

June 7, 2024

Ms. Breeka Lí Goodlander, Agent
Town of Franklin Conservation Commission
355 East Central Street
Franklin, MA 02038

**Re: Veterans Memorial Drive Extension and Definitive Subdivision
MassDEP File No. 159-1292
Notice of Intent Peer Review**

Dear Ms. Goodlander:

BETA Group, Inc. (BETA) has reviewed documents and plans for the project entitled ***Veteran Memorial Drive Extension & Definitive Subdivision***, located at ***0 Veterans Memorial Drive off of Irondequoit Road*** in Franklin, Massachusetts. This letter is provided to present BETA's findings, comments and recommendations.

BASIS OF REVIEW

The following documents were received by BETA and will form the basis of the review:

- Notice of Intent Packet entitled ***Notice of Intent- Veterans Memorial Drive Extension and Definitive Subdivision***; prepared by Guerriere & Halnon, Inc.; dated April 5, 2024. Packet Includes:
 - Application Process Signature Form;
 - Property Access Signature Form;
 - Local Filing Fee Calculation Worksheet;
 - Resource Area Impact Summary Form;
 - Abutter Notifications;
 - Affidavit of Service;
 - WPA Form 3 and Fee Transmittal Form;
 - Project Narrative;
 - Figures (NHESP, FEMA and Locus); and
 - Wetland Replication Plan.
- Plans (13 Sheets) entitled ***Definitive Subdivision Plan of Land Veterans Memorial Drive Extension, Franklin, Massachusetts***; prepared by Guerriere & Halnon, Inc.; dated April 2, 2024; stamped and signed by Robert E. Constantine, II, MA PLS No. 49611 and Dale Mackinnon MA P.E. No. 34575.
- Stormwater Report entitled ***Stormwater Report for Veterans Memorial Drive Extension Subdivision Franklin, MA***; prepared by Guerriere & Halnon, Inc.; dated April 3, 2024; stamped and signed by Dale Mackinnon, MA P.E. No. 34575.

Review by BETA included the above items along with the following, as applicable:

- Site Visit on May 8, 2024
- ***Massachusetts Wetlands Protection Act 310 CMR 10.00*** effective October 24, 2014
- ***Massachusetts Stormwater Handbook*** effective January 2, 2008 by MassDEP

- **Stormwater Management Chapter 153 From the Code of the Town of Franklin**, Adopted May 2, 2007
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, dated August 20, 1997
- **Town of Franklin Best Development Practices Guidebook**, dated September 2016

SITE AND PROJECT DESCRIPTION

The Site is 16.90-acre parcel identified by the Town of Franklin Assessor's Office as Assessor's Map 259 Lot 7 located off Irondequoit Road at 0 Veterans Memorial Drive in Franklin, Massachusetts (the Site). The Site is bounded to the north by a residential neighborhood, to the west by Franklin High School, and to the south and east by apartment complexes. Existing conditions at the Site include an undeveloped wooded lot consisting of hardwood uplands vegetated with species including Eastern white pine (*Pinus strobus*), American beech (*Fagus grandifolia*), and red maple (*Acer rubrum*); and isolated wetland complexes. Topographic relief at the Site generally follows a west-to-east orientation.

No Resource Areas Subject to Protection or Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch.131 s.40) and its implementing regulations at 310 CMR 10.00 (collectively "the Act") are located at the Site. Resource Areas that are Jurisdictional under the Town of Franklin Wetlands Protection Bylaw (Chapter 181) and its associated regulations (collectively "the Bylaw") are present at the Site and include:

- Isolated Vegetated Wetland (IVW); and
- Associated Buffer Zones (25-foot No Disturbance Zone, 50-foot No Build Zone and the 100-foot Buffer Zone).

The boundaries of onsite Resource Areas were previously confirmed by an Order of Resource Area Delineation (ORAD) issued under MassDEP File No. 159-1273 on September 7, 2023. Previously confirmed boundaries are as follows:

- The GC-1 to GC-26 Series IVW;
- The GC-100 to GC-126 Series IVW; and
- The I-1 to I-11 Series IVW.

The Site is not located within any Surface Water Protection Areas (Zone A, B, or C), or Zone I, Zone II or Interim Wellhead Protection Areas. There are no Outstanding Resource Waters (ORWs) or Areas of Critical Environmental Concern (ACEC) present, and the most recent Natural Heritage and Endangered Species Program (NHESP) mapping does not depict any Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife at the Site. There are no NHESP-mapped Certified or Potential Vernal Pools located within 100 feet of the Site. The IVWs at the Site do not exhibit Vernal Pool characteristics.

Natural Resource Conservation Service (NRCS) soil maps indicate the presence of the following soil type at the Site, Montauk fine sandy loam, 3 to 8 percent slope with a Hydrologic Soil Group (HSG) rating of C.

Proposed work is associated with the construction of a Town owned road extension to service a proposed residential development pursuant to M.G.L. Chapter 40B (40B) and includes the following activities (collectively referred to as "the Project"):

- Installation of erosion controls;
- Clearing existing vegetation;
- Construction a temporary stormwater basin and temporary stormwater swales;
- Filling of the I-Series IVW;

- Grading;
- Establishment of the new roadway;
- Creation of a 1,960-sf wetland replication area;
- Installation of utilities;
- Installation of a gated fence;
- Construction of the 60-unit residential complex with associated Site features outside of jurisdictional areas; and
- Stabilization of the Site.

The Project will result in direct impacts to IVW, the associated 50-foot No Build Zone, and 100-foot Buffer Zone. The Applicant has requested a Bylaw Variance for the filling of the I-Series IVW and has proposed a 2:1 wetland replication area. The proposed wetland replication area will be 1960-sf and will connect the two existing IVWs. The Applicant has submitted an alternatives analysis and a functions and values analysis in support of the proposed wetland impacts and replication area.

ADMINISTRATIVE AND PLAN COMMENTS

The plan set (as identified above) is missing information and requires additional information for clarity.

Table 1. NOI Plan

NOI Plan Requirements	Yes	No
Scale of 40'=1" or larger		✓ (See Comment A3.a.)
North Arrow (with reference)	✓	
Topographic contours (2' intervals)	✓	
Existing Conditions Topography (with source and date of survey)		✓ (See Comment A3.b.)
Proposed Topography	✓	
Existing and Proposed Vegetation		✓ (See Comment A3.c.)
Existing Structures and Improvements	✓	
Resource Areas and Buffer Zones labeled	✓	
Location of Erosion Controls	✓	
Details of Proposed Structures	✓	
Construction Sequence and Schedule	✓	
Registered PLS Stamp (Existing Condition Plans Only)	✓	
Assessors' Reference		✓ (See Comment A3.d.)
Abutting Property Assessors' Reference	✓	
Survey Benchmark	✓	
Accurate Plan Scale	✓	

PLAN AND GENERAL COMMENTS

- A1. The Massachusetts Department of Environmental Protection (MassDEP) has issued a DEP file number (159-1292) with the following technical comments:

“Noting that IVWs are not jurisdictional under the WPA, MassDEP still recommends the use of appropriate sedimentation barriers during replication area construction in order to prevent sedimentation of adjacent IVWs.”

A2. The following elements are missing from the provided Plan Set:

- a. The provided Plan Set has a scale of 50'=1". BETA defers to the commission on the Bylaw requirement of plan scales at 40'=1" or larger per Bylaw Regulation Section 7.18.1.1. The Applicant's use of 50'=1" appears reasonable for this Site.
- b. Provide survey dates/methods for all on-the-ground topographic and boundary survey efforts in the plan notes.
- c. The existing tree line and individual trees/shrubs with a diameter greater than 1" proposed for removal should be shown on the Existing Conditions Plans per Bylaw Regulation Section 7.18.1.5. It is BETA's understanding that the Commission generally increases the size threshold for tree location based on the Project and therefore defers to the Commission on this matter.
- d. Depict the Assessors' references for the Site on all plan sheets.

WETLAND RESOURCE AREAS AND REGULATORY REVIEW

BETA has completed a regulatory review of the submitted documents and plans, focusing on compliance with jurisdictional regulations set forth in the Bylaw.

The NOI application includes narrative information describing the Project, and the proposed impacts within Resource Areas have generally been quantified and described. Proposed mitigation measures include the creation of a 1,960-sf replication area and conducting all associated monitoring. However, the NOI requires further information regarding construction details, impacts to Buffer Zones, and compliance with Bylaw provisions to confirm regulatory compliance.

Resource Areas at the Site have been previously approved by the above-referenced ORAD (MassDEP File No. 159-1273).

CONSTRUCTION COMMENTS

- W1. The provided plans state that 1,030 sf of IVW will be disturbed, while the NOI filing states 980 sf. The Applicant should clarify which number is accurate and increase the size of the replication area if necessary.

MITIGATION COMMENTS

- W2. Proposed erosion controls include the use of silt fence and mulch sock. Silt fence is not permitted erosion control measure in the Town of Franklin (Pg. 13 of Town of Franklin Best Development Practices Guidebook). The Applicant should coordinate with the Conservation Commission to determine the appropriate erosion control measure for the Site. Twelve (12)-inch diameter compost filter tube may be an appropriate option commensurate with the scope of the Project.
- W3. The Applicant should provide the replication protocol and schedule, cross sections of altered and proposed replicated areas, and groundwater elevation data for the proposed replication area on the plans (Bylaw Regulation Section 7.14.2). The protocol attached to the NOI could be transferred to the plans for the contractor's reference; however, a cross section depicting proposed grading and depth to groundwater should be provided.

- W4. In the Wetland Replication Plan, the Applicant proposes to remove hydrophytic vegetation from the I-Series IVW impact area and stockpile it for use within the replication area. If this approach is pursued, it is recommended that these plantings be used as a supplement to, and not a replacement for, the proposed planting schedule.
- W5. The Applicant should provide information regarding the intended access to the replication area. Given that clearing of Buffer Zone will be required for access and grading, a Buffer Zone restoration plan should be provided for the Commission's review and should include proposed erosion controls to protect the replication area.
- W6. The location of the proposed replication area was observed to be vegetated by hydrophytic plant species including sweet pepperbush (*Clethra alnifolia*), highbush blueberry (*Vaccinium corymbosum*), and red maple (*Acer rubrum*). The Applicant should consider maintaining the existing hydrophytic vegetation (particularly the red maples) when grading the replication area. This existing vegetation could be incorporated into the replication area through establishing hummocks to preserve their root systems while field adjusting the limits of the replication area if this results in any decrease in the overall area of replication. It is recommended that the Commission include a Special Condition in the Order of Conditions requiring the Applicant to flag vegetation to remain in the field and revise the planting schedule (if necessary) for review and approval by the Commission and/or Agent.

WPA PERFORMANCE STANDARDS COMMENTS

The Project does not propose any work within Areas Subject to Protection or Jurisdiction under the Act.

BYLAW REGULATORY COMMENTS

- W7. The Applicant should provide a narrative with information on the steps taken to mitigate for unavoidable impacts for work that is proposed within the Buffer Zones (Bylaw Regulation Section 7.11.2). Plantings do not appear to be proposed within the Buffer Zone, and it is recommended that the Applicant consider planting native shade trees along the new roadway.
- W8. The Erosion and Sediment Control Plan should include a description of the measures that will be taken to properly install and maintain the erosion control devices used during the project, the names and phone numbers of all individuals that will be responsible for erosion controls, as well as the requirement that the erosion control will be inspected weekly and all other criteria set forth in Bylaw Regulation Section 7.12.
- W9. BETA defers to the Commission on the approval of the Project Narrative due to several Bylaw requirements being absent from the current Project Narrative (Bylaw Regulation Section 7.9.1.) including who is performing the work, a detailed description of all of the activity within Conservation jurisdiction, and when the proposed activity will be done.
- W10. The Applicant provided a Construction Sequence on the plans that does not appear to include all proposed construction activities. A Construction Sequence with all proposed construction activities including building construction and installation of drainage structures should be included within the NOI and plan set (Bylaw Regulation Section 7.15.1).
- W11. The Applicant submitted a Variance request for the filling of an IVW with proposed wetland replication. BETA defers to the Commission on the issuance of this waiver.

STORMWATER MANAGEMENT REVIEW

The proposed primary stormwater system which will treat and infiltrate the runoff from most of the proposed impervious surfaces at the Site will consist of three (3) infiltration basins along the eastern extent of the Project. Two (2) of the proposed stormwater basins will discharge towards the existing development at 20 Veterans Memorial Drive and be treated by the existing stormwater system at this location. Pretreatment for the three (3) infiltration basins will be provided by deep sump catch basins and a sediment forebay formed by a 2'x4' gabion weir. Two (2) subsurface infiltration systems will be provided to treat the runoff from the proposed pavement areas at the rear of the proposed building. These systems will be lined with a 40-mil impervious liner and will therefore act primarily as detention basins. A separator row will be provided at the inlet for pre-treatment. Discharge from the chambers will be conveyed to the forebays at Infiltration Basins 2 & 3. At the front of the building, two (2) detention basins are proposed and will collect runoff from the impervious surfaces at the front of the building prior to discharge to the forebays at Infiltration Basins 2 & 3; however, the detention basins themselves will only qualify as providing pretreatment. In addition, a portion of the roadway system from STA 19+05.90 to the catch basins at STA 21+24 will be collected and directed to a location north of the roadway where it is directed towards a wetland complex to the northeast.

GENERAL

- SW1. The discharge from the roadway system at Headwall #6 near the 175 Irondequoit Road property line will not discharge to the Town of Franklin Parcel at 218 Oak Street. Rather, it will flow towards the parcel at 346 Oak Street and the B-series wetlands. BETA recommends that a separate design point for the B-series wetlands be developed in the existing conditions analysis for comparison with the proposed discharge from headwall #6.
- SW2. Based on the data identified in TP-9, it appears that there will be blasting required to establish the proposed grades for both the building and the parking at the rear of the building. These areas are far enough downgradient from the GC-Series wetlands that groundwater impacts within Resource Areas are not anticipated. However, the design should address the potential issues associated with the groundwater that will be intercepted by the proposed slope at the rear of the building to ensure that it will not impact the proposed stormwater system.
- SW3. The catch basins inside the detention basins, as shown in the stormwater report, will have a 1-1/2" orifice opening in the side of the structure. BETA recommends that a detail be provided for this orifice and that the table on Sheet 7 be modified to identify the orifice invert elevations at CB Nos. 4 & 5.
- SW4. The construction details provided for the detention basins on Sheet 12 do not reflect the design as shown on the grading sheet (Sheet 6). There is no embankment around these basins; rather, they are depressions adjacent to either the proposed building or access roadway. In addition, the inlet into the catch basin is shown as a 1" diameter pipe located below grade. Based on the calculations, this inlet is 1.5" diameter and level with the bottom of the basin. The detail should be modified to address these conflicts.
- SW5. Although it is not a design issue, the floors of the two (2) detention basins are directly over ledge based on test pit data and should be noted as such on the plans in the Detention Basin Profile.
- SW6. The total suspended solids (TSS) calculation for the treatment train through the detention basins should be shown. Detention Basin 2 is required to provide a minimum of 25% TSS removal to meet

the 44% pretreatment requirement. It appears that there is a grass shoulder adjacent to the roadway which will act as a filter strip. The detail should be modified to show this and the TSS calculation sheet for this train should also be provided.

SW7. TSS calculation sheet for the discharge at Headwall #6 should be submitted. Presently, it does not appear that the runoff from the proposed roadway conveyed to this headwall will meet the treatment requirements. The designer should indicate which best management practices (BMPs) are being used/designed for this discharge point.

SW8. Based on the provided plans, it appears that the calculations for both storage and infiltration in the infiltration basins includes the forebay areas. These areas cannot be used in the analysis of the capacities of the basins. BETA recommends that the designer:

- a. Reduce the height and area of the forebays to provide greater storage area and volume for exfiltration in the basin itself; and
- b. To minimize the size of the forebay, direct only that portion of the runoff from the tributary impervious surfaces which needs this incremental treatment to bring the pretreatment up to the standard.

These measures should minimize the impact of the loss of the forebay in the analysis of the basins.

REVIEW SUMMARY

Based on our review of the NOI submittal and Project plans, the Applicant has not submitted sufficient information to comply with the Bylaw. In addition, the Project does not presently comply with the Massachusetts Stormwater Management Regulations.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.



Anna Haznar
Staff Scientist



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Senior Project Scientist



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Senior Project Manager

cc: Amy Love, Town Planner
Bryan Taberner, AICP, Director of Planning & Community Development