



CITY OF MELROSE

DEPARTMENT OF PUBLIC WORKS
*Administration & Engineering–Water–Sewer–Facilities
Park & Forestry–Highway–Sanitation–Cemetery–Fleet*

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MEMORANDUM

To: Denise Gaffey, City Planner & Director of Community Development
CC: Lori Masa, Senior Planner

From: Vonnie Reis, P.E., City Engineer
Jay Coy, P.E., PMP, Deputy City Engineer

Date: May 15, 2024

Re: 164 Essex Street – Comprehensive Permit Review

This memorandum summarizes comments from the Department of Public Works on the proposed Chapter 40B Comprehensive Permit at 164 Essex Street, based on the plans and documentation received by this office on April 23, 2024 and the subsequent meeting held with the applicant on May 8, 2024.

The following issues, concerns, and considerations have been identified during the course of our review of the project plans and documentation:

Roadway/Property Considerations

1. Mark outs of utilities will be required prior to any site work both onsite and within the right-of-way.
2. Any disruption or damage to sidewalks and/or pavement markings due to the project will necessitate replacement with new sidewalks and pavement markings meeting the City's standards.
3. Due to the excellent condition of the roadway and the location of the project, curb-to-curb restoration on Essex Street will be required where any work is performed. Specific details of this restoration will be dictated by the Engineering Division via the right-of-way permit that will be required to be obtained for the project.
4. We understand from the application that bike racks are proposed as part of the project. We support the inclusion of bike racks, especially given the proposed uses in the building.

5. A traffic study was submitted and reviewed. DPW agrees with the methodology.
6. The traffic study recommends installing a Stop Sign on Vine Street at the Essex Street intersection. Any proposed changes in traffic control will require Traffic Commission approval. Should the stop sign be pursued, please submit a request in writing to jrosa@cityofmelrose.org to be on an upcoming Traffic Commission agenda. The Traffic Commission meets quarterly, in March, June, September, and December.
7. The location of the final curb cuts should be reviewed in the field with the Engineering Division prior to installation.
8. Pedestrian access within the right-of-way during construction must be clearly marked with signage when detoured.
9. Please note that it is the property owner's responsibility to shovel snow from the sidewalks abutting the property and to handle onsite snow plowing/removal. No snow from the private property shall be placed within the City's right-of-way.

Water System Comments

10. Any required backflow prevention devices must be registered for routine inspections with the City's subcontractor, Water Safety Services Inc. in Woburn, MA. The applicant must contact Bob Heitz or Joe Heitz at Water Safety Services to add this address to the inspection list should cross-connection controls be required. They can be reached at 781-932-8787.
11. The new water service connections will require a new connection fee through the Engineering Division.
12. No unmetered water use during construction is allowed. If construction water is needed from the adjacent hydrant, this must be coordinated with the Melrose Fire Department and Water Division.
13. If the units of this building will be rentals, all water and sewer usage will fall under one account. However, we recommend private submetering within the building to allow for individual unit water usage to be measured and to encourage conservation. If submetering is performed, we recommend all meters to individual units be located in a common location, preferably close to the master meter for the property, to minimize discrepancies. If the residential units will be condominiums, separate accounts are allowable provided all related state law requirements for submetering are met.
14. The utility plan appropriately shows two separate new fire and domestic water services. Water service sizing is not presently shown; the applicant should provide supporting documentation for

the proposed sizes of the domestic and fire services. Oversized domestic services can create water quality problems, therefore the sizing should be based on estimated water use. Connections should be performed using wet taps; planned disruption of water service will not be allowed.

Sewer System Comments

15. The applicant should coordinate with MWRA for any capacity and connection issues.
16. The applicant will be required to pay a one-time infiltration/inflow (I/I) fund contribution for any increase in proposed sewer flows compared to existing conditions. The current cost for this fee is \$6.89 per gallon-per-day (gpd), calculated using Title 5 flows to determine the pre- and post-construction conditions. Assessor's Department records will be used by the Engineering Division to make the final determination regarding flows before and after construction.
17. The plans show a connection to the sewer main from the garage drain. The applicant will be required to submit a maintenance schedule for the oil/water separator and will be required to maintain the structure according to the schedule. Documentation of such must be submitted to the City. Please also ensure that the grades are designed and constructed such that no stormwater will run off to the garage drain.
18. The applicant will require an 8(m) Permit for work in proximity to MWRA utilities. Any such permit is the responsibility of the applicant.

Stormwater Management

19. The Engineering Division has reviewed the proposed stormwater management system and associated documentation. The stormwater analysis submitted indicates an overall increase in impervious area from 66.0% to 66.2%, with a runoff area of 1.15 acres. The proposed stormwater management system is sized to decrease peak runoff rates from the 2-, 10-, 25-, 50-, and 100-year 24-hour storms, compared to existing conditions.
20. The stormwater report claims a reduction in impervious area but the HydroCAD calculations show a slight increase with a total of 33,215 SF, which also does not match the recharge and water quality volume calculations. Please note, pervious pavements should be included in the total impervious area calculations.
21. The grading and drainage plans show an inline catch basin (DMH5 to CB1). All CB's shall be offline structures to reduce resuspension of any sediment in the catch basins.
22. All stormwater pipe sizes shall be a minimum of 12" in diameter.
23. The soil logs are not included in the stormwater report. Please provide and confirm ESHGW.

24. The property owner will be responsible for all maintenance requirements for each of the elements of the stormwater management system. Evidence of proper maintenance will be required to be submitted to the City annually. The City should have the right to enter and maintain all stormwater systems if adequate maintenance of the systems is not being performed, with costs assumed by the owner.
25. The Engineering Division supports the short- and long-term mitigation measures and operations and maintenance requirements provided in the stormwater report. Should the owner not perform the required maintenance, the City reserves the right to perform such maintenance at the property owner's expense. Furthermore, records demonstrating compliance with these requirements may be requested at any time by the City and must be provided by the property owner upon request.

Other Utility Comments:

26. The plan should show the location of existing and proposed gas infrastructure, if applicable, and shall meet any associated permit requirements for the installation of such utilities.
27. A grant-of-location will be required from the Melrose City Council if new electrical conduit is required in a different location beneath the right-of-way.
28. The applicant must work with National Grid to finalize the electrical and gas connections to the property. The applicant will need to confirm with National Grid that they have adequate capacity to handle the gas needs of the property. The project must also be careful to adhere to all setback requirements from overhead electrical wires, as indicated by National Grid.
29. No staging areas have been shown on the plans.
30. The Engineering Division reviewed the Construction Management Plan and has no comments.
31. Given the location of the proposed project, within walking distance from several public transportation options, residents of the development should be encouraged, possibly through incentives such as free MBTA passes for a period of time, to use public transportation.
32. Due to the close proximity of the MBTA, an MBTA ROW permit may be required.

Other Comments

33. Species and placement of street trees Street should be selected such that they are not likely to lift the new sidewalks in the future.

34. The application does not indicate what lighting will be installed. Please submit a lighting and lighting impact plan. High energy efficiency fixtures should be used. The City replaced all street lights with new Light Emitting Diode (LED) fixtures. For your information, the City has selected fixtures from Acuity, Series ATBS, Catalog #ATBS-B-MVOLT-R2-3K-MP-AO.
35. Street opening and utility permits will be required through the Engineering Division and can be obtained by contacting 781-979-4172. An engineer from the City will be the applicant's point of contact throughout permitting and construction for approvals and inspections related to roadway, sidewalk, or utility work. Construction inspection will be required for all work performed on utilities or within the City's right-of-way.
36. The Owner shall be responsible for any police detail costs related to the performance of the work. Details shall be provided as dictated by the Melrose Police Department.
37. At the conclusion of construction, an as-built drawing showing all utilities as installed (including both rims and inverts, as well as any abandoned utilities remaining in place) shall be submitted to the Engineering Division, **in both PDF and CAD formats**, for our records. As-built plans shall include the final locations (and ties to water and sewer services), materials, and sizes of all utilities and other features as deemed necessary by the City. Any revisions requested by the City shall be made, and final hard copies and electronic files must be submitted of the final as-built plans.

Thank you for the opportunity to submit comments on this project.