



100 GROVE ST. | WORCESTER, MA 01605

March 21, 2022

Shrewsbury Planning Board
100 Maple Avenue
Shrewsbury, MA 01545

T 508-856-0321

F 508-856-0357

gravesengineering.com

**Subject: 571 Boston Turnpike
Site Plan Review**

Dear Planning Board Members:

We received the following documents in our office on March 8, 2023:

- Correspondence from Bohler to Shrewsbury Planning Board dated March 6, 2023 Re: Drainage Memo – Proposed Financial Office Building, 571 Boston Turnpike, with attached hydrology calculations.
- Plans entitled Proposed Site Plan Documents for Shrewsbury Crossing II LLC, Proposed Financial Office Building Development, 571 Boston Turnpike, Town of Shrewsbury, Worcester County, MA dated March 6, 2023, prepared by Bohler for Shrewsbury Crossing II LLC. (27 sheets)

Graves Engineering, Inc. (GEI) has been requested to review the plans and supporting materials for compliance with the Rules and Regulations Governing Special Permits and Site Plan Review with amendments through September 7, 2017; Zoning Bylaw, Town of Shrewsbury, Massachusetts with amendments through May 21, 2022; Massachusetts Department of Environmental Protection (MassDEP) Stormwater Handbook, and standard engineering practices.

Our comments follow:

Rules and Regulations Governing Specials Permits and Site Plan Review

1. The plans need to identify the horizontal datum used, which is required to be Massachusetts Coordinate System, North American Datum 1983. (Article IV §1.g(2))
2. The locus map needs to include the boundary line between the Commercial Business and Townhouse Type MF-2 zoning districts north of the project site. (Article IV §1.g(4))
3. The plans need to identify snow storage areas. (Article IV §1.g(15))
4. The plans need to include any outdoor lighting around the proposed building. Neither the site plans nor the building plans show any outdoor lighting. (Article IV §1.g(15))
5. The plan set needs to include a photometric plan. (Article IV §1.g(22))
6. GEI understands that the Planning Board will review any architectural elevation and floor plans. (Article IV §1.g(23))

Zoning By-Law

7. GEI has no issues with the number of parking spaces for the proposed building and the existing building. (Article VII §D.2)
8. Article VII, Section D.3.g states that “off-street parking... shall be paved to the current specifications required under the Planning Board’s Subdivision Rules and Regulations.” Per Sections V.B.3 and V.B.5 of the Rules and Regulations Governing the Subdivision of Land in Shrewsbury, Massachusetts, a minimum of 18 inches of gravel, 2.5 inches of binder course asphalt, and 1.5 inches of top course asphalt are required. The Pavement Section construction detail on Sheet C-901 depicts heavy duty and light duty pavement requirements, with heavy duty requiring 16 inches of gravel, 2 inches of binder course, and 1 inch of top course. The plans need to be revised to indicate whether the proposed pavement is heavy duty or light duty, and to correlate with the aforementioned requirements. (Article VII §D.3.g)

Hydrology & Stormwater Management Review

9. GEI reviewed the accompanying hydrology calculations and found them to be in order.
10. Compliance with the MassDEP Stormwater Handbook is reasonable provided that the two following comments are addressed.
11. Sheet C-301 shows that the proposed drainage system will connect to the existing drainage system via a catch basin-to-catch basin configuration. To better mimic the amount of tributary area to each existing catch basin and to not compromise total suspended solids removal capacity in the catch basins, the connection point to the drainage system should be to the drain line located just south of the currently proposed connection point. A new drain manhole will need to be added at the connection point.
12. Sheet C-401 of the site plans and Sheet 3 of the ALTA/NSPS Land Title Survey Plans show a catch basin (labeled “GRT=528.05”) along the western part of the southern curb line with the note “NVP-FOW.” NVP represents *no visible pipe*, and it appears FOW may represent *full of water*. This catch basin is at the lowest point in the parking lot and the catch basin and/or its outlet pipe are likely clogged. The property owner should inspect the catch basin and its outlet pipe and take necessary corrective actions to return the catch basin to good working order.

General Engineering Comments

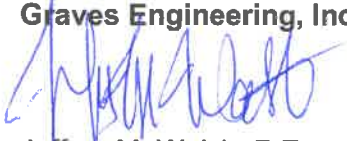
13. On Sheet C-401 east of the proposed dumpster, a proposed 536 elevation contour line and proposed 535 elevation contour line connect to an existing 536 elevation contour line. The proposed contours need to be revised to connect the proposed 535 contour with an existing 535 contour.

General Comments

14. GEI understands the Shrewsbury Department of Public Works Water & Sewer Division will review the proposed water and sewer infrastructure.

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,
Graves Engineering, Inc.



Jeffrey M. Walsh, P.E.
Principal