



500A Washington Street, Quincy, MA 02169

MEMORANDUM

TO: Town of Southborough
Zoning Board of Appeals
9 Cordaville Road
Southborough, MA 01772

FROM: Lucas Environmental, LLC
Joseph H. Orzel, PWS, CWS
Christopher M. Lucas, PWS, CWS, RPSS

DATE: December 18, 2024

PROJECT NUMBER: 10030.382

RE: Comprehensive Permit Review
250 Turnpike Road
Southborough, MA

Lucas Environmental, LLC (LE) has completed an initial review of materials submitted in support of a Comprehensive Permit application under M.G.L. c.40B, §21-23, and 760 CMR 56.00, and under the Massachusetts Wetlands Protection Act M.G.L. c. 131 §40 (WPA) and its implementing regulations 310 CMR 10.00 *et seq.*, for a project located at 250 Turnpike Road in Southborough, Massachusetts. The project has also been reviewed with respect to the Southborough Wetlands Protection By-law (Chapter 170), and the Southborough Wetland Regulations as requested by the Town of Southborough Zoning Board of Appeals (ZBA).

1.0 DOCUMENTS REVIEWED

- *Comprehensive Permit Application, 250 Turnpike Road, Southborough, MA*, and supporting documentation, prepared by Ferris Development Group, dated May 23, 2024 (with revisions as noted below).
- *List of Requested Waivers from Applicable Town of Southborough By-laws and Regulations, Comprehensive Permit – 250 Turnpike Road, Southborough*, dated November 27, 2024, (10 Pages).
- *Site Plan of Land at 250 Turnpike Road in Southborough, Massachusetts*, prepared by Expedited Engineering, LLC, dated May 28, 2023, and last revised November 20, 2024. Stamped by James L. Tetreault, P.E. The Plan set includes *Existing Conditions sheets E1 and E2*, prepared by Azimuth Land Design, LLC, dated April 15, 2024, and stamped by Gerry L. Holbright, P.L.S.
- *Sewage Disposal System Plan, 250 Turnpike Road, Lot B, in Southborough Mass.*, Sheets 1 and 2 of 2, prepared by Expedited Engineering, LLC, dated November 20, 2024, and stamped by James L. Tetreault, P.E.
- Document titled *Re: Environmental Analysis, 250 Turnpike Road, Southborough, MA, 01772, Assessors Map 277, Lot 27, Parcel 2, 2A and 46*, prepared by Goddard Consulting, LLC, dated June 3, 2024.
- Option B Concept Plan of 28 Townhouse Units at 250 Turnpike Road, Southborough. Plan titled *Concept Plan of Land at 250 Turnpike Road in Southborough, Mass.*, prepared by Azimuth Land Design, LLC, dated January 30, 2024, and last revised May 20, 2024.

- Option C Sketch of 40B Building on 125 Parkerville Road. Plan titled *Site Plan of Land at 250 Turnpike Road in Southborough, Mass.*, prepared by Azimuth Land Design, LLC, dated April 15, 2024, stamped by James L. Tetreault, P.E.
- Town of Southborough Zoning Board of Appeals Notice of Decision regarding an application for a Special Permit by Ferris Development Group, LLC, for 250 Turnpike Road, Map 27, Lot 2A, dated January 29, 2024.
- WPA Form 5, Order of Conditions (OOC), for 250 Turnpike Road, issued by the Southborough Conservation Commission on November 20, 2023, under MassDEP File #290-1109.
- Town of Southborough Fire Department Comments *Re: 250 Turnpike Road, Southborough, MA*, dated September 15, 2023.
- Town of Southborough Planning Board Comments *Re: Revised Proposed 40B Development – 250 Turnpike Road, Southborough, MA, MH ID No. 1197*, dated September 6, 2023.
- WPA Form 4B, Order of Resource Area Delineation (ORAD), for 250 Turnpike Road, issued by the Southborough Conservation Commission on September 26, 2022, under MassDEP File #290-1091.
- Town of Southborough Zoning Board of Appeals Decision regarding a Petition of a Variance by Leaf Systems, Inc, 250 Turnpike Road (27-2A), dated August 8, 1990.
- Town Planning Board documents relative to site plan review for a proposed office building at 250 Turnpike Road, dated May 20, 1986, May 27, 1986, and June 2, 1986.

2.0 PROJECT SUMMARY

According to the most recent plan revisions, the project proposes construction of 32 townhouse style rental units in a combination of duplex and triplex layouts, parking spaces, driving aisles, sidewalks, stormwater management features, a septic system with leach fields located under the proposed cul-de-sack, and associated grading and landscaping. Work is proposed within the 100-Foot Buffer Zone of Bordering Vegetated Wetlands (BVW) under both the WPA and Bylaw, and within the BVW 20-Foot No Work Zone under the Bylaw.

Based on GIS mapping, the wetland resources on the site have a hydrologic connection to the Sudbury Reservoir and Reservoir No. 3 (Framingham). As such, these wetlands/watercourses would be considered tributary to a Class A Public Water Supply and an Outstanding Resource Water (ORW), as defined under 314 CMR 4.00 et seq.

The most current MassGIS dataset (August 1, 2021) indicates that there are no mapped Estimated Habitat of Rare Wildlife, Priority Habitat of Rare Species, or Certified Vernal Pools within the project site or immediate vicinity. However, LE notes that during review of the Abbreviated Notice of Resource Area Delineation (ANRAD) with the Southborough Conservation Commission, the western “detention basin” was observed to contain egg masses of wood frog (*Lithobates sylvaticus*), an obligate vernal pool species.

The site is not mapped as being within an Area of Critical Environmental Concern (ACEC), MassDEP Wellhead Protection Area, or Surface Water Supply Protection Area, nor is the site mapped within any FEMA 100-year Flood Zones.

3.0 COMMENTS & REQUESTS FOR ADDITIONAL INFORMATION

The following are our comments and/or requests for additional information related to the project design. Additional materials submitted to the Southborough ZBA during the course of the public hearing will be reviewed by LE and commented on, as needed. LE has not reviewed the stormwater management system or Stormwater Management Report as requested by the ZBA, except where it directly pertains to the WPA jurisdiction. LE understands that Howard Stein Hudson has been engaged by the ZBA to provide comments related to stormwater. Additional materials submitted will be reviewed by LE and commented on, as needed.

Wetland Delineation Comments per the WPA

1. The wetland boundaries at the site have been previously confirmed through an ORAD issued by the Southborough Conservation on September 26, 2022, under MassDEP File #290-1091.
2. LE notes that the ORAD established the wetland boundaries for Parcels A and B at the site. The 40B Application includes a copy of the ORAD, but also describes the wetland boundaries as being confirmed through the Order of Conditions issued under DEP File #290-1109. LE recommends that the language in the Application be revised to be consistent in describing the jurisdictional wetland boundaries as being confirmed through the ORAD, which included both Lot A and Lot B, and not the OOC, for which the approved Site Plans did not include all of the wetlands located on Lot B, which would have been confirmed through the valid ORAD at the time.
3. LE has previously conducted site inspections at Parcels A and B at the property on April 24, 2022 and May 18, 2022, during the course of the ANRAD review.
4. LE has not inspected the area of the proposed 20-foot-wide water line easement located on the southern portion of the 125 Parkerville Road lot (Parcel ID: 27-0000-002-0), as this parcel was not included in the previously reviewed filings under the above noted ORAD and OOC. LE anticipates reviewing this location once a Notice of Intent is filed with the Conservation Commission for the current project; however, LE can inspect it for the ZBA review if requested.
5. LE notes that the submitted Plans do not show the ORAD approved location of revised wetland flag B3R, but rather the original location of flag B3. Although this flag does not apparently impact the Buffer Zone in areas of proposed work, LE recommends that the Plans be revised to show the correct approved location for wetland flag B3R and associated Buffer Zones.
6. LE notes that during the course of the ANRAD review, in May of 2022, evidence of breeding by wood frogs (*Rana sylvatica*) was reported within the western stormwater basin, identified by the A-series wetland flags. Therefore, although maintenance of the basin was approved by the Southborough Conservation Commission under MassDEP File#290-1109, the basin is considered jurisdictional BVW and provides Vernal Pool habitat. The adjacent upland areas also provide important upland habitat for this Vernal Pool species. This should be identified on all Site Plans.

General Comments per the WPA

7. LE notes that the project is proposed as a single phase. Given the area of ground disturbance proposed, LE recommends that the Applicant investigate alternative phasing to minimize the area of active ground disturbance.
8. LE notes that there are several areas of relatively steep slopes to be created adjacent to wetland areas. LE recommends additional erosion control be installed at these locations, such as a minimum size of 12 inches for the straw wattles (which are to be installed along with silt fencing) or a double row of wattles and silt fence.
9. LE notes that the Erosion and Sediment Control Plan does not indicate areas where erosion control blankets are proposed. LE recommends that these areas be indicated on the Erosion Control Plan.
10. The proposed erosion control blankets (Tensar North American Green SC150BN) apparently do not contain plastic netting. LE recommends that the Applicant confirm this. LE also recommends that Erosion Control Notes have language added that states any erosion control blanket used shall not contain plastic netting, in case a substitute product is proposed.
11. As the BVWs are classified as tributary to a Class A Public Water Supply and ORW, the Applicant should evaluate the Title V minimum setback requirements of 100 feet to the soil absorption system per 310 CMR 15.000.
12. Per the MA Stormwater Management Standards, the *stormwater discharges to ORWs must be set back from the receiving water or wetland and receive the highest and best practical method of treatment*. Infiltration structures require a minimum setback of 50 feet. LE recommends that the 50-foot setback from wetlands be included on the Site Plans.
13. As work is proposed within close proximity to the wetlands, the Applicant should demonstrate and document that the proposed work will not alter the hydrology feeding Wetland A, to ensure that there is no adverse effect to the BVW and Vernal Pool.
14. LE recommends that the Landscape Plan indicate seeding areas on the Plan and the proposed seed mix(es).
15. LE notes that no connection is indicated on the Site Plans from the sewer line to the proposed septic leach field. LE recommends this be added to the Plan.
16. LE recommends that the top and bottom elevation of the retaining walls be identified on the Plans.
17. The Applicant should provide further details on how the retaining walls near the wetlands will be constructed without impacts to the wetland, particularly within the limit of work/erosion controls.
18. Snow storage areas are not apparent on the Plans, LE recommends that these be added to the Plans.
19. LE notes that invasive species are present on the site and recommends that the Applicant provide an Invasive Species Management Plan for the proposed project, as was required by the Conservation Commission under MassDEP File #290-1109.
20. LE notes that an impermeable barrier is proposed for the septic leach field. LE recommends the location of the barrier be included on the Plan.
21. LE recommends that the Applicant provide information on whether an impermeable/clay barrier is needed for proposed underground utilities in areas of shallow groundwater.

Southborough Wetlands Bylaw Comments

The following are our comments with respect to the additional protections under the Southborough Wetlands Protection Bylaw and its implementing regulations, related to work proposed within 20 feet of wetland resource areas and additional wetland values and performance standards, if applicable.

22. The Comments provided by LE under the previous sections are also applicable under the Bylaw.
23. LE notes that the Waiver Request states that a Notice of Intent has been filed with the Southborough Conservation Commission. As of the date of this review, LE is not aware of any NOI filing having been submitted for this project.
24. Per the Town of Southborough's ZBA Comprehensive Permit Regulations and Guidelines (CPRG), Section 4.1.12.3, the Applicant is required to assess the wildlife habitat and corridors on the site. The Environmental Analysis provided discusses this criteria; however, has no reference or discussion of the Vernal Pool or wildlife corridors/migration of Vernal Pool species on the site.
 - a. Based upon the location of the Vernal Pool within Wetland A, and the extensive impacts to the 20-Foot and 100-Foot Buffer Zones, LE recommends further evaluation of the Vernal Pool in the Spring of 2025. LE understands a limited Vernal Pool assessment has been previously completed and should be further evaluated to determine if other organisms are using the Vernal Pool, in addition to wood frogs.
 - b. LE recommends a Migration Study of potential Vernal Pool species be completed in the early spring at the onset of the breeding season in 2025. No studies of amphibian movement through the site have been provided. Therefore, it is unknown if any Vernal Pool species are potentially migrating across the project site.
 - c. Following a Migration Study, LE recommends the Applicant evaluate a wildlife crossing of the proposed roadway between the two wetland areas to the east and west. This generally requires a four (4) foot crossing height for wildlife movement for optimal wildlife crossings. The Applicant should also evaluate barriers to direct wildlife to the crossing and not to the developed areas of the site.
 - d. Due to the extent of the Buffer Zone impacts on the site, and location of the Vernal Pool within Wetland A, the Applicant is required to demonstrate that there will be no adverse effect to the Vernal Pool.
 - e. LE recommends that the Applicant provide a description of mitigation measures for potential loss of wildlife habitat within the 100-Foot Buffer Zone.
25. LE recommends that the Applicant provide calculation of the proposed areas of disturbance within the 100-Foot Buffer Zone and within the Bylaw 20-Foot No Work Zone.

26. Per the Bylaw, the Conservation Commission presumes “*all activities that involve removal of vegetation (except routine lawn and garden maintenance), grading, filling, excavation, erection of permanent structures, application of inorganic fertilizers (excluding lime and other soil treatments approved by the Commission) or application of pesticides whose labels indicate they are toxic to aquatic organisms, is presumed to alter the adjacent resource areas.*” The Applicant seeks a Waiver from the Wetlands Bylaw for work proposed within 20 feet of wetlands. The Bylaw establishes performance standards for work within 20 feet of a wetland. LE also notes that the Conservation Commission has the authority to consider a wider undisturbed buffer to ensure the protection of wetland resource areas under the Bylaw.

Based upon the proposed work and location of the Vernal Pool, LE recommends the ZBA request that the Applicant evaluate alternatives for the proposed work in the 20-Foot No Work Zone associated with the grading, retaining walls, and townhouses to reduce impacts, particularly in areas proximal to Wetland A, which has been found to provide Vernal Pool habitat. Currently, Units 2 and 29-32 are proposed in the 20-Foot No Work Zone, and Unit 20 requires work within 20 feet of the wetland.

27. The Waiver Request seeks a Waiver as to the use of native species, stating that the Applicant proposes plantings that are not native, but better suited for the proposed development. As general policy, the Southborough Conservation Commission and MassDEP require planting native, non-cultivar species within the 100-Foot Buffer Zone. LE notes that the list of plants provided on the Landscape Plan includes several species that are considered non-native in eastern Massachusetts on the Go Botany website but considered native in eastern Massachusetts on the USDA Plants Database website. None of the plants included on the Landscape Plan are considered invasive; however, LE recommends that the Applicant verify that only native straight species are proposed within the 100-Foot Buffer Zone.

28. Per the Town of Southborough’s ZBA CPRG, Section 4.1.12.7, the Applicant is required to assess impacts from road salt and fertilizer loading. The Environmental Analysis provided discusses this criteria; however, has no reference or discussion of the use of road salt or fertilizer. A work is located in close proximity to a Vernal Pool, this should be further evaluated.

The comments provided above are based on the plans, documentation, and supporting information received at the time of this review. Any revision to the plans, documentation, and supporting information will require additional review. LE has no further comments as this time.