

LAND SUBDIVISION - FORM F

Development Impact Report (DIR) PLANNING BOARD – Town of Medway, MA

OVERVIEW

The DIR is intended to serve as a guide to the applicant in formulating their development proposal, as well as a guide to the Planning Board in evaluating the proposed Subdivision Plan in the context of existing conditions and the Town's planning efforts. The DIR should be prepared as early in the design process as possible, even if certain aspects are unknown at that time.

The DIR seeks to raise the broad range of issues generally association with a subdivision development plan in a form and in language that is understandable to the layperson. The DIR shall identify and assess development impacts that could possibly be avoided or mitigated if recognized early in the development process. Other portions of the DIR request information that will help the Town plan ahead to provide adequate services in the future.

The DIR shall be filed with an application for approval of a Preliminary and a Definitive Subdivision Plan. It shall clearly and methodically assess the relationship of the proposed development to the natural, physical, and social environment of the surrounding area. In preparing the DIR, a systematic interdisciplinary approach shall be utilized to include professionals in the natural and social sciences and environmental design arts.

April 1, 2021

Date

1. Name of Proposed Subdivision: Boundary Lane
2. Location: 67R & 69 Summer Street
3. Name of Applicant (s): Zachary T. Lindsey et. ux
4. Brief Description of the Proposed Project: _____

3 Lot residential subdivision

Includes one (1) new house lot and two (2) existing house lots

5. Name of Individual Preparing this DIR Vito Colonna / Connorstone Engineering

Address: 10 Southwest Cutoff, Northborough, MA Phone: 508-393-9727

Professional Credentials: Professional Engineer MA #47635

SITE DESCRIPTION6. Total Site Acreage: 11.3

Approximate Acreage	At Present	After Completion
Meadow/brushland (<i>non-agricultural</i>)	0	0
Forested	4.6	4.4
Agricultural (<i>includes orchards, croplands, pasture</i>)	0.3	0.3
Wetlands	2.9	2.9
Water Surface Area	0	0
Flood Plain	0	0
Unvegetated (<i>rock, earth or fill</i>)	0	0
Roads, buildings and other impervious surfaces	0.7	0.7
Other (<i>indicate type</i>) - LAWN	2.8	3.0
TOTAL	11.3	11.3

7. Present permitted and actual land use by percentage of the site.

Uses	Percentage
Industrial	
Commercial	
Residential	32%
Forest	65%
Agricultural	3%
Other (specify)	

8. List the zoning districts in which the site is located and indicate the percentage of the site in each district. *NOTE – Be sure to include overlay zoning districts.*

Zoning District	Percentage
AR-1	100%

9. Predominant soil type(s) on the site: "Woodbridge"**Soil Drainage***(Use the U.S. Soil Conservation Service's definition)*

Soil Type	% of Site
Well drained	
Moderately well drained	60%
Poorly drained	40%

10. Are there any bedrock outcroppings on the site? ☐ Yes ☒ No

If yes, specify: _____

11. Approximate percentage of proposed site with slopes between:

<i>Slope</i>	<i>% of Site</i>
0 – 10%	93%
10 – 15%	6%
Greater than 15%	1%

12. In which of the Groundwater Protection Districts is the site located?

Zone(s) N/A

Proximity to a public well: 11,000 +/- feet

13. Does the project site contain any species of plant or animal life that is identified as rare or endangered? (*Consult the Massachusetts Heritage Program and the Medway Conservation Commission for information.*) ☐ Yes ☒ No

If yes, specify: _____

14. Are there any unusual site features such as trees larger than 30 inches, bogs, kettle ponds, eskers, drumlins, quarries, distinctive rock formations or granite bridges?

☐ Yes ☒ No

If yes, specify: _____

15. Are there any established foot paths running through the site or railroad right of ways? ☐ Yes ☒ No

If yes, please specify: _____

16. Is the site presently used by the community as an open space or recreation area? ☐ Yes ☒ No

If yes, please specify: _____

17. Does the site include scenic views or will the proposed development cause any scenic vistas to be obstructed from view? ☐ Yes ☒ No

If yes, please specify: _____

18. Are there wetlands, lakes, pond, streams or rivers within or contiguous to the site? ☒ Yes ☐ No

If yes, please specify: Wetlands located on-site

19. Is there any farmland or forest land on the site protected under Chapter 61A or 61B of the Massachusetts General Laws? ☐ Yes ☒ No

If yes, please specify: _____

20. Has the site ever been used for the disposal of hazardous waste? Has a 21E study been conducted for the site? ☐ Yes ☒ No

If yes, please specify: _____

21. Will the proposed activity require use and/or storage of hazardous materials, or generation of hazardous waste? ☐ Yes ☒ No

If yes, please specify: _____

22. Does the project location contain any buildings or sites of historic or archaeological significance? (Consult with the Medway Historical Commission) ☐ Yes ☒ No

If yes, please describe: _____

23. Is the project contiguous to or does it contain a building located in a national register historic district? ☐ Yes ☒ No

If yes, please describe: _____

CIRCULATION

24. What is the expected average weekday traffic and peak hour volumes to be generated by the proposed subdivision?

Average weekday traffic	29
Average peak hour volumes – morning	3
Average peak hour volumes - evening	3

25. Existing street(s) providing access to the proposed subdivision:

Please specify: Summer Street

26. Existing intersection(s) within 1000 feet of any access to the proposed development. Please specify intersection names: Highland Street

27. Location of existing sidewalks within 1000 feet of the proposed site: _____

Sidewalks on Summer Street

28. Location of proposed sidewalks and their connection to existing sidewalks:

None

29. Are there parcels of undeveloped land adjacent to the proposed site:

 Yes X No

Will access to these undeveloped parcels be provided from the proposed subdivision?

 Yes No

If yes, please describe: _____

If no, please explain why: _____

UTILITIES AND MUNICIPAL SERVICES

30. What is the total number of dwelling units proposed? 3

31. What is the total number of bedrooms in the proposed subdivision? 12

32. Stormwater Management

A. Describe the nature, location and surface water body receiving current surface water of the site: _____

(1.) On-site wetland and unnamed stream along rear of site, which flows to the south ultimately tributary to Hopping Brook. (2) Culvert in the front (north east) corner of the site, which flows north to wetland on the east side of Summer Street. These wetlands are ultimately tributary to Chicken Brook.

- B. Describe the how the proposed stormwater management system will operate and how the existing stormwater patterns will be altered: _____

On-site stormwater collection, detention, and treatment system including a surface detention basin.
Discharges shall match the peak rate, volume, and pattern of runoff when compared to the existing conditions.

- C. Will a NPDS Permit be required? _____ Yes _____ ☒ No

33. Please estimate the response time of the Fire Department to this site:
(Please consult with the Fire Department): _____ 5 to 7 minutes

34. Schools

- A. Projected number of new school age children: _____ 3

- B. Distance to nearest elementary school: _____ 2.5 Mile

MEASURES TO MITIGATE IMPACTS - Please attach a brief description of the measures that haven been taken during subdivision design and will be taken during subdivision construction for each of the following:

- 35. Maximize stormwater infiltration and groundwater recharge
- 36. Prevent surface and groundwater contamination
- 37. Reduce detrimental impacts to water quality
- 38. Maintain slope stability and prevent erosion
- 39. Conserve energy
- 40. Preserve wetlands
- 41. Preserve wildlife habitats, outstanding ecological or botanical features
- 42. Protect scenic views
- 43. Retain natural landscape features
- 44. Design street layouts to facilitate southern orientation of houses
- 45. Use curvilinear street patterns
- 46. Promote pedestrian and bicycle access and safety
- 47. Reduce the number of mature trees to be removed
- 48. Provide green belt/buffer areas
- 49. Preserve historically important structures and features on the site
- 50. Retain natural valley flood storage areas
- 51. Minimize the extent of waterways altered or relocated
- 52. Reduce the volume of cut and fill
- 53. Minimize the visual prominence of man-made elements even if necessary for safety or orientation
- 54. Minimize municipal maintenance frequency and costs
- 55. Reduce building site frontages or driveway egresses onto primary or secondary streets

In describing each of the above, please use layman's terms where possible while still being accurate and comprehensive. Where appropriate, please use graphic illustrations. Identify data sources, reference materials and methodology used to determine all conclusions.

MEASURES TO MITIGATE IMPACTS

35. *Maximum stormwater infiltration and groundwater recharge.*

Proposed private road has been directed to a stormwater management basin system sized and designed in accordance with DEP Stormwater Standards. The system will maximize infiltration to match the existing recharge conditions.

36. *Prevent surface and groundwater water contamination.*

Stormwater drainage from the roadway will be collected in Low Impact Development (LID) techniques including vegetated swales for pretreatment and directed to a Stormwater Basin for recharge and treatment. The system will be designed to remove a minimum 80% of the TSS, and will be designed in full compliance with the Massachusetts Stormwater Handbook and Stormwater Standards to ensure protection to water quality.

37. *Reduce detrimental impacts to water quality.*

As noted above, the stormwater system will be designed to remove a minimum 80% of the TSS, and will be designed in full compliance with the Massachusetts Stormwater Handbook and Stormwater Standards to ensure protection to water quality.

38. *Maintain Slope Stability and Prevent Erosion*

Proposed vegetated slopes will be limited to 2 horizontal to 1 vertical, which will be dressed with minimum 6 inches of loam and seeded. Any slope greater than 3 horizontal to 1 vertical will be seeded with hydroseed methods including a tackifier. The existing topography is relatively flat with little need to create large cut or fill slopes requiring special slope protection. Construction period erosion control would be implements and provided in the final definitive subdivision plans.

39. *Conserve Energy*

The proposed development and new home would be new construction meeting the current building codes for energy conservation.

40. *Preserve wetlands*

No wetlands or undisturbed areas within 25 feet of any wetland will be altered as part of the project, and sedimentation and erosion controls will be implemented during construction to mitigate potential temporary impacts.

41. *Preserve wildlife habitats, outstanding ecological or biological features*

The wetland areas onsite and the 25 foot buffer zone will not be altered by the proposed work, which will provide habitat for wildlife in the area. There are no mapped areas of estimated or priority habitats within the project limits.

42. *Protect scenic views*

The proposed project would not block or obstruct any existing scenic views or vistas. The existing frontage along Summer Street is currently developed with a single family home.

43. *Retain natural landscape features*

Existing vegetation will be preserved to the extent feasible, and all vegetation within 25 feet of the wetland will also be preserved.

44. *Design street layouts to facilitate southern orientation of houses.*

The proposed street layout options are limited due to the existing homes, and the street generally runs over the existing common driveway in an east west direction. The proposed home would have sun exposure.

45. *Use curvilinear street patterns*

The proposed street layout options are limited due to the currently existing homes, and the street generally runs over the existing common driveway to limit further land disturbance.

46. *Promote pedestrian and bicycle access and safety*

The size and scope of the subdivision with the addition of one house would not increase the pedestrian and bicycle safety. The existing sidewalk along Summer Street would be maintained and proper access provided across the entrance.

47. *Reduce the number of mature trees to be removed*

Mature trees would be preserved to the maximum extent feasible. Tree preservation would be reviewed in greater detail during the definitive design phase.

48. Provide green belt/buffer areas

A large buffer area would be provided to the rear of the proposed house with the on-site wetlands and power line easement. The other two homes are existing and well established.

49. Preserve historically important structures and features on the site

Not applicable, there are no known historic features on the subject site.

50. Retain natural valley flood storage areas

Not applicable, there are no valley flood storage areas on the subject site.

51. Minimize the extent of waterways altered or relocated

The proposed work will not require any filling of wetlands or waterways.

52. Reduce the volume of cut and fill

The amount of cut and fill has been reduced to the extent feasible. The proposed roadway does not require and large cuts or fills and closely follows the existing grade.

53. Minimize the visual prominence of man-made elements even if necessary for safety or orientation

The majority of the development including the one new home would be located to the rear portion of the lot reducing the visual impact from Summer Street.

54. Minimize municipal maintenance frequency and costs

The proposed project would have minimal effect on municipal services. There would be a net increase in one single family house, and the roadway would remain in private ownership. All future maintenance of the roadway would be the responsibility of the homeowners association.

55. Reduce building site frontages or driveway egresses onto primary or secondary streets

The existing conditions include common driveway access to Summer Street. This location would be utilized as the private road entrance. No new lot frontage on Summer Street would be created, and the three lots would have frontage on the proposed roadway.