



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: Emma Schnur, Senior Planner, OPCD

From: Elena Proakis Ellis, DPW Director/ City Engineer
Jason Coy, Deputy City Engineer

Date: July 15, 2020

Re: Site Plan Review: Multi-Use Building 272 Tremont Street

This memorandum summarizes comments from the Department of Public Works on the multi-use building at 272 Tremont Street, based on the plans and documentation received by this office on June 11, 2020. These include the proposed Drainage Calculations and Stormwater Management Plan dated January 15, 2020, the architectural and engineering plans dated April 1, 2020, the construction management plan, and the traffic management plan.

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

Right-of-way Comments

1. Any work performed within the City's right-of-way will require a permit from the DPW Engineering Division by a bonded and insured contractor.
2. The existing curb cut is contiguous with that of the adjacent garage, resulting in a very wide opening. If it is possible to separate the two openings while leaving adequate width driving distance at both entrances, this is preferred. Any changes to the proposed curb cuts or addition of radius blocks to separate the two driveways should be reviewed in the field with the Engineering Division prior to installation.
3. All elements within the right-of-way must meet any applicable ADA requirements for accessibility.
4. Mark-outs of utilities will be required prior to any site work, both onsite and within the right-of-way.

5. Any disruption or damage to sidewalks, pavement, and/or pavement markings due to the project will necessitate replacement with new, meeting the City's standards.
6. Based on the City's 2020 Roadway Condition Assessment, Tremont Street in this area is in "good/excellent" condition. Due to the good condition of the roadway, curb-to-curb restoration on Tremont Street will be required where any work is performed from one-foot beyond the limits of trenches at each end of the paving area. 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 but will likely include a mill and inlay.
7. The construction management plan has been reviewed, and we concur with the items specified in the plan, including items pertaining to offsite parking for employees, maintenance of safe pedestrian access, and performing utility work during off-peak daytime hours. Please also note that any applicable COVID-related requirements will need to be met during construction.
8. 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 and the proximity to the City's north-south bike route on Tremont Street.
9. The traffic management plan has been reviewed. We are pleased to see the inclusion of covered bike racks and the provision of MBTA passes for one month to all new residents, to encourage the use of nearby transit options, etc. We recommend that the passes provided allow for travel on the MBTA commuter rail from Melrose Highlands to North Station.
10. All work must be performed to the City's standards for both roadway and sidewalk areas, and any disturbed areas, including both within and outside the work areas shown on the plans, shall be restored to the City's satisfaction. All sidewalks along the project's frontage shall be replaced at the conclusion of site work to concrete sidewalks in accordance with City standards.
11. Please note that the Melrose Traffic Code prohibits parking on Tremont Street along the frontage of this building.
12. 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.
13. Given the size of the building, it is the applicant's responsibility to provide trash and recycling hauling from the building. The building should include an area for storage of recycling, to encourage recycling. Items that are not picked up curbside can be brought to the City Yard by residents to be recycled.
14. Pedestrian access must be maintained throughout construction and must be protected during demolition of the existing building to protect public safety. Bicycle access on Tremont Street should also be maintained, along the City's north-south bike route.
15. Any police and fire details required as part of the project are the responsibility of the applicant.

16. The City encourages the planting of trees along the frontage of the project as shown. Installation of any plantings in the right-of-way should be coordinated with the Engineering Division prior to their installation. Species should be selected such that they are not likely to lift sidewalk panels.

Drainage Calculations and Stormwater Management

17. Soils on the site are classified as Urban Land, and thus a Hydrologic Soil Group of C was used to calculate runoff. However, infiltration calculations used a Rawls Rate of 2.41 in/hr, which coincides with a hydrologic soil group of A. Please revise the calculations to use a Rawls rate for C soils or conduct an infiltration test on site to confirm actual site conditions.
18. The Erosion and Sedimentation Control section references haybales and straw wattles. Please clarify which will be used and show them on a plan. If bales are to be used, please reference strawbales instead. Haybales can contain seeds so we prefer strawbales. Please add the erosion and sedimentation control to the plans.
19. Please include pre-and-post impervious areas and water quality volume calculations.
20. The 36-inch perforated pipe infiltration system has a static volume of 421 CF. All storm events show a surplus of runoff flowing into the system. Please explain how the overflows are managed.
21. The Cultec infiltration system has a static volume of 394 cf. The 25- and 100-year storm events have a surplus of runoff flowing into the system. Please explain how the overflows are managed.
22. Please include rainfall maps in the appendices. We request that the applicant use the NOAA Atlas 14 rainfall data.
23. Melrose measures projects according to language in the zoning code pertaining to Site Plan Reviews that states that, to the extent practicable, stormwater best management practices “shall be sized to capture, retain, and percolate to ground all runoff from impermeable surfaces generated by the five-year, twenty-four hour storm event. Preferred BMPs shall include, but not be limited to, constructed wetlands, pocket wetlands, rain gardens, vegetated swales, retention/detention ponds, and subsurface leaching systems.” Furthermore, the code references other low-impact design elements such as “porous pavements, bioretention cells, infiltration trenches, rainwater collection cisterns, and other design methods that maximize the use of landscaped areas for stormwater control and promote the reuse of runoff.” The applicant should provide a written statement indicating whether the project meets these requirements.
24. The proposed development is required to meet all components of the City’s Stormwater Management Plan. In particular, the applicant should be aware of the construction site monitoring that will take place to ensure sedimentation and erosion controls are adequate.
25. 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.

26. Any areas receiving runoff from outdoor pervious area should include treatment for oil/grease.
27. The Operations and Maintenance plan for all stormwater systems must include a checklist of the manufacturer's recommendations and the specified maintenance frequency, for the future owners to use as a guide.

Site Layout Plan

28. Please provide an auto-turn, or similar, analysis showing the vehicle paths for all applicable vehicles for the following conditions:
 - a. Entering and exiting the site
 - b. Entering and exiting the parking stalls
 - c. Entering and exiting the building parking area from and onto the driveway

Grading, Drainage, and Utility Plan

29. Please label all pipe sizes, materials, and slopes.
30. CB#2 shows 1.8 feet (21.6") from rim to invert. However, the shallow cover catch basin detail shows 14" to the top of pipe. Assuming 12" HDPE, rim to invert would be approximately 2.25' (27") minimum. Please confirm the constructability of this structure.
31. Please confirm minimum rim to inverts for the CDS/treatment units.
32. All frames, covers, and grates shall meet Melrose current casting material specifications. Please specify the models to be used on the details.
33. Please show the location of the new valves and curbstops on the proposed water/fire lines.
34. Please confirm that all proposed utility crossings will not impact the MWRA sewer.
35. Please note that crossing the MWRA sewer will require an 8(m) permit prior to construction. This will be the responsibility of the applicant.

Sewer System Comments

36. Please show all sewer service connections, sizes, slopes, and pipe materials. Please include sewer service connection and clean out details on the plans. The plan appropriately shows a new sewer service extending from the proposed building to the City sewer main.
37. Calculations should be provided to confirm the appropriateness of the size of the proposed sewer service to handle future peak flows.
38. All frames, covers, and grates shall meet Melrose current casting material specifications. Please specify the models to be used on the details.

39. If any garage drains are proposed to be connected to the sanitary sewer, an oil/water separator must be included. The maintenance schedule and protocol for this structure should be included in the O&M plan, and documentation of its cleanout will be required by the City.
40. If a restaurant use is contemplated for the commercial space, any grease traps must meet all state and local requirements to ensure grease is not improperly discharged to the sanitary sewer system.
41. The existing sewer service must be cut and capped at the sewer main, unless the same connection point is proposed to be used.
42. Prior to the issuance of any building permits, the applicant will be required to pay a one-time infiltration/inflow (I/I) fund contribution. The current cost for this fee is \$6.89 per gallon-per-day (gpd), calculated using the Title 5 flow of 110 gallons per bedroom per day. For any non-residential space, Title 5 calculations will also be used to determine both existing and proposed flows. The final calculations and fee assessment will be made by the Engineering Division based on floor plans submitted by the applicant for the proposed conditions, and Assessor's Department records for the current conditions.

Water System Comments

43. Our records indicate that the property contains a new water meter. Please ensure that any water meters installed or replaced as part of this project include the radio-read technology that is presently the City's standard.
44. 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.
45. The site plans appropriately shows two separate new domestic and fire services. The site plans show a proposed new 2-inch domestic service, as well as a 4-inch fire service, connecting to the water main on Tremont Street. This work should be performed using wet taps; planned disruption of water service will not be allowed.
46. The existing water service must be cut and capped at the main with the corporation shut off.
47. Calculations should be provided supporting the proposed size of the water services (both domestic and fire). Oversized domestic services can create water quality problems, therefore the sizing should be based on estimated water use.
48. 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. Please note that the Engineering and Water and Sewer Divisions have a checklist for demolition requirements which includes information about metering construction water usage. This checklist must be obtained and returned signed to the Engineering Division prior to our sign-off on any demolition permits.

49. 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.
50. The applicant should perform a flow test to confirm that adequate pressure and volume exist for the proposed fire service.
51. Please show all water service connections, sizes, and pipe materials. Please include a water service connection detail on the plans. All services should maintain at least a 10-foot separation from sewers.

Comments on Detail Sheets

52. Please make sure all text is legible. There are a few cases of lines and leaders going through text.
53. Please include the details noted above.

Other Utility Comments

54. The applicant must work with National Grid to finalize the electrical and gas connections to the property. Such connections shall meet any applicable permit requirements and should be added to the drawings. The project should also be careful to adhere to all setback requirements from overhead electrical wires. The proponent should work with National Grid early in the process to confirm the availability of the capacity of the necessary utilities.
55. A grant-of-location may be required from the Melrose Board of Aldermen if any new electrical conduit is required beneath the right-of-way.

Other Comments

56. Any/all alterations to utilities serving the property will require that permits be obtained by a bonded and insured contractor through the Engineering Division of Public Works. This also includes any trench work required and all work within the right-of-way. Permits can be obtained by calling 781-979-4172.
57. 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 for our records. As-built plans shall include the final locations, 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 review this project.