
**CONCORD PUBLIC WORKS
ENGINEERING DIVISION**

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133 Keyes Road
Concord, MA 01742



DATE: 07/19/2022

MEMORANDUM

TO: Elizabeth Hughes, Town Planner
COPY: Alan Cathcart, Director of Public Works
VIA: Steve Dookran, P.E., Town Engineer
FROM: Justin Richardson, P.E., Assistant Town Engineer
SUBJECT: 48Y Fitchburg Turnpike: ZBA Special Permit

Concord Public Works (CPW) Engineering Division has reviewed the ZBA Special Permit Application, Plans, Calculations and Reports for 48Y Fitchburg Turnpike prepared by Civil Design Group, LLC, dated June 9, 2022 from the Applicant Quarry North Road LLC. The Engineering Division offers the following:

Engineering Division Comments (07/20/2022):

1. Please provide a Stormwater Pollution Prevention Plan (SWPPP) and make the appropriate filings with National Pollutant Discharge Elimination System (NPDES) for the site alterations that are to be performed.
2. The traffic analysis provided indicates an increase in traffic, but it is unclear how much of the increased traffic will be traveling eastbound into the Town of Concord. Please include that information in the traffic analysis.
3. Are stop signs still necessary where Emery Lane and Cold Brook Drive meet Rookery Lane?
4. The inside radius of the roadway at the east and west corners is 30-feet. Please show vehicle turning movements around these curves to prove that delivery trucks (including tractor trailer trucks) and emergency services can make the turns.
5. Rookery Lane will remain private in perpetuity and can never be petitioned for street acceptance by the Town of Concord. Property owners abutting the roadway or an established homeowner's association are responsible for all required maintenance including but not limited to snow removal, roadway maintenance, and drainage maintenance in accordance with the Long Term Operation and Maintenance Plan (LTOMP).
6. Inspection reports from the LTOMP are to be submitted to the CPW Engineering Division annually.
7. The bio retention area shall comply with CPW Design and Construction Standards, Sections 2.2.4 Structural Best Management Practices, subsections B and C. Currently, the basin does not have an emergency overflow and the appropriate amount of freeboard.
8. The Subsurface Infiltration system is in close proximity to house #6's leach field. Please verify that this meets all State and Local requirements for proximity.



9. Please add Deeps Sump and Hooded Catch Basins to your TSS Removal Calculation Worksheet. Also, add a grass strip to the worksheet for the portions of driveways flowing to the bio-retention basin.
10. The stormwater report includes "TABLE 2: PEAK FLOW RATE COMPARISON". A similar table should be included that states the pre and post development volumes of discharge as is required under the Concord Public Works Design & Construction Standards & Details.
11. Please show Time of Concentration information (slope, length, designated) lines on Pre and Post Development Watershed plans.
12. The Stormwater Report provided rational method calculations, but Concord Public Works Design & Construction Standards & Details, Section 2 - Drainage Standards requires "rational method for a 100 year frequency storm event and Manning's equation for open channel flow". The Hydraflow SSA shows flow rates in cfs, but it does not show that the 100-year storm event was used. Please update the Hydraflow analysis to include a column for the rainfall event that was used.
13. Was soil testing on site performed in the area of the Bio-Retention basin? And if so, was a Town of Concord representative present to observe the testing?
14. The Engineering Divisions reserves the right to comment on future submittals related to any new or previously submitted information provided to the Town for review including the Definitive Subdivision Plan and supporting documentation.