# CITY OF NEWTON Department of Public Works ENGINEERING DIVISION

#### **MEMORANDUM**

To: Council Rick Lipof, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – 280 Nevada Street

Date: September 19, 2023

CC: Lou Taverna, PE City Engineer

> Barney Heath, Director of Planning Jennifer Caira, Deputy Director Katie Whewell, Chief Planner Alyssa Sandoval Deputy Chief Planner

Michael Gleba, Sr. Planner

Scott Matthews, Committee Clerk

In reference to the above site, I have the following comments for a plan entitled:

## TOPOGRAPHIC SITE PLAN NEWTON, MASSACHUSETTS

SHOWING PROPOSED CONDITIONS AT #280 NEVADA STREET

SCALE: 1in.=10ft. DATE: DATE: APRIL 25, 2023

Prepared by: VTP Associates Inc.

#### **Executive Summary**:

The proposed permit entails the demolition of an existing single-family dwelling, a built in pool and ancillary building on a 29,550 square foot [0.67 acre] lot, and the construction of three separate building each with two units. The site has a high point elevation of 55 feet near Nevada Street at the front of the lot and slopes to a low point at elevation 45-feet, towards the rear of the lot. The property has just over 80-feet of frontage on Nevada Street to the southwest, and residential homes along the east & west and commercial property to the

280 Nevada Street Page 1 of 7 northeast, and a City Drain easement. The existing conditions plan indicates that the abutting contractor has encroached upon this property and stores materials.



Currently access to the site is from two driveway aprons providing a "horseshoe" driveway in the front of the house and a long driveway along the southeast property line.

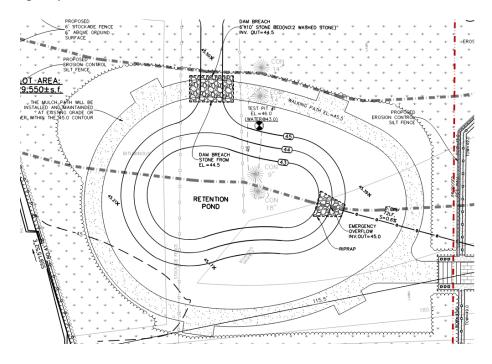


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Looking towards Nevada St. this driveway will be eliminated.

Currently the site has no stormwater collection system, runoff from the roof and paved surfaces sheet flows towards the rear of the lot to the wooded & grassy area near the low point. The engineer of record has designed a stormwater collection and three infiltration system for the development. A series of catch basins and infiltration units will capture runoff and improve stormwater quality and reduce stormwater runoff. Infiltration system #3 will have an overflow connection to a retention pond. This retention pond is the remnants of *Silver Lake* with an emergency overflow to the wooded area.



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The proposed Operations and Maintenance plan is acceptable for the design intent; however, it should be updated to include long-term maintenance of the retention pond. Based on the proposed elevations the maximum depth of water retained in the pond is approximately 1.5-feet.

Access for the six units will be from a new driveway along the northern property line. The driveway will be 18-feet wide total that will include a 4-foot-wide paver walkway. To facilitate the construction of the driveway a retaining wall of varying height is to be built beginning opposite the rear corner of unit one and extending approximately 185 -feet towards the backyard then turns 90-degrees and is 52 feet long, then extend on an angle for approximately 43 -feet, then turns parallel to the property line with (#288 Nevada Street) for length of 171 feet.

New municipal sewer & water services will be extended for the six units, for fire protection a fire hydrant is proposed.

### **Construction Management**:

- 1. A construction management plan is needed for this project. At a minimum, it must address the following: staging site for construction materials and equipment, parking for construction workers vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of the general contractor. It shall also address anticipated dewatering during construction, site safety & stability, siltation & dust control and noise impact to abutters.
- 2. Stabilized driveway construction entrance(s) will be required for the duration of the construction which will provide a truck wash to prevent tracking of mud and silt onto City streets.
- Catch basins within and downstream of the construction zone will be required to have siltation control installed for the duration of the project and must be identified on the site plan.

#### **Drainage**:

The Operations and Maintenance (O&M) plan for the long-term maintenance of the
proposed stormwater management facilities needs to be updated as recommended and
submitted for review. Once approved the O&M must be adopted by the
applicant/property owner, incorporated into the deeds; and recorded at the Middlesex
Registry of Deeds. A copy of the recording instrument shall be submitted to the
Engineering Division.

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2. It is imperative to note that the ownership, operation, and maintenance of the proposed drainage system and all appurtenances including but not limited to the drywells, catch basins, trench drains, and pipe(s) are the sole responsibility of the property owner(s).

#### **Environmental**:

- 1. Has a 21E Investigation and report been performed on the site, if so, copies of the report should be submitted to the Newton Board of Health and Engineering Division.
- 2. Are there any existing underground oil or fuel tanks? Have they been removed, if they have been, evidence of the proper removal should be submitted to the Newton Fire Department and the Board of Health.

## Sanitary Sewer & Domestic Water Service(s):

- Existing water and sewer services to building(s) shall cut and capped at the respective
  mains and completely removed from the main(s) and its entire length and properly
  backfilled. The Engineering Division must inspect and approve this work, failure to
  having this work inspected will result in delay of issuance of the new Utility Connection
  or issuance of a Certificate of Occupancy.
- 2. All new sewer service(s) shall be pressure tested in accordance with the City Construction Specifications & Standards and inspected via Closed Circuit Television CCTV inspection after installation is completed. A copy of the video inspection and written report shall be submitted to the City Engineer or his representative. The sewer service will NOT be accepted until the two methods of inspection are completed AND witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until these tests are completed to the satisfaction of the City Engineer.
- 3. All sanitary sewer manhole(s) shall be vacuum tested in accordance to the City's Construction Standards & Specifications, the sewer service and manhole will NOT be accepted until the manhole(s) pass the testing requirements. All testing MUST be witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until this test is completed to the satisfaction of the City Engineer and a written report of the test results is submitted to the City Engineer.

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- 4. With the exception of natural gas service(s), all utility trenches within the right of way shall be backfilled with Control Density Fill (CDF) Excavatable Type I-E up to within 18-inches of the asphalt binder level, after which Dense Grade Gravel compacted to 95 % Proctor Testing shall be placed over the CDF. Details of this requirement is the Engineering Division website "Standard Construction Details".
- 5. For water quality issues a fire hydrant will be required at the end of the proposed water main/service. This hydrant will be utilized for flushing out the main as required.
- 6. All water services shall be chlorinated, and pressure tested in accordance with the AWWA and the City Construction Standards & Specifications prior to coming online. These tests MUST be witnessed by a representative of the Engineering Division.
- 7. Approval of the final configurations of the water service(s) shall be determined by the Utilities Division, the engineer of record shall submit a plan to the Director of Utilities for approval.

#### Infiltration & Inflow:

Will be addressed via a separate memo for the six-units.

#### General:

- 1. 5 Year Moratorium if at time of construction the roadway is under a 5-year moratorium, the roadway must be milled and paved gutter-to-gutter for a distance of 25 feet in each direction from the outermost trenches.
- 2. All trench excavation shall comply with Massachusetts General Law Chapter 82A, Trench Excavation Safety Requirements, and OSHA Standards to protect the general public from unauthorized access to unattended trenches or excavations. Trench Excavation Permit is required prior to any construction. This applies to all trenches on public and private property. *This note shall be incorporated onto the final plans*.
- 3. All tree removal shall comply with the City's Tree Ordinance.
- 4. The contractor of record is responsible for contacting the Engineering Division and scheduling an appointment 48-hours prior to the date when the utilities will be made available for an inspection of water services, sewer services and drainage system installation. The utility in question shall be fully exposed for the Inspector to view, backfilling shall only take place when the City Engineer's Inspector has given their approval. This note shall be incorporated onto the final plans.

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- 5. The applicant shall apply for a Building Permit with the Inspectional Services Department prior to ANY construction.
- 6. Before requesting a Certificate of Occupancy, an As Built plan shall be submitted to the Engineering Division in both digital and paper format. The plan shall show all utilities and final grades, any easements and improvements and limits of restoration. The plan shall include profiles of the various new utilities including but not limited to rim & invert elevations (City of Newton Datum), slopes of pipes, pipe materials, and swing ties from permanent building corners. The as built shall be stamped by both a Massachusetts Registered Professional Engineer and Registered Professional Land Surveyor. Once the As built plan is received the Engineering Division shall perform a final site inspection and then make a determination to issue a Certificate of Occupancy. This note shall be incorporated onto the final plans.
- 7. All site work including trench restoration, sidewalk, curb, apron, and loam border (where applicable) shall be completed before a Certificate of Occupancy is issued. *This note shall be incorporated onto the final plans*.
- 8. The contractor of record shall contact the Newton Police Department 48-hours in advanced and arrange for Police Detail to help residents and commuters navigate around the construction zone.
- 9. If any changes from the final approved design plan that are required due to unforeseen site conditions, the contractor of record shall contact the design engineer of record and submit revised design and stamped full scale plans for review and approval prior to continuing with construction.
- 10. The engineer of record shall add the following attestation to the plans when applying for a building permit:

I certify that the construction so shown was inspected prior to backfill and that all work conforms with the Approved Plan and meets or exceeds the City of Newton Construction Standards.

## Signature

Note: If the plans are updated it is the responsibility of the applicant to provide all City Departments [ISD, Conservation Commission, Planning and Engineering] involved in the permitting and approval process with complete and consistent plans.

If you have any questions or concerns, please feel free to contact me at 617-796-1023

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