



**Frederick W. Russell, PE**  
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Amanda Loomis, Planning Director  
Lexington Planning Department  
1625 Massachusetts Avenue  
Lexington, MA 02420

April 8, 2020

Re: Lexington Meadows; Plan modifications & additional information

Dear Amanda,

The following information addresses comments by the Planning Board at their March 25<sup>th</sup> public hearing and comments from the Lexington Engineering Department:

1. Letter from Seaver Construction, Inc. addressing the Board's request for a second moderate income unit;
2. Letter from the writer addressing comments from the Lexington Engineering Department review;
3. Updated photos of proposed units;
4. Building Energy Efficiency details;
5. Letter addressing compliance with the Lexington Tree Bylaw;

In addition, the previously proposed plant materials, of which a majority were Native plant species, have now been revised to include a few more species that are native to Middlesex County as well. Of the proposed plant materials depicted on the Landscape Plan, 56% of the shrubs are Native plant species and 94% of the trees are Native plant species;

If you have any questions or need additional information, please do not hesitate to contact my office.

Very truly yours,

Frederick W. Russell, PE

CC Scott Seaver  
John Farrington



# SEEVER

CONSTRUCTION, INC.

GENERAL CONTRACTING • CONSTRUCTION MANAGEMENT

April 3, 2020

Dear Members of the Planning Board,

I am writing to address the request to add a second moderate unit to the project. It is my intention to do anything practical and reasonable the board members request. Unfortunately, because of all the expense of the items currently planned adding a second unit that will be an additional significant loss is not possible. Please remember there is a very large structure full of asbestos and other contaminants that needs to be abated and then demolished on this site. Beyond that there is a large amount of pavement to be removed.

The project will bring with it a large amount of public benefit in which most items add cost to the project as well. The public benefit items are:

- 1) Walking Trail to Great Meadows
- 2) Fire Department access road
- 3) Public parking
- 4) Bike rack for public use
- 5) Legal easements to permanently secure use of trail
- 6) Substantial reduction of impervious surface on site
- 7) Removal of existing building and environmental hazards
- 8) Trail screening
- 9) Additional open space

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# SEAVER

CONSTRUCTION, INC.

GENERAL CONTRACTING • CONSTRUCTION MANAGEMENT

Beyond the cost discussion I would like to point out that this project will provide some of the most affordable new construction units in the Town of Lexington. The unit sizes range from 1200 – 2250 square feet of living area. There is a good variety of unit mix with one and two car garage options that will allow residents to sell their large expensive homes and move into relatively affordable units and not have to leave Lexington.

**Scott Seaver**

President



SEAVER

CONSTRUCTION, INC.

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Amanda Loomis, Planning Director  
Lexington Planning Department  
1625 Massachusetts Avenue  
Lexington, MA 02420

April 8, 2020

Re: Lexington Meadows Balanced Housing Development  
Response to Engineering Department Review

Dear Amanda,

The following is in response to comments from the Lexington Engineering Department review of the above referenced project:

- The stormwater will be reviewed under Conservation due to the stricter regulations. Comments will be provided during that process.

**Response:** None required

- Typically the water service for subdivisions is looped. Please provide a response as to why the water line can't be looped.

**Response:** Project is not a subdivision, but a private development. Project bounded by wetlands/conservation land along the entire boundary with the exception of the Emerson Gardens Condominiums (144 Emerson Gardens Road). The proposed water service to the development will remain under private ownership, as it will exclusively serve the proposed development. Looping would require 1) the acquisition of easements from 144 Emerson Gardens Road condominiums and 2) significant disruption to existing parking and driveway areas. Two hydrants will be installed as per the direction of the Fire Department to provide adequate fire protection and flushing for water quality;

- The vertical curves in the profile should be designed to meet a minimum design speed of 25 mph. Adjust the profile curves to have minimum K values of 12 (crest) and 26 (sag).

**Response:** Profile revised to address this comment.

- Due to the depth of the proposed sewer, sewer drops and chimneys will be required. Please add the appropriate details to plan set.

**Response:** Detail added to the Construction Details Plan (Sheet 10).

- The slope of the sewer pipe furthest upstream shall be 1%.

**Response:** Profile revised to address this comment.

- The sewer service connections should be angled/wyes. Revise services to connect to sewer pipe, services should not connect to manholes.

**Response:** Utilities Plan & Profile (Sheet 9) revised to address this comment.

If you have any questions or need additional information, please do not hesitate to contact my office.

Very truly yours,

A handwritten signature in blue ink, reading "Frederick W. Russell". The signature is written in a cursive style with a large initial "F" and "R".

Frederick W. Russell, PE

CC: Seaver Construction  
John Farrington















## **EMERSON GARDENS, LEXINGTON, MA**

### **BUILDING ENERGY EFFICIENCY DETAILS**

#### **General:**

- Seaver Construction retains a certified third-party Home Energy Rating System (HERS) rater to perform an analysis of the home's construction plans and onsite inspections. Based on the home's plans, the Home Energy Rater uses an energy efficiency software package to perform an energy analysis of the home's design and work with the builder to identify the energy efficiency standards needed to ensure the house will meet ENERGY STAR performance guidelines. The rater then conducts onsite inspections, including a blower door test (to test the leakiness of the house) and a duct test (to test the leakiness of the ducts). Results of these tests, along with inputs derived from the plan review, are used to generate the HERS Index score for the home, which are provided to the building inspector.

#### **Exterior Doors and Windows:**

- Harvey Classic Series ENERGY STAR® Qualified windows and glass sliding door with Insulated Low E4 glass and U-Value = .30.
- Thermatru Smoothstar fiberglass insulated front door unit with Low E glass.

#### **Insulation:**

- Attic / Roof: R-49 open-cell icynene spray foam in rafters.
- Exterior walls: R-21 fiberglass batts.
- Garage Ceiling: R-30 fiberglass batts.
- All basement exterior walls: 2 ½" closed-cell icynene spray foam around perimeter of basement.
- 5 ½" open-cell icynene spray foam behind all tubs on exterior walls.
- All floor penetrations fire-caulked and sealed.
- Building envelope air sealed and spray foam applied to all band joists.

#### **Electrical:**

- 100% LED lighting and energy efficient lighting fixtures.
- 220V electric car charger outlet in garage.
- Low voltage LED strip under cabinet lighting in kitchen.

4/6/20

**Plumbing:**

- Navien NPE-240S 199,000 BTU ENERGY STAR® Qualified Condensing Premium Propane Tankless On-Demand Water Heater.

**HVAC:**

- Heating: Propane-fired – High Efficiency 96.0 AFUE ENERGY STAR® Qualified forced hot air systems with one zone per finished floor and Honeywell WIFI programmable thermostats.
- Air conditioning: High Efficiency system with 13-Seer condensers and one zone per finished floor.

**Kitchen Appliances:**

- Kitchen-Aide ENERGY STAR® Qualified gas range.
- Kitchen-Aide ENERGY STAR® Qualified dishwasher.
- Kitchen-Aide ENERGY STAR® Qualified over the range microwave.
- Kitchen-Aide ENERGY STAR® Qualified refrigerator.

**Mary Trudeau**  
Wetlands Consultant  
141 Lowell Street  
Lexington, Massachusetts 02420

781 424 4768  
marytrudeau@ymail.com

April 5, 2020

Scott Seaver  
Seaver Construction  
115 Lexington Street  
Woburn, MA 01801

RE: 840 Emersons Garden Road, Lexington, MA  
Lexington Meadows Project  
Compliance with local Tree retention bylaw

Dear Mr. Seaver:

As you requested, I have reviewed the proposed site plan for the Lexington Meadows project for compliance with the Lexington tree bylaw (Chapter 120 of the General Bylaws). Based on my analysis of the bylaw, and a review of your proposed site plan, I believe that there are six (6) trees, located within a zoning setback area, that will require mitigation under the local regulations. These trees are located within a stand of vegetation located at the current site entrance off of Emerson Garden Road and Bryant Road. These trees fall within the footprint of the proposed access road, and will be removed to implement your site design. The trees to be cut are as follows:

12 inch dbh pine  
14 inch dbh pine  
20 inch dbh maple  
22 inch dbh pine  
6 inch dbh pine  
12 inch dbh pine

Using the tree Replacement Inch Calculation Table (Ch 120, s. 16), the removal of these trees will require mitigation for 86 inches of lost tree diameter. Using the performance standards found in the regulations, you can either pay a one-time fee of \$100 dollars per inch of lost diameter (\$8600.00) or mitigate through tree replacement. Tree replacement credit is calculated as 50% percent of the proposed loss, resulting in 43 inches of replacement tree diameter planting required on this site. (Credit is only given for trees of three inch or greater dbh.)



Based on this analysis, I am suggesting that the tree replacement mitigation will provide greater site benefit, and can be designed in conjunction with your landscaping plan. Using the guidance found in the local regulation, I believe that planting (15) trees with a dbh of at least three (3) inches will provide the necessary 43 inches of replacement dbh. This will fully mitigate for the removal of the six (6) trees located within the zoning setback off of Bryant Street and Emerson Garden Road.

The landscaping plan prepared by Laurie Tarr Ellsworth, of LTE Landscape Architecture, LLC includes the planting of a wide variety of native trees and shrubs. She has included (15) fifteen trees with suitable diameters for the requisite mitigation. These trees are native to Massachusetts and are slightly more diverse than the lost plant material. I am satisfied that using the LTE landscaping plan will provide full compliance with the local regulations.

The following photos show the stand of trees, lying between the paved driveways, six of which require removal and fall within the zoning setback areas for this site:



Please feel free to call if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Mary Trudeau".

Mary Trudeau,  
Wetlands Consultant