas are hydraulically connected to the flood plain. There is a clear break along the south west corner with continuous grades above elevation 157 that would define the limits of the flood plain. This would also agree with the limits shown on the FEMA mapping
- 7. See item 6 above.

- 8. As noted, there are portions of the existing site abutting the river that are within the AE Flood Hazard Zone. The limits are defined on the plans
- 9. All of the proposed work, including the proposed berm, would be located outside the 100 year flood boundaries.
- 10. The site plans have been revised to include s Stormwater Management System in compliance with the MassDEP Standards.
- 11. No waste oil or emergency generator has been proposed at this time.
- 12. A locked storage container would be provided within the garage for any minor maintenance items, as approved through DEP by the RCC Permit. Bulk asphalt paving materials would not be stored on-site.
- 13. No on-site storage of chemical de-icing materials would be proposed.
- 14. The proposed plan have noted an oil/water separator and holding tank to be connected to any floor drains. The final design plan would be prepared as required to meet MassDEP requirements.
- 15. The existing conditions plan has been stamped by a Massachusetts PLS.
- 16. A "Certificate of Action" block has been added to Sheet 1.
- 17. The zoning setbacks had been added as requested in comment 1.
- 18. A Landscaping Plan has been included with the updated site plans.
- 19. A Lighting Plan has been provided to the Board.
- 20. Existing utilities (where known) have been included on the updated plans.
- 21. The proposed water and electric services have been included on the site plans.
- 22. A Landscape Plan has been included (not stamped by a registered Landscape Architect).
- 23. The proposed grading has been maintained at 3:1, except for the proposed berm along the westerly site of the site, which has utilized a 2:1 slope to be stabilized with an erosion control blanket suitable for the intended slope and use conditions.
- 24. The sight distances have been added to the site plans.
- 25. A curb cut turning analysis has been attached to this letter to verify turning movements.
- 26. Gas service has not been proposed to the new building.
- 27. Comment noted related to the septic system.

- 28. The proposed water service has been added to the plans along with the typical construction details.
- 29. The proposed site has been designed to collect and infiltrate the entire 100 year event with no offsite discharge. Pre-existing flow would not be required to verify compliance with the regulations.
- 30. The revised site development has been designed to full compliance with the MassDEP Standards.
- 31. The Hydrologic soil group in the updated analysis was based upon the Soil Mapping (HSG B), and the most conservative underlying soil conditions encountered in the test pits (sandy loam), which is listed as a HSG B in the MassDEP Handbook, Vol. 3. The infiltration basin design has noted that all fill below the bottom of basin would be removed and replaced with suitable clean free draining materials.
- 32. The soil mapping was not included on the recent subcatchment mapping. Attached is an updated map with the soil limits included.
- 33. The proposed plans have been modified to isolate the development area from the remaining portions of the existing site. This area would be collected and infiltrated through a separate infiltration basin. For a conservative design, the Tc was assumed to be instantaneous.
- 34. As recommended, an area solely dedicated for stormwater infiltration has been proposed for the new development area.
- 35. As recommended, the areas of new development have been designed to meet full compliance with the Stormwater Standards.
- 36. The proposed plans have been modified to provide paved surfaces for the parking areas. All other areas outside the pavement limits to the north would remain to match the existing conditions.
- The testing was noted as to witnessed vs. not witnessed. The witnessed testing on 1/11/2022 was performed by Michael Sullivan (soil evaluator #2374), the unwitnessed testing on 8/2/2022 was performed by Vito Colonna, PE (soil evaluator #2811), and the unwitnessed testing on 8/8/2022 was performed by George Connors of Connorstone Engineering, Inc.
- 38. The estimated seasonal high groundwater was determined by both redoximorphic features (DTH D-5, and direct observation of groundwater with consultation with BOH staff (DTH-1-5).
- 39. The infiltration rate has been updated to be based upon the more conservative of the underlying soils within the location of the infiltration basin (loamy sand). As noted above, all fill within this area would be removed.
- 40. The Stormwater Report/Checklist has been stamped by a Massachusetts Professional Engineer.

- 41. The required permitting will be submitted to the Conservation Commission.
- 42. The Snow Storage Areas have been labeled on the plans.
- 43. Design of any fences would be provided by a Structural Engineer, and could be provided to the Town prior to construction.
- 44. The required pretreatment prior to recharge has been provide don the proposed plans. Also, no new point source discharges have been proposed to any wetland resource areas.
- 45. The hydrology calculation has been updated based upon the current plans with the HSG edited as recommended.
- 46. The stormwater calculations for the 2-, 10-, and 100-year storm events have been included with the updated report. If requested the existing conditions model can be included, however, as noted above the plans have been designed to fully contain site runoff and zero discharge is proposed from the new development area.
- 47. Recharge of the new development area has been provided in full compliance with Standard 3.
- 48. The hydraulic conductivity was based upon the underlying soil texture encountered within the test pits.
- 49. The required documentation to verify compliance with Standard 3 has been included in the report.
- 50. The recharge calculation had utilized the highest rate of 0.6 inches just as a conservative measure. The report can be edited to HSG B if required.
- 51. Treatment of runoff from the development area has been provided in full compliance with Standard 3.
- 52. TSS treatment train calculations have been included in the Stormwater Report, and have shown an average annual TSS removal of 97%.
- 53. The revised site design has implemented pretreatment of at least 80% TSS removal prior to recharge, which exceeds the minimum 44% TSS removal requirement.
- 54. The project has been designed to meet the requirements of Standard 5, including the use of Proprietary Separators for oil/gas separation and a minimum 44% pretreatment prior to infiltration.
- 55. As recommended, all areas of potential fleet storage have been located on paved surfaces.
- 56. The site has been revised to provide full compliance with the stormwater standards for all of the development area.

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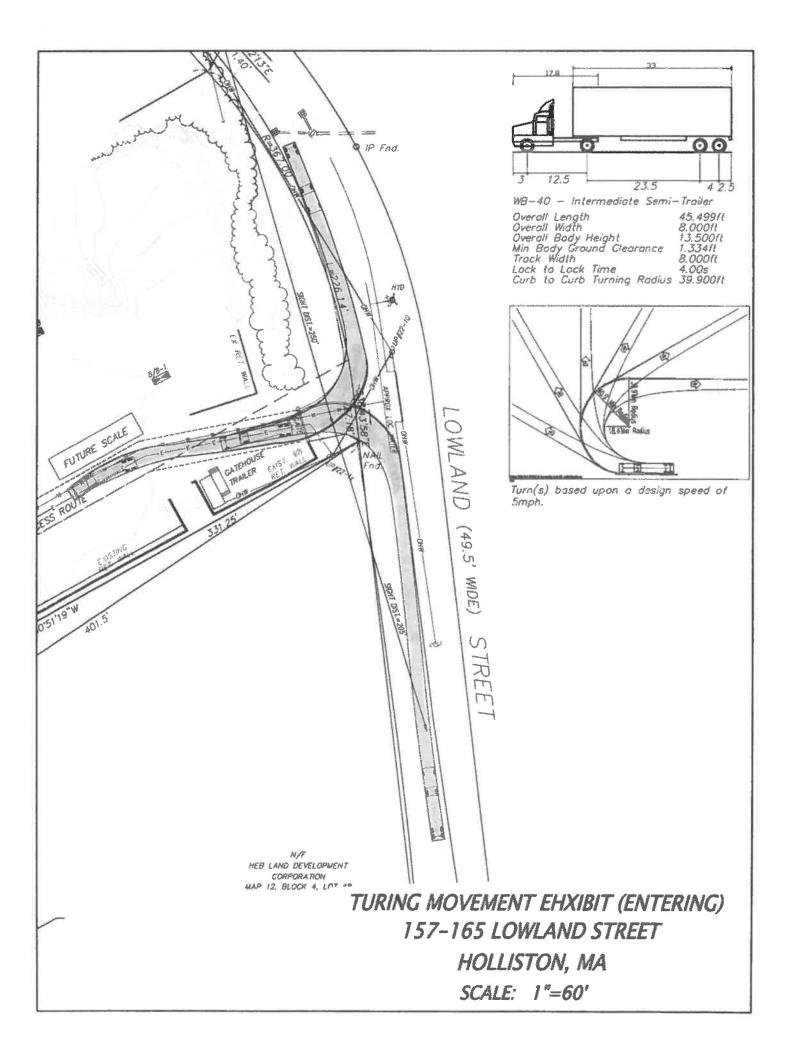
- 57. The Zone II has been noted in the report and accounted for in the design. The system has been sized for a 1" Water Quality Volume, and appropriate pretreatment including Proprietary separators designed to remove suspended solids and provide oil/gas containment.
- 58. See comment 57 above.
- 59. The site would be a mix of new and redevelopment. However, the development area has been designed to fully meet all of the Stormwater Standards.
- 60. As noted above full compliance has been provided.
- 61. The proposed site has been designed to fully contain runoff on-site and the NPDES GCP may not apply to the work. However, if requested a SWPPP could be prepared and submitted for review.
- 62. A construction entrance detail has been added to Sheet 3.
- 63. The proposed work within Lowland Street would be limited to trenching for utility connections. Additional erosion controls may not be warranted for this limited work area.
- 64. Timing of specific erosion control BMP's have been included on the updated plan. If requested a full construction sequence can be provided.
- 65. A long term Operation and Maintenance Plan is included in the updated Stormwater report.
- 66. An Illicit Discharge Compliance Statement is attached.

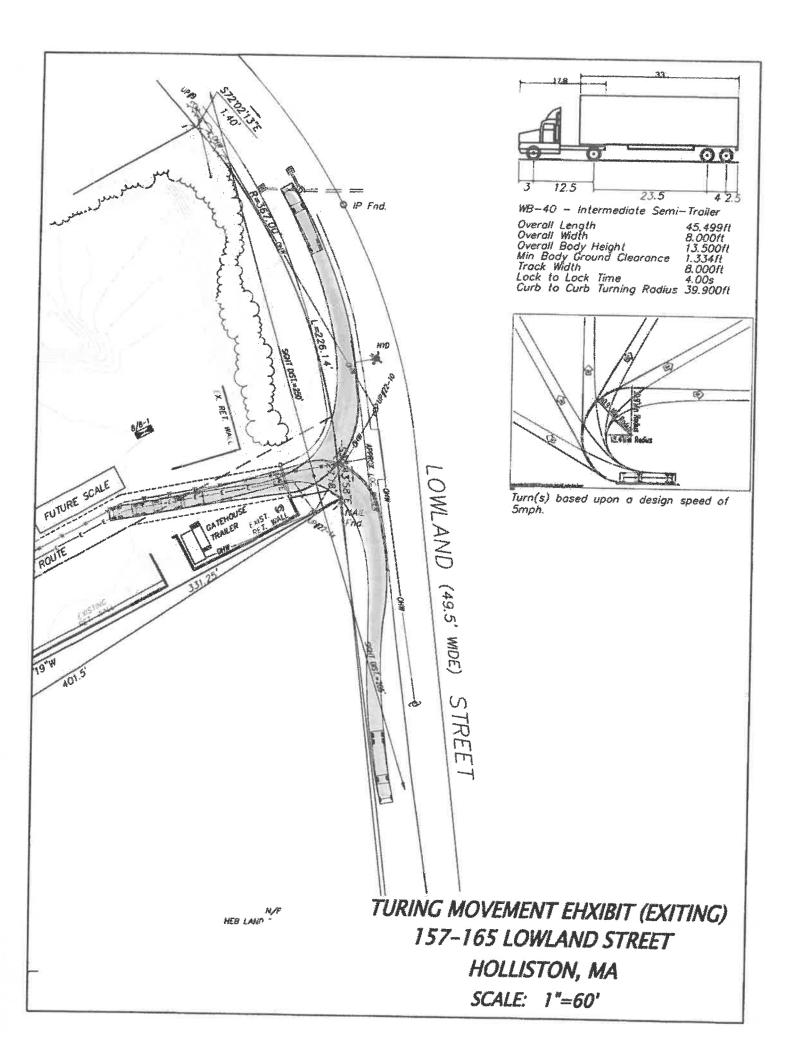
Should you have any questions or require additional information, please contact our office at 508-393-9727.

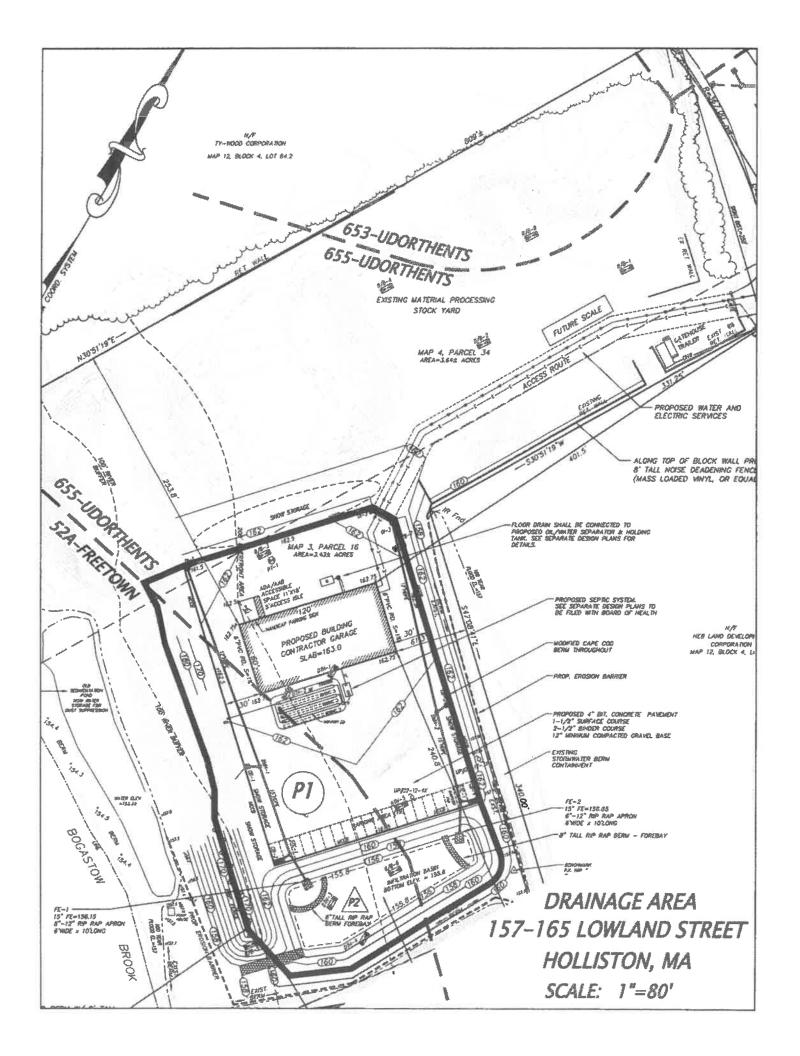
Sincerely

Connorstone Engineering, Inc.

Vito Colonna, PE







## **Illicit Discharge Compliance Statement**

Project:

Master Paving Corp.

157-165 Lowland Street

Holliston, MA

Date:

October 25, 2022

## Engineer's Certification:

To the best of my knowledge, the attached plans, computations and specifications meet the requirements of Standard 10 of the Massachusetts Stormwater Handbook regarding illicit discharges to the stormwater management system. Based upon site observations no detectable illicit discharges exist on the site, and future Illicit discharges are prohibited. The proposed facility will be serviced by an on-site subsurface sewerage disposal system per Board of Health requirements. All current documents and attachments were prepared under my direction and qualified personnel properly gathered and evaluated the information submitted.

Name: Vito Colonna	
Organization: Connorstone Engine.	nh
Signature: 150	$\sigma$
Date: 10/25/22	