

December 27, 2018

Lancaster Board of Appeals  
701 Main Street, Suite 4  
Lancaster 01523

RECEIVED

JAN 03 2019

COMMUNITY DEVELOPMENT  
AND PLANNING

**Re: Goodridge Brook Estates  
Comprehensive Permit Application  
Sterling Road, Lancaster, MA**

Dear Board Members,

Our firm revised the project site plans for the above captioned project to address the comments in letter from Hamwey Engineering Inc., dated November 27, 2018 . The following is in response to the comments.

The following plan revisions are being proposed based the work session meeting:

- The proposed units have been reduced as follows:
  - 96 Multi Units in 3 – 3 Story buildings (Note 4<sup>th</sup> floor removed)
  - 56 Single family dwellings (No dwellings along Sterling Road)
- All roadways are to be a minimum of 24 foot pavement.
- The proposed parking spaces are to be 9'x20' typical.
- A recreational area for the multi-units has been depicted on the plans.

**Hamwey Engineering Inc. Comments dated November 27, 2018:**

**GENERAL**

1. The availability of water (flow & pressure) should be confirmed with the Water Department. \*\*  
**Response: The applicant will accept a condition in the decision that the above information be provided to the ZBA prior to submitting an application for Building Permit.**

2. The availability of sewer capacity should be confirmed with the Sewer Commission. \*\*  
**Response: The applicant will accept a condition in the decision that the above information be provided to the ZBA prior to submitting an application for Building Permit.**

3. Please clarify the extent of the existing sewer in Sterling Road (length, slope, SMH's, lot servicing, etc.). Refer to the comments under **PLAN SHEET 19**.  
**Response: The plans have been revised depicting the sewer in Sterling Road.**

4. The applicant will be submitting the plans to the Conservation Commission.  
**Response: Notice of Intent will be submitted to the Conservation Commission.**

5. Will the ZBA require speed limit signs?  
**Response: If the ZBA deems it necessary speed limit signs will be provided by the applicant.**

6. Sewer pump station calculations should be submitted. \*\*

**Response: Sewer pump calculations and sizing are being provided by others. They will be submitted to the ZBA prior to submitting an application for Building Permit.**

7. A Special Permit may be required for the apartment complex driveway (greater than 1000').

**Response: The permitting for 40B application is through the ZBA process.**

8. The electric, telephone & cable lines shown on the plans may have to be relocated to the other side of the roadways to connect to the relocated utility poles. This will require the water lines and hydrants to be relocated to the opposite side of the roadways. \*\*

The applicant has stated that the electric company will provide the layout for multi-unit portion of the site.

**Response: The electric company will not provide a layout prior to approvals.**

9. It should be noted that the majority of the site's upland area is proposed to be developed.

**Response: No Comment**

10. The Zoning Board may want to require that the proposed lots that abut Sterling Road, including the lots on the corners of Road A & Road C, be similar in size, frontage, setbacks, etc. as the existing lots on Sterling Road.

**Response: Lots along Sterling Road removed.**

11. The applicant should submit a list of all local, state and federal permits/approvals that will be required.

**Response: No comment necessary**

12. Confirm with the Water Department that they will accept the water line to be installed outside of the traveled way (paved portion of the roadway).

**Response: The applicant has been working with the Water Department and will request confirmation from the Water Department.**

13. Passive recreation areas are mentioned but not shown on the plans. \*\*

**Response: Recreation area depicted on Sheet 7 for the multi-units.**

14. The applicant is providing 1.7 parking spaces per unit for the multi-unit portion of the site. The required parking spaces should be 2 spaces per unit. This would allow for overflow and visitor parking. \*\*

**Response: There are a total of 196 spaces for 96 units.**

15. Confirm adequate access for emergency vehicles with the Police Department. \*\*

**Response: Request for Police to provide comments.**

## **WAIVERS/VARIANCES**

### **Subdivision Rules and Regulations**

1. Waive the Environmental Analysis. ZBA's decision.

***Response: No comment***

2. Variance to reduce the diameter of the cul-de-sac. ZBA should request input from the Fire Department. \*\*

***Response: The applicant has discussed with the Fire Department and will accept the recommendation of the Fire Chief as a condition to the permit.***

3. Variance to allow a dead end street for collector streets. ZBA should request input from the Fire Department. \*\*

***Response: The applicant has discussed with the Fire Department and will accept the recommendation of the Fire Chief as a condition to the permit.***

4. Variance of the right of way & pavement widths (40' & 24'). The requirements for a lane are 40' & 24", for a minor street are 50' & 24' and for a collector street 60' & 30'. ZBA should request input from the Fire Department. \*\*

***Response: - Road A - Proposed 40' Layout, 24' pavement. (Waiver for Layout & Pavement)  
- Road B - Proposed 40' Layout, 24' pavement (Waiver for Layout)  
- Road C - Proposed 40' Layout, 24' pavement (No waiver required)***

5. Variance to install iron rods at front lot corners and easements. ZBA should require the bounds.

***Response: No comment. Note the plans depict Iron Rods at front lot corners and easements.***

6. Request to allow Modified Cape Cod berms. The requirement is bituminous concrete berms. I don't believe this request is necessary.

***Response: Bituminous concrete berm is proposed along the sidewalks and C.C. Berm on the remaining portions of the road.***

7. An additional variance is required for the centerline radii of Road "B" (150' required, 100' provided).

***Response: Waiver requested***

**Zoning By-Laws**

1. Variance for lot shape. The lots sizes have been considerably reduced and the lot shapes are basically square and rectangular. I don't believe this that variance is applicable.

Lot shape calculations have been provided and the applicant has stated that this variance is not required.

***Response: Lot shape calculations have been provided, waiver not required***

2. Variance of the lot area and frontage. ZBA's decision.

***Response: No comment***

3. Variance of the yard setbacks. ZBA's decision

***Response: No comment***

4. Waiver of building permit fees for the affordable units. ZBA's decision.

***Response: No comment***

5. Waiver of occupancy permit fees for the affordable units. ZBA's decision.

**Response: No comment**

6. Variance of parking space size from 9'x20' to 9'x18'.

The applicant has stated " *that all the parking abuts a cape cod berm. There is no interior parking abutting one vehicle to another*". It is my understanding that the vehicles' bumpers would be allowed to hang over the cape cod berms.

There is no need to allow this variance.

- a. A majority of the parking spaces abut a sidewalk. If the vehicles are allowed to hang over the berms, the sidewalk width would be reduced.
- b. Where there are no sidewalks, snow will be piled during the winter season.
- c. Even though we have supposedly gone to compact vehicles. Many people still drive large trucks, SUV's and vans that will be parking in these spaces.

**Response: Spaces revised to 9'x20'.**

7. Waiver of sewer fees for the affordable units. ZBA's decision.

**Response: No comment**

8. Waiver of water fees for the affordable units. ZBA's decision.

**Response: No comment**

#### **PLAN SHEET 1**

1. Zoning Classification Table: There is a conflict with the Town's Subdivision Rule & Regulations and the Zoning Map regarding the status of Sterling Road (collector street vs minor street). This will affect the required front setback.

**Response: Variance for setbacks requested**

2. The date of the NOTE: Stormwater Management Report should be July 5, 20128, last revised 11/6/18.

**Response: Revised**

#### **PLAN SHEET 4**

1. Show landscaping. \*\*

**Response: The applicant will accept a condition in the decision that the above information be provided to the ZBA prior to submitting an application for Building Permit.**

2. The required parking space size is 9' x 20'. The plan shows spaces 9' x 18', a variance has been requested.

**Response: Revised spaces to 9'x20'**

Please refer to WAIVERS/VARIANCES, Zoning By-laws, Item 6, above.

#### **PLAN SHEET 5**

1. A school bus shelter/area should be included on the plan. \*\*

**Response: Revised Shelter depicted on Sheet 5.**

2. Is the one long entrance adequate for emergency vehicles? Confirm with the Police Department. \*\*

**Response: The applicant will request confirmation from the Police Department.**

#### **PLAN SHEET 6**

1. Show the type and size of the water services to the buildings. \*\*

**Response: The size and type of domestic and fire lines have not been designed at this time. The ZBA may make this a condition of approval.**

2. The Fire Department may want a hydrant opposite the 46 unit building. Check with the Fire Department. \*\*

**Response: The applicant will request confirmation from the Fire Department.**

3. Show the size and type of the sewer force main. \*\*

**Response: Final design of the sewer pump station is not completed at this time. Information to be provided with construction documents.**

4. The pipe at HW #67 should be labelled 15" RCP.

**Response: Revised**

5. The size of the snow storage areas appear to be very small compared to the amount of pavement and sidewalks that will require snow removal. Please submit detailed calculations showing the adequacy of the snow storage areas.

The applicant will accept a condition in the decision that if the snow removals areas are not sufficient then the excess snow will be removed from the site.

**Response: The applicant agrees to a condition of approval.**

#### **PLAN SHEET 7**

1. Show the type and size of the water services to the buildings. \*\*

**Response: The size and type of domestic and fire lines have not been designed at this time. The ZBA may make this a condition of approval.**

2. Show the size and type of the sewer force main. \*\*

**Response: Final design of the sewer pump station is not completed at this time. Information to be provided with construction documents.**

3. The size of the snow storage areas appear to be very small compared to the amount of pavement and sidewalks that will require snow removal. Please submit detailed calculations showing the adequacy of the snow storage areas.

The applicant will accept a condition in the decision that if the snow removals areas are not sufficient then the excess snow will be removed from the site.

**Response: The applicant agrees to a condition of approval.**

**PLAN SHEETS 9 - 11**

1. Show all the required bounds (along the ROW, each front lot corner & easement corners) as reinforced concrete.

***Response: Revised plan depicting bounds and iron rods.***

2. The centerline radii for Road "B" is designed at 100'. The required centerline radius is 150'. A variance is requested.

***Response: No comment***

**PLAN SHEETS 12 - 14**

1. At the cul-de-sac, the required pavement diameter should be 120' and the required property line diameter should be 160'. A variance has been requested.

***Response: Waiver requested***

2. The required right-of-way width for a collector street (Road A) is 60' and a minor street (Road B) is 50'. A variance is requested.

***Response: Waiver Requested***

3. The required pavement width for a collector street (Road A) is 30', a minor street (Road B) is 24' and a lane (Road C) is 24'. The plan shows a 22' width. The proposed width of the apartment complex driveway is 24'. Why is the roadway width less than the driveway width? A variance has been requested.

***Response: All roads 24' pavement, waiver requested***

4. Do the proposed street trees fit within the right-of-way? Do they interfere with the water mains and E/T/C lines?

The applicant will plant the trees outside of the right-of-way. Is this acceptable to the ZBA?

***Response: The street trees will not fit within the right of way. They will be planted outside the right of way.***

5. Is the one long entrance adequate for emergency vehicles? Confirm with the Police Department. \*\*

***Response: The applicant will request confirmation from the Police Department.***

6. Should the entrances to Roads A & B line up with the Town of Lancaster ROW's on the north side of Sterling Road?

***Response: No comment***

7. Confirm with the Water Department that they will accept the water line installed outside of the traveled/paved portion of the road. \*\*

***Response: The applicant will accept a condition in the decision that the above information be provided to the ZBA prior to submitting an application for Building Permit.***

8. Does the Conservation Commission consider that the isolated wetlands are protected under their regulations?

***Response: No comment***

**PLAN SHEET 15**

1. Proposed SMH#1: How does it affect any upstream pipes and services along Sterling Road? Please show the existing sewer line that extends up Sterling Road. Coordinate this design with the Sewer Commission and DPW.

The applicant has stated that the construction shall be coordinated with the Sewer Commission prior to installation. This should be stated on the plan.

***Response: This is stated on sheet 19.***

**PLAN SHEETS 16 - 17**

1. What is the size and type of the force main? \*\*

***Response: Final sewer force main design will be provided with construction documents.***

**PLAN SHEET 19**

1. The existing sewer line in Sterling Road to Station -2+50 should be shown on the profile.

***Response: Revised***

**PLAN SHEET 21**

1. Typical Right of Way Cross Section Detail: Variance requested.

a. The required right-of-way width for a minor street is 50'. The detail shows 40'.

b. The required pavement width for a lane and minor street is 24'. The detail shows a 22' width.

***Response: Revised Typical cross section depicts 24' pavement with 40' ROW.***

**PLAN SHEET 22**

1. Grass Access Detail.

a. Show the width of the access drive.

b. Show 12" depth of M1.03.0, Type b gravel.

***Response: Revised***

2. Detention Basin Typical Section.

a. Show the depth of the sand bottom (12").

***Response: Revised***

**PLAN SHEETS SUP-A1 & SUP A2**

1. On the Intersection Site Distance drawings, all obstructions (trees, vegetation, utility poles, stone walls, other site obstructions, etc.,) to be removed and/or relocated should be shown on the plans.

The following note should be added to the plans.

***"Signs, landscaping and other features located within sight triangle areas shall be designed, installed and maintained so as not to exceed 2.5-feet in height. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed."***

***Response: Revised***

Also, the following condition should be added to the decision.

***"The Applicant must submit an affidavit from a Professional Engineer confirming that the required sight lines are provided at the driveways after they are constructed and prior to the issuance of the first Certificate of Occupancy for the project."***

***Response: No comment***

**LIGHTING PLAN** *(Response: These comments to be address by the others)*

I am not an Electrical Engineer, so portions of my comments maybe incorrect.

1. The plan should be stamped by a Mass. Registered Electrical Engineer.
2. The plan only shows the lighting for the apartment complex. No lighting is shown for the subdivision roadways.
3. The foot candles opposite the apartment building along the west property line exceed 0.3 foot candles.
4. Are there any lights proposed on the buildings?
5. The plan should state that the lighting design meets the requirements of the Town of Lancaster Zoning By-Law and the Town of Lancaster Subdivision Rules and Regulations.

**ADDITIONAL REQUIRED DETAILS**

1. Sewer Pump Station and Calculations \*\*

***Response: Final design of the sewer pump station is not completed at this time. Information to be provided with construction documents.***

2. Wetland Crossing (should be shown on the design plans).

The applicant will show the wetland impact details on the plans submitted to the Conservation Commission. After they receive an Order of Conditions, the details should be shown on the Construction Drawings. This should be added as a condition in the decision.

***Response: No Comment***

3. Privacy Fence

***Response: Detail provide see Sheet 27.***



4. Sewer Flushing Manhole

***Response: Revised See sheet 25.***

5. Street & Stop Signs with Posts

***Response: Revised See sheet 21.***

6. Fire Lane

***Response: Applicant to review with Fire Chief.***

**STORMWATER MANAGEMENT REPORT**

1. Hydrogeological Calculations:

- a. The length of Post 16S flow path should be greater than 1000'. The flow length was not revised.

***Response: Revised See Report***

2. Appendix A-1:

- a. The Average "c" Value for Structures Table is labelled Fieldcrest Estates and dated 9/27/07. The correct title and date should be on the Table.

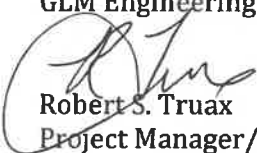
***Response: Revised See Report***

Enclosed herewith are the revised plans and documents for your review.  
If you have any questions please contact our office

Thank you for your cooperation in this matter.

Yours truly,

GLM Engineering Consultants Inc.



Robert S. Truax  
Project Manager/Design Eng.