

May 11, 2020

Conservation Commission  
Town of Lexington  
1625 Massachusetts Avenue  
Lexington MA 02420

Via: email

Reference: Supplemental Information  
91 Hartwell Avenue  
Lexington, Massachusetts  
PFA Project No. 201-1004.00

Dear Commission Members,

Attached please find supplemental information on the design, details and engineering submitted in support of the proposed project at 91 Hartwell Avenue. The Project Team, Conservation Staff and your Peer Review Consultant have been diligently working to evaluate the project components and we have provided further clarification of the stormwater design as well as the compensatory flood storage in support of our design.

In addition, minor changes in the site design reflect requests and comments received from the Planning Board and Conservation Commission members. It is our goal to produce and permit the same drawings by both Boards incorporating all changes requested.

To assist in the review of these documents, the following summarizes revisions to the plans and other documents included in this submission.

**A. General Design Revisions**

1. We propose to remove the existing culverts from within the parking lots including the headwall on the west side of the site. This will result in a minor amount of temporary wetland alteration that will be restored in-kind.
2. In lieu of the culverts, a vegetated swale will be constructed to provide the hydrologic connection between the compensatory flood storage under the building and parking structure and the adjacent floodplain.
3. At the request of the Planning Board, the space between the existing building and the parking structure and lab building has been reconfigured to become a pedestrian plaza. Porous concrete pavers have been included in lieu of asphalt pavement and porous asphalt. The redesign also expanded the stormwater pond #3.

**B. Sediment and Erosion Controls Plan**

1. Modification of western dewatering areas to outlet at headwall to minimize BVW disturbance.

2. Document temporary BVW alteration areas as a result of the removal of the headwall and culverts.

C. Site Construction Plan

1. Replacement of internal drive with paver courtyard
2. Increase size of stormwater wetland area #3
3. Added vegetated swales between the building and garage to nearby BVW/Floodplain
4. Added a pedestrian walk/ bike bath from existing bridge at north side of site.

D. Grading Plan

1. Minor grading changes due to new paver plaza
2. Revised grading re: expanded stormwater wetland #3
3. Revised grading on north side of garage and building to accommodate vegetated swales.
4. Revised grading under garage and building to accommodate new storm water detention of roof drains to accommodate the 1-year storm

E. Landscape Plan

1. Added/Revised wetland planting communities at lower elevations for the stormwater wetlands and WRA
2. Added plantings and specified seed mixtures throughout buffer and on the north side of the building and garage.

F. Drainage & Utilities

1. Added a Water Quality Structure (WQS) for roof and first floor drainage at the parking structure
2. Relocated transformers and electrical layout

G. Revised stormwater report

The revised stormwater report is submitted that incorporates all the requested modifications and data requested from Environmental Partners.

H. Project Compliance with the Wetlands Protect Act (the Act) and Lexington Wetlands Protection Bylaw (the Bylaw) and associated Regulations.

As outlined in the Notice of Intent, DEP File # 201-1163, the project is classified as Re-development. The site contains a number of environmental constraints including but not limited to the floodplain as well and being bordered by BVW on two sides of the site. Despite these constraints, the proposed project proposes a substantial improvement over the existing conditions "No Build" scenario by;

1. Providing substantial stormwater improvement from the site;
2. Creating additional flood storage;
3. Increasing the amount of open space and vegetated area; and
4. Increasing the vegetated buffer between the edge of the BVW and the proposed structures.

The project plans propose to meet the performance standards of both the *Act* and the *Bylaw* to the best means practicable. The project proposes a reasonable, sensitive and creative approach to compliance with the regulations and we request a positive Order of Conditions be issued by the Commission. We would respectfully request the following waivers be considered by the Commission.

Section 9 of the Rules Adopted by the Lexington Conservation Commission Pursuant to the Code of the Town of Lexington for Wetland Protection, Chapter 130 (the *Bylaw Regulations*), discusses **Waiver of Regulations**, stating that: *Strict compliance with these rules and regulations may be waived when, in the judgement of the Conservation Commission, such action would serve a substantial public interest or when strict compliance would result in severe economic hardship far greater in magnitude than the public interest to be served. In the latter case, the Commission may require that compensatory or mitigating measures be taken, even at an offsite location, to protect the public interest in the Protected Resource Area to be removed, filled, dredged, built upon, or altered.*

1. The Applicant seeks waivers for two sections of the Bylaw Regulations, including Section 5(3) Structures in Floodplain, and Section 5(5) Buffer Zone. *Section 5(3) Structures in Floodplain, states: No building of any kind, and no parking lot or any other facility for the temporary or permanent storage of automobiles, trucks, or other material shall be located below the 10-year flood level.*

Response: The Site currently contains 395 paved surface parking spaces, all of which are within the 100-year floodplain, and 336 of which are within the 10-year floodplain. The proposed Garage eliminates all surface parking (except three handicap parking spaces that need to be located closest to the front entry of the buildings) and all the parking within the 10-year floodplain. The Garage also elevates most of the proposed parking above the 100-year floodplain elevation. Further, the Applicant proposes to implement a Vehicle Evacuation Program in the event a 10-year or greater statistical storm event is forecast. This program takes into consideration the delay time between precipitation and rising flood waters, allowing time for vehicle owners and, if necessary, tow trucks, to remove the vehicles from the Site well in advance of such flooding should it occur. This effort significantly reduces the pollutant potential that currently exists at the site, with much of the existing parking lot located at or below the 10-year floodplain, and no program for evacuating vehicles in the event of a forecast 10-year or larger statistical storm event under existing conditions.

2. Section 5(5) Buffer Zone states:
  - A. *New Construction*
    1. *No setbacks for structures necessary for upland access where reasonable alternative access is unavailable, for wetland dependent structures such as drain outfalls, weirs, etc. and for underground utilities.*
    2. *25 feet - 100 feet for roads, driveways, retaining walls.*
    3. *50 feet - 100 feet for all other structures: residential and commercial buildings, garages, parking lots, decks, etc.*

*C. Site Development and Landscaping*

1. *Of contiguous land within the 100-foot buffer zone, construction activities can disturb no more than 50% or the amount not presently supporting a natural community, whichever is greater.*
2. *Within 25 feet of a wetland a critical edge shall be required where:*
  - a. *there shall be no clearcutting of trees and surface vegetation, only selective thinning of trees to a spacing of not more than 20 feet;*
  - b. *brush may be topped to a height of three feet or replaced with a more desirable species;*
  - c. *areas disturbed by construction must be planted with a continuous groundcover requiring no fertilizers or pesticides for maintenance.*
3. *Critical edge may be waived to provide access to bodies of water.*

Response: The existing pavement along the northern, western, and southwestern parking lot edges measures only between roughly 3 and 6 feet from the BVW boundary. The proposed Garage and Building have been re-designed from the NOI submittal to entirely meet the 25-foot Buffer Zone setback requirement. The land between the proposed Building and Garage and the BVW boundary measures between 25 and roughly 50 feet in width and will be vegetated open space – a significant improvement over existing conditions.

While the Garage and Building are located within the 50-foot Buffer Zone, the project must also comply with Federal Aviation Administration (FAA) height restrictions associated with the adjacent Hanscom Field, and balance the long-term financial considerations associated with constructing the Garage and the available rental space in the Building.

The proposed redevelopment balances the protection of Wetland Resource Areas, and significantly contributes to the protection of the interests identified in the *Act* and the *Bylaw* by:

- 1) reducing impervious area associated with the Project Area by 0.93 acres, or roughly 30.7%, including an 89% reduction of impervious area within the 25-foot Buffer Zone and 57% decrease in impervious area within the 50-foot Buffer Zone;
  - 2) significantly increasing the distance between the development and the adjacent Wetland Resource Areas;
  - 3) significantly reducing the current pollutant potential associated with surface parking at or below the 10-year floodplain from 336 existing parking spaces to 3 proposed handicap parking spaces;
  - 4) providing a significantly improved stormwater management design; and
  - 5) providing a 6,750 square-foot Wetland Replication Area whose function, and value will far exceed the existing jurisdictional drainage swale located within the landscape island.
3. MADEP Stormwater Policy and Lexington Stormwater Management Bylaw  
The project complies with all aspects of the Stormwater Regulations as a Redevelopment Project. Stormwater quality is significantly improved, and the project provides attenuation of all storm events. The site and surrounding area are subject to flooding and as such cannot

treat all stormwater for the larger storm events since the stormwater treatment areas will be inundated with flood waters and hence not functioning. There is no engineering solution or technology available to resolve this conflict "It is not Practicable," however there are significant improvements in both volume and quality for lower storm events.

The proposed improvements and mitigating measures proposed herein serve a substantial public interest by improving the protection of groundwater supply, flood control, storm damage prevention, other water damage prevention, prevention of pollution, protection of surrounding land and other homes or buildings, aquatic life and wildlife, and the protection of streams, ponds, or other bodies of water.

Strict compliance with Sections 5(3) and 5(5) would result in either no project, where the Site's existing shortcomings relative to the protection of said interests would remain, or a project that is not feasible to construct, since a garage of a certain size is required to accommodate adequate parking for both the existing and proposed buildings, and the construction costs associated with the garage must be balanced by the available lab/office rental space.

Accordingly, the Applicant is requesting Waivers from Sections 5(3) and 5(5) of the Bylaw Regulations and that of the Stormwater Regulations

Thank you for your consideration  
PAUL FINGER ASSOCIATES

Paul Finger, RLA  
President

Enclosures: NOI Plan Set Revised 5/11/20 "Response to Comments"  
Stormwater Report revised 5/11/20

cc: Karen Mullens, Lexington Conservation Director  
Amanda Loomis, Lexington Planning Director  
Scott Turner, Environmental Partners  
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