

Town of East Lyme


P.O. DRAWER 519

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Town Engineer
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To: William Mulholland, Zoning Official
From: Victor Benni, P.E., Town Engineer 
Date: February 19, 2021
Re: 10 Colton Road (Earth Products Showcase)
Special Permit Staff Review

Information submitted by the Applicant which was considered in this review:

- Drawing Set (7-Sheets), Earth Products Showcase, 10 Colton Road, East Lyme, Connecticut, Prepared for: O&G Industries, Inc., Issue Date: February 11, 2021, Prepared by: BL Companies.
- Stormwater Management Report, For the Proposed: Earth Products Showcase, Located at: 10 Colton Road, East Lyme, Connecticut, Prepared for: O&G Building Group, O&G Industries, Inc., Date: February 11, 2021, Prepared by: BL Companies.

This office has reviewed the above referenced information and has the following comments:

1. Provide signed/sealed copies of the Drawing Set and Stormwater Management Report.
2. Provide Handicap sign (and detail) at the head of the proposed Handicap parking space.
3. Relocate the proposed granite posts outside of the designated 9'x18' parking space areas.
4. Provide pavement detail; to include base material/pavement depth & type.
5. Label the dimensions and provide detail for the proposed dumpster enclosure; include the depth and material for the base & pad and the enclosure type/height.
6. The Zoning Official may wish to consider requesting more information regarding the proposed bulk storage bins, i.e., material, maximum height, & etc.
7. The Zoning Official may wish to consider requesting more information regarding the proposed fence, gate, and columns being proposed at the access drive.
8. Provide details for the storm structures, i.e., catch basins, swirl chambers, Cultec units/inspection ports, & etc.
9. Provide a cross section detail for the proposed underground infiltration system.
10. Due to the extent of the proposed storm drain system it is recommended that existing on-site utilities be depicted on the plans (i.e. water, sewer, electric, telephone/cable, & etc.).
11. An appropriately sized Energy Dissipator should be considered at the outlet pipe leading from the proposed underground infiltration system. An outflow velocity exceeding 20 cubic feet per second is noted in the drainage calculations for the 100-year storm event. Provide detail and sediment & erosion controls for the Energy Dissipator.
12. The outlet pipe from the underground infiltration system has been proposed adjacent to the CT DOT right-of-way (I-95 Corridor). The Zoning Official may wish to consider notifying the CT DOT Drainage Department to inquire as to any permits/approvals that may be required by the State; the Engineering Department can assist with this communication.
13. According to the 2004 Connecticut Stormwater Quality Manual (the Manual) by CT DEEP, underground infiltration structures are alternatives to infiltration trenches and basins. Two (2) deep test pits and two (2) percolation tests should be completed in the area being considered for the underground infiltration system. According to the Manual, the bottom of the infiltration facility

should be located at least 3' above the seasonally high groundwater table or bedrock and should be designed to completely drain the water quality volume into the soil within 78 to 72 hours after the storm event.

14. Provide a location and detail for a Construction Access pad on the Sediment & Erosion Control Plan.

15. Provide for 6" of topsoil at Note #15, under the Construction Sequence (Sheet EC-2).

16. The Zoning Official may wish to consider requesting a Lighting/Lumens Plan. The plan should provide for method of shielding glare from adjoining properties indicating "full cutoff" fixtures. Full specifications sheets for light fixtures, poles and accessories should also be provided for approval by the Zoning Official prior to installation.

17. The Zoning Official may wish to consider requesting a Landscape Plan.

18. A *Pollution Prevention & Stormwater Quality Management* plan for the site should be considered; the stand-alone document would ultimately be submitted to the property owner and property management company. The plan should provide Best Management Practices (BMPs) for the management & maintenance of roof runoff, litter control, landscaped areas, driveway & parking lot sweeping/vacuuming, de-icing chemical use & storage, handling & stockpiling of snow, and stormwater treatment facilities.

19. The Stormwater Management Report (the Report) should be updated to include the findings of the soil investigation (DTP's & Percs) and calculations/sizing criteria for the energy dissipator, the hydrodynamic separators, and the required & proposed water quality volumes. Currently, the Report indicates that the required water quality volume matches the calculation or the proposed water quality volume. Assuming the proposed water quality volume calculation is based on the sizing/design criteria for the hydrodynamic separators, we might expect an excess in treatment for the proposed water quality volume calculation.

20. Consider requiring the Applicant to provide the Zoning Department with an As-built drawing upon the completion of construction. The As-built drawing should include the site improvements associated with the proposed development, the locations of all underground utilities, and all the components of the stormwater treatment system.

21. An erosion & sedimentation bond in the amount of \$8,000 is recommended by this Department to control erosion & sedimentation, as specified on the applicant's certified plan, or as conditions may require.