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## NOTICE TO THE TOWN CLERK

I, Adam J. Costa, attorney for Petitioner Still River Road Development, LLC, hereby provide notice that said Petitioner has appealed Defendant Town of Bolton Zoning Board of Appeals' denial of a comprehensive permit for the Petitioner's project known as "Still River Commons," located off Still River Road in Bolton, Massachusetts. Said appeal has been brought pursuant to G.L. c. 40B, §§ 20-23, a.k.a. Chapter 40B, and 760 CMR 56.05(9)(b) and 760 CMR 56.06, generally. The Petitioner contends that the aforesaid denial is unreasonable and inconsistent with local needs; that it was based not on legitimate concerns justified by the Board's consultants or other experts that outweigh the regional need for affordable housing, but instead on subjective and unspecified fears or preferences expressed by the public and by certain municipal staff, boards and commissions, including the Board's own appointing authority; and, accordingly, that the Board's decision should be annulled and the Board ordered to issue a comprehensive permit to the Petitioner forthwith.

A copy of the Petitioner's Initial Pleading as filed with the Housing Appeals Committee (HAC) is annexed hereto, as are the Exhibits referenced therein.

Date: May 29, 2019

Adam J. Costa, BBO No. 667840  
Mead, Talerman & Costa, LLC  
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2019 MAY 29 AM 11:34

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By Hand

May 29, 2019

Shelagh A. Ellman-Pearl, Chair  
Housing Appeals Committee  
100 Cambridge Street, Suite 300  
Boston, Massachusetts 02114

COPY

Re: Initial Pleading  
Comprehensive Permit Denial  
Still River Commons  
Bolton, Massachusetts

Dear Chair Ellman-Pearl:

Reference is made to the above-captioned matter. In that connection and on behalf of Still River Road Development, LLC, I enclose the following items:

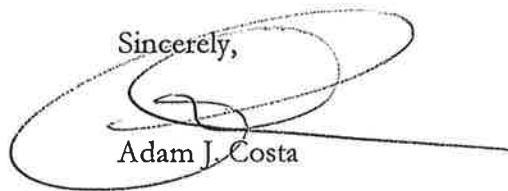
- (i) my Notice of Appearance;
- (ii) Initial Pleading Cover Sheet;
- (iii) Initial Pleading;
- (iv) Motion for Reduction of Fee; and
- (v) minimum filing fee in the amount of \$1,500.00, payable to the Department of Housing and Community Development per Standing Order 08-01.

Also enclosed are copies of the application and complete description of the Still River Commons project as submitted to the Board, i.e. Exhibit A, and of the Board's decision, i.e. Exhibit B, per 760 CMR 56.06(4)(a)(6) and 760 CMR 56.06(4)(a)(7), respectively.

Kindly docket and file the same, as applicable.

Thank you.

Sincerely,



Adam J. Costa

AJC/fhs

Enclosures

cc: Bolton Town Clerk (w/ encl.)

Certificate of Service (w/ encl., via first-class mail only)

Client (w/ encl. in part, via e-mail only)

*Millis Office*

730 Main Street, Suite 1F  
Millis, MA 02054  
Phone 508.376.8400



COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
HOUSING APPEALS COMMITTEE

HAC No.: \_\_\_\_\_

STILL RIVER ROAD  
DEVELOPMENT, LLC,

Petitioner,

v.

TOWN OF BOLTON ZONING  
BOARD OF APPEALS,

Respondent.

COPY

**NOTICE OF APPEARANCE**

Please enter my appearance for Still River Road Development, LLC, Petitioner in the above-captioned action. Thank you.

Date: May 29, 2019



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# INITIAL PLEADING COVER SHEET

# HOUSING APPEALS COMMITTEE

(PER 760 CMR 56.00)

|  |  |
|--|--|
| <b>Developer/Applicant (Name/Address):</b><br>Still River Road Development, LLC<br>c/o David Russell, Manager<br>28 Country Club Lane<br>Middleton, Massachusetts 01949  | <b>Chairman/Zoning Board (Name/Address):</b><br>Gerard Ahearn, Chair<br>Town of Bolton Zoning Board of Appeals<br>Town Hall<br>663 Main Street<br>Bolton, Massachusetts 01740  |
| <b>Developer/Applicant's Attorney (Name/Address/Phone/Fax/Email):</b><br>Adam J. Costa, Esq.<br>Mead, Talerman & Costa, LLC<br>30 Green Street<br>Newburyport, Massachusetts 01950<br>(978) 463-7700 Phone (978) 463-7747 Fax<br>adam@mtclawyers.com | <b>Zoning Board's Attorney (Name/Address/Phone/Fax/Email):</b><br>Robert B. Gibbons, Esq.<br>Mirick O'Connell<br>1800 West Park Drive, Suite 400<br>Westborough, Massachusetts 01581<br>(508) 898-1501 Phone (508) 898-1502 Fax<br>rgibbons@mirickoconnell.com |

Project Name: Still River Commons  
 Address: Off Still River Road  
Bolton, Massachusetts 01740

Type of Development: Rental ☐ Ownership ☒ Mixed ☐

Funding Agency/Program: MassHousing; New England Fund Program

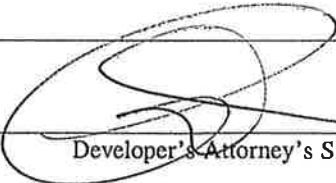
Site Approval/Project Eligibility: Yes ☒ No ☐ Date: June 20, 2018

Total No. Units Appealed to H.A.C.: 8 No. Affordable (subsidized) Units: 2

ZBA Decision: Denial ☒ Grant ☐ Grant With Conditions ☐ Constructive Grant ☐  
 Constructive Denial ☐ Other ☐

Date ZBA Decision Filed With Municipal Clerk: May 9, 2019

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

  
 Developer's Attorney's Signature and Date 5/29/19

## FOR DOCKET CLERK USE ONLY

Standard Fee Amount: \$ \_\_\_\_\_

Full Standard Fee enclosed  
 with Initial Pleading? ☐ Yes ☐ No

Motion on Fee enclosed  
 with Initial Pleading? ☐ Yes ☐ No

Minimum Fee of \$1,500 enclosed  
 with Initial Pleading? ☐ Yes ☐ No

Docket #: \_\_\_\_\_ Case #: \_\_\_\_\_

Motion on Fee: ☐ Granted ☐ Denied

on (date) \_\_\_\_\_

Additional Fee beyond \$1,500 Minimum  
 Fee paid as per Ruling on Motion on Fee:

amount: \$ \_\_\_\_\_

on (date): \_\_\_\_\_

HAC Appeal Date: \_\_\_\_\_



COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
HOUSING APPEALS COMMITTEE

HAC No.: \_\_\_\_\_

STILL RIVER ROAD  
DEVELOPMENT, LLC,

Petitioner,

v.

TOWN OF BOLTON ZONING  
BOARD OF APPEALS,

Respondent.

COPY

**INITIAL PLEADING REGARDING  
DENIAL OF COMPREHENSIVE PERMIT BY  
RESPONDENT TOWN OF BOLTON ZONING BOARD OF APPEALS**

**I. Introduction**

1. The following is an appeal brought pursuant to G.L. c. 40B, §§ 20-23 (“Chapter 40B”), and 760 CMR 56.05(9)(b) and 760 CMR 56.06, generally, of Respondent Town of Bolton Zoning Board of Appeals’ (the “Board”) denial of a comprehensive permit to Petitioner Still River Road Development, LLC, for a project known as “Still River Commons” (the “Project”), located off Still River Road in Bolton, Massachusetts (the “Locus”).

2. The Project proposes eight (8) units of homeownership housing in four (4) duplex-style buildings, on an approximately 6.68-acre site. Two (2) of the aforesaid units are to be designated as affordable to low- to moderate-income households.

3. After more than seven-and-a-half months of a public hearing continued from time-to-time and subsequent deliberations, including assistance from Chapter 40B consultant



Joseph Peznola, P.E., and technical review by the Horsley Witten Group, the Board voted, contrary to the advice and/or favorable recommendation(s) of these consultants, to deny a comprehensive permit for the Project.

4. The Petitioner contends that said denial is unreasonable and inconsistent with local needs. No meaningful or reliable evidence was presented to the Board that the Project, including the variety of revisions made thereto at the behest of the Board while the public hearing was underway, will imperil the public health or safety, endanger the natural environment or deplete critically needed open space.

5. The Board's denial of the comprehensive permit was based not on legitimate concerns justified by its consultants or other experts that outweigh the regional need for affordable housing, but instead on subjective and unspecified fears or preferences expressed by the public and by certain municipal boards and commissions. The theme of the Board's decision (the "Decision") is that these boards and commissions, as well as some members of Town staff, believed, but did not justify with supporting data, that all Town standards, e.g. the Bolton Wetlands Bylaw, the Bolton Board of Health Regulations and Requirements for the Subsurface Disposal of Sanitary Sewage, ought to be applied to the Project, ignoring Chapter 40B's Legislative mandate that these standards be waived in the interest of creating affordable housing.

6. Especially problematic is a February 5, 2019 letter from the Board of Selectmen, i.e. the Board's appointing authority, in which the Selectmen "urge that the Zoning Board of Appeals deny this Comprehensive Permit." Not unlike the comments received from other boards, commissions and staff, the Selectmen's recommendation of a denial was without evidentiary support. Their aforementioned letter speaks of "no guarantee [that] the septic or storm water systems... won't negatively affect the groundwater, private



wells and wetlands,” expresses fear that Project “will wreak havoc on... Still River Road” because some surrounding areas are “subject to flooding,” complains of a “tight building site” and cites to ecological resources on the site that, remarkably, the Board concedes are “undefined” and “need to be established by experts...”

## II. Statement of the Prior Proceedings

7. On June 20, 2018, the Massachusetts Housing Finance Agency, a.k.a. MassHousing, issued to the Petitioner a written determination of project eligibility or site approval, a.k.a. a Project Eligibility Letter or PEL, for the development of “eight (8) units in four (4) duplex-style buildings including two (2) affordable units... on approximately 6.68 acres of land located on Still River Road... in Bolton, MA...”

8. Thereafter, on August 21, 2018, the Petitioner submitted to the Board its application for a comprehensive permit, accompanied by all supporting information and documentation required by the Board’s Rules and Regulations (collectively, the “Application”). See Exhibit A.

9. A duly-noticed, -advertised and -posted public hearing on the Application was opened on September 24, 2018. The Petitioner granted the Board an extension to allow the opening of said public hearing more than 30 days following receipt of the Application. See G.L. c. 40B, § 21 (“[t]he board of appeals shall... within thirty days of the receipt of such application, hold a public hearing on the same”).

10. The public hearing was continued to October 17, 2018; November 19, 2018; November 26, 2018; December 18, 2018; January 17, 2019; February 12, 2019; February 19, 2019; March 6, 2019; March 19, 2019; and April 2, 2019. Said public hearing was closed on April 2, 2019. Again, the Petitioner granted the Board an extension to allow the public hearing to exceed 180 days in length. See 760 CMR 56.05(3) (“a hearing shall not extend



beyond 180 days from the date of opening the hearing...”).

11. The Board was aided in its processing and review of the Application by Joseph Peznola, P.E., a consultant whose services were provided via a grant from the Massachusetts Housing Partnership’s Chapter 40B Technical Assistance Program. Mr. Peznola submitted multiple letters to the Board dated October 23, 2018; November 23, 2018; December 17, 2018; January 14, 2019; February 6, 2019; March 4, 2019; and March 19, 2019. Mr. Peznola also attended six (6) sessions of the aforementioned public hearing on the Application.

12. The Board was further assisted in its review of the Application by consultants at the Horsley Witten Group (HWG), namely Janet Carter Bernardo, P.E., LEED AP, and Amy Ball, PWS, CWS. HWG’s charge was, per the Decision, “to conduct a technical peer review of the Application for civil engineering and environmental impact.” HWG issued several letters to the Board dated October 11, 2018; December 18, 2018; January 15, 2019; and February 14, 2019. The Board concedes in the Decision that the advice sought from and provided to it by HWG was “unavailable from municipal employees.”

13. Throughout the public hearing and between sessions thereof, additional information was submitted and revisions were made to the Project documentation, plans and supporting data, by the Petitioner, so as to address feedback received from Board member(s), comments from the Board’s consultants, requests from Town staff, boards and commissions and remarks made by residents or other interested parties. Additional filings by the Petitioner included:

- (a) four (4) letters from the Petitioner’s consultant, Ducharme and Dillis Civil Design Group, Inc. (CDG), responding to and addressing comments received from HWG;



- (b) five (5) separate revisions to the Project's site plans, addressing not only HWG's comments but also those received from the Board, the Town and residents;
- (c) revisions to the Stormwater Report and to the accompanying Stormwater Operation and Maintenance Manual;
- (d) a December 11, 2018 letter from CDG responding to feedback received from Town staff, boards and commissions, followed by separate letters dated February 28, 2019, addressing certain requests made by the Board during the preceding session of the public hearing; dated March 14, 2019, addressing correspondence from the Board of Selectmen; dated March 14, 2019, addressing an e-mail from the Conservation Commission; and dated March 15, 2019, again addressing certain (additional) requests made by the Board during the preceding session of the public hearing;
- (e) a February 5, 2019 letter with accompanying plan describing and depicting, respectively, certain drainage improvements offered by the Petitioner within the adjacent Still River Road right-of-way; and
- (f) February 28, 2019 and March 13, 2019 plans showing the extent of disturbance of the 25-foot buffer to wetland resource area(s) on the Locus, as were requested by the Board.

14. HWG concluded in its fourth and final peer review letter, i.e. that dated February 14, 2019, referenced in Paragraph 12, above, that "HW[G] is satisfied that the Applicant has addressed our concerns."

15. After acknowledging that "[t]he plans submitted are more than sufficient for review," Mr. Peznola likewise stated in his seventh and final letter to the Board, i.e. that dated March 19, 2019, referenced in Paragraph 11, above, that "[t]he Applicant seems to have satisfied all of the outstanding comments" by HWG.

16. At the April 2, 2019 session of the public hearing and just in advance of closing the same, the Board reviewed the Petitioner's requests for waivers from local requirements and regulations. They were relatively few in number; however, the Board had required that the waivers be itemized by individual unit in the Project, by individual lot



comprising the Project site, etc., thereby giving the appearance of an extensive list of waivers, especially from the Bolton Wetlands Bylaw and the Bolton Board of Health Regulations and Requirements for the Subsurface Disposal of Sanitary Sewage. The Board proceeded at its April 2, 2019 meeting to deny the overwhelming majority of these waivers, based substantially, per the Decision itself, on “request[s]” from the Conservation Commission and the Board of Health that the Board require compliance with their respective regulations and requirements.

17. Following the close of the public hearing, the Board conducted deliberations at its April 18, 2019 meeting.<sup>1</sup>

18. Despite the Petitioner’s cooperation throughout the permitting process before the Board, its extensive revisions to the Project meant to satisfy the Board and the courtesies it extended with respect to the belated opening and subsequent continuation beyond 180 days of the public hearing on the Application, and notwithstanding satisfaction of the Board’s own consultants, the Board voted at its April 18, 2019 to deny the Application. See Exhibit B.

19. The Decision was subsequently filed with the Town Clerk on May 9, 2019, see Exhibit B, i.e. 21 days after the Board’s vote to deny the Application and thus in violation of the requirement in 760 CMR 56.05(8)(a) that it “file its decision within 14 days in the office of the city or town clerk” (emphasis added).

### III. Statement of Petitioner’s Objections and Reasons Therefor

20. The Decision of the Board, per its explicit terms, was “based on the

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<sup>1</sup> It is unknown whether the Board or certain member(s) thereof deliberated at other meeting(s) prior thereto. At the conclusion of its April 2, 2019 meeting, the Board discussed the possibility of further deliberating on the Application in executive session. Inasmuch as a quorum of the Board did so, such action violated the Open Meeting Law, G.L. c. 30A, §§ 18-25, and the regulations promulgated thereunder, 940 CMR 29.00, *et seq.*; and the Petitioner expressly reserves the right to pursue all remedies available to it in that regard.



following reasons”:

- (a) that “[a]s designed, the [d]evelopment would endanger the natural environment due to the proximity of sensitive wetland resource areas...”;
- (b) that “[a]s designed, the [d]evelopment would endanger the natural environment... the protection of private drinking water wells and wetland... resource areas that may only be adequately protected through compliance with the Board of Health’s Regulations for Requirements for the Subsurface Disposal of Sanitary Sewage”;
- (c) that “[a]s designed, the [d]evelopment would endanger the natural environment... [due to] a significant risk that stormwater will overflow to Still River Road and impact road drainage and downstream wetlands”;
- (d) that “[t]he [d]evelopment would endanger the natural environment [by] undermin[ing] the Town’s Open Space and Recreation Plan as a result of the project’s design and its close proximity to protected land owned by Bolton Conservation Trust, Harvard Conservation Trust and Bolton Flats Wildlife Management Area”;
- (e) that “[a]s designed, the [d]evelopment would endanger the archeological significance of the property and surrounding area”; and
- (f) that “[t]he [d]evelopment’s ingress/egress as designed would potentially endanger public safety.”

See Exhibit B.

21. These conclusions are wholly unsupported by the record of proceedings before the Board; and are expressly contradicted by the Petitioner’s submittals to the Board as reviewed by the Board’s own consultants, as follows.

**A. Proximity to wetland resource areas**

22. The 6.68-acre Project site is comprised of approximately 3.8 acres of wetlands and 2.88 acres of upland. Much of the upland area is presently a cleared meadow surrounded by wooded area(s). The Project as proposed is to be clustered in an area that is 1.0 acre in size, more or less, with the remainder of the Locus preserved as native meadow,



woodland and wetlands. The Project has therefore been designed so as to retain nearly 85% of the Locus in its natural, undisturbed state.

23. The Decision frequently and repeatedly cites to “[d]iscrepancies in the resource area delineation,” see, e.g., Exhibit B, ¶ 24, which the Petitioner denies.

24. Indeed the Petitioner’s delineation of the boundary of bordering vegetated wetlands on the Locus was based on an Order of Conditions previously issued by the Conservation Commission in 2015, i.e. DEP File No. 112-636; just extended in 2018; and still-in-effect.

25. The aforementioned, alleged “[d]iscrepancies” arose from an unannounced and unauthorized inspection of the Locus by the Town’s Conservation Agent followed by assertion(s) that additional, undelineated wetlands exist on-site.

26. Without conceding the above, the Petitioner subsequently enlisted the assistance of EcoTec, Inc., to verify the wetland delineation and investigate the allegation of additional wetlands on-site. Adjustments were made to the Project plans thereafter, none too substantial and of no consequence to the Project as a whole.

27. The Board’s continued dissatisfaction with the foregoing was rooted in its frustration that “[t]he Applicant declined to file with the Bolton Conservation Commission early in the permitting process... [but] intends to submit filings with the Commission after the comprehensive permit application process is complete.” See Exhibit B, ¶ 32.

28. Yet the Board was advised by its consultant, Mr. Peznola, that the Petitioner was within its rights to rely on the wetland delineation performed previously (and approved by the Conservation Commission), i.e. DEP File No. 112-636; and, further, that the Petitioner was not obligated to sequence its permitting at the Board’s behest. Even HWG conceded the same, stating in its December 18, 2018 letter to the Board: “[I]t appears that



the Applicant has opted to complete... additional permitting at a later date... The Zoning Board [of Appeals] may choose to require that the Applicant return to the... Board if design modifications are required as a result of this additional permitting process.”

29. The Petitioner contests the other assertions and conclusory statements made by the Board in Paragraphs 10 and Paragraphs 14 through 39 of the Decision, see Exhibit B, all relative to the purported endangerment of wetland resource areas, as contrary to the information and documentation submitted by the Petitioner and unsupported by the evidence presented at the public hearing.

**B. Protection of drinking water wells**

30. The Board repeats in Paragraphs 13 and 40 of the Decision that, “[b]ased on the evidence at the public hearing, the Board concluded that compliance with the Bolton Well Regulations” and “the... Board of Health Regulations” “was necessary for the protection of private potable water systems and public health...” See Exhibit B.

31. Yet absent from the Decision is any reference to the “evidence” upon which such a conclusion was “[b]ased.” That is because none exists. None of the Board’s consultants raised the specter of potential risk(s) to the Town’s drinking water wells in their reviews.

32. Statements by the Board that “these concerns require denial of the Application” and “are not addressed by compliance with the more relaxed State standards,” see Exhibit B, ¶ 13, require justification that is not provided in the Decision.

33. Where the Project satisfies Title 5 of the State Sanitary Code, 310 CMR 15.00, *et seq.*, the Petitioner has not, despite what the Decision says, “failed to provide evidence” that its design “is adequate for the protection of potable water.” See Exhibit B, ¶ 12. The Board, not the Petitioner, has the burden of proving that the imposition of the



Town's more stringent standard(s) is consistent with local needs. See 760 CMR 56.07(2)(b)(2) ("[i]n the case of denial, the Board shall have the burden of proving, first, that there is a valid health, safety, environmental, design, open space, or other Local Concern which supports such denial, and then, that such Local Concern outweighs the Housing Need").

**C. Stormwater**

34. The Board's objections to stormwater management on the Locus, which it advanced as (additional) bases for its denial of the Application, were that "the Applicant declined to conduct a permeability test" to verify the infiltration rate of soils on-site, see **Exhibit B**, ¶ 55; that "[t]he Applicant failed to provide an appropriate overflow for the subsurface infiltration system," see **Exhibit B**, ¶ 57; that "[t]he subsurface infiltration system must be monitored on a regular basis to ensure no obstructions are present," see **Exhibit B**, ¶ 58; and that the Applicant "requested that the use of fertilizers, herbicides or pesticides be allowed consistent with other residential projects in Bolton," see **Exhibit B**, ¶ 62.

35. These concerns are predictably grounded in "oral testimony," see **Exhibit B**, ¶¶ 54, 55, 59, or letter from Town boards and commissions, see **Exhibit B**, ¶¶ 56, 61, not from the Board's own consultants.

36. That is no doubt because HWG, in its February 14, 2019 letter to the Board, concluded that "[t]he Applicant complies with" the standards in the Massachusetts Stormwater Handbook, subject to certain conditions of approval that the Board could have, but opted not to, include in an approval of the comprehensive permit.

37. A permeability test is not required by the aforementioned Massachusetts Stormwater Handbook; and was not deemed necessary by the Board's consultant(s).

38. The Petitioner did provide a solution for overflow and runoff onto or into



the adjacent Still River Road. HWG stated in its aforesaid February 17, 2019 letter: “The Applicant has provided a Drainage Improvement Plan that will be coordinated with the Bolton Department of Public Works (DPW). HW[G] has reviewed this plan and is in favor of the improvements.”

39. The need for monitoring and associated maintenance of the Project’s proposed subsurface infiltration system is no basis for Project denial, as an approval of the comprehensive permit could have been appropriately conditioned.

40. Restricting the use of fertilizers, herbicides and/or pesticides allowed within other residential projects in Bolton is problematic inasmuch as it runs afoul of Chapter 40B’s command that “requirements and regulations [be] applied as equally as possible to both subsidized and unsubsidized housing.” G.L. c. 40B, § 20. Irrespective thereof, if so justified, said restriction could have been made a condition of approval of the comprehensive permit.

**D. Status as or proximity to protected land**

41. The Board’s fears about wildlife habitat of rare and/or endangered species, see Exhibit B, ¶¶ 41, 44, 47, is belied by the March 22, 2019 letter from the Massachusetts Division of Fisheries and Wildlife, acknowledged in but disregarded by the Decision, in which the Division concludes that “this project will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species” and “will not result in a prohibited Take of state-listed rare species...”

42. Reference(s) to the Locus, i.e. the area of which it is a part, in the Town’s 2017 Open Space and Recreation Plan (OSRP) is no justification for denial of the comprehensive permit. The OSRP is not a master or comprehensive plan that operates as a planning tool in the Town of Bolton, has a history of implementation and contemplates or



incorporates an action plan for the creation of affordable housing in the community. Its preference for preservation of the Locus cannot operate to deprive the Petitioner of its reasonable use thereof.

43. The location of the Project site nearby other protected land, see Exhibit B, ¶¶ 45, 46, does not alter the above analysis.

E. Archeological significance

44. Neither a vague reference in a 2001 reconnaissance survey to the “archeological significance of the Still River Road area,” see Exhibit B, ¶ 48, nor the opinion of the Conservation Commission that the Locus is situated within an area “significant to local history,” see Exhibit B, ¶ 49, renders the Locus a protected archeological site.

45. The Massachusetts Cultural Resource Information System (MACRIS) does not identify the Locus as containing an Area, Building, Burial Ground, Structure or Object, i.e. all resource types listed therein.

46. No known archeological resources exist on-site.

F. Public safety

47. The Board’s apprehensions about vehicle traffic, access adequacy and parking, see Exhibit B, ¶¶ 50, 51, are contrived; unsupported by any evidence in the record whatsoever, they were mere pretexts for denial of the comprehensive permit.

48. None of the Board’s consultants cautioned the Board about, or even commented on, vehicular traffic or parking.

49. The Project is comprised of a mere eight (8) dwelling units. The Locus is not accessed via a country lane, minor street or even collector road, but rather Still River Road, a.k.a. Route 110, a major roadway that traverses three (3) Massachusetts counties and fifteen



(15) Massachusetts municipalities.

50. The Project as designed provides two (2) parking spaces per dwelling unit; no waiver was sought nor required therefor.

51. The Police Department had no concern with or objection to the Project design vis-à-vis traffic, access or parking. The Department commented on September 10, 2018: "No concerns or issues from the Police."

52. The Fire Department thanked the Petitioner, in a January 31, 2019 letter, for its revision to the Project plan to improve access to the building(s): "I appreciate that you did revise this portion of the proposed plan. The ability for the [F]ire [D]epartment to access all sides of the building[s] will assist if there were to be an emergency situation at any of the homes." The Department expressed no concern with traffic or objection to the parking adequacy, layout or configuration.

#### IV. Prayer for Relief Sought

53. Pursuant to 760 CMR 56.06(4)(a)(3), the Petitioner states that it is seeking the following relief:

- (a) a determination and ruling by the Committee that the Town has failed to satisfy any of the Statutory Minima, as defined in 760 CMR 56.01, see also 760 CMR 56.03(3), thereby creating a rebuttable presumption that the regional housing need outweighs local health, safety, design and/or planning concerns, if any;
- (b) a determination and ruling by the Committee that the Board has failed to rebut the aforesaid presumption and, consequently, that the Board's denial of a comprehensive permit to the Applicant exceeded its discretion and was in error;
- (c) a determination and ruling by the Committee that, irrespective of the foregoing presumption, requisite rebuttal, etc., the Board's denial of a comprehensive permit to the Applicant was neither reasonable nor consistent with local needs; and, indeed, was contrary to the evidence presented by the Applicant, its consultants and even the Board's own consultants, at and/or during the public hearing on the Application;



- (d) annulment of the Decision; and
- (e) issuance of an order by the Committee to the Board, directing it to issue a comprehensive permit for the Project forthwith.

V. Name and Address of the Petitioner

54. The Petitioner's name and address for the purpose of service of papers in connection with the within appeal, see 760 CMR 56.06(4)(a)(4), are as follows:

Still River Road Development, LLC  
c/o David Russell, Manager  
28 Country Club Lane  
Middleton, Massachusetts 01949

VI. Name and Address of the Petitioner's Counsel

55. The name and address of the Petitioner's undersigned counsel-of-record in these proceedings, see 760 CMR 56.06(4)(a)(5), are as follows:

Adam J. Costa, Esq.  
Mead, Talerman & Costa, LLC  
30 Green Street  
Newburyport, Massachusetts 01950

VII. Accompanying Documentation

56. The Petitioner submits together herewith as **Exhibit A**, per 760 CMR 56.06(4)(a)(6), a copy of the application and complete description of the Project as submitted to the Board.

57. The Petitioner further submits together herewith as **Exhibit B**, per 760 CMR 56.06(4)(a)(7), a copy of the Decision as filed with the Town Clerk on May 9, 2019.

VIII. Conclusion

58. For all of the foregoing reasons, as may be supplemented or amended by the



Petitioner in advance of or at the hearing before the Committee, the Petitioner asks that relief be granted as stated in Section IV, above.

Respectfully submitted,

Petitioner,  
by its attorney,

Date: May 29, 2019



Adam J. Costa, BBO No. 667840  
Mead, Talerman & Costa, LLC  
30 Green Street  
Newburyport, Massachusetts 01950  
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COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
HOUSING APPEALS COMMITTEE

HAC No.: \_\_\_\_\_

\_\_\_\_\_  
STILL RIVER ROAD  
DEVELOPMENT, LLC,

Petitioner,

v.

TOWN OF BOLTON ZONING  
BOARD OF APPEALS,

Respondent.  
\_\_\_\_\_

COPY

**PETITIONER'S MOTION  
FOR REDUCTION OF FEE**

NOW COMES Petitioner Still River Road Development, LLC, and hereby moves the Committee for a reduction of the \$6,000.00 fee otherwise applicable to its filing of an appeal of Respondent Town of Bolton Zoning Board of Appeals' denial of a comprehensive permit for the Petitioner's project known as "Still River Commons." As grounds for its request, the Petitioner asserts that the aforesaid project is modest in size, i.e. only eight (8) dwelling units in total, two (2) of which will be designated as affordable to low- to moderate-income households; that, as a consequence thereof, the Petitioner's anticipated profit, should the project proceed, is far less than it would be for a larger, denser, more intense development of the project site; and that the Petitioner anticipates a streamlined review by the Committee where the sole issue before it is whether the Board's decision is consistent with local needs.



WHEREFORE, for the foregoing reasons, the Petitioner respectfully requests that the filing fee be reduced to a more appropriate sum as determined by the Committee.

Respectfully submitted,

Petitioner,  
by its attorney,

Date: May 29, 2019



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Adam J. Costa, BBO No. 667840  
Mead, Talerman & Costa, LLC  
30 Green Street  
Newburyport, Massachusetts 01950  
(978) 463-7700 Phone  
(978) 463-7747 Fax  
adam@mtclawyers.com



CERTIFICATE OF SERVICE

I, Adam J. Costa, attorney for the aforesaid Petitioner, hereby certify that I have served  
a copy of the foregoing by first-class mail, postage paid, on:

Robert B. Gibbons, Esq.  
Mirick O'Connell  
1800 West Park Drive, Suite 400  
Westborough, Massachusetts 01581

COPY

Date: May 29, 2019

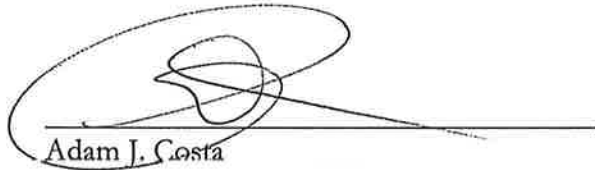
  
Adam J. Costa



Exhibit A



**FILE COPY**

**STILL RIVER COMMONS**

Still River Road  
Bolton, MA 01740

**COMPREHENSIVE PERMIT APPLICATION**

(8 units of Homeownership Housing)

Submitted to:

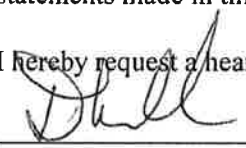
MassHousing  
AUGUST 2018

Submitted by:

Still River Road Development, LLC  
and  
Attorney Melissa E. Robbins  
Deschenes & Farrell, PC  
515 Groton Road, Ste. 204  
Westford, MA 01886  
(978) 496-1177

2018 AUG 21 AM 10:14  
*Handwritten signature*  
Hester, Dawn



|   |   |
|---|---|
| <b>Description of problem for which relief is sought:</b>   | Development pursuant to M.G.L. Chapter 40B. |
| <b>Applicable section(s) of Zoning Bylaws or other reference for consideration by Board of Appeals:</b>   |   |
| <b>Justification for request:</b><br>(attach additional information if necessary)   |   |
| <p>The undersigned certifies that he/she has read and examined this application and the Bolton Zoning Board of Appeals Rules and Regulations, and that the proposed project is accurately represented in the statements made in this application.</p> <p>I hereby request a hearing before the Board of Appeals with reference to the above application.</p> <p>  <span style="float: right;">6/22/18</span> </p> <p> Property Owner's Signature (REQUIRED) <span style="float: right;">Date</span> </p> <p> Property Owner's Signature (REQUIRED) <span style="float: right;">Date</span> </p> <p> Applicant's Signature (if different from owner) <span style="float: right;">Date</span> </p> |   |

**This form, completed by the applicant, must accompany the pertinent application materials (see sections 4, 5, or 6 of the Zoning Board of Appeals Rules and Regulations) to comprise a complete application.**

**This application will be reviewed by the Board of Appeals. An application found to be incomplete upon receipt by the Board of Appeals may be returned to the applicant for completion and re-filing. The date of any re-filing shall be the date of the application.**

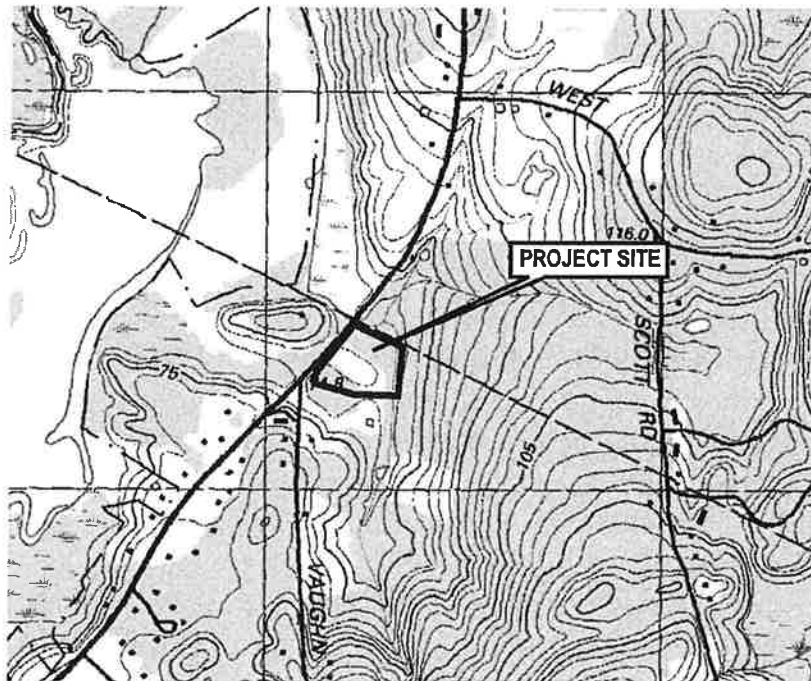


## 1. OVERVIEW

Still River Commons is a proposed residential development on approximately 6.68-acres of land located on Still River Road in Bolton. The 6.68-acre parcel is presently a vacant field with wooded areas and wetlands along the perimeter. The Development will consist of eight (8) homeownership units consisting of four (4) two-unit duplex style buildings located on two lots each lot containing two (2) duplex buildings. The units will contain two (2) or three (3) bedrooms and will total 18 bedrooms. More specifically there will be six (6) two-bedroom units and two (2) three-bedroom units (the "Development").

Massachusetts General Law Chapter 40B requires that a minimum of 25% of the units be made affordable to families whose income is at or below 80% of the median family income, adjusted for household size for the United States Department of Housing and Urban Development (HUD) Fair Market Rent (FMR) Area, as determined by the Massachusetts Department of Housing and Community Development (DHCD). In conformance with the MGL Chapter 40B the development, will contain two (2) affordable units.

*Figure 1 – Locus Map*



## MASSHOUSING

A copy of MassHousing's corporate information is provided as Exhibit A. The Program, administered by MassHousing and funded through the New England Fund ("NEF") Program



Bank, which is a member of the Federal Home Loan Bank of Boston (FHLBB). A minimum of 25% of the construction costs will be obtained from the NEF Program. Evidence of form commitment for financing for the Development will be provided during the request to MassHousing for Final Approval. The Regulatory Agreement will provide that any transfer of all or a portion of the NEF lender's interest (including participation or sale of servicing rights) during the entire term of the construction financing will be subject to the approval of the Subsidizing Agency.

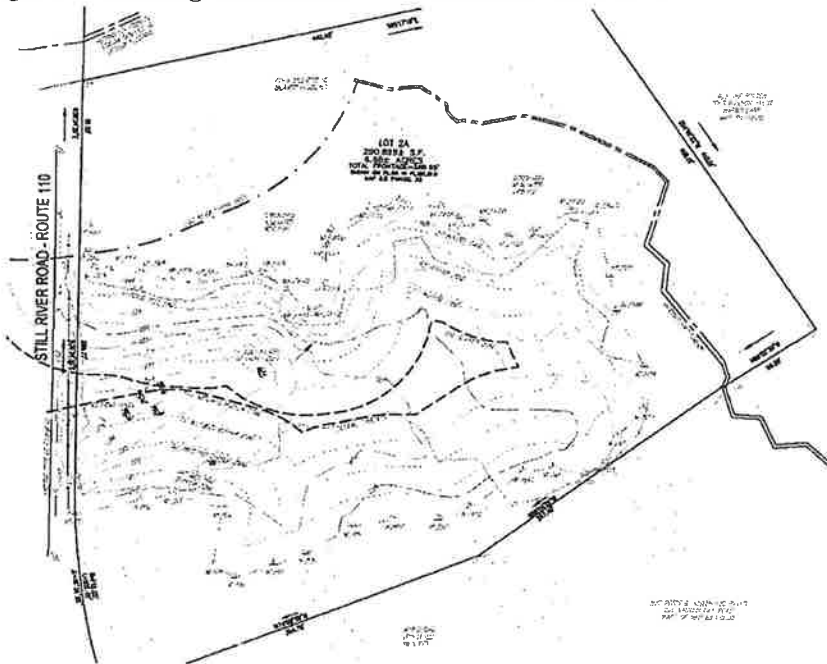
- G. The Development will comply with the Commonwealth's Sustainable Development Principles embraced by DHCD.

## 2. THE PREMISES

### Existing Conditions

The subject site is located on Still River Road, Route 110, at the cross street of Vaughn Hill Road. The parcel is mapped as Bolton Tax Map 8B, Parcel 32. The site contains 6.68 acres of land and has 586.55 feet of frontage along Still River Road. The site is surrounded by single family homes and residential zoned vacant land. The parcel directly to the south is developed with a single-family home. To the north is the Harvard Town line and vacant land. The opposite side of Still River Road is developed with single family homes. Approximately 1,400 feet to the south on Still River Road is a cul-de-sac with a development consisting of seven (7) single family homes.

*Figure -2 Existing Conditions – See Plan Set Sheet C1.2*





A portion of the property is located in Zone AE areas determined to be within the 100-year flood plain as shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), Community Panels 25027C0457E and 25027C0476E, effective date July 4, 2011.

The site is also located in a Natural Heritage Endangered Species Program (NHESP) Estimated Habitat of Rare Wildlife as shown on the Natural Heritage Mapping provided by the OLIVER online mapping system. Alterations at the site were previously approved under NHESP File Number 15-34941. The current site plan has been subject to an informal review by NHESP in April of 2018 which noted that changes appear insignificant relative to the scope of the original NHESP approval. However, a formal request for change of the previous filing will be submitted to NHESP. It should be noted that the project has been designed to allow approximately 84% of the site to remain in a natural state, with 42,000 sf of resource area being maintained as meadow.

The site is not located within 1,000-feet of Massachusetts Department of Environmental Protection (MassDEP) Wellhead Protection Zone II or Interim Wellhead Protection Areas.

### 3. THE DEVELOPMENT

The proposed Development will be accessed by the construction of a private driveway, creating a small "community" of homes. The proposed driveway will be 240 feet long ending in a cul-de-sac style turnaround providing access to the homes. The homes will be offset a minimum of 100 feet from Still River Road, providing a private setting. The homes have been clustered around the cul-de-sac turnaround which has been designed to accommodate fire and safety apparatus. The proposed Development will be clustered on approximately 1 acre, and the remaining 5.8 acres will be preserved as native meadow, woodland and wetlands.

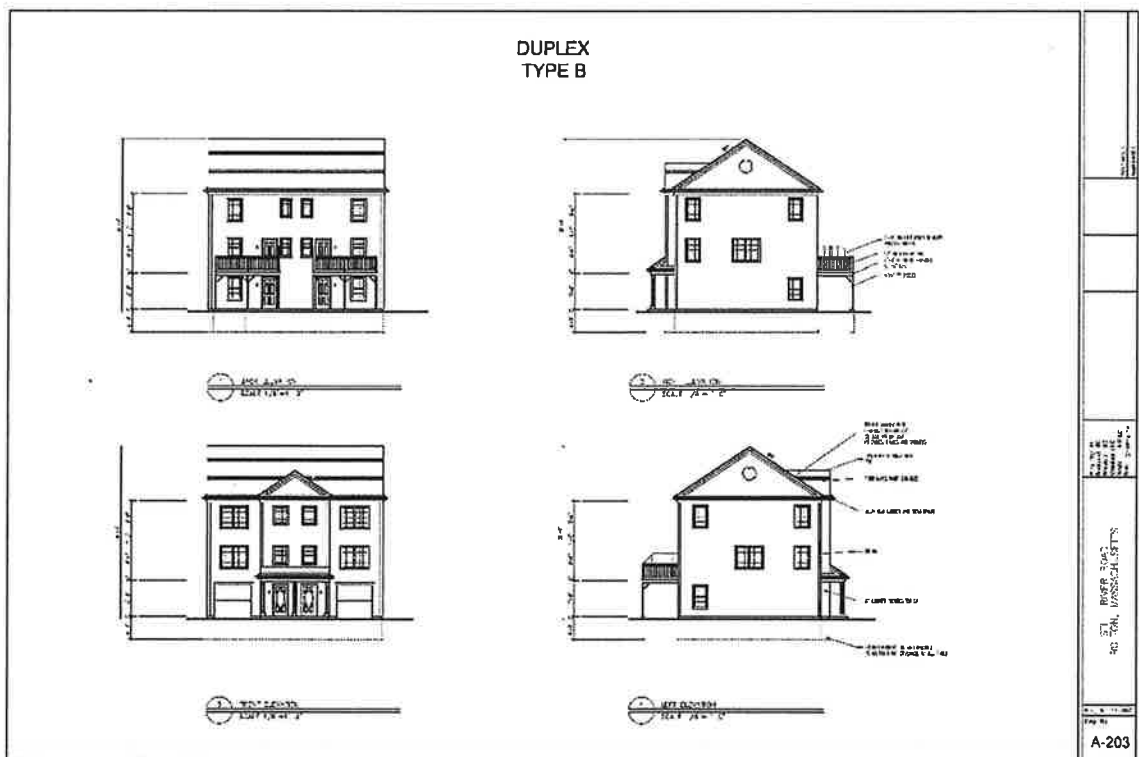
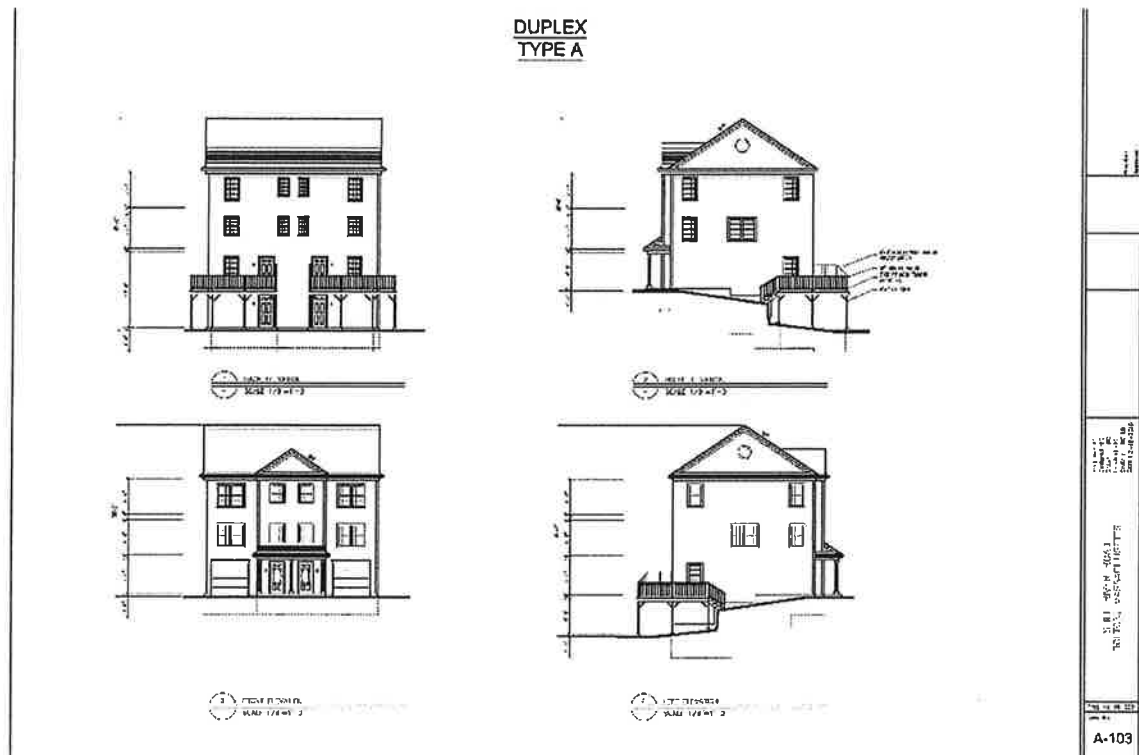
The buildings will be 3-story townhouse style units with dormers and eaves to provide an upscale look. The proposed exterior materials and architecture are designed to fit into the nature of the surrounding architecture, with individual entrances for each unit. See Exhibit J for Architectural Plans.

The Development will provide parking for 16 cars dedicated to the individual unit owners. Each unit will have a one-car garage with the ability to park one (1) car in the driveway. This will ensure that each unit owner has parking for two vehicles.

The roadway configuration provides an emergency-response vehicle turn area at the end of the road consistent with subdivision regulations.



Figure-4 Building Elevations





### Electric/Telephone/Cable

Electric, telephone and cable exist on Still River Road and will be extended into the Development with no adverse impact on existing service anticipated.

### Sanitary Waste

Each lot will be serviced by a subsurface sewage disposal system, which has been designed in accordance with Massachusetts 310 CMR 15.000. Each system has been designed to serve a total of nine (9) bedrooms and the individual lots have been sized to meet or exceed the nitrogen loading requirements specified in 310 CMR 15.214.

### B. Construction

It is estimated that construction would commence within 90 days of the final approvals and would take 18 months to complete. The Development sequence would include building the infrastructure (pavement, utilities, drainage and grading) first and then constructing the individual units. The market rate units would be sold as they are completed, and the affordable units would be sold in accordance with the DHCD guidelines.

## 4. NARRATIVE STATEMENT OF DEVELOPMENT IMPACTS

### General

#### A. Traffic/Access

The proposed Development will be accessed off a new 15-foot-wide paved driveway off Still River Road. The driveway will provide access for all of the units from Still River Road and will remain privately owned by the future Homeowner's Association. The access drive will be approximately 240 feet long and will terminate in a cul-de-sac sized to allow emergency vehicles and homeowners to turn around safely.

Visibility off of the access drive onto Still River Road is excellent and the driveway provides for 20-foot radius rounding's at the road intersection.

The net increase in traffic on Still River Road will be generated by the 8 additional homes in the development. Based on the Institute of Transportation Engineers Trip Generation 7<sup>th</sup> Edition manual, the average trips per day per dwelling unit is 5.86. Therefore, a total of 47 vehicle trips per day are expected as a result of this development. Given the



tract would be open space. A portion of the open space will provide a natural buffer to the dwellings from Still River Road, as well as providing a significant addition to the natural corridor of preserved land abutting the property.

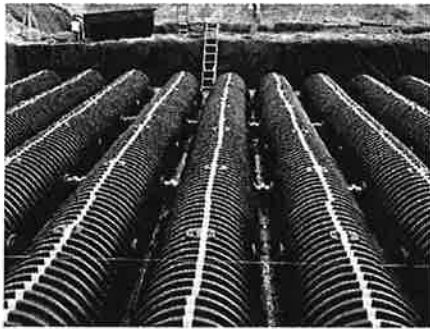
A tabulation of proposed buildings and summary of land use percentages is shown in Figures 5 and 6 above.

#### D. Wetlands

The project will not result in the filling of bordering vegetated wetlands. However, the Development will require the filing of a Notice of Intent with the Bolton Conservation Commission under the Massachusetts Wetland Protection Act. The project has been designed to increase the flood storage on the property and alterations are limited to the present meadow area and land immediately adjacent to.

#### E. Stormwater

*Figure-7 Cultec Subsurface Infiltration System*



Stormwater management for this Development has been designed in compliance with the Stormwater Management Standards as outlined in 310 CMR 10.05(6)(k) through (q) and defined in detail in the DEP's Stormwater Management Handbook. The system incorporates Best Management Practices (BMPs). The Development has been designed to minimize impacts on nearby resource areas from both the construction and post-construction activities of the proposed Development. See Exhibit N for Drainage Calculations.

A closed drainage system would collect stormwater runoff from the site and discharge portions of it to a subsurface infiltration system. The drainage system will provide water quality treatment, recharge, and infiltration of runoff generated from paved areas. The drainage system has been designed to treat rainfall events up to and including the 100-year storm event. The runoff from the site Development will be collected in a catch basin and manhole system, and discharged to a subsurface infiltration area located within the



### C. Erosion/Siltation

To help control runoff during construction, erosion and sediment control measures have been provided. Additionally, a storm water management system maintenance schedule will be provided for use during and after construction. The proposed Development has been designed in accordance with the DEP Stormwater Management Handbook. All drainage calculations and a more detailed description of the proposed stormwater management system are included in the Stormwater Management Report.

### D. Potential Releases

The Developer will be required to adhere to all State and local safety standards during construction.

## 5. REQUESTED WAIVERS

As part of this application, the Developer is requesting exceptions from the Town of Bolton Zoning and non-Zoning Bylaws. The requested waivers are attached as Exhibit L.

## 6. OWNER/ APPLICANT

The Owner of the property is Turn Left, LLC, 130 Parker Street, Unit 12, Lawrence, MA 01843. A copy of the deed for the property is attached as Exhibit M.

The Applicant is Still River Road Development, LLC, C. David Russell Manager, of 28 Country Club Lane, Middleton, MA 01949. Information regarding the applicant is attached hereto as Exhibit N.

## 7. DEVELOPMENT FINANCING

As previously discussed, the Development will be funded through the Federal Home Loan Bank of Boston's New England Fund Program with MassHousing as Project Administrator.

## 8. SUMMARY

The proposed Development of Still River Commons will help to increase the Town of Bolton's affordable housing inventory and to help the town to reach their 10% goal of affordable housing. The Developer is committed to working with the Town to create a Development that is consistent with the character of the Town of Bolton.



## Exhibit A

### MassHousing Corporate Information



to transparency in all of its operations, investments and policies. This will be achieved through ongoing dialog with housing partners and stakeholders and regular public reporting of financial and program performance and progress against its strategic goals and objectives.

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Equal Housing Lender



Unlike other commercial lenders, we take a proactive approach to fostering strong communities among the people who live in the housing we finance. We facilitate educational programs and activities for residents. We also offer a wealth of trainings, workshops and conferences for the property managers that handle the day-to-day operations.

Learn more at [www.masshousingrental.com](http://www.masshousingrental.com).

#### Comprehensive Permit Programs/Chapter 40B

MassHousing is one of several state entities authorized to provide site approval/project eligibility, final approval and cost certification for both rental and homeownership housing proposals made under Chapter 40B, the state's affordable housing law. We work with developers, town residents and municipal officials to make certain that all opinions are heard and to encourage new housing that best serves the community. It should be noted that MassHousing does not finance every housing development for which it provides initial approval. Developers often secure financing from other sources for these projects.

#### Our Commitment to Minority- and Women-Owned Businesses

MassHousing is committed to increasing economic opportunities for minority- and women-owned businesses (M/WBEs) in Massachusetts. We work with housing developers, general contractors and property managers to set goals for utilizing M/WBEs at the properties we finance and oversee. We also help M/WBEs access contracts and subcontracts through an online directory of businesses and open contracts. Additionally, we sponsor trade fairs and mentoring programs, promote equal access to housing and foster our own hiring and procurement practices that facilitate opportunities for minorities and women. Learn more about the work of our Diversity & Inclusion Division.

#### Nondiscrimination Statement

MassHousing does not discriminate on the basis of race, color, religion, sex, national origin, ancestry, sexual orientation, gender identity, age, familial status, children, marital status, veteran status or membership in the armed services, the receiving of public assistance, or physical or mental disability in the access or admission to its programs or employment, or in its programs' activities, functions or services. The following persons are responsible for coordinating compliance with applicable nondiscrimination requirements:

- Andrea J. Laing, Director of Diversity & Inclusion
- Patricia Santos, 504/ADA Coordinator
- Deb Sullivan, Manager of Human Resources and 504/ADA Employment Coordinator
- Karen Kelleher, General Counsel

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Equal Housing Lender



## Exhibit B

### Program Overview



Outline of Steps Involved in the Comprehensive Permit Process

7. Within the required time frame, the local ZBA schedules a public hearing (giving proper notice to area residents) and comments are solicited as to development concerns relating to the proposed development. Contact either the local ZBA, or the State Housing Appeals Committee (c/o the State's Department of Housing and Community Development) for further details of the process.
8. At the conclusion of this hearing process -- which often lasts for several meetings -- the local ZBA issues its determination as to whether the project will be granted a final Comprehensive Permit. If it is granted, the project can go forward (assuming that the developer secures appropriate financing for the project).
9. Upon receipt of a final Comprehensive Permit, the developer must submit an application for Final Approval from MassHousing (See **Site Approval and Final Approval Checklists** on MassHousing's website under the Chapter 40B Site Approval Application section). This process is required for developments approved under a MassHousing Program and/or the NEF Program to ensure that the proposal approved under the Comprehensive Permit is consistent with the proposal approved under MassHousing's original Site Approval.

*NOTE: In accordance with the Code of Massachusetts Regulations (760 CMR 31.00) governing the Site Approval process, no local permits (including building permits) can be issued for a MassHousing Site Approval development until **Final Approval** has been obtained from MassHousing.*

**Appeals Process**

*(Note: The following summary is provided for general informational purposes only. Applicants should seek the assistance of legal counsel for review of MGL c. 40B §§20-23, 760 CMR 30.00, 760 CMR 31.00, and any determination relating to the ability to appeal a ZBA decision.)*

If a Comprehensive Permit application is **rejected or conditionally approved** by the ZBA, the applicant may appeal to the State's Housing Appeals Committee, in accordance with 760 CMR 30.00 and 31.00, if **NONE** of the following conditions are currently met within the town or city:

- Subsidized low or moderate income housing ("subsidized housing") exists in the city or town that is in excess of ten percent (10%) of the housing units reported in the latest U.S. decennial census of the town or city. See MGL c. 40B, §20 and 760 CMR 31.04.(1).
- Subsidized housing exists in the city or town that comprises one and one-half percent (1.5%) or more of the total land area zoned for residential, commercial or industrial use in the applicable city or town. See MGL c. 40B, §20 and 760 CMR 31.04.(2).
- In any one calendar year, the Comprehensive Permit application before a city or town's ZBA would result in the commencement of subsidized housing on sites comprising more than three tenths of one percent (0.3%) of the community's land (excluding land owned by the federal or commonwealth governments, or any political subdivision thereof, the metropolitan district commission or any other public authority) zoned for residential commercial or industrial use, or ten (10) acres, whichever is larger. See MGL c. 40B, §20 and 760 CMR 31.04.(3).



Exhibit "C"

Project Eligibility Application















## **Comprehensive Permit Site Approval Application/Homeownership**

Attached is the Massachusetts Housing Finance Agency ("MassHousing") application form for Project Eligibility/Site Approval ("Site Approval") under the state's comprehensive permit statute (M.G.L. c. 40B, Sections 20-23 enacted as Chapter 774 of the Acts of 1969) known as "Chapter 40B". Developers seeking a comprehensive permit to construct affordable housing under Chapter 40B and intending to use a MassHousing financing program or financing through the New England Fund ("NEF") program must receive Site Approval from MassHousing. This approval (also referred to as "project eligibility approval") is a required component of any comprehensive permit application to be submitted to the local Zoning Board of Appeals of the municipality in which the development is to be located.

As part of its review of your application, MassHousing will conduct an inspection of the site and will solicit comments from the relevant municipality. MassHousing will consider any relevant concerns that the municipality might have about the proposed project or the developer. The applicant is encouraged, therefore, to make contact with the municipality prior to submitting the Site Approval application in order to ensure that the applicant understands any concerns that the municipality may be likely to raise regarding the proposed development.

In order for a project to receive Site Approval, MassHousing must determine that (i) the applicant has sufficient legal control of the site, (ii) the applicant is a public agency, non-profit organization or limited dividend organization, and (iii) the applicant and the project are generally eligible under the requirements of the MassHousing program selected by the applicant, subject to final eligibility review and approval. Furthermore, MassHousing must determine that the site of the proposed project is generally appropriate for residential development (taking into consideration municipal actions previously taken to meet affordable housing needs) and that the conceptual project design is generally appropriate for the site. In order for MassHousing to be able to make these findings (required by 760 CMR 56.04 (4)), it is important that you answer all questions in the application and include all required attachments.

Please note that MassHousing requires that all applicants meet with a member of our 40B Department staff before submitting their application. Applications for any projects that have not been the subject of a required pre-application meeting will not be accepted or processed.

Upon completion of its analysis, MassHousing will either issue a Site Approval Letter that approves, conditionally approves or denies the application. If the application is approved, the applicant should apply to the Zoning Board of Appeals within two years from the date of the Site Approval Letter (unless MassHousing extends such term in writing).

Please note that Site Approval from MassHousing does not constitute a loan commitment by MassHousing or any other financing program. All potential MassHousing financing is subject to further review and underwriting by MassHousing's Rental Lending Department.

Please be sure you have familiarized yourself with all of the applicable requirements set forth in the Chapter 40B regulations and guidelines, which can be found at

<http://www.mass.gov/hed/economic/cohed/dhcd/legal/rcgs/760-cmr-56.html> and  
[www.mass.gov/hed/docs/dhcd/legal/comprehensivepermitguidelines.pdf](http://www.mass.gov/hed/docs/dhcd/legal/comprehensivepermitguidelines.pdf).



**Application for Chapter 40B Project Eligibility/Site Approval  
for MassHousing-Financed and New England Fund ("NEF") Homeownership Projects**

*Please be sure to answer ALL questions. Indicate "N/A", "None" or "Same" when necessary.*

**Section 1: GENERAL INFORMATION** (also see Required Attachments listed at end of Section 1)

Name of Proposed Project: Still River Commons

Municipality: Bolton

Address of Site: Still River Road

Cross Street (if applicable): 295 Vaughn Hill Road

Zip Code: 01740

Tax Parcel I.D. Number(s) (Map/Block/Lot): Map 8B, Parcel 30

Name of Proposed Development Entity (typically a single purpose entity):  
Still River Road Development, LLC

Entity Type: Limited Dividend Organization ☒ Non-Profit\* ☐ Government Agency ☐

*\* If the Proposed Development Entity is a Non-Profit, please contact MassHousing regarding additional documentation that must be submitted.*

Has this entity already been formed? Yes ☐ No ☒

Name of Applicant (typically the Proposed Development Entity or its controlling entity or individual):  
David Russell

Applicant's Web Address, if any: \_\_\_\_\_

Does the Applicant have an identity of interest with any other member of the development team or other party to the Proposed Project? Yes ☒ No ☐ If yes, please explain: Developer

**Primary Contact Information** (required)

Name of Individual: David Russell

Relationship to Applicant: Applicant

Name of Company (if any): Still River Road Development, LLC

Street Address: 28 Country Club Lane

City/Town/Zip: Middleton, MA 01949

Telephone (office and cell) and Email: Cell: 603-233-8444 / email: nomtg2000@yahoo.com

**Secondary Contact Information** (required)

Name of Individual: Melissa E. Robbins

Relationship to Applicant: Attorney

Name of Company (if any): Deschenes & Farrell, PC

Street Address: 515 Groton Road, Ste. 204

City/Town/Zip: Westford, MA 01886

Telephone (office and cell) and Email: Office: 978-496-1177 / email: melissa@dfpclaw.com



**Application for Chapter 40B Project Eligibility/Site Approval  
for MassHousing-Financed and New England Fund ("NEF") Homeownership Projects**

**Section 2: EXISTING CONDITIONS / SITE INFORMATION** (also see Required Attachments listed at end of Section 2)

*In order to issue Site Approval, MassHousing must find (as required by 760 CMR 56.04 (4)) that the site is generally appropriate for residential development.*

Name of Proposed Project: Still River Commons

| Buildable Area Calculations                      | Sq. Feet/Acres (enter "0" if applicable—do not leave blank) |
|--|---|
| Total Site Area                                  | 290,899 s.f. / 6.68 acres                                   |
| Wetland Area                                     | 168,948 s.f. / 3.87 acres                                   |
| Flood/Hazard Area                                | 197,369 s.f. / 4.53 acres                                   |
| Endangered Species Habitat (animal and/or plant) | 290,899 s.f. / 6.68 acres                                   |
| Conservation/Article 97 Land                     | 0   |
| Protected Agricultural Land                      | 0   |
| Other Non-Buildable (Describe)                   | 0   |
| Total Non-Buildable Area                         | 168,948 s.f. / 3.87 acres                                   |
| Total Buildable Site Area                        | 121,951 s.f. / 2.81 acres                                   |

Current use of the site and prior use if known:

The site is presently a vacant field with wooded areas and wetlands along the perimeter.

Is the site located entirely within one municipality? Yes ☒ No ☐

If not, in what other municipality is the site located? \_\_\_\_\_

How much land is in each municipality? (the Existing Conditions Plan must show the municipal boundary lines) \_\_\_\_\_

Current zoning classification and principal permitted uses:

Residential - Agriculture, single family dwelling, mobile home, religious, library, museum.

**Previous Development Efforts**

Please list (on the following page) any previous applications pertaining to construction on or development of the site, including (i) type of application (comprehensive permit, subdivision, special permit, etc.); (ii) application filing date; (iii) date of denial, approval or withdrawal. Also indicate the current Applicant's role, if any, in the previous applications. Note that, pursuant to 760 CMR 56.03 (1), a decision of a Zoning Board of Appeals to deny a Comprehensive Permit, or (if the Statutory Minima defined at 760 CMR 56.03 (3) (b or c) have been satisfied) grant a Comprehensive Permit with conditions, shall be upheld if a related application has previously been received, as set forth in 760 CMR 56.03 (7).



List any public transportation near the Site, including type of transportation and distance from the site:

Shirley MBTA Station - 12 miles

#### Site Characteristics and Development Constraints

Please answer "Yes", "No" or "Unknown" to the following questions. If the answer is "Yes" please identify on Existing Conditions Plan as required for Attachment 2.1 and provide additional information and documentation as an attachment as instructed for Attachment 2.4, "Documentation Regarding Site Characteristics/Constraints."

Are there any easements, rights of way or other restrictions of record affecting the development of the site? No

Is there any evidence of hazardous, flammable, or explosive material on the site? No

Is the site, or any portion thereof, located within a designated flood hazard area? Yes, development is located outside zone AE

Does the site include areas designated by Natural Heritage as endangered species habitat? Yes

Are there documented state-designated wetlands on the site? Yes

Are there documented vernal pools on the site? No

Is the site within a local or state Historic District or listed on the National Register or Historic Places? No

Has the site or any building(s) on the site been designated as a local, state or national landmark? No

Are there existing buildings and structures on site? No

Does the site include documented archeological resources? No

Does the site include any known significant areas of ledge or steep slopes? No



## Application for Chapter 40B Project Eligibility/Site Approval for MassHousing-Financed and New England Fund ("NEF") Homeownership Projects

### Section 3: PROJECT INFORMATION (also see Required Attachments listed at end of Section 3)

*In order to issue Site Approval, MassHousing must find (as required by 760 CMR 56.04 (4)) that the proposed project appears generally eligible under the requirements of the housing subsidy program and that the conceptual project design is generally appropriate for the site.*

Name of Proposed Project: Still River Commons

Project Type (mark both if applicable): New Construction ☒ Rehabilitation ☐ Both ☐

Total Number of Dwelling Units: 8.00

Total Number of Affordable Units: 2.00

Number of 50% AMI Affordable Units:       

Number of 80% AMI Affordable Units: 2.00

#### Unit Mix: Affordable Units

| Unit Type           | Studio | 1 Bedroom | 2 Bedroom | 3 Bedroom | 4 Bedroom |
|---------------------|--------|-----------|-----------|-----------|-----------|
| Number of Units     |        |           | 1.00      | 1.00      |           |
| Number of Bathrooms |        |           | 1.50      | 1.50      |           |
| Square Feet/Unit    |        |           | 1,550.00  | 1,750.00  |           |

#### Unit Mix: Market Rate

| Unit Type           | Studio | 1 Bedroom | 2 Bedroom | 3 Bedroom | 4 Bedroom |
|---------------------|--------|-----------|-----------|-----------|-----------|
| Number of Units     |        |           | 5.00      | 1.00      |           |
| Number of Bathrooms |        |           | 1.50      | 1.50      |           |
| Square Feet/Unit    |        |           | 1,550.00  | 1,750.00  |           |

Percentage of Units with 3 or More Bedrooms\*: 25.00

*\* Note that the January 17, 2014 Interagency Agreement Regarding Housing Opportunities for Families with Children requires that at least 10% of the units in the project must have three (3) or more bedrooms. Evidence of compliance with this requirement must be provided at Final Approval.*

Number of Handicapped Accessible Units: 0.00 Market Rate: 0.00 Affordable: 0.00

Gross Density (units per acre): 0.84

Net Density (units per buildable acre): 0.35



## **Required Attachments Relating to Section 3**

### **3.1 Preliminary Site Layout Plan(s)**

Please provide preliminary site layout plans of the entire Site prepared, signed and stamped by a registered architect or engineer. Plans should be prepared at a scale of 1"=100' or 1"=200', and should show:

- Proposed site grading
- Existing lot lines
- Easements (existing and proposed)
- Access to a public way must be identified
- Required setbacks
- Proposed site circulation (entrances/egresses, roadways, driveways, parking areas, walk ways, paths, trails)
- Building and structure footprints (label)
- Utilities (existing and proposed)
- Open space areas
- Schematic landscaping and screening
- Wetland and other restricted area boundaries and buffer zones

Please provide one (1) set of full size (30"x40") plans along with one (1) set of 11"x17" reproductions and one (1) electronic set of plans. Please note that MassHousing cannot accept USB flash drives.

### **3.2 Graphic Representations of Project/Preliminary Architectural Plans**

- Typical floor plans
- Unit plans showing dimensions, bedrooms, bathrooms and overall unit layout
- Exterior elevations, sections, perspectives and illustrative rendering.

### **3.3 Narrative Description of Design Approach**

Provide a narrative description of the approach to building massing, style, and exterior materials; site layout, and the relationship of the project to adjacent properties, rights of way and existing development patterns. The handbook called Approach to Chapter 40B Design Reviews prepared by the Cecil Group in January 2011 may be helpful in demonstrating the nature of the discussion that MassHousing seeks in this narrative.

### **3.4 Tabular Zoning Analysis**

Zoning analysis in tabular form comparing existing zoning requirements to the waivers that you will request from the Zoning Board of Appeals for the proposed project, showing required and proposed dimensional requirements including lot area, frontage, front, side and rear setbacks, maximum building coverage, maximum lot coverage, height, number of stories, maximum gross floor area ratio, units per acre, units per buildable acre; number of parking spaces per unit/square foot and total number of parking spaces (proposed and required).

### **3.5 Completed Sustainable Development Principles Evaluation Assessment Form (see attached form)**



*Note: The Grantee/Buyer on each document must be either the Applicant or the Proposed Development Entity, or you must attach an explanation showing direct control of the Grantee/Buyer by the Applicant or the Proposed Development Entity.*

Grantor/Seller: \_\_\_\_\_

Grantee/Buyer: \_\_\_\_\_

Are the Parties Related? \_\_\_\_\_

**For Easements**

Date(s) of Easement(s): n/a \_\_\_\_\_

Purchase Price: \_\_\_\_\_

**For Easement Purchase and Sale Agreements or Easement Option Agreements**

Date of Agreement: n/a \_\_\_\_\_

Expiration Date: \_\_\_\_\_

If an extension has been granted, date of extension: \_\_\_\_\_

If an extension has been granted, new expiration date: \_\_\_\_\_

Purchase Price: \_\_\_\_\_

**Required Attachments Relating to Section 4**

**4.1 Evidence of Site Control (required)**

Copies of all applicable, fully executed documents (deed, ground lease, purchase and sale agreement, option agreement, land disposition agreement) showing evidence of site control, including any required easements, along with copies of all amendments and extensions. Copies of all plans referenced in documents must be included.



**Costs****Item****Budgeted****Construction Costs–Site Work (Hard Costs)**

|   |            |
|---|------------|
| Earth Work                              | 250,000.00 |
| Utilities: On Site                      | 20,000.00  |
| Utilities: Off-Site                     |            |
| Roads and Walks                         |            |
| Site Improvement                        | 50,000.00  |
| Lawns and Planting                      | 15,000.00  |
| Geotechnical Condition                  |            |
| Environmental Remediation               |            |
| Demolition                              |            |
| Unusual Site Conditions/Other Site Work |            |
| Subtotal –Site Work (Hard Costs)        | 335,000.00 |

**Construction Costs–General Conditions,  
Builders Overhead and Profit (Hard Costs)**

|   |            |
|---|------------|
| General Conditions  | 50,000.00  |
| Builder's Overhead  | 50,000.00  |
| Builder's Profit  |            |
| Subtotal – General Conditions Builder's<br>Overhead and Profit (Hard Costs) | 100,000.00 |

**General Development Costs (Soft Costs)**

|  |            |
|--|------------|
| Appraisal and Marketing Study<br>(not 40B "as is" appraisal) | 1,000.00   |
| Lottery  |            |
| Commissions/Advertising–Affordable                           | 10,000.00  |
| Commissions/Advertising–Market                               | 105,000.00 |
| Model Unit   | 5,000.00   |
| Closing Costs (unit sales)                                   | 24,000.00  |
| Real Estate Taxes (during construction)                      | 7,000.00   |
| Utility Usage (during construction)                          | 2,000.00   |
| Insurance (during construction)                              | 2,000.00   |
| Security (during construction)                               |            |
| Inspecting Engineer  |            |
| Fees to Others   |            |
| Construction Loan Interest                                   | 12,000.00  |
| Fees to Construction Lender                                  | 3,000.00   |
| Architectural  | 2,000.00   |
| Engineering  | 4,000.00   |
| Survey, Permits, Etc.  | 18,000.00  |
| Clerk of the Works   |            |
| Construction Manager   | 50,000.00  |



Initial Unit/Sales Price

|                  | Studio | 1 Bedroom | 2 Bedroom  | 3 Bedroom  | 4 Bedroom |
|------------------|--------|-----------|------------|------------|-----------|
| Affordable Units |        |           | 1.00       | 1.00       |           |
| Number of Units  |        |           | 1.00       | 1.00       |           |
| Number of Sq. Ft |        |           | 1,600.00   | 1,750.00   |           |
| Sales Price      |        |           | 179,900.00 | 185,000.00 |           |
| Condo / HOA Fee  |        |           | 180.00     | 180.00     |           |

|                  | Studio | 1 Bedroom | 2 Bedroom | 3 Bedroom | 4 Bedroom |
|------------------|--------|-----------|-----------|-----------|-----------|
| Affordable Units |        |           |           |           |           |
| Number of Units  |        |           |           |           |           |
| Number of Sq. Ft |        |           |           |           |           |
| Sales Price      |        |           |           |           |           |
| Condo / HOA Fee  |        |           |           |           |           |

Describe your approach to calculating any additional fees relating to Condominium Association or a Homeowners Association.



## Application for Chapter 40B Project Eligibility/Site Approval for MassHousing-Financed and New England Fund ("NEF") Homeownership Projects

### Section 6: APPLICANT QUALIFICATIONS, ENTITY INFORMATION, AND CERTIFICATION

*In order to issue Site Approval MassHousing must find (as required by 760 CRM 56.04 (4)) that the applicant is either a non-profit public agency or would be eligible to apply as a Limited Dividend Organization and meets the general eligibility standards of the program.*

Name of Proposed Project: Still River Commons

#### Development Team

Developer/Applicant: David Russell - Still River Road Development, LLC

Development Consultant (if any): David Russell

Attorney: Melissa E. Robbins - Deschenes & Farrell, PC, Westford, MA

Architect: Fabrizio Carusso

Contractor: David Russell

Lottery Agent: \_\_\_\_\_

Management Agent: \_\_\_\_\_

Other (specify): \_\_\_\_\_

Other (specify): \_\_\_\_\_

#### Role of Applicant in Current Proposal

| Development Task                        | Developer/Applicant                        | Development Consultant (identify) |
|---|--|-----------------------------------|
| <del>Architecture and</del> Engineering | Ducharme & Dillis Civil Design Group, Inc. |                                   |
| Local Permitting                        | Deschenes & Farrell, P.C.                  |                                   |
| Financing Package                       |  |                                   |
| Construction Management                 | Developer                                  |                                   |
| Other Architect                         | Fabrizio Carusso/Architect                 |                                   |

#### Applicant's Ownership Entity Information

Please identify for each of (i) the Applicant and, if different (ii), the Proposed Development Entity, the following (collectively with the Applicant and the Proposed Development Entity, the "Applicant Entities"): the Managing Entities, Principals, Controlling Entities and Affiliates of each.

*Note: For the purposes hereof, "Managing Entities" shall include all persons and entities (e.g. natural persons, corporations, partnerships, limited liability companies, etc., including beneficiaries of nominee trusts) who are managers of limited liability companies, general partners of limited partnerships, managing general partners of limited liability partnerships, directors and officers of corporations, trustees of trusts, and other similar persons and entities which have the power to manage and control the activities of the Applicant and/or Proposed Development Entity.*



**Proposed Development Entity**

Name of Proposed Development Entity: Still River Commons

Entity Type (*limited liability company, limited partnership, limited liability partnership, corporation, trust, etc.*):

Limited Liability Company

State in which registered/formed: MA

List all Managing Entities of Proposed Development Entity (*you must list at least one*):

Still River Road Development, LLC

List all Principals and Controlling Entities of Proposed Development Entity and (*unless the Managing Entity is an individual*) its Managing Entities (*use additional pages as necessary*):

See Attached - Exhibit 8

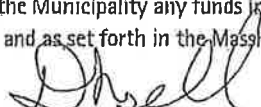
List all Affiliates of Proposed Development Entity and its Managing Entities (*use additional pages as necessary*):

See Attached - Exhibit 8



I hereby acknowledge that it will be required to provide financial surety, by means of bond, cash escrow and a surety escrow agreement or letter of credit with the agreement that it may be called upon or used in the event that the Developer fails either to (i) complete and submit the Cost Examination as required by 760 CMR 56.04(8) and the MassHousing Regulatory Agreement, or (ii) pay over to the Municipality any funds in excess of the limitations on profits and distributions as required by 760 CMR 56.04(8) and as set forth in the MassHousing Regulatory Agreement.

Signature: \_\_\_\_\_



Name: \_\_\_\_\_

David Russell

Title: \_\_\_\_\_

Mgr.

Date: \_\_\_\_\_

1/28/2018



**Application for Chapter 40B Project Eligibility/Site Approval  
for MassHousing-Financed and New England Fund ("NEF") Homeownership Projects**

**Section 7: NOTIFICATIONS AND FEES**

Name of Proposed Project: Still River Commons

**Notice**

|  |                |
|--|----------------|
| Date(s) of meetings, if any, with municipal officials prior to submission of application to MassHousing: <u>Town Planner</u> | <u>2/22/18</u> |
| Date copy of complete application sent to chief elected office of municipality:  | <u>TBD</u>     |
| Date notice of application sent to DHCD:   | <u>TBD</u>     |

**Fees** *(all fees should be submitted to MassHousing)*

|  |                |
|--|----------------|
| MassHousing Application Processing Fee (\$2500) Payable to MassHousing:  | <u>2500.00</u> |
| Chapter 40B Technical Assistance/Mediation Fee Payable to Massachusetts Housing Partnership:                       |                |
| a. Base Fee:<br><i>(Limited Dividend Sponsor \$2500, Non-Profit or Public Agency Sponsor \$1,000)</i>              | <u>2500.00</u> |
| b. Unit Fee:<br><i>(Limited Dividend Sponsor \$50 per unit, Non-Profit or Public Agency Sponsor \$30 per unit)</i> | <u>400.00</u>  |

**Land Appraisal Cost**

*You will be required to pay for an "as-is" market value appraisal of the Site to be commissioned by MassHousing. MassHousing will contact you once a quote has been received for the cost of the appraisal.*



## Application Checklist

The documentation listed below must, where applicable, accompany each application. For detailed descriptions of these required documents, please see the relevant sections of the application form.

\* Applications missing any of the documents indicated by an asterisk will not be processed by MassHousing until MassHousing receives the missing item(s).

- ☐ \* Completed application form, and certification under pains and penalties of perjury (one (1) signed original) accompanied by one (1) electronic copy of the completed application package
- ☐ \* Location Map
- ☐ Tax Map
- ☐ \* Directions to the proposed Site
- ☐ \* Existing Conditions Plan
- ☐ Aerial Photographs
- ☐ Site/Context Photographs
- ☐ \* Documentation Regarding Site Characteristics/Constraints
- ☐ \* By Right Site Plan, if applicable
- ☐ \* Preliminary Site Layout Plan(s)
- ☐ \* Graphic Representations of Project/Preliminary Architectural Plans
- ☐ \* Narrative Description of Design Approach
- ☐ \* Tabular Zoning Analysis
- ☐ Sustainable Development Principles Evaluation Assessment Form
- ☐ \* Evidence of site control *(documents and any plans referenced therein)*
- ☐ Land Disposition Agreement, if applicable
- ☐ \* NEF Lender Letter of Interest
- ☐ Market Sales Comparables
- ☐ Market Study, if required by MassHousing
- ☐ \* Development Team Qualifications
- ☐ Applicant's Certification *(any required additional sheets)*
- ☐ Narrative describing prior contact *(if any)* with municipal officials
- ☐ \* Evidence that a copy of the application package has been received by the Chief Elected Official in the municipality *(may follow after initial submission of application package, but site visit will not be scheduled nor request for municipal comments made until such evidence is received by MassHousing)*
- ☐ Copy of notification letter to DHCD
- ☐ \*\$2,500 Fee payable to MassHousing *(once an appraiser has been selected by MassHousing and an appraisal fee quoted, an additional non-refundable appraisal fee will be required)*
- ☐ \*Technical Assistance/Mediation Fee payable to Massachusetts Housing Partnership.



Optional – Demonstration of Municipal Support: *N/A*

Check "X" below if applicable

- Letter of Support from the Chief Elected Official of the municipality\* ☐
- Housing development involves municipal funding ☐
- Housing development involves land owned or donated by the municipality ☐

*\*Other acceptable evidence: Zoning variance issued by ZBA for project; Minutes from Board of Selectman meeting showing that project was discussed and approved, etc.*

Explanation (Required)

**Method 2:** Development meets a minimum of **five (5)** of the Commonwealth's *Sustainable Development Principles*, as shown in the next section below.

If the development involves strong **municipal support** (evidence of such support must be submitted as an attachment), the development need only meet **four (4)** of the *Sustainable Development Principles*. However, one (1) of the Principles met must be **Protect Land and Ecosystems**.

Please explain at the end of each category how the development follows the relevant *Sustainable Development Principle(s)* and explain how the development demonstrates each of the checked "X" statements listed under the *Sustainable Development Principle(s)*.

**(1) Concentrate Development and Mix Uses**

Support the revitalization of city and town centers and neighborhoods by promoting development that is compact, conserves land, protects historic resources, and integrates uses. Encourage remediation and reuse of existing sites, structures, and infrastructure rather than new construction in undeveloped areas. Create pedestrian friendly districts and neighborhoods that mix commercial, civic, cultural, educational, and recreational activities with open spaces and homes.

Check "X" below if applicable

- Higher density than surrounding area ☒
- Mixes uses or adds new uses to an existing neighborhood ☐
- Includes multi-family housing ☒
- Utilizes existing water/sewer infrastructure ☒
- Compact and/or clustered so as to preserve undeveloped land ☒
- Reuse existing sites, structures, or infrastructure ☐
- Pedestrian friendly ☐
- Other (discuss below) ☐

Explanation (Required)

ATTACHED



Explanation (Required)

ATTACHED

#### (4) Use Natural Resources Wisely

Construct and promote developments, buildings, and infrastructure that conserve natural resources by reducing waste and pollution through efficient use of land, energy, water and materials.

Check "X" below *if applicable*

- Uses alternative technologies for water and/or wastewater treatment ☐
- Uses low impact development (LID) or other innovative techniques ☐
- Other (discuss below)

Explanation (Required)

ATTACHED

#### (5) Expand Housing Opportunities

Support the construction and rehabilitation of homes to meet the needs of people of all abilities, income levels and household types. Build homes near jobs, transit, and where services are available. Foster the development of housing, particularly multifamily and single-family homes, in a way that is compatible with a community's character and vision and with providing new housing choices for people of all means.

Check "X" below *if applicable*

- Includes rental units, including for low/mod households ☐
- Includes homeownership units, including for low/mod households ☒
- Includes housing options for special needs and disabled population ☐
- Expands the term of affordability ☐
- Homes are near jobs, transit and other services ☐
- Other (discuss below) ☐

Explanation (Required)

ATTACHED



**Explanation (Required)**

ATTACHED

**(8) Promote Clean Energy**

Maximize energy efficiency and renewable energy opportunities. Support energy conservation strategies, local clean power generation, distributed generation technologies, and innovative industries. Reduce greenhouse gas emissions and consumption of fossil fuels.

*Check "X" below if applicable*

- Energy Star or equivalent\* ☐
- Uses renewable energy source, recycled and/or non-/low-toxic materials, exceeds the state energy code, is configured to optimize solar access, and/or otherwise results in waste reduction and conservation of resources ☐
- Other (discuss below) ☐

\*All units are required by MassHousing to be Energy Star Efficient. Please include in your explanation a description of how the development will meet Energy Star criteria.

**Explanation (Required)**

ATTACHED

**(9) Plan Regionally**

N/A

Support the development and implementation of local and regional, state and interstate plans that have broad public support and are consistent with these principles. Foster development projects, land and water conservation, transportation and housing that have a regional or multi-community benefit. Consider the long term costs and benefits to the Commonwealth.

*Check "X" below if applicable*

- Consistent with a municipally supported regional plan ☐
- Addresses barriers identified in a Regional Analysis of Impediments to Fair Housing ☐
- Measurable public benefit beyond the applicant community ☐
- Other (discuss below) ☐

**Explanation (Required)**

*For further information regarding 40B applications, please contact Greg Watson, Manager, Comprehensive Permit Programs, at (617) 854.1880 or [gwatson@masshousing.com](mailto:gwatson@masshousing.com)*



### 3. Make Efficient Decisions

Make regulatory and permitting processes for development clear, predictable, coordinated, and timely in accordance with smart growth and environmental stewardship.

*The Project addresses at least one of the barriers identified as an impediment to fair housing in the Department of Housing and Community Development's 2013 publication entitled "Analysis of Impediments to Fair Housing Choice". The action step requires the promotion of fair housing by reducing regulatory barriers to, and creating incentives for, regional equity in affordable housing. Restrictive zoning requirements such as large lot requirements increase the cost of housing. The Project as proposed will help address the above referenced barrier by creating more equal and affordable housing opportunities within Massachusetts by promoting smart growth within the state. The variety of 2 and 3-bedroom units will provide a neighborhood with a range of families and empty nesters.*

### 4. Protect Land and Ecosystems

Protect and restore environmentally sensitive lands, natural resources, agricultural lands, critical habitats, wetlands and water resources, and cultural and historic landscapes.

*The proposed Project will be protective of the environmentally sensitive areas and will provide buffer areas for wildlife.*

### 5. Use Natural Resources Wisely

Construct and promote developments, buildings, and infrastructure that conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, and materials.

*The proposed Project will be very energy efficient. The units will exceed the EPA Energy Star guidelines, and comply with the "stretch" energy code. Where a typical home has a home energy rating of 100 and energy star homes have a rating of 75, the Project will have ratings of 65 or less, significantly better than energy star homes.*

*The Project will also use recycled materials where possible in the construction such as plywood, vinyl siding and deck material, insulation, flooring and cabinets. Construction waste shall be recycled as much as possible and forwarded to a recycling processing center for further breakdown and distribution.*











# One Beacon Street to [1 - 499] Still River Rd Directions - MapQuest

1.3

## YOUR TRIP TO:

[1 - 499] Still River Rd



1 HR 5 MIN | 45.7 MI

Est. fuel cost: \$3.62

Trip time based on traffic conditions as of 4:29 PM on February 1, 2018. Current Traffic: Moderate



Print a full health report of your car with HUM vehicle diagnostics (800) 908-2501



1. Start out going southeast on Beacon St toward Tremont St.



2. Take the 1st right onto Tremont St.

King's Chapel is on the corner.

If you are on School St and reach Chapman Pl you've gone a little too far.



Then 0.71 miles - 0.71 total miles



3. Turn right to stay on Tremont St.

Tremont St is 0.1 miles past Seaver Pl.

If you are on Shawmut Ave and reach Marginal St you've gone a little too far.



Then 0.15 miles - 0.86 total miles



4. Turn slight right onto Marginal St.

Marginal St is just past Church St.

If you reach Herald St you've gone a little too far.



Then 0.06 miles - 0.92 total miles



5. Merge onto I-60 W/Massachusetts Tpke W (Portions toll).



Then 27.56 miles - 28.49 total miles



6. Merge onto I-495 N via EXIT 11A toward NH - Maine/Marlborough.



Then 13.24 miles - 41.73 total miles



7. Merge onto Main St/MA-117 W via EXIT 27 toward Bolton.



Then 3.50 miles - 45.23 total miles



8. Turn right onto Still River Rd/MA-110.

Still River Rd is 0.3 miles past Fox Run Rd.



Then 0.46 miles - 45.69 total miles



9. [1 - 499] Still River Rd, [1 - 499] STILL RIVER RD.

Your destination is 0.3 miles past Kettle Hole Rd.

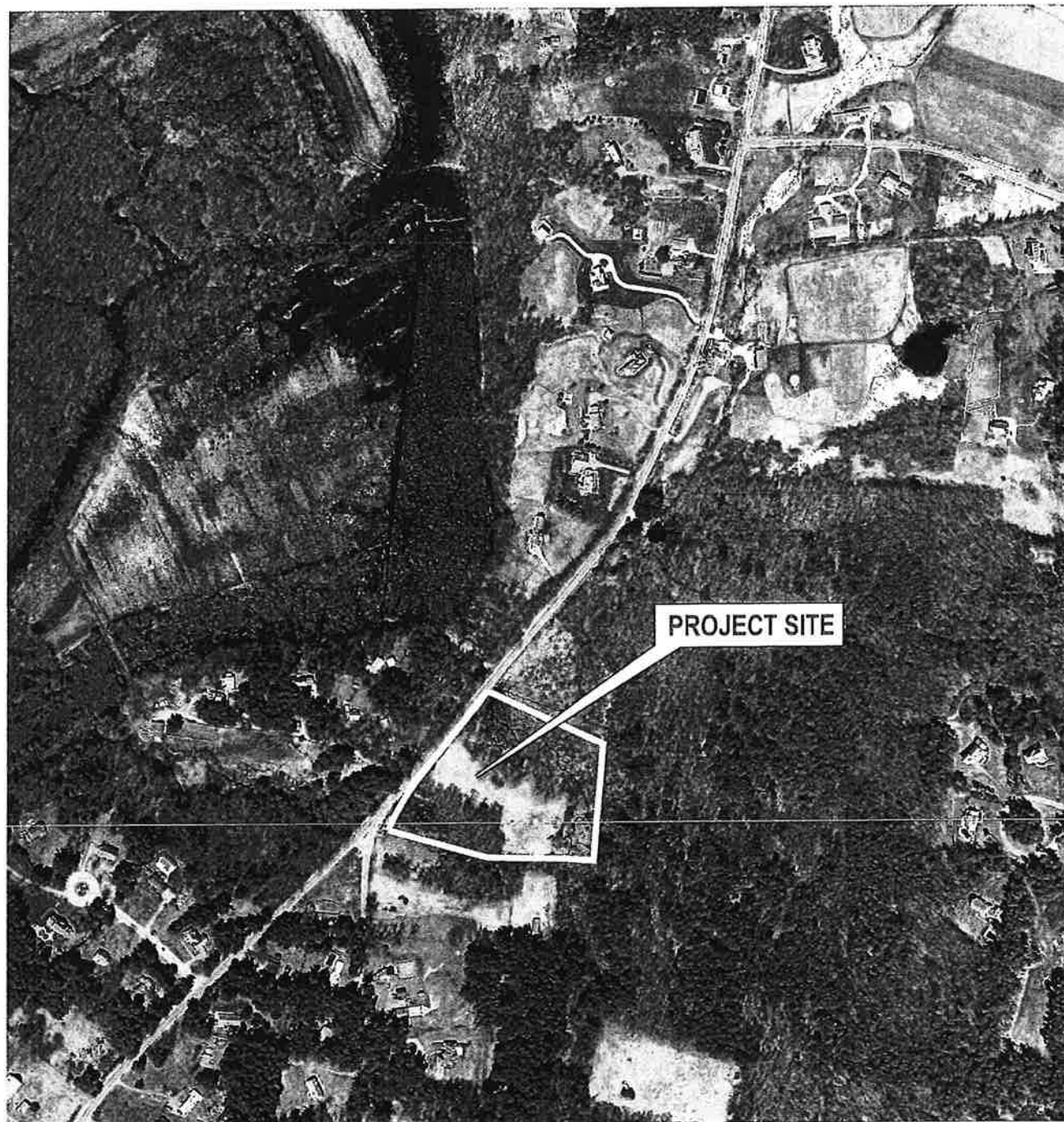
If you reach Nashaway Rd you've gone about 0.4 miles too far.

Use of directions and maps is subject to our [Terms of Use](#). We don't guarantee accuracy, route conditions or usability. You assume all risk of use.









## FIGURE 3 - AERIAL PHOTOGRAPH

1"=500'

Prepared By: Ducharme & Dillis Civil Design Group, Inc.  
1092 Main Street, P.O. Box 428  
Bolton, Massachusetts



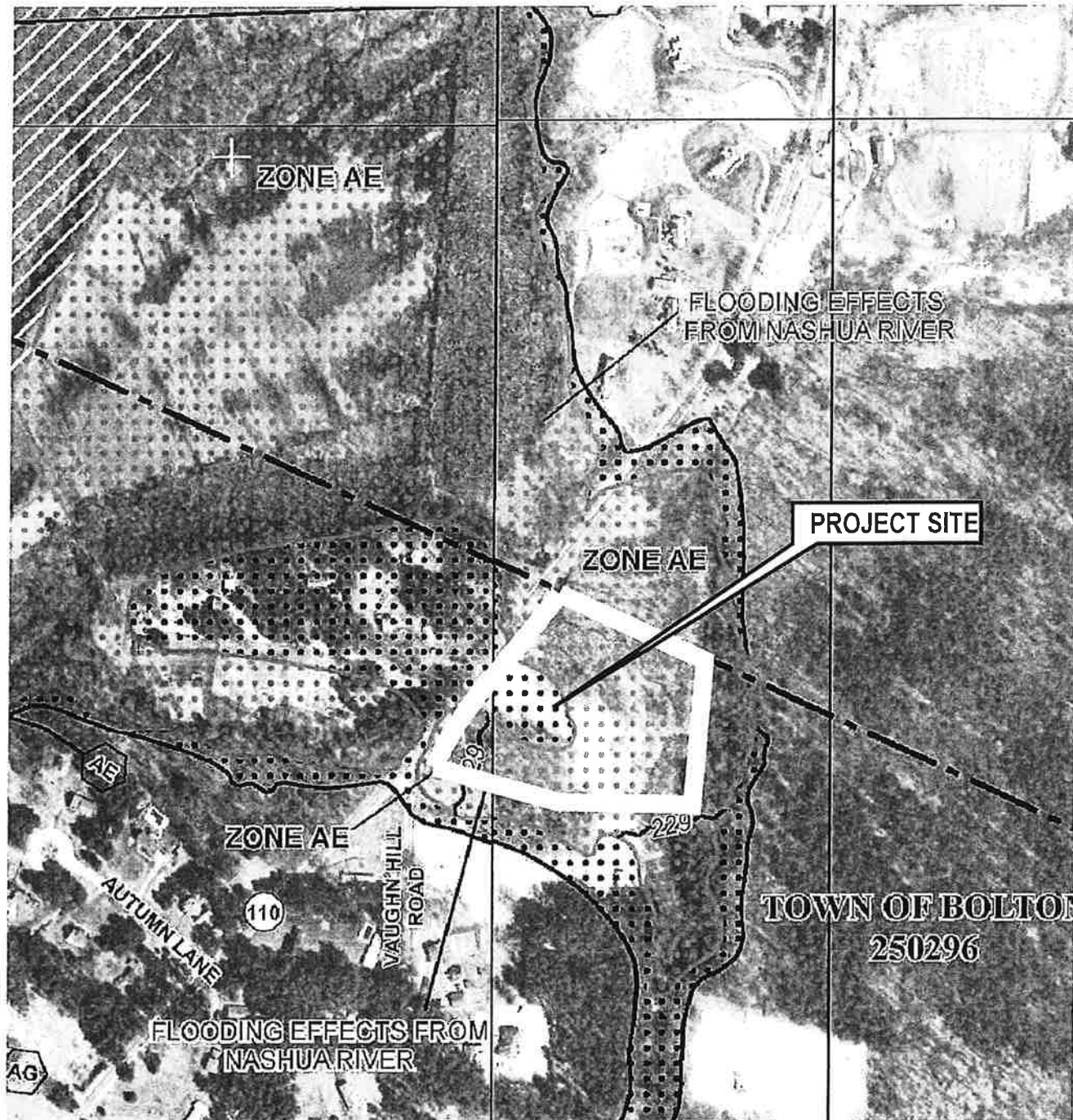
**DUCHARME & DILLIS**  
Civil Design Group, Inc.

CIVIL ENGINEERS • LAND SURVEYORS • WETLAND CONSULTANTS

References: FIRM - Flood Insurance Rate Map  
Community-Panel Numbers: 25027C0457E & 25027C476F

Prepared For: Turn Left, LLC  
130 Parker Street, Unit 12  
Lawrence, Massachusetts





**FIGURE 2 - FLOOD MAP**

1"=400'

Prepared By: Ducharme & Dillis Civil Design Group, Inc.  
1092 Main Street, P.O. Box 428  
Bolton, Massachusetts

**DUCHARME & DILLIS**  
Civil Design Group, Inc.  
CIVIL ENGINEERS • LAND SURVEYORS • WETLAND CONSULTANTS

References: FIRM - Flood Insurance Rate Map  
Community-Panel Numbers: 25027C0457E & 25027C476F

Prepared For: Turn Left, LLC  
130 Parker Street, Unit 12  
Lawrence, Massachusetts



COMBONENT DOCUMENT & DILLS CIVIL DESIGN GROUP, INC 2018

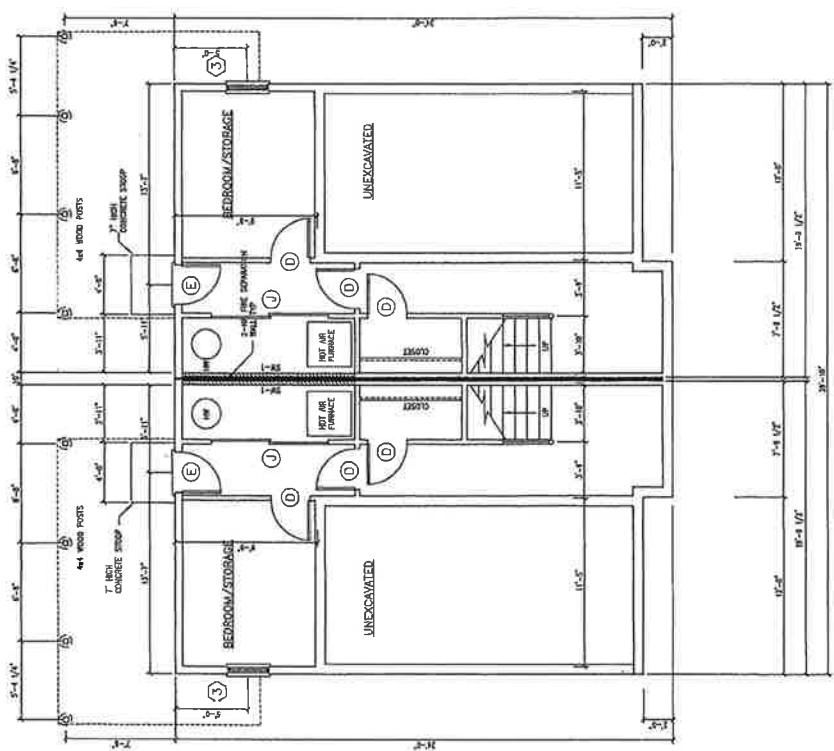
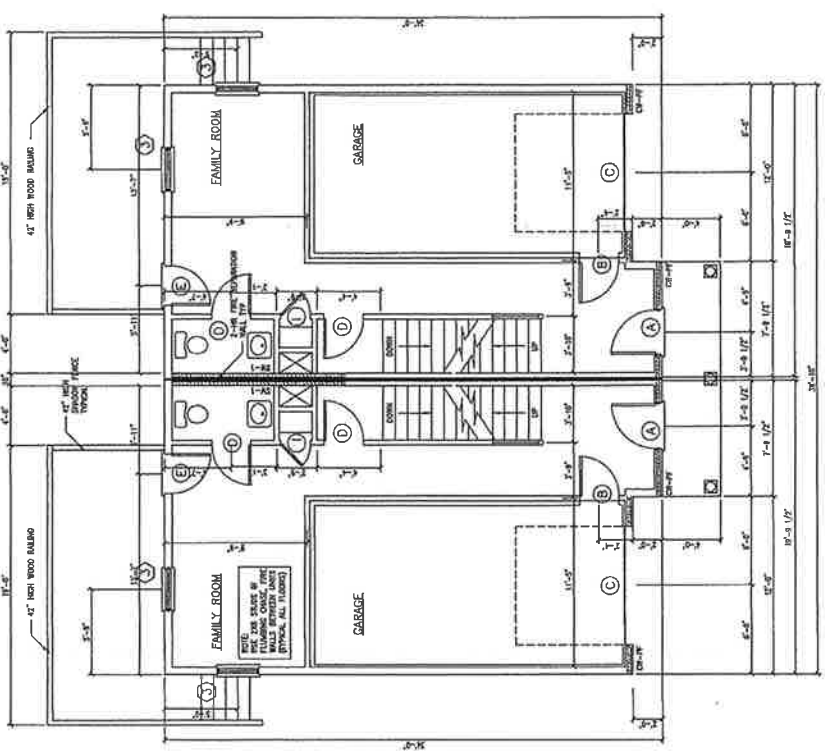












DUPLEX



The development consists of four duplex units circularly arrayed about a main shared cul-de-sac. Each unit has a very compact floor plan with three stories, partial walk out basement and gabled roof. The architectural style of the units is in keeping with the local and New England vernacular. The exterior enclosure complies with the Massachusetts energy code and consists of 2x6 wood framing, synthetic wood clapboard siding, double hung window with insulated glass and architectural roofing shingles.

The units comply with the current state building code and local ordinances.

The ground floor (648 square feet) consists of the main entrance, single car garage, a family room and a half bath. The rear of the facility access a raised pressure treated deck that serves as a secondary means of egress.

The first floor (648 square feet) is an open floor plan consisting of the kitchen, dining area and living room, a half bathroom is located adjacent to the kitchen. Large windows flood the interior with natural light and a zero clearance gas fireplace provides a focal point as well as supplemental heating.

The second floor (648 square feet) houses a master bedroom, an additional bedroom and a full bathroom. The master bedroom has an oversized walk in closet and a raised tray ceiling

Due to the site restrictions and grades the units have a partial daylight basement (378 square feet) to the rear of the facility and storage/bedroom and a utility room. The basement does not extend under the garage.



## Sustainable Development Principles

The Commonwealth of Massachusetts shall care for the built and natural environment by promoting sustainable development through integrated energy and environment, housing and economic development, transportation and other policies, programs, investments, and regulations. The Commonwealth will encourage the coordination and cooperation of all agencies, invest public funds wisely in smart growth and equitable development, give priority to investments that will deliver good jobs and good wages, transit access, housing, and open space, in accordance with the following sustainable development principles. Furthermore, the

Commonwealth shall seek to advance these principles in partnership with regional and municipal governments, non-profit organizations, business, and other stakeholders.



### 1. Concentrate Development and Mix Uses

Support the revitalization of city and town centers and neighborhoods by promoting development that is compact, conserves land, protects historic resources, and integrates uses. Encourage remediation and reuse of existing sites, structures, and infrastructure rather than new construction in undeveloped areas. Create pedestrian friendly districts and neighborhoods that mix commercial, civic, cultural, educational, and recreational activities with open spaces and homes.

### 2. Advance Equity

Promote equitable sharing of the benefits and burdens of development. Provide technical and strategic support for inclusive community planning and decision making to ensure social, economic, and environmental justice. Ensure that the interests of future generations are not compromised by today's decisions.



### 3. Make Efficient Decisions

Make regulatory and permitting processes for development clear, predictable, coordinated, and timely in accordance with smart growth and environmental stewardship.



### 4. Protect Land and Ecosystems

Protect and restore environmentally sensitive lands, natural resources, agricultural lands, critical habitats, wetlands and water resources, and cultural and historic landscapes. Increase the quantity, quality and accessibility of open spaces and recreational opportunities.



### 5. Use Natural Resources Wisely

Construct and promote developments, buildings, and infrastructure that conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, and materials.



### 6. Expand Housing Opportunities

Support the construction and rehabilitation of homes to meet the needs of people of all abilities, income levels, and household types. Build homes near jobs, transit, and where services are available. Foster the development of housing, particularly multifamily and smaller single-family homes, in a way that is compatible with a community's character and vision and with providing new housing choices for people of all means.



### 7. Provide Transportation Choice

Maintain and expand transportation options that maximize mobility, reduce congestion, conserve fuel and improve air quality. Prioritize rail, bus, boat, rapid and surface transit, shared-vehicle and shared-ride services, bicycling, and walking. Invest strategically in existing and new passenger and freight transportation infrastructure that supports sound economic development consistent with smart growth objectives.



### 8. Increase Job and Business Opportunities

Attract businesses and jobs to locations near housing, infrastructure, and transportation options. Promote economic development in industry clusters. Expand access to education, training, and entrepreneurial opportunities. Support the growth of local businesses, including sustainable natural resource-based businesses, such as agriculture, forestry, clean energy technology, and fisheries.



### 9. Promote Clean Energy

Maximize energy efficiency and renewable energy opportunities. Support energy conservation strategies, local clean power generation, distributed generation technologies, and innovative industries. Reduce greenhouse gas emissions and consumption of fossil fuels.

### 10. Plan Regionally

Support the development and implementation of local and regional, state and interstate plans that have broad public support and are consistent with these principles. Foster development projects, land and water conservation, transportation and housing that have a regional or multi-community benefit. Consider the long-term costs and benefits to the Commonwealth.





Property Address: Lot 2A, off Still River Road, Bolton, MA

## QUITCLAIM DEED

I, David Elkinson, Trustee of EB Realty Trust, u/d/t dated November 11, 2014, an unrecorded Trust, with a notice address of 10 Schipper Farm Lane, Southborough, MA

in consideration of **ONE HUNDRED SEVENTY TWO THOUSAND AND NO/100 (\$172,000.00) DOLLARS**

grant to **TURN LEFT, LLC**, a Massachusetts limited liability company with a notice address of 130 Parker Street, Unit 12, Lawrence, MA 01843,

with **Quitclaim covenants**

A vacant parcel of land in Bolton, Worcester County, Massachusetts containing 6.68 acres of land, more or less, being shown as Lot 2A on a plan entitled "Plan of Land in Bolton & Harvard, Massachusetts" prepared for: EB Realty Trust dated January 16, 2018; Scale: 1" = 80', prepared by Ducharme & Dillis Civil Design Group, Inc., 1092 Main Street, P.O. Box 428, Bolton, MA 01740.

Said plan is recorded at the Worcester District Registry of Deeds in Plan Book 932, Plan 91.

Lot 2A contains 290,899 square feet (6.68 acres) more or less, according to said plan.

Parcel A, containing 2.52 acres and located in Harvard, is not included in this deed.

This is not homestead property.

Being a portion of the same premises as conveyed by deed to Grantor herein dated February 5, 2015 and recorded at Worcester District Registry of Deeds in Book 53350, Page 329.

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## Worcester District Registry of Deeds - 20/20 Perfect Vision i2 Document Detail Report

Current datetime: 1/22/2018 5:40:58 PM

| Doc#   | Document Type | Town | Book/Page | File Date  | Consideration |
|--|---------------|------|-----------|------------|---------------|
| 6786   | DEED          |      | 58346/149 | 01/22/2018 | 172000.00     |
| Property-Street Address and/or Description   |               |      |           |            |               |
| STILL RIVER RD                               |               |      |           |            |               |
| Grantors                                     |               |      |           |            |               |
| ELKINSON DAVID TR, EB REALTY TRUST           |               |      |           |            |               |
| Grantees                                     |               |      |           |            |               |
| TURN LEFT LLC                                |               |      |           |            |               |
| References-Book/Pg Description Recorded Year |               |      |           |            |               |
| Registered Land Certificate(s)-Cert# Book/Pg |               |      |           |            |               |



53-1

**Subject:** 2 Charles Ridge Rd, Littleton, MA - Unit D



**Exterior - Front**

**MLS # 72199443 - Sold**

**Condo - Townhouse, Rowhouse, Attached, Other (See Remarks)**

**2 Charles Ridge Rd - Unit D  
Littleton, MA 01460-6234  
Middlesex County**

**List Price: \$420,000**

**Sale Price: \$420,000**

**Unit Placement: Street, Middle, Front**

**Total Rooms: 5**

**Unit Level: 1**

**Bedrooms: 2**

**Grade School:**

**Bathrooms: 2f 1h**

**Middle School:**

**Master Bath: Yes**

**High School:**

**Fireplaces: 1**

**Outdoor Space Available: Yes - Private**

**Handicap Access/Features: Unknown**

**Directions: Use google maps/navigation. Easy access to 495 and commuter train.**

**Remarks**

**NEW PICS - LOOK AT THIS LARGE, bright open concept home. Gorgeous wood floors with high ceilings, leads you into your granite kitchen, fully applianced with a breakfast bar and 1/2 bath for easy entertaining. Next to your fabulous, updated kitchen is a large dining room which can fit a table to seat 10 comfortably and hutch to match. Sliders off your kitchen and dining room to your first floor, with views of the lush, green conservation land that borders this beautiful home. You have a contemporary deck that wraps around the interior and brings you to the second floor. A large welcoming landing houses your washer and dryer behind closed doors. The first of two bedrooms has a large walk in closet and full bathroom outside the bedroom door. The master bedroom has a walk in closet large enough to put in a single bed. The master bedroom suite is very generous, with a bathroom to match. The master bedroom suite finishes the second floor. Large walkout basement w/sliders and patio.**

**Property Information**

**Approx. Living Area: 2,343 Sq. Ft. (\$179.26/Sq. Ft.)**

**Approx. Acres:**

**Garage Spaces: 1 Attached, Opener, Deeded, Side Entry**

**Living Area Includes:**

**Heat Zones: 2 Forced Air, Gas**

**Parking Spaces: 2 Off-Street Improved Driveway, Paved Exclusive Parking**

**Living Area Source: Owner**

**Cool Zones: 2 Central Air**

**Levels in Unit: 2**

**Living Area Disclosures: including downstairs space w/walkout sliders to patio-545 sq. ft. Space is unfinished w/heat & a/c.**

**Disclosures:**

**Complex & Association Information**

**Complex Name: Littleton Ridge Estates**

**Units in Complex: 43 Complete: Yes**

**Units Owner Occupied: See Remarks**

**Association: Yes Fee: \$388 Monthly**

**Assoc. Fee Incls:**

**Master Insurance, Exterior Maintenance, Road Maintenance, Landscaping, Snow Removal, Walking/Jogging Trails, Refuse Removal**



Off Market Date: 10/10/2017

Financing: Conv. Fixed

Sale Date: 11/9/2017

le Price: \$420,000

Offer Date: 9/27/2017 Days to Offer: 72

MLS # 72199443 - Sold

2 Charles Ridge Rd U:D, Littleton, MA 01460-6234

Condominium

Sale Price:



Exterior - Front



Complex Name



Living Room



Living Room





Dining Room



Dining Room



Dining Room



Dining Room

MLS # 72199443 - Sold  
2 Charles Ridge Rd U:D, Littleton, MA 01460-6234

Condominium  
Sale Price:



MLS # 72199443 - Sold  
2 Charles Ridge Rd U:D, Littleton, MA 01460-6234

Condominium  
Sale Price:



Master Bedroom



Walk-In Closet



Bathroom - Master

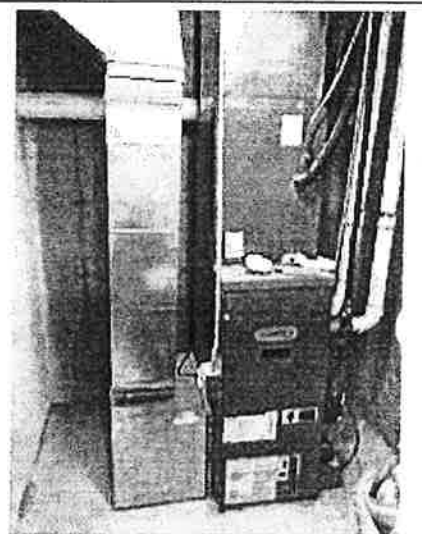
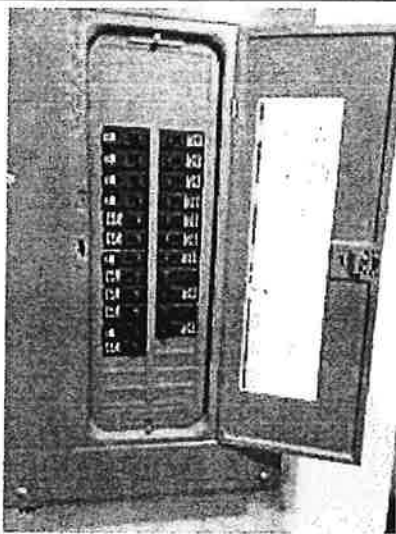
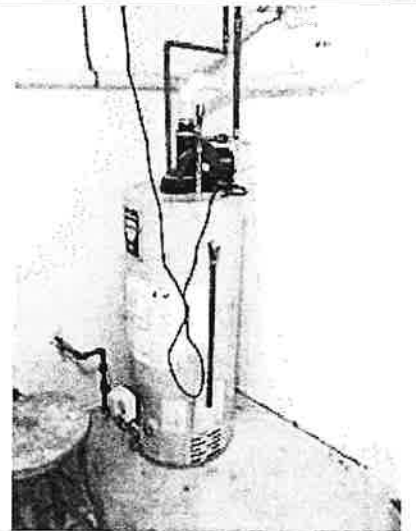


Bedroom 2





Deck



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**Room Levels, Dimensions and Features**

| Room            | Level | Size  | Features   |
|-----------------|-------|-------|--|
| Living Room:    | 1     | 17X16 | Fireplace, Ceiling - Cathedral, Flooring - Hardwood, Cable Hookup  |
| Dining Room:    | 1     | 13X12 | Flooring - Hardwood, Deck - Exterior, Exterior Access  |
| Kitchen:        | 1     | 12X12 | Flooring - Hardwood, Countertops - Stone/Granite/Solid, Main Level, Kitchen Island                                   |
| Master Bedroom: | 2     | 16X16 | Bathroom - Full, Ceiling - Cathedral, Ceiling Fan(s), Closet - Walk-in, Flooring - Wall to Wall Carpet, Cable Hookup |
| Bedroom 2:      | 2     | 17X14 | Closet, Flooring - Wall to Wall Carpet   |
| Bath 1:         |       |       | Bathroom - Half, Closet - Linen  |
| Bath 2:         |       |       | Bathroom - Full, Bathroom - Double Vanity/Sink, Bathroom - With Tub & Shower, Linen, Flooring - Stone/Ceramic Tile   |
| Bath 3:         |       |       | Bathroom - Full, Bathroom - With Tub & Shower, Closet - Linen, Flooring - Stone/Ceramic Tile                         |
| Laundry:        | 1     |       | Main Level, Dryer Hookup - Electric, Washer Hookup   |
| Loft:           | 2     | 20X11 | Flooring - Wall to Wall Carpet   |
| Entry Hall:     |       |       | Closet, Flooring - Hardwood  |

**Features**

Appliances: Range, Dishwasher, Microwave  
Association Pool: No  
Basement: Yes Full, Interior Access  
Beach: No  
Construction: Frame  
Docs in Hand: Master Deed, Rules & Regs  
Electric Features: 200 Amps  
Energy Features: Insulated Windows, Insulated Doors, Programmable Thermostat  
Exterior: Vinyl  
Exterior Features: Porch, Deck  
Flooring: Tile, Wall to Wall Carpet, Hardwood  
Hot Water: Propane Gas  
Insulation Features: Full  
Management: Developer Control  
Pets Allowed: Yes w/ Restrictions  
Roof Material: Asphalt/Fiberglass Shingles  
Sewer Utilities: Private Sewerage - Title 5: Certificate of Compliance  
Water Utilities: Community Well, Private Water  
Utility Connections: for Gas Range, for Gas Oven, for Electric Dryer, Washer Hookup  
Waterfront: No  
Water View: No

**Other Property Info**

Adult Community: No  
Elevator: No  
Disclosure Declaration: Yes  
Exclusions:  
Green Certified: No  
Laundry Features: In Unit  
Lead Paint: None  
UFFI: No Warranty Features: No  
Year Built/Converted: 2017  
Year Built Source: Public Record  
Year Built Desc: Actual  
Year Round: Yes  
Short Sale w/Lndr. App. Req: No  
Lender Owned: No

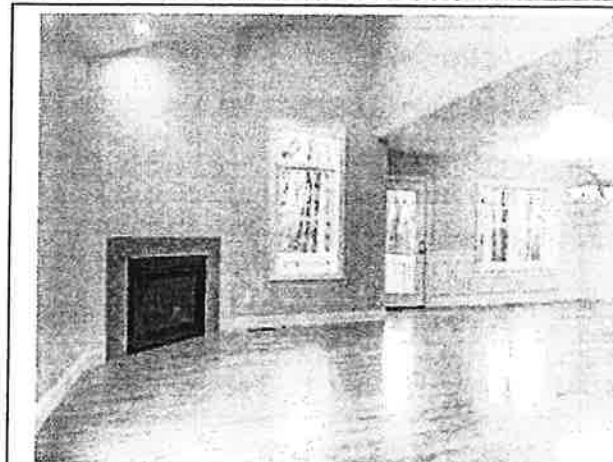
**Tax Information**

Pin #: M:14 B:69 L:2B  
Assessed: \$0  
Tax: \$0 Tax Year: 2017  
Book: 26078 Page: 289  
Cert:  
Zoning Code: RES  
Map: 14 Block: 69 Lot: 2B

**Remarks**

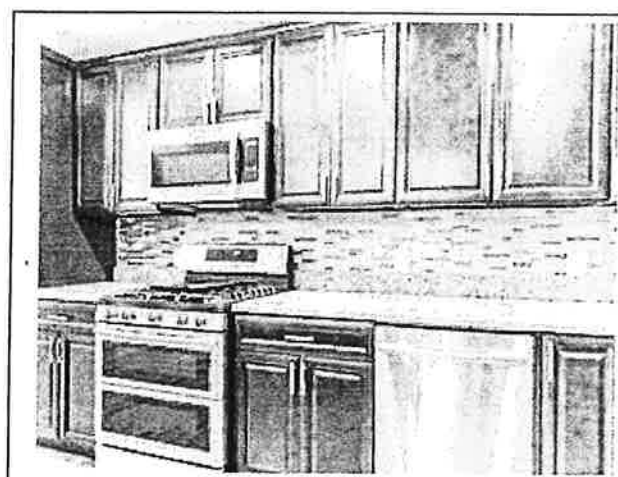
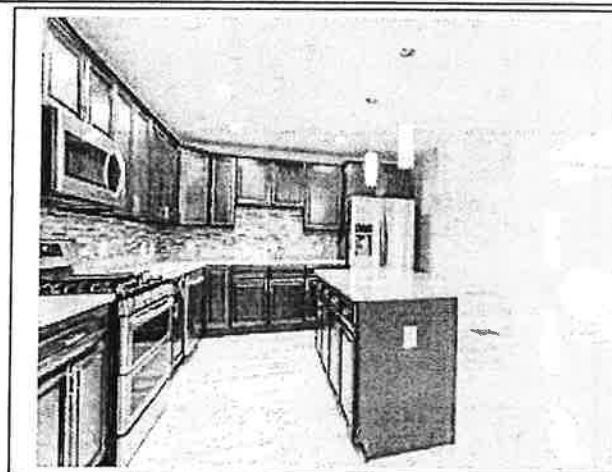
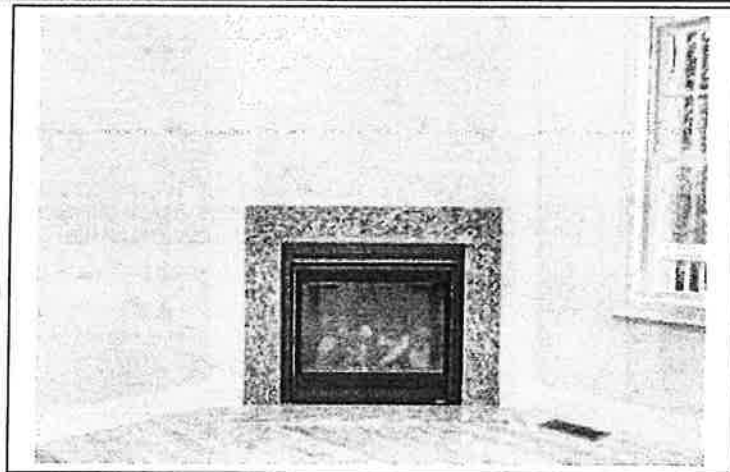
Buyer agent commission paid on base price. Buyer agent must attend all buyer meetings and site visits after Open House. and septic reserve required from buyer at closing.



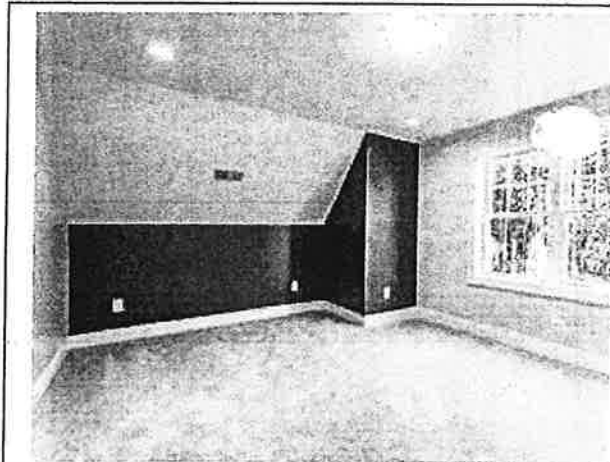
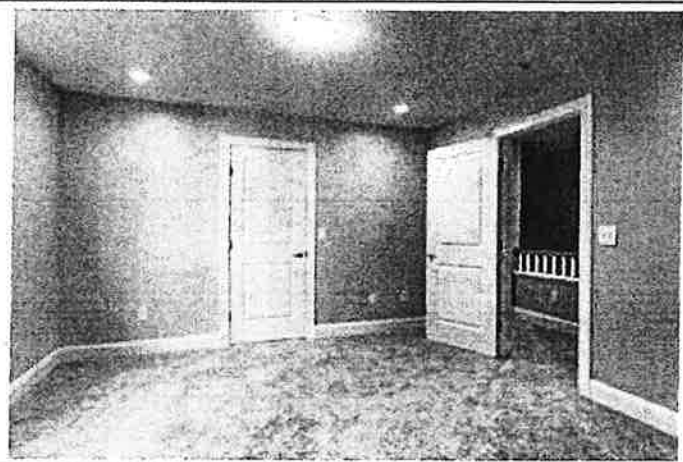


MLS # 72175939 - Sold  
2B Trail Ridge Way U:B, Harvard, MA 01451-1463

Condominium  
Sale Price:

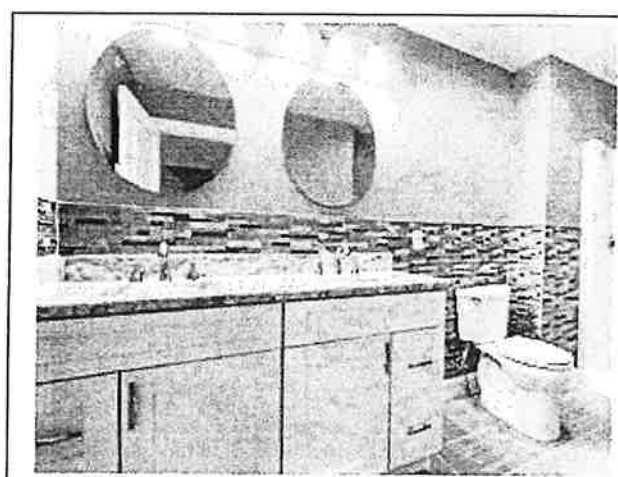
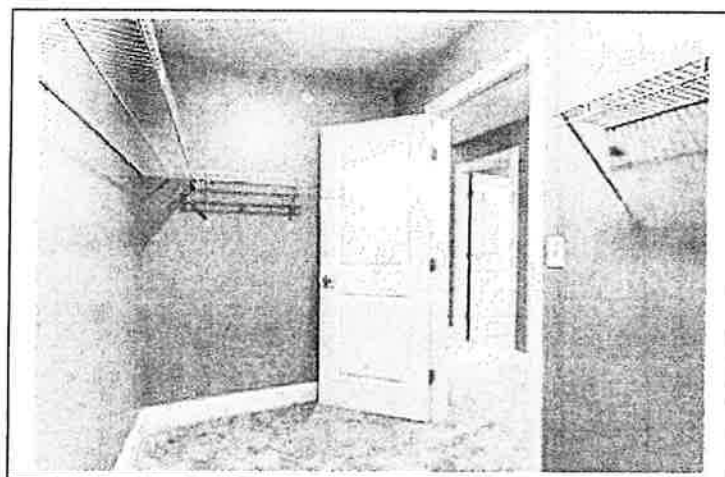
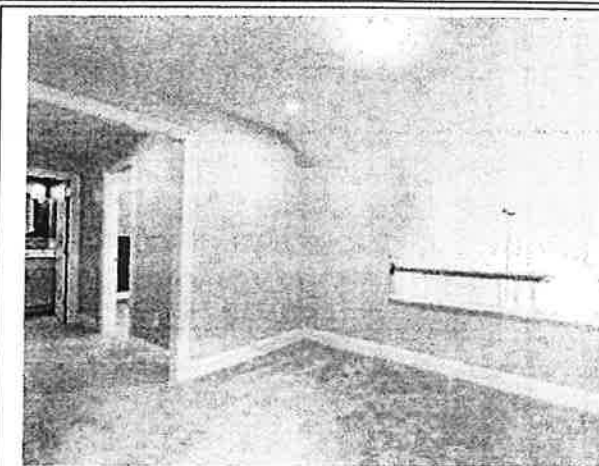
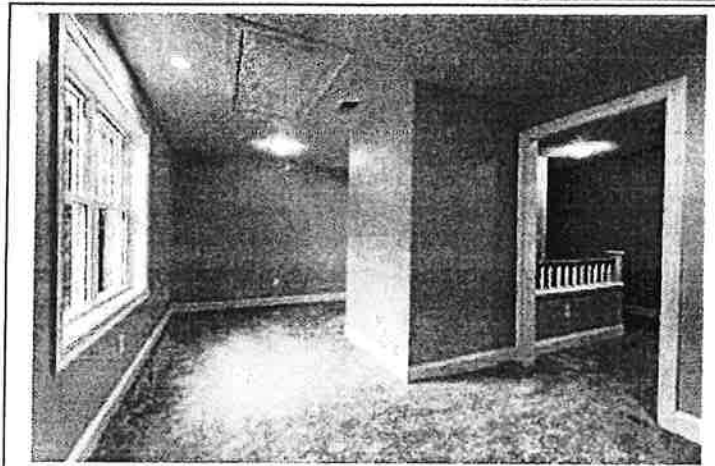






MLS # 72175939 - Sold  
2B Trail Ridge Way U:B, Harvard, MA 01451-1463

Condominium  
Sale Price:









# Melissa E. Robbins

## Attorney

Westford, MA 01886

DFPCLAW.COM

[Melissa@dfpclaw.com](mailto:Melissa@dfpclaw.com)



## References:

Douglas C. Deschenes, Esq.  
Deschenes & Farrell, PC  
Westford, MA

Walter Eriksen  
Applewood Construction Corp.  
Tyngsborough, MA

Dennis M. Page  
RE/MAX Prestige  
Tyngsborough, MA

## EDUCATION

Juris Doctor  
New England School of Law,  
Boston, MA

Bachelor Degree  
Clark University, Worcester, MA

## EXPERIENCE:

August 2004 – Present  
Deschenes & Farrell, PC  
515 Groton Road  
Chelmsford, MA 01886

- Actively involved with the legal aspects of the development, financing and construction of real estate and affordable housing.
- Highly involved in promoting smart growth and affordable housing for developers as well as non-profit and governmental agencies through the use of local zoning and M.G.L. Chapter 40B.
- Promoted to partner in 2010.

## AFFILIATIONS

- Member Massachusetts Real Estate Bar Association
- Member New England Builders Association
- Secretary of Habitat for Humanity of Greater Lowell

## DEVELOPMENTS

### Tynq Village – Tyngsborough, MA

Attorney for a 28-unit for sale development of which 7 units are affordable.

### Graniteville Woods – Westford, MA

Attorney for a 164-unit development which includes condominiums and single-family residences of which 41 units are affordable.

### Tyngsborough Crossing – Tyngsborough, MA

Attorney for a 120-unit for sale development of which 30 units are affordable.

### Common Ground Development Corp. – Acton, MA

Attorney for a 15-unit rental development of which all units are affordable.

### Common Ground Development Corp. - Westford, MA

#### Residences at Stony Brook I and II

Attorney for a 51-unit multi-family development of which 46 units are affordable.

### CHOICE – Chelmsford Housing Opportunities for Intergenerational & Community Endeavors – Harvard, MA

Attorney for a 9-unit rental development of which all units are affordable.

### Cottages at River Hill, West Newbury, MA

Attorney for a 30-unit development with three affordable units.

6.1/6.2



Recent Project:

Mr. Ducharme is currently overseeing the replication of approximately 38,000 square feet of Bordering Vegetated Wetlands in Dracut Massachusetts. His responsibilities include direct oversight of replication activities and collaboration with the Department of Environmental Protection.

**Greg Roy** has extensive experience in both the public and private fields of civil engineering. His work in construction oversight and management aides his abilities in plan preparation and permitting for commercial and residential sites. Mr. Roy's skill in managing complex projects proves to be a strength in water distribution design. His specialties include site planning, focusing on the details of road and utility design. He enjoys working closely with clients through representation and presentation of projects at public hearings.

Registrations:

Registered Professional Engineer- Massachusetts- 2004  
Confined Space Entry- Michigan 2004

Recent Project:

As project engineer in a 66-unit active adult community in Stow, MA, Mr. Roy was responsible for all utility, road and drainage designs. His job also included permitting coordination with the Stow Planning Board, Conservation Commission, and Executive Office of Environmental Affairs.



I hereby acknowledge that it will be required to provide financial surety, by means of bond, cash escrow and a surety escrow agreement or letter of credit with the agreement that it may be called upon or used in the event that the Developer fails either to (i) complete and submit the Cost Examination as required by 760 CMR 56.04(8) and the MassHousing Regulatory Agreement, or (ii) pay over to the Municipality any funds in excess of the limitations on profits and distributions as required by 760 CMR 56.04(8) and as set forth in the MassHousing Regulatory Agreement.

Signature: Dr. Russell

Name: David Russell

Title: Mgr.

Date: 1/28/2018







DESCHENES & FARRELL, P.C.

Attorneys at Law  
515 Groton Road, Suite 204  
Westford, MA 01886  
Telephone: (978) 496-1177  
Facsimile: (978) 577-6462

*Douglas C. Deschenes*  
*Kathryn Lorah Farrell*  
*Melissa E. Robbins\**

*\*Admitted in MA and NH*

April 3, 2018

Polly Donaldson, Director  
Department of Housing & Community Development  
1 Congress Street, 10<sup>th</sup> Floor  
Boston, MA 02114

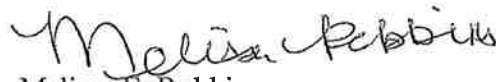
RE: **David Russell – 40B Housing Project**  
**Still River Commons**  
**Still River Road, Bolton, MA**

Dear Ms. Donaldson,

We represent David Russell and are providing you notice pursuant to 760 CMR 31.01(2)(c) that an application has been made with a subsidizing agency for approval of the above referenced project. More specifically, Mr. Russell has filed an application with MassHousing for funding of the project under the MassHousing Housing Starts Program.

Please contact me with any comments or questions you may have. Thank you for your time and consideration in this matter.

Sincerely,  
Deschenes & Farrell, PC

  
Melissa E. Robbins

Ch/Aff'd/Russell



**COPY OF 40B TECHNICAL ASSISTANCE/MEDIATION FEE  
PAYABLE TO MASSHOUSING PARTNERSHIP**







liable by reason of his own acts or conduct." Because each corporate entity is intended to be treated as a separate person, distinct from its shareholders, officers, directors and employees and further because shareholders, officers, directors and employees cannot, except in special circumstances, be held liable for acts or debts of a corporation, the fact that David Russell is a shareholder, officer, director, member and/or manager of numerous corporate entities does not mean that these entities are in anyway relevant to the Applicant's application for a Comprehensive Permit at Still River Road, Bolton, MA. Similarly, the actions of the listed entities may not be attributed to the Applicant Entity simply because they may share a similar officer/manager. Accordingly, while we provide the attached list per the request of MassHousing, we would at the same time suggest that the list provided should not have any relevance to the Applicant Entity's application pending before MassHousing. Thank you in advance for your time and consideration.

Sincerely,  
Deschenes & Farrell, PC

A handwritten signature in dark ink, appearing to read "Melissa Robbins", written in a cursive style.

Melissa E. Robbins

MER/cas

Attachment

Cheryl/Affordable Housing/Russell/Bolton ENTITY LTR



| Title | Individual Name<br>First, Middle, Last, Suffix | Address (no PO Box)<br>Address, City or Town, State, Zip Code |
|-------|--|---|
|       |  |   |

8. The name and business address of the person(s) authorized to execute, acknowledge, deliver and record any recordable instrument purporting to affect an interest in real property:

| Title         | Individual Name<br>First, Middle, Last, Suffix | Address (no PO Box)<br>Address, City or Town, State, Zip Code |
|---------------|--|---|
| REAL PROPERTY | CHARLES DAVID RUSSELL                          | 28 COUNTRY CLUB LANE<br>MIDDLETON, MA 01949 USA               |

9. Additional matters:

**SIGNED UNDER THE PENALTIES OF PERJURY, this 3 Day of April, 2018,**  
CHARLES DAVID RUSSELL  
*(The certificate must be signed by the person forming the LLC.)*





## Corporations Division

### Business Entity results

Number of records: 129

Number of pages: 6

[Print results](#)

| <u>Name</u>    | <u>Position</u> | <u>Individual's Address</u>  | <u>Entity Name</u>                                 | <u>ID No.</u> | <u>Old ID No.</u> |
|----------------|-----------------|--|--|---------------|-------------------|
| RUSSELL, DAVID | TREASURER       | 281D BOYLSTON ST.,<br>LOWELL, MA USA<br>281D BOYLSTON ST.,<br>LOWELL, MA USA             | <b>COKELL, INC.</b>                                | 000334910     |                   |
| RUSSELL, DAVID | SECRETARY       | 281D BOYLSTON ST.,<br>LOWELL, MA USA<br>281D BOYLSTON ST.,<br>LOWELL, MA USA             | <b>COKELL, INC.</b>                                | 000334910     |                   |
| RUSSELL, DAVID | PRESIDENT       | 281D BOYLSTON ST.,<br>LOWELL, MA USA<br>281D BOYLSTON ST.,<br>LOWELL, MA USA             | <b>COKELL, INC.</b>                                | 000334910     |                   |
| RUSSELL, DAVID | PRESIDENT       | 556 MAIN STREET,<br>STONEHAM, MA 02180 USA<br>556 MAIN STREET,<br>STONEHAM, MA 02180 USA | <b>NEW ENGLAND INTERNATIONAL PRODUCTIONS, INC.</b> | 000167301     | 000077790         |
| RUSSELL, DAVID | PRESIDENT       | 281D BOYLSTON ST.,<br>LOWELL, MA USA<br>281D BOYLSTON ST.,<br>LOWELL, MA USA             | <b>RULEY, INC.</b>                                 | 000333584     |                   |
| RUSSELL, DAVID | TREASURER       | 281D BOYLSTON ST.,<br>LOWELL, MA USA<br>281D BOYLSTON ST.,<br>LOWELL, MA USA             | <b>RULEY, INC.</b>                                 | 000333584     |                   |





**William Francis Galvin**  
Secretary of the Commonwealth of Massachusetts



## Corporations Division

### Business Entity results

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Number of pages: 6

| <u>Name</u>     | <u>Position</u> | <u>Individual's Address</u>   | <u>Entity Name</u>  | <u>ID No.</u> | <u>Old ID No.</u> |
|-----------------|-----------------|---|---|---------------|-------------------|
| RUSSELL , DAVID | DIRECTOR        | 1601 CHESTNUT STREET, TWO LIBERTY PLACE<br>PHILADELPHIA, PA 19192 USA | CIGNA HEALTHCARE, INC.                                    | 000973629     |                   |
| RUSSELL , DAVID | NONE GIVEN - P  |   | CRESCENT D AND K FAMILY LIMITED PARTNERSHIP, THE          | 000921585     |                   |
| RUSSELL , DAVID | MANAGER         |   | DAME HOLLIS PROPERTIES, LLC                               | 001141463     |                   |
| RUSSELL , DAVID | REAL PROPERTY   |   | DAME HOLLIS PROPERTIES, LLC                               | 001141463     |                   |
| RUSSELL , DAVID | MANAGER         |   | DAVIS ALLIANCE, LLC                                       | 001036599     |                   |
| RUSSELL , DAVID | SOC SIGNATORY   |   | DAVIS ALLIANCE, LLC                                       | 001036599     |                   |
| RUSSELL , DAVID | REAL PROPERTY   |   | DAVIS ALLIANCE, LLC                                       | 001036599     |                   |
| RUSSELL , DAVID | MANAGER         |   | EAST HILL, LLC  | 270672032     |                   |
| RUSSELL , DAVID | TREASURER       | 115 WILDER ROAD<br>BOLTON, MA 01740 USA                               | EXTERRA GLOBAL TRADING, INC.                              | 043165715     | 000406625         |
| RUSSELL , DAVID | DIRECTOR        | 200 RYAN ST.<br>SO. PLAINFIELD, NJ 07080 USA                          | FIRE AND EMERGENCY MANUFACTURERS AND SERVICES ASSOCIATION | 000660074     | 000000000         |
| RUSSELL , DAVID | REAL PROPERTY   |   | GENTLE MANOR LLC  | 001101763     |                   |
| RUSSELL , DAVID | MANAGER         |   | GENTLE MANOR LLC  | 001101763     |                   |
|                 |                 |   | GENTLE MANOR LLC  | 001101763     |                   |





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Secretary of the Commonwealth of Massachusetts



## Corporations Division

### Business Entity results

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| <u>Name</u>        | <u>Position</u>  | <u>Individual's Address</u>   | <u>Entity Name</u>                           | <u>ID No.</u> | <u>Old ID No.</u> |
|--------------------|------------------|---|--|---------------|-------------------|
| RUSSELL ,<br>DAVID | DIRECTOR         | 13100<br>NORTHWEST<br>FREEWAY, SUITE<br>500<br>HOUSTON, TX<br>77040 USA | <b>PALLET COMPANIES,<br/>INC.</b>            | 000903131     |                   |
| RUSSELL ,<br>DAVID | PRESIDENT        | 13100<br>NORTHWEST<br>FREEWAY, SUITE<br>500<br>HOUSTON, TX<br>77040 USA | <b>PALLET COMPANIES,<br/>INC.</b>            | 000903131     |                   |
| RUSSELL ,<br>DAVID | CLERK            | 131 BLAKE ST.<br>NORTHBOROUGH,<br>MA 01532 USA                          | <b>PET ROCK FEST, INC.</b>                   | 202303812     | 000889269         |
| RUSSELL ,<br>DAVID | MANAGER          |   | <b>RIVERNECK ROAD<br/>DEVELOPMENT LLC</b>    | 001271865     |                   |
| RUSSELL ,<br>DAVID | REAL<br>PROPERTY |   | <b>RIVERNECK ROAD<br/>DEVELOPMENT LLC</b>    | 001271865     |                   |
| RUSSELL ,<br>DAVID | REAL<br>PROPERTY |   | <b>SALISBURY<br/>NORTHPOINTE II,<br/>LLC</b> | 001063858     |                   |
| RUSSELL ,<br>DAVID | MANAGER          |   | <b>SALISBURY<br/>NORTHPOINTE II,<br/>LLC</b> | 001063858     |                   |
| RUSSELL ,<br>DAVID | MANAGER          |   | <b>SALISBURY<br/>NORTHPOINTE II,<br/>LLC</b> | 001063858     |                   |
| RUSSELL ,<br>DAVID | SOC<br>SIGNATORY |   | <b>SALISBURY<br/>NORTHPOINTE II,<br/>LLC</b> | 001063858     |                   |
| RUSSELL ,<br>DAVID | SOC<br>SIGNATORY |   | <b>SALISBURY<br/>NORTHPOINTE II,<br/>LLC</b> | 001063858     |                   |
|                    |                  |   |  | 001063858     |                   |





**William Francis Galvin**  
Secretary of the Commonwealth of Massachusetts



## Corporations Division

### Business Entity results

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[Print results](#)

| <u>Name</u>           | <u>Position</u>  | <u>Individual's Address</u>  | <u>Entity Name</u>                         | <u>ID No.</u> | <u>Old ID No.</u> |
|-----------------------|------------------|--|--|---------------|-------------------|
| RUSSELL ,<br>DAVID B. | REAL<br>PROPERTY |  | NAGATECH, LLC                              | 001208943     |                   |
| RUSSELL ,<br>DAVID C  | MANAGER          |  | BLACKFOOT<br>CAPITAL, LLC                  | 000998607     |                   |
| RUSSELL ,<br>DAVID C  | REAL<br>PROPERTY |  | BLACKFOOT<br>CAPITAL, LLC                  | 000998607     |                   |
| RUSSELL,<br>DAVID C.  | PRESIDENT        | 30 D.W.<br>HIGHWAY,<br>MERRIMAC,<br>N.H, 03054<br>30 D.W.<br>HIGHWAY,<br>MERRIMAC,<br>N.H, 03054 | INTERNATIONAL<br>CARPET GALLERIES,<br>INC. | 000603538     | 000000000         |
| RUSSELL,<br>DAVID C.  | PRESIDENT        | 281D BOYLSTON<br>ST.,<br>LOWELL, MA USA<br>281D BOYLSTON<br>ST.,<br>LOWELL, MA USA               | RUBAN, INC.                                | 042998115     | 000248036         |
| RUSSELL,<br>DAVID C.  | SECRETARY        | 281D BOYLSTON<br>ST.,<br>LOWELL, MA USA<br>281D BOYLSTON<br>ST.,<br>LOWELL, MA USA               | RUBAN, INC.                                | 042998115     | 000248036         |
| RUSSELL ,<br>DAVID C. | MANAGER          |  | BLACKFOOT CAPITAL<br>II, LLC               | 001094302     |                   |
| RUSSELL ,<br>DAVID C. | REAL<br>PROPERTY |  | WATERFRONT<br>CAPITAL, LLC                 | 001033363     |                   |
| RUSSELL ,<br>DAVID D. | SOC<br>SIGNATORY |  | TURNING LEAF, LLC                          | 262813859     |                   |
| RUSSELL ,<br>DAVID D. | REAL<br>PROPERTY |  | TURNING LEAF, LLC                          | 262813859     |                   |
|                       | MANAGER          |  | TURNING LEAF, LLC                          | 262813859     |                   |



18 ROUTE 6A  
SANDWICH, MA  
02563 USA

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**New Search**



|                         |                  |  |   |                     |
|-------------------------|------------------|--|---|---------------------|
| RUSSELL,<br>DAVID I.    |                  | 240 EAST 47TH<br>ST.,<br>NY, NY USA<br>240 EAST 47TH<br>ST.,<br>NY, NY USA                   | <b>S.G. WARBURG,<br/>ROWE &amp; PITMAN,<br/>AKROYD INC.</b> |                     |
| RUSSELL,<br>DAVID I.    | PRESIDENT        | 240 EAST 47TH<br>ST.,<br>NY, NY USA<br>240 EAST 47TH<br>ST.,<br>NY, NY USA                   | <b>S.G. WARBURG,<br/>ROWE &amp; PITMAN,<br/>AKROYD INC.</b> | 132681492           |
| RUSSELL ,<br>DAVID O.   | PRESIDENT        | 8075 WEST 3RD<br>STREET #310<br>LOS ANGELES, CA<br>90048 USA                                 | <b>KANZEON CORP.</b>  | 001103906           |
| RUSSELL ,<br>DAVID OWEN | PRESIDENT        | 9200 W SUNSET<br>BLVD SUITE 600<br>LOS ANGELES, CA<br>90069 USA                              | <b>KANZEON CORP.</b>  | 001179021           |
| RUSSELL ,<br>DAVID OWEN | TREASURER        | 9200 W SUNSET<br>BLVD SUITE 600<br>LOS ANGELES, CA<br>90069 USA                              | <b>KANZEON CORP.</b>  | 001179021           |
| RUSSELL ,<br>DAVID OWEN | SECRETARY        | 9200 W SUNSET<br>BLVD SUITE 600<br>LOS ANGELES, CA<br>90069 USA                              | <b>KANZEON CORP.</b>  | 001179021           |
| RUSSELL ,<br>DAVID OWEN | DIRECTOR         | 9200 W SUNSET<br>BLVD SUITE 600<br>LOS ANGELES, CA<br>90069 USA                              | <b>KANZEON CORP.</b>  | 001179021           |
| RUSSELL ,<br>DAVID T.   | MANAGER          |  | <b>GLENDOVER<br/>STERLING LLC</b>                           | 001096869           |
| RUSSELL ,<br>DAVID T.   | SOC<br>SIGNATORY |  | <b>GLENDOVER<br/>STERLING LLC</b>                           | 001096869           |
| RUSSELL ,<br>DAVID T.   | REAL<br>PROPERTY |  | <b>GLENDOVER<br/>STERLING LLC</b>                           | 001096869           |
| RUSSELL,<br>DAVID W.    | PRESIDENT        | 57 OWENS<br>AVE.,DEFUNIAK<br>SPRINGS, FL USA<br>57 OWENS<br>AVE.,DEFUNIAK<br>SPRINGS, FL USA | <b>DAVID CLARK<br/>ASSOCIATES, INC.</b>                     | 043013384 000273081 |
| RUSSELL,<br>DAVID W.    | TREASURER        | 57 OWENS<br>AVE.,DEFUNIAK<br>SPRINGS, FL USA<br>57 OWENS<br>AVE.,DEFUNIAK<br>SPRINGS, FL USA | <b>DAVID CLARK<br/>ASSOCIATES, INC.</b>                     | 043013384 000273081 |
|                         | PRESIDENT        |  |   | 001305491           |





**William Francis Galvin**  
Secretary of the Commonwealth of Massachusetts



## Corporations Division

### Business Entity results

Number of records: 129

Number of pages: 6

[Print results](#)

| <u>Name</u>                 | <u>Position</u> | <u>Individual's<br/>Address</u>                         | <u>Entity Name</u>                                | <u>ID No.</u> | <u>Old ID No.</u> |
|-----------------------------|-----------------|---|---|---------------|-------------------|
| RUSSELL ,<br>DAVID<br>WAYNE | DIRECTOR        | 12A DUNSTABLE<br>STREET<br>CHARLESTOWN,<br>MA 02129 USA | <b>RUSSELL<br/>CONSTRUCTION<br/>SERVICES INC.</b> | 001305491     |                   |
| RUSSELL ,<br>DAVID<br>WAYNE | TREASURER       | 12A DUNSTABLE<br>STREET<br>CHARLESTOWN,<br>MA 02129 USA | <b>RUSSELL<br/>CONSTRUCTION<br/>SERVICES INC.</b> | 001305491     |                   |
| RUSSELL ,<br>DAVID<br>WAYNE | SECRETARY       | 12A DUNSTABLE<br>STREET<br>CHARLESTOWN,<br>MA 02129 USA | <b>RUSSELL<br/>CONSTRUCTION<br/>SERVICES INC.</b> | 001305491     |                   |
| RUSSELL JR.<br>, DAVID F    | DIRECTOR        | 314 WEST ST<br>BROCKTON, MA<br>02301 USA                | <b>RUSSELL LIVERY<br/>SERVICE, INC.</b>           | 043276537     | 000499439         |
| 123456                      |                 |   |   |               |                   |

[New Search](#)









Massachusetts Housing Finance Agency  
One Beacon Street, Boston, MA 02108

Tel: 617.854.1000  
Fax: 617.854.1091 | [www.masshousing.com](http://www.masshousing.com)  
Videophone: 857.366.4157 or Relay: 711

June 20, 2018

Still River Road Development, LLC  
c/o David Russell  
28 Country Club Lane  
Middleton, MA 01949

**RE: Still River Commons-Bolton, MA  
Project Eligibility/Site Approval  
MassHousing ID No. 984**

Dear Mr. Russell:

This letter is in response to your application as "Applicant" for a determination of Project Eligibility (Site Approval) pursuant to Massachusetts General Laws Chapter 40B ("Chapter 40B"), 760 CMR 56.00 (the "Regulations") and the Comprehensive Permit Guidelines issued by the Department of Housing and Community Development ("DHCD") (the "Guidelines" and, collectively with Chapter 40B and the Regulations, the "Comprehensive Permit Rules"), under the New England Fund ("NEF") Program ("the Program") of the Federal Home Loan Bank of Boston ("FHLBB").

You have proposed to build eight (8) units in four (4) duplex-style buildings including two (2) affordable units (the "Project") on approximately 6.68 acres of land located on Still River Road (the "Site") in Bolton, MA (the "Municipality").

In accordance with the Comprehensive Permit Rules, this letter is intended to be a written determination of Project Eligibility ("Site Approval") by MassHousing acting as Subsidizing Agency under the Guidelines, including Part V thereof, "Housing Programs in Which Funding Is Provided by Other Than a State Agency."

MassHousing has performed an on-site inspection of the Site, which local boards and officials were invited to attend, and has reviewed the pertinent information for the Project submitted by the Applicant, the Municipality and others in accordance with the Comprehensive Permit Rules.

#### **Municipal Comments**

Pursuant to the Regulations, the Municipality was given a thirty (30) day period in which to review the Site Approval application and submit comments and recommendations to MassHousing. The Chairman of the Planning Board, Erik Neyland, provided a response, recommending that the Applicant apply for design review through Bolton's Design Review



For guidance on the Comprehensive Permit review process, you are advised to consult the Guidelines. Further, we urge you to review carefully with legal counsel the M.G.L. c.40B Comprehensive Permit Regulations at 760 CMR 56.00.

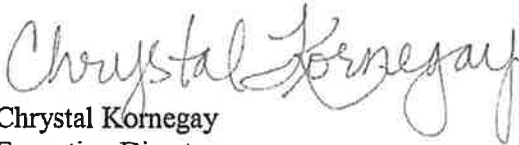
This approval will be effective for a period of two years from the date of this letter. Should the Applicant not apply for a Comprehensive Permit within this period or should MassHousing not extend the effective period of this letter in writing, this letter shall be considered to have expired and no longer be in effect. In addition, the Applicant is required to notify MassHousing at the following times throughout this two-year period: (1) when the Applicant applies to the local ZBA for a Comprehensive Permit, (2) when the ZBA issues a decision and (3) if applicable, when any appeals are filed.

Should a Comprehensive Permit be issued, please note that prior to (i) commencement of construction of the Project or (ii) issuance of a building permit, the Applicant is required to submit to MassHousing a request for Final Approval of the Project (as it may have been amended) in accordance with the Comprehensive Permit Rules (see especially 760 CMR 56.04(07) and the Guidelines including, without limitation, Part III thereof concerning Affirmative Fair Housing Marketing and Resident Selection). Final Approval will not be issued unless MassHousing is able to make the same findings at the time of issuing Final Approval as required at Site Approval.

**Please note that MassHousing may not issue Final Approval if the Comprehensive Permit contains any conditions that are inconsistent with the regulatory requirements of the New England Fund Program of the FHLBB, for which MassHousing serves as Subsidizing Agency, as reflected in the applicable regulatory documents. In the interest of providing for an efficient review process and to avoid the potential lapse of certain appeal rights, the Applicant may wish to submit a "final draft" of the Comprehensive Permit to MassHousing for review. Applicants who avail themselves of this opportunity may avoid significant procedural delays that can result from the need to seek modification of the Comprehensive Permit after its initial issuance.**

If you have any questions concerning this letter, please contact Michael Busby at (617) 854-1219.

Sincerely,



Chrystal Kornegay  
Executive Director

cc: Janelle Chan, Undersecretary, DHCD  
The Honorable Dean A. Tran  
The Honorable Kate Hogan  
Stan Wysocki, Chairman, Board of Selectmen  
Gerard Ahearn, Chairman, Zoning Board of Appeals



following plan review findings are made in response to the conceptual plan, submitted to MassHousing:

**Relationship to Adjacent Building Typology** (including building massing, site arrangement, and architectural details):

The Site is located in an area that has rural characteristics with a combination of open fields and woodlands with several large farm houses and some recently constructed contemporary homes. The proposed residential structures will reflect a New England vernacular featuring four (4), two-unit duplex-style buildings designed to complement the architectural features, size, and massing of other homes built in the area. The proposed architectural elements include roofline details, façade details and overhangs to lessen the overall perception of the building's height and impact of the project's massing.

**Relationship to Adjacent Streets**

The Site is located in the northwest section of Bolton on the Harvard town line, approximately two miles from the local high school and three miles from the town center. Although this is primarily an auto dependent location, the Site is 4.6 miles, or roughly eight minutes by car from the intersection of Routes 495 and 117. Once on Route 495, Routes 2, 3 and 93 are within reasonable distances of the Site. The relationship of the proposed Site access and egress to Still River Road does not present any discernable public safety impacts. There appears to be adequate lines of sight for vehicles entering and exiting the proposed Site. The site plan presents a development pattern that is similar to that found in adjacent streets.

**Density**

The Applicant proposes to build eight (8) units on approximately 6.68-acres, of which approximately 2.81-acres are buildable. The resulting density is 2.84 units per buildable acre, which is acceptable given the proposed housing type and similar uses found in the surrounding context.

**Conceptual Site Plan**

The Applicant plans to keep the existing grass and tree lines as much as possible to maintain the existing vegetated landscape. The Applicant utilizes the land efficiently by grouping the buildings in a circular pattern approximately 60 feet into the Site. The proposed roadway layout and circulation patterns appear to provide adequate access and egress to Still River Road. The Applicant intends to use Cluster Design principles to preserve undeveloped land as open space leading to an open meadow area.

**Environmental Resources**

The subject property is a 6.68-acre parcel with approximately 3.87-acres of the Site consisting of undisturbed wetland areas. Wetlands in the northeast portion of the Site will limit the development to upland areas identified by the Applicant. Development of the Site will require careful attention to current Best Management Practices to avoid any adverse impacts to the protected wetland resource areas. These resource areas will ultimately serve to break down the perceived massing of the Site, provide visual screening, and surround the residential portions of the Site with natural features. Wetland resources in these areas will be subject to further review by the local Conservation Commission under a Notice of Intent.



## Exhibit E

### Affordable Housing Restriction



\_\_\_\_\_, a program to assist construction of low or moderate income housing the "Program"; and WHEREAS, pursuant to the Program, eligible purchasers such as the Owner are given the opportunity to purchase residential property at less than its fair market value if the purchaser agrees to certain use and transfer restrictions, including an agreement to occupy the property as a principal residence and to convey the property for an amount not greater than a maximum resale price, all as more fully provided herein; and

WHEREAS, \_\_\_\_\_

\_\_\_\_\_ (singly, or if more than one entity is listed, collectively, the "Monitoring Agent") is obligated by the Program or has been retained to monitor compliance with and to enforce the terms of this Restriction, and eligible purchasers such as the Owner may be required to pay to the Monitoring Agent, or its successor, a small percentage of the resale price upon the Owner's conveyance of the Property, as set out in the Regulatory Agreement and as more fully provided herein; and

WHEREAS, the rights and restrictions granted herein to the Monitoring Agent and the Municipality serve the public's interest in the creation and retention of affordable housing for persons and households of low and moderate income and in the restricting of the resale price of property in order to assure its affordability by future low and moderate income purchasers.

NOW, THEREFORE, as further consideration for the conveyance of the Property at less than fair market value (if this Restriction is attached to the Deed), or as further consideration for the ability to enter into the financing or refinancing transaction, the Owner (and the Grantor if this Restriction is attached to the Deed), including his/her/their heirs, successors and assigns, hereby agree that the Property shall be subject to the following rights and restrictions which are imposed for the benefit of, and shall be enforceable by, the Municipality and the Monitoring Agent, and, if DHCD is a party to the Regulatory Agreement and is not the Monitoring Agent, by DHCD.

**1. Definitions.** In this Restriction, in addition to the terms defined above, the following words and phrases shall have the following meanings:

**Affordable Housing Fund** means a fund established by the Municipality for the purpose of reducing the cost of housing for Eligible Purchasers or for the purpose of encouraging, creating, or subsidizing the construction or rehabilitation of housing for Eligible Purchasers or, if no such fund exists, a fund established by the Municipality pursuant to Massachusetts General Laws Chapter 44 Section 53A, et seq.

**Applicable Foreclosure Price** shall have the meaning set forth in Section 7(b) hereof.

**Appropriate Size Household** means a household containing a number of members equal to the number of bedrooms in the Property plus one.

**Approved Capital Improvements** means the documented commercially reasonable cost of extraordinary capital improvements made to the Property by the Owner; provided that the Monitoring Agent shall have given written authorization for incurring such cost prior to the cost



\_\_\_\_\_ percent (\_\_\_\_%) of Area Median Income, as required by the Program) for an Appropriate Size Household could obtain mortgage financing (as such purchase price is determined by the Monitoring Agent using the same methodology then used by DHCD for its Local Initiative Program or similar comprehensive permit program); and further provided that the Maximum Resale Price shall not be less than the purchase price paid for the Property by the Owner unless the Owner agrees to accept a lesser price.

**Monitoring Services Agreement** means any Monitoring Services Agreement for monitoring and enforcement of this Restriction among some or all of the Developer, the Monitoring Agent, the Municipality, MassHousing and DHCD.

**Mortgage Satisfaction Amount** shall have the meaning set forth in Section 7(b) hereof.

**Mortgagee** shall have the meaning set forth in Section 7(a) hereof.

**Program Guidelines** means the regulations and/or guidelines issued for the applicable Program and controlling its operations, as amended from time to time.

**Resale Fee** means a fee of \_\_\_\_\_% [no more than two and one-half percent (2.5%)] of the Base Income Number (at the time of resale) multiplied by the Resale Price Multiplier, to be paid to the Monitoring Agent as compensation for monitoring and enforcing compliance with the terms of this Restriction, including the supervision of the resale process.

**Resale Price Certificate** means the certificate issued as may be specified in the Regulatory Agreement and recorded with the first deed of the Property from the Developer, or the subsequent certificate (if any) issued as may be specified in the Regulatory Agreement, which sets forth the Resale Price Multiplier to be applied on the Owner's sale of the Property, as provided herein, for so long as the restrictions set forth herein continue. In the absence of contrary specification in the Regulatory Agreement the Monitoring Agent shall issue the certificate.

**Resale Price Multiplier** means the number calculated by dividing the Property's initial sale price by the Base Income Number at the time of the initial sale from the Developer to the first Eligible Purchaser. The Resale Price Multiplier will be multiplied by the Base Income Number at the time of the Owner's resale of the Property to determine the Maximum Resale Price on such conveyance subject to adjustment for the Resale Fee, marketing expenses and Approved Capital Improvements. In the event that the purchase price paid for the Property by the Owner includes such an adjustment a new Resale Price Multiplier will be recalculated by the Monitoring Agent by dividing the purchase price so paid by the Base Income Number at the time of such purchase, and a new Resale Price Certificate will be issued and recorded reflecting the new Resale Price Multiplier. A Resale Price Multiplier of \_\_\_\_\_ is hereby assigned to the Property. **Term** means in perpetuity, unless earlier terminated by (i) the termination of the term of affordability set forth in the Regulatory Agreement or Comprehensive Permit, whichever is longer; or (ii) the recording of a Compliance Certificate and a new Restriction executed by the purchaser in form and substance substantially identical to this Restriction establishing a new term.

2. **Owner-Occupancy/Principal Residence.** The Property shall be occupied and used by the Owner's household exclusively as his, her or their principal residence. Any use of the Property or activity thereon which is inconsistent with such exclusive residential use is expressly prohibited.

3. **Restrictions Against Leasing, Refinancing and Junior Encumbrances.** The Property shall not be leased, rented, refinanced, encumbered (voluntarily or otherwise) or mortgaged



Guidelines. If an Eligible Purchaser is located within ninety (90) days after receipt of the Conveyance Notice, but such Eligible Purchaser proves unable to secure mortgage financing so as to be able to complete the purchase of the Property pursuant to the purchase and sale agreement, following written notice to Owner within the 90-day period the Monitoring

Agent shall have an additional sixty (60) days to locate another Eligible Purchaser who will enter a purchase and sale agreement and purchase the Property by the end of such sixty (60)-day period or such further time as reasonably requested to carry out the purchase and sale agreement. (c) In lieu of sale to an Eligible Purchaser, the Monitoring Agent or the Municipality or designee shall also have the right to purchase the Property at the Maximum Resale Price, in which event the purchase and sale agreement shall be entered, and the purchase shall occur within ninety (90) days after receipt of the Conveyance Notice or, within the additional sixty (60)-day period specified in subsection (b) above, or such further time as reasonably requested to carry out the purchase and sale agreement. Any lack of cooperation by Owner in measures reasonably necessary to effect the sale shall extend the 90-day period by the length of the delay caused by such lack of cooperation. The Monitoring Agent shall promptly give Owner written notice of the lack of cooperation and the length of the extension added to the 90-day period. In the event of such a sale to the Monitoring Agent or Municipality or designee, the Property shall remain subject to this Restriction and shall thereafter be sold or rented to an Eligible Purchaser as may be more particularly set forth in the Regulatory Agreement.

(d) If an Eligible Purchaser fails to purchase the Property within the 90-day period (or such further time determined as provided herein) after receipt of the Conveyance Notice, and the Monitoring Agent or Municipality or designee does not purchase the Property during said period, then the Owner may convey the Property to an Ineligible Purchaser no earlier than thirty (30) days after the end of said period at the Maximum Resale Price, but subject to all rights and restrictions contained herein; provided that the Property shall be conveyed subject to a Restriction identical in form and substance to this Restriction which the Owner agrees to execute, to secure execution by the Ineligible Purchaser and to record with the Deed; and further provided that, if more than one Ineligible Purchaser is ready, willing and able to purchase the Property the Owner will give preference and enter a purchase and sale agreement with any individuals or households identified by the Monitoring Agent as an Appropriate Size Household earning more than eighty percent (80%) but less than one hundred twenty percent (120%) of the Area Median Income.

(e) The priority for exercising the options to purchase contained in this Section 4 shall be as follows: (i) an Eligible Purchaser located and selected by the Monitoring Agent, as provided in subsection (b) above, (ii) the Municipality or its designee, as provided in subsection (c) above, and (iii) an Ineligible Purchaser, as provided in subsection (d) above.

(f) Nothing in this Restriction or the Regulatory Agreement constitutes a promise, commitment or guarantee by DHCD, MassHousing, the Municipality or the Monitoring Agent that upon resale the Owner shall actually receive the Maximum Resale Price for the Property or any other price for the Property.

(g) The holder of a mortgage on the Property is not obligated to forbear from exercising the rights and remedies under its mortgage, at law or in equity, after delivery of the Conveyance Notice.



was to have occurred in which to remove any defect in title or to restore the Property to the condition herein required. The Owner shall use best efforts to remove any such defects in the title, whether voluntary or involuntary, and to restore the Property to the extent permitted by insurance proceeds or condemnation award. The Closing shall occur fifteen (15) days after notice by Owner that such defect has been cured or that the Property has been so restored. The selected purchaser shall have the election, at either the original or any extended time for performance, to accept such title as the Owner can deliver to the Property in its then condition and to pay therefor the purchase price without deduction, in which case the Owner shall convey such title, except that in the event of such conveyance in accordance with the provisions of this clause, if the Property shall have been damaged by fire or casualty insured against or if a portion of the Property shall have been taken by a public authority, then the Owner shall, unless the Owner has previously restored the Property to its former condition, either:

- (A) pay over or assign to the selected purchaser, on delivery of the deed, all amounts recovered or recoverable on account of such insurance or condemnation award less any amounts reasonably expended by the Owner for any partial restoration, or
- (B) if a holder of a mortgage on the Property shall not permit the insurance proceeds or the condemnation award or part thereof to be used to restore the Property to its former condition or to be so paid over or assigned, give to the selected purchaser a credit against the purchase price, on delivery of the deed, equal to said amounts so retained by the holder of the said mortgage less any amounts reasonably expended by the Owner for any partial restoration.

**6. Resale and Transfer Restrictions.** (a) Except as otherwise provided herein, the Property or any interest therein shall not at any time be sold by the Owner, or the Owner's successors and assigns, and no attempted sale shall be valid, unless the aggregate value of all consideration and payments of every kind given or paid by the selected purchaser of the Property for and in connection with the transfer of such Property, is equal to or less than the Maximum Resale Price for the Property, and unless a certificate (the "Compliance Certificate") is obtained and recorded, signed and acknowledged by the Monitoring Agent which Compliance Certificate refers to the Property, the Owner, the selected purchaser thereof, and the Maximum Resale Price therefor, and states that the proposed conveyance, sale or transfer of the Property to the selected purchaser is in compliance with the rights, restrictions, covenants and agreements contained in this Restriction, and unless there is also recorded a new Restriction executed by the selected purchaser, which new Restriction is identical in form and substance to this Restriction.

(b) The Owner, any good faith purchaser of the Property, any lender or other party taking a security interest in such Property and any other third party may rely upon a Compliance Certificate as conclusive evidence that the proposed conveyance, sale or transfer of the Property to the selected purchaser is in compliance with the rights, restrictions, covenants and agreements contained in this Restriction, and may record such Compliance Certificate in connection with the conveyance of the Property.

(c) Within ten (10) days of the closing of the conveyance of the Property from the Owner to the selected purchaser, the Owner shall deliver to the Monitoring Agent a copy of the Deed of the Property, including the Restriction, together with recording information. Failure of



(c) Not earlier than one hundred twenty (120) days following the delivery of the Foreclosure Notice to the Monitoring Agent, the Municipality and any senior Mortgagee(s) pursuant to subsection (a) above, the foreclosing Mortgagee may conduct the foreclosure sale or accept a deed in lieu of foreclosure. The Property shall be sold and conveyed in its then-current

"as is, where is" condition, without representation or warranty of any kind, direct or indirect, express or implied, and with the benefit of and subject to all rights, rights of way, restrictions, easements, covenants, liens, improvements, housing code violations, public assessments, any and all unpaid federal or state taxes (subject to any rights of redemption for unpaid federal taxes), municipal liens and any other encumbrances of record then in force and applicable to the Property having priority over the foreclosing Mortgagee's mortgage, and further subject to a Restriction, as set forth below.

(d) In the event that the foreclosing Mortgagee conducts a foreclosure sale or other proceeding enforcing its rights under its mortgage and the Property is sold for a price in excess of the greater of the Maximum Resale Price and the Mortgage Satisfaction Amount, such excess shall be paid to the Municipality for its Affordable Housing Fund after (i) a final judicial determination, or (ii) a written agreement of all parties who, as of such date hold (or have been duly authorized to act for other parties who hold) a record interest in the Property, that the Municipality is entitled to such excess. The legal costs of obtaining any such judicial determination or agreement shall be deducted from the excess prior to payment to the Municipality. To the extent that the Owner possesses any interest in any amount which would otherwise be payable to the Municipality under this paragraph, to the fullest extent permissible by law, the Owner hereby assigns its interest in such amount to the Mortgagee for payment to the Municipality.

(e) If any Mortgagee shall acquire the Property by reason of foreclosure or upon conveyance of the Property in lieu of foreclosure, then the rights and restrictions contained herein shall apply to such Mortgagee upon such acquisition of the Property and to any purchaser of the Property from such Mortgagee, and the Property shall be conveyed subject to a Restriction identical in form and substance to this Restriction, which the Mortgagee that has so acquired the Property agrees to annex to the deed and to record with the deed, except that (i) during the term of ownership of the Property by such Mortgagee the owner-occupancy requirements of Section 2 hereof shall not apply, and (ii) the Maximum Resale Price shall be recalculated based on the price paid for the Property by such Mortgagee at the foreclosure sale, but not greater than the Applicable Foreclosure Price. **Said deed shall clearly state that it is made subject to the Restriction which is made part of the deed.** Failure to comply with the preceding sentence shall not affect the validity of the conveyance to the Mortgagee or the enforceability of the restrictions herein.

(f) If any party other than a Mortgagee shall acquire the Property by reason of foreclosure or upon conveyance of the Property in lieu of foreclosure, the Property shall be conveyed subject to a Restriction identical in form and substance to this Restriction, which the foreclosing Mortgagee agrees to annex to the deed and to record with the deed, except that (i) if the purchaser at such foreclosure sale or assignee of a deed in lieu of foreclosure is an Ineligible Purchaser, then during the term of ownership of the Property by such Ineligible Purchaser, the owner-occupancy requirements of Section 2 hereof shall not apply, and (ii) the Maximum Resale Price shall be recalculated based on the price paid for the Property by such third party purchaser at the



Grantor:  
(applicable  
only if this  
Restriction  
is attached  
to the Deed)

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Owner:

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Monitoring Agent[s]

(1)

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(2)

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Others:

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junior to the lien of any institutional holder of a first mortgage on the Property, to secure payment of such fees and expenses in any successful enforcement action. The Monitoring Agent and the Municipality shall be entitled to seek recovery of fees and expenses incurred in a successful enforcement action of this Restriction against the Owner and to assert such a lien on the Property to secure payment by the Owner of such fees and expenses. Notwithstanding anything herein to the contrary, in the event that the Monitoring Agent and/or Municipality fails to enforce this Restriction as provided in this Section, DHCD, if it is not named as Monitoring Agent, shall have the same rights and standing to enforce this Restriction as the Municipality and Monitoring Agent.

(d) The Owner for himself, herself or themselves and his, her or their successors and assigns, hereby grants to the Monitoring Agent and the Municipality the right to take all actions with respect to the Property which the Monitoring Agent or Municipality may determine to be necessary or appropriate pursuant to applicable law, court order, or the consent of the Owner to prevent, remedy or abate any violation of this Restriction.

12. **Monitoring Agent Services; Fees.** The Monitoring Agent shall monitor compliance of the Project and enforce the requirements of this Restriction. As partial compensation for providing these services, a Resale Fee [ ] shall [ ] shall not be payable to the Monitoring Agent on the sale of the Property to an Eligible Purchaser or any other purchaser in accordance with the terms of this Restriction. This fee, if imposed, shall be paid by the Owner herein as a closing cost at the time of Closing, and payment of the fee to the Monitoring Agent shall be a condition to delivery and recording of its certificate, failing which the Monitoring Agent shall have a claim against the new purchaser, his, her or their successors or assigns, for which the Monitoring Agent may bring an action and may seek an attachment against the Property.
13. **Actions by Municipality.** Any action required or allowed to be taken by the Municipality hereunder shall be taken by the Municipality's Chief Executive Officer or designee.
14. **Severability.** If any provisions hereof or the application thereof to any person or circumstance are judicially determined, to any extent, to be invalid or unenforceable, the remainder hereof, or the application of such provision to the persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby.
15. **Independent Counsel.** THE OWNER ACKNOWLEDGES THAT HE, SHE, OR THEY HAVE READ THIS DOCUMENT IN ITS ENTIRETY AND HAS HAD THE OPPORTUNITY TO CONSULT LEGAL AND FINANCIAL ADVISORS OF HIS, HER OR THEIR CHOOSING REGARDING THE EXECUTION, DELIVERY AND PERFORMANCE OF THE OBLIGATIONS HEREUNDER.
16. **Binding Agreement.** This Restriction shall bind and inure to the benefit of the persons, entities and parties named herein and their successors or assigns as are permitted by this Restriction.
17. **Amendment.** This Restriction may not be rescinded, modified or amended, in whole or in part, without the written consent of the Monitoring Agent, the Municipality and the holder of any mortgage or other security instrument encumbering all or any portion of the Property, which written consent shall be recorded with the Registry.

Executed as a sealed instrument this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_.



COMMONWEALTH OF MASSACHUSETTS

\_\_\_\_\_ County, ss. \_\_\_\_\_, 200\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 200\_\_, before me, the undersigned notary public, personally appeared \_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_ in its capacity as the \_\_\_\_\_ of \_\_\_\_\_, proved to me through satisfactory evidence of identification, which was [a current driver's license] [a current U.S. passport] [my personal knowledge], to be the person whose name is signed on the preceding instrument and acknowledged the foregoing instrument to be his or her free act and deed and the free act and deed of \_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires:



## Application for Chapter 40B Project Eligibility/Site Approval for MassHousing-Financed and New England Fund ("NEF") Homeownership Projects

### Section 5: FINANCIAL INFORMATION – Site Approval Application Homeownership 40B

In order to issue Site Approval, MassHousing must find (as required by 760 CMR 56.04 (4)) that an initial pro forma has been reviewed and that the Proposed Project appears financially feasible and consistent with the Chapter 40B Guidelines, and that the Proposed Project is fundable under the applicable program.

Name of Proposed Project: Still River Commons

**Initial Capital Budget** (please enter "0" when no such sales/revenue or cost is anticipated)

#### Sales / Revenue

|                            |                     |
|----------------------------|---------------------|
| Market                     | <u>2,100,000.00</u> |
| Affordable                 | <u>360,000.00</u>   |
| Related Party              | <u></u>             |
| Other Income               | <u></u>             |
| <b>Total Sales/Revenue</b> | <u>2,460,000.00</u> |

#### Pre-Permit Land Value, Reasonable Carrying Costs

| Item   | Budgeted                                 |
|--|--|
| Site Acquisition: pre-permit land value (to be determined by MassHousing commissioned appraisal) plus reasonable carrying costs. | \$173,000.00 plus \$50,000.00 permitting |

#### Costs

##### Item

##### Budgeted

#### Acquisition Cost

Site Acquisition: pre-permit land value (to be determined by MassHousing Commissioned Appraisal) plus reasonable carrying costs

173,000.00

**Subtotal Acquisition Costs**

173,000.00

#### Construction Costs-Residential Construction (Hard Costs)

Building Structure Costs

1,200,000.00

Hard Cost Contingency

60,000.00

**Subtotal – Residential Construction (Hard Costs)**

1,260,000.00



| Item   | Budgeted     |
|--|--------------|
| <b>General Development Costs (Soft Costs) – Continued</b>    |              |
| Bond Premiums <i>(Payment/Performance/Lien Bond)</i>         |              |
| Legal  | 6,000.00     |
| Title <i>(including title insurance)</i> and Recording       |              |
| Accounting and Cost Certification <i>(incl. 40B)</i>         | 10,000.00    |
| Relocation   |              |
| 40B Site Approval Processing Fee                             | 5,000.00     |
| 40B Technical Assistance/Mediation Fund Fee                  |              |
| 40B Land Appraisal Cost <i>(as-is value)</i>                 | 500.00       |
| 40B Final Approval Processing Fee                            | 5,000.00     |
| 40B Subsidizing Agency Cost Certification Examination Fee    |              |
| 40B Monitoring Agent Fees                                    | 3,000.00     |
| 40B Surety Fees  |              |
| Other Financing Fees   |              |
| Development Consultant                                       |              |
| Other Consultants <i>(describe)</i>                          |              |
| Other Consultants <i>(describe)</i>                          |              |
| Soft Cost Contingency  | 40,000.00    |
| Other General Development (Soft) Costs                       |              |
| Subtotal – General Development Costs (Soft Costs)            | 314,500.00   |
| <b>Developer Overhead</b>                                    |              |
| Developer Overhead   | 80,000.00    |
| Subtotal – Developer Overhead                                | 80,000.00    |
| <b>Summary of Subtotals</b>                                  |              |
| Sales/Revenue  | 2,460,000.00 |
| Site Acquisition   | 173,000.00   |
| Residential Construction                                     | 1,260,000.00 |
| Site Work  | 335,000.00   |
| Builder's Overhead, Profit and General Conditions            | 100,000.00   |
| General Development Costs                                    | 314,500.00   |
| Developer Overhead   | 80,000.00    |
| <b>Summary</b>   |              |
| Total Sales/Revenue  | 2,460,000.00 |
| Total Development Costs (TDC)                                | 2,262,500.00 |
| Profit (Loss) from Sales/Revenue                             | 197,500.00   |
| Percentage of Profit (Loss) Over the Total Development Costs | 8.73%        |



## **REGULATORY AGREEMENT**

### ***For Comprehensive Permit Projects in Which Funding is Provided Through Other than a State Entity***

This Regulatory Agreement (this "Agreement") is made as of the \_\_\_ day of \_\_\_\_\_ 20\_\_\_, by and between the Massachusetts Housing Finance Agency acting as Subsidizing Agency as defined under the provisions of 760 CMR 56.02 (the "Subsidizing Agency"), and \_\_\_\_\_, a Massachusetts \_\_\_\_\_, having an address at \_\_\_\_\_, and its successors and assigns (the "Developer").

#### **RECITALS**

WHEREAS, the Developer intends to construct a housing development known as \_\_\_\_\_ consisting of \_\_\_\_\_ for-sale [*condominium units/single-family*] residences (the "Project") on a \_\_\_\_\_-acre site located at \_\_\_\_\_ in the [*City/Town*] of \_\_\_\_\_ (the "Municipality"), which property is more particularly described in Exhibit A attached hereto and made a part hereof; and

WHEREAS, the Project is being financed with a \$ \_\_\_\_\_ construction loan from \_\_\_\_\_ (the "NEF Lender"), a non-governmental entity; and

WHEREAS, the Massachusetts Housing Finance Agency acts as Subsidizing Agency for the Project, on behalf of DHCD, pursuant to Massachusetts General Laws Chapter 40B Sections 20-23 (the "Act"), the regulations at 760 CMR 56.00, and the Comprehensive Permit Guidelines issued pursuant thereto (collectively, the "Comprehensive Permit Rules"); and

WHEREAS, the Developer has received a comprehensive permit (as it may previously have been amended, the "Comprehensive Permit") from the Zoning Board of Appeals of the Municipality in accordance with the Act, which permit is [*recorded/filed*] at the \_\_\_\_\_ County [*Registry of Deeds/Registry District of Land Court*] ("Registry") [*in Book \_\_\_\_\_, Page \_\_\_\_\_ / as Document No. \_\_\_\_\_*], as amended by the terms of this Agreement; and

WHEREAS, pursuant to the requirements of the Comprehensive Permit Rules, twenty-five percent (25%) of the units in the Project (\_\_\_ units) (the "Affordable Units") will be sold at prices specified in this Agreement to Eligible Purchasers (as defined herein) and will be subject to resale restrictions as set forth herein; and



Limited Dividend Monitoring Services Agreement shall have the meaning set forth in Section 4 hereof.

Marketing Documentation shall have the meaning set forth in Section 3(c) hereof.

Marketing Plan shall have the meaning set forth in Section 3(c) hereof.

Maximum Initial Sale Price means the purchase price for which a credit-worthy Eligible Purchaser earning seventy percent (70%) of the Area Median Income for an Appropriate Size Household could obtain mortgage financing as determined by the Subsidizing Agency using the same methodology then used by DHCD for its Local Initiative Program or similar comprehensive permit program.

Plans and Specifications shall have the meaning set forth in Section 2 hereof.

Resale Price Certificate means the certificate in recordable form issued by the Subsidizing Agency and recorded with the first deed of each Affordable Unit from the Developer to the initial Eligible Purchaser, which certificate sets forth the Resale Price Multiplier to be applied on the resale of such Affordable Unit, according to the terms of the Affordable Housing Restriction for such unit, for so long as the restrictions set forth in the Affordable Housing Restriction continue, and any subsequent certificate issued by the Affordability Monitoring Agent in accordance with the terms of the Affordable Housing Restriction.

Substantial Completion shall have occurred for purposes of this Agreement when the construction of the Project is sufficiently complete so that all of the units may be occupied and amenities may be used for their intended purpose, except for designated punch list items and seasonal work which does not interfere with the residential use of the Project.

Term shall have the meaning set forth in Section 14(a) hereof.

Total Development Costs means the total budget for the acquisition and construction of the Project (including both hard and soft costs and such other sums as the Subsidizing Agency may determine constitute the Developer's contribution to the Project, but not including any fee paid to the Developer), as approved by Subsidizing Agency pursuant to the Comprehensive Permit Rules, this Regulatory Agreement, and the Limited Dividend Monitoring Services Agreement, using the standards of the Subsidizing Agency applicable to comprehensive permit projects, and as finally determined by the Subsidizing Agency in accordance with the Comprehensive Permit Rules.

2. Construction Obligations. (a) The Developer agrees to construct the Project in accordance with plans and specifications approved by the Subsidizing Agency and the Municipality (the "Plans and Specifications"), in accordance with all on-site and off-site construction, design and land use conditions of the Comprehensive Permit, and in accordance with the information describing the Project provided by the Developer to the



(b) Prior to the publication of any Marketing Documentation for the Affordable Units, the Developer shall request the Subsidizing Agency to calculate the Maximum Initial Sale Price for each Affordable Unit and shall advertise the price so calculated in marketing the Affordable Units. Prior to the delivery of the first deed for each Affordable Unit, the Developer shall notify the Subsidizing Agency of the actual purchase price for each Affordable Unit (which shall in no event be greater than the Maximum Initial Sale Price calculated by the Subsidizing Agency), and the Subsidizing Agency shall issue a Resale Price Certificate to the Developer calculating the Resale Price Multiplier. The Developer shall as a condition of the sale cause the purchaser to record the Resale Price Certificate immediately after the first deed of each Affordable Unit.

(c) Prior to marketing or otherwise making available for sale any of the Units, the Developer must obtain the Subsidizing Agency's approval of a marketing plan (the "Marketing Plan") for the Affordable Units to be administered under the supervision of the Affordability Monitoring Agent. After such approval, the Marketing Plan may not be amended without the Subsidizing Agency's consent. The Marketing Plan must describe the buyer selection process for the Affordable Units, including any lottery or similar procedure for choosing among Eligible Purchasers, and must provide for Affirmative Fair Marketing of Affordable Units. If required under the Comprehensive Permit and approved by the Subsidizing Agency, the Marketing Plan may also include a preference for local residents, which in no event may exceed more than seventy percent (70%) of the Affordable Units; provided that, in the event a local resident preference is established, use of the preference shall not violate applicable fair housing laws and regulations. All costs of carrying out the Marketing Plan with respect to outreach, location and selection of the initial Eligible Purchasers shall be paid by the Developer; thereafter, such costs shall be paid from the Resale Fee (as defined in the Affordable Housing Restriction). The Developer agrees to maintain for at least five (5) years following the sale of the last Affordable Unit, a record of all newspaper ads, outreach letters, translations, leaflets, and all Affirmative Fair Marketing efforts (collectively "Marketing Documentation") as described in the Marketing Plan. The Marketing Documentation may be inspected at any time by the Affordability Monitoring Agent, the Subsidizing Agency and the Municipality. If at any time prior to or during the initial process of marketing the Affordable Units, the Subsidizing Agency determines that the Developer or the Affordability Monitoring Agent has not adequately complied with the approved Marketing Plan, the Developer or Affordability Monitoring Agent, as the case may be, shall take such additional corrective measures as shall be specified by the Subsidizing Agency.

4. Limited Dividend Requirement. (a) The Developer agrees that the aggregate profit from the Project which shall be payable to the Developer or to the partners, shareholders or other owners of Developer or the Project shall not exceed twenty percent (20%) of Total Development Costs (the "Allowable Profit"), which development costs have been approved by the Subsidizing Agency pursuant to the Comprehensive Permit Rules, this Regulatory Agreement, and the Limited Dividend Monitoring Services Agreement attached hereto as Exhibit C and incorporated herein by



(e) All profits from the Project in excess of the Allowable Profit, as finally determined by the Subsidizing Agency (the "Excess Profit"), shall be paid by the Developer to the Municipality promptly after such determination.

5. Affordability Monitoring Agent. At the request of the Subsidizing Agency, the Developer shall retain one or more Affordability Monitoring Agents for purposes of administration, monitoring and enforcement under this Agreement pursuant to an agreement substantially in the form of the Affordability Monitoring Services Agreement attached hereto as Exhibit D and incorporated herein by reference (the "Affordability Monitoring Services Agreement"). All notices and reports required to be submitted under this Agreement shall be submitted simultaneously to the specified entity and to the Affordability Monitoring Agent. The Affordability Monitoring Services Agreement may be terminated by the Subsidizing Agency or the Affordability Monitoring Agent as provided in the Affordability Monitoring Services Agreement. In the event of such termination, a successor monitoring agent shall be selected in accordance with the provisions of the Affordability Monitoring Services Agreement, and thereafter such successor shall be the Affordability Monitoring Agent for the Project.

6. Developer's Representations, Covenants and Warranties. The Developer hereby represents, covenants and warrants as follows:

(a) The Developer (i) is a \_\_\_\_\_ duly organized under the laws of the Commonwealth of Massachusetts, and is qualified to transact business under the laws of said Commonwealth, (ii) has the power and authority to own its properties and assets and to carry on its business as now being conducted, and (iii) has the full legal right, power and authority to execute and deliver this Agreement.

(b) The execution and performance of this Agreement by the Developer (i) will not violate or, as applicable, has not violated any provision of law, rule or regulation, or any order of any court or other agency or governmental body, and (ii) will not violate or, as applicable, has not violated any provision of any indenture, agreement, mortgage, mortgage note, or other instrument to which the Developer is a party or by which it or the Project is bound, and (iii) will not result in the creation or imposition of any prohibited encumbrance of any nature.

(c) The Developer will, at the time of execution and delivery of this Agreement, have good and marketable title to the premises constituting the Project free and clear of any lien or encumbrance (subject to encumbrances created pursuant to this Agreement, and any other documents executed in connection with the loan from the NEF Lender, or other encumbrances permitted by the Subsidizing Agency).

(d) There is no action, suit or proceeding at law or in equity or by or before any governmental instrumentality or other agency now pending, or, to the knowledge of the Developer, threatened against or affecting it, or any of its properties or rights, which, if adversely determined, would materially impair its right to carry on business



10. Defaults; Remedies. (a) Any default, violation, or breach of obligations of the Developer hereunder shall constitute an Event of Default hereunder (an "Event of Default") if such default, violation, or breach is not cured to the satisfaction of the Subsidizing Agency within thirty (30) days after the Subsidizing Agency or the Affordability Monitoring Agent gives notice to the Developer. At any time after the occurrence of an Event of Default, at the Subsidizing Agency's option, and without further notice, the Subsidizing Agency may apply to any state or federal court for specific performance of this Agreement, or the Subsidizing Agency may exercise any other remedy at law or in equity or take any other action as may be necessary or desirable to correct non-compliance with this Agreement, including without limitation drawing upon the additional security described in Section 11 below. The Affordability Monitoring Agent shall have the same rights as the Subsidizing Agency to exercise remedies hereunder.

(b) The Developer shall pay all fees and expenses (including legal fees) of the Subsidizing Agency and the Affordability Monitoring Agent incurred in connection with enforcement of the Developer's obligations hereunder. The Developer hereby grants to the Subsidizing Agency and the Affordability Monitoring Agent a lien on the Project, junior to the lien securing the loan from the NEF Lender, to secure payment of such fees and expenses. The Subsidizing Agency and the Affordability Monitoring Agent may perfect a lien on the Project by recording/filing one or more certificates setting forth the amount of the costs and expenses due and owing in the Registry. A purchaser of the Project or any portion of the Project shall be liable for the payment of any unpaid costs and expenses which were the subject of a recorded/filed certificate prior to the purchaser's acquisition of the Project or any portion thereof.

(c) The Subsidizing Agency and the Affordability Monitoring Agent shall have access during normal business hours to all books and records of the Developer and the Project in order to monitor the Developer's compliance with the terms of this Agreement.

(d) The Developer agrees to submit any information, documents or certifications requested by the Subsidizing Agency or the Affordability Monitoring Agent that either shall deem necessary or appropriate to evidence the continuing compliance of the Developer with the terms of this Agreement.

11. Additional Security. As required by 760 CMR 56.04(7)(c), the Developer shall secure to the Subsidizing Agency adequate financial surety to ensure completion of the Cost Examination and to ensure distribution of any Excess Profit. In furtherance of the Developer's obligations hereunder to construct the Project in accordance with the Plans and Specifications, to comply with the Affordability Requirement and otherwise to comply with its obligations under this Agreement, the Developer shall deliver to the Subsidizing Agency such additional security as the Subsidizing Agency may deem reasonable in form and amount ("Additional Security"). The Subsidizing Agency may waive the requirement for such Additional Security in its sole discretion.



Developer, its successors and assigns and enure to the benefit of the Subsidizing Agency and its successors and assigns for the Term. Developer hereby agrees that any and all requirements of the laws of the Commonwealth of Massachusetts to be satisfied in order for the provisions of this Agreement to constitute restrictions and covenants running with the land shall be deemed to be satisfied in full and that any requirements of privity of estate are also deemed to be satisfied in full.

(c) This Agreement and the use and resale restrictions contained in each of the Affordable Housing Restrictions which are to encumber each of the Affordable Units at the Project pursuant to the requirements of this Agreement shall constitute an affordable housing restriction as that term is defined in Section 31 of Chapter 184 of the Massachusetts General Laws. Such restrictions shall be for the benefit of the Municipality and the Affordability Monitoring Agent, and the Municipality and the Affordability Monitoring Agent shall be deemed to be the holders of the affordable housing restriction created by the restrictions in each of the Affordable Housing Restrictions.

15. Subsidized Housing Inventory. The Affordable Units shall be included in the Subsidized Housing Inventory as that term is described in 760 CMR 56.03(2) in accordance with rules and regulations issued by DHCD, as amended from time to time.

16. Recording. Upon execution, the Developer shall immediately cause this Agreement and any amendments hereto to be recorded or filed with the Registry, and the Developer shall pay all fees and charges incurred in connection therewith. Upon recording or filing, as applicable, the Developer shall immediately transmit to the Subsidizing Agency and the Affordability Monitoring Agent evidence of such recording or filing including the date and instrument, book and page or registration number of the Agreement.

17. Intent and Effect. The terms and conditions of this Agreement have been freely accepted by the parties. The provisions and restrictions contained herein exist to further the mutual purposes and goals of DHCD, the Subsidizing Agency, the Municipality and the Developer set forth herein to create and preserve access to land and to decent and affordable homeownership opportunities for eligible families who are often denied such opportunities for lack of financial resources.

18. Miscellaneous. (a) The rights and obligations of the Subsidizing Agency under this Agreement shall continue for the Term, regardless of whether the loan from the NEF Lender is still outstanding.

(b) Neither the Subsidizing Agency nor the Affordability Monitoring Agent shall be held liable for any action taken or omitted under this Agreement so long as it shall have acted in good faith and without gross negligence.

(c) The Developer, for itself and its successors and assigns, agrees to indemnify and hold harmless the Subsidizing Agency and Affordability Monitoring



Executed as a sealed instrument as of the date first above written.

**[DEVELOPER]**

By: \_\_\_\_\_

Name:

Title:

**MASSACHUSETTS HOUSING FINANCE  
AGENCY, as Subsidizing Agency as aforesaid**

By: \_\_\_\_\_

Gina B. Dailey, Director of Comprehensive Permit  
Programs

Acknowledgement of Zoning Board of Appeals

Exhibit A – Legal Description

Exhibit B – Form of Affordable Housing Restriction

Exhibit C – Form of Limited Dividend Monitoring Services Agreement

Exhibit D – Form of Affordability Monitoring Services Agreement



## ACKNOWLEDGEMENT OF ZONING BOARD OF APPEALS

The undersigned duly appointed Chairman and members of the \_\_\_\_\_ Zoning Board of Appeals hereby acknowledge that, after due consideration of the Developer's request, pursuant to the requirements of 760 CMR 56.05(11), the Board hereby agrees that the foregoing Regulatory Agreement, including the terms and conditions of the form of Affordable Housing Restriction, Affordability Monitoring Services Agreement, and Limited Dividend Monitoring Services Agreement attached thereto, satisfy the requirements of the Comprehensive Permit as defined therein. Without limiting the generality of the foregoing, the units in the Project required to be affordable under the Comprehensive Permit shall be affordable if such units are subject to an Affordable Housing Restriction in the form attached to the foregoing Regulatory Agreement; any local preference set forth in the Comprehensive Permit shall be implemented only to the extent in compliance with applicable state and federal fair housing rules; and compliance with the limited dividend requirement shall be determined solely by the Subsidizing Agency (as defined at 760 CMR 56.02) under the Regulatory Agreement using the standards of the Subsidizing Agency applicable to comprehensive permit projects in accordance with the Comprehensive Permit Guidelines. In addition, the conflict provision of the Regulatory Agreement shall control over any conflict provision of the Comprehensive Permit.

\_\_\_\_\_  
ZONING BOARD OF  
APPEALS

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



EXHIBIT A

Legal Description



EXHIBIT C

Limited Dividend Monitoring Services Agreement

(see attached)



























Exhibit H

Soil Report



## MAP LEGEND

|                               |  |   |                            |
|-------------------------------|--|---|----------------------------|
| <b>Area of Interest (AOI)</b> |  |    | C                          |
| <b>Area of Interest (AOI)</b> |  |    | C/D                        |
| <b>Soils</b>                  |  |    | D                          |
| <b>Soil Rating Polygons</b>   |  |    | Not rated or not available |
| <b>Soil Rating Polygons</b>   |  |    | A                          |
| <b>Soil Rating Polygons</b>   |  |    | A/D                        |
| <b>Soil Rating Polygons</b>   |  |    | B                          |
| <b>Soil Rating Polygons</b>   |  |    | B/D                        |
| <b>Soil Rating Polygons</b>   |  |    | C                          |
| <b>Soil Rating Polygons</b>   |  |    | C/D                        |
| <b>Soil Rating Polygons</b>   |  |    | D                          |
| <b>Soil Rating Polygons</b>   |  |    | Not rated or not available |
| <b>Soil Rating Lines</b>      |  |    | A                          |
| <b>Soil Rating Lines</b>      |  |    | A/D                        |
| <b>Soil Rating Lines</b>      |  |    | B                          |
| <b>Soil Rating Lines</b>      |  |    | B/D                        |
| <b>Soil Rating Lines</b>      |  |    | C                          |
| <b>Soil Rating Lines</b>      |  |    | C/D                        |
| <b>Soil Rating Lines</b>      |  |    | D                          |
| <b>Soil Rating Lines</b>      |  |    | Not rated or not available |
| <b>Soil Rating Points</b>     |  |   | A                          |
| <b>Soil Rating Points</b>     |  |  | A/D                        |
| <b>Soil Rating Points</b>     |  |  | B                          |
| <b>Soil Rating Points</b>     |  |  | B/D                        |

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Worcester County, Massachusetts, Northeastern Part

Survey Area Data: Version 12, Oct 6, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 12, 2014—Sep 28, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher





Commonwealth of Massachusetts

City/Town of BOLTON

## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

### C. On-Site Review *(minimum of two holes required at every proposed primary and reserved disposal area)*

Deep Observation Hole Number: 615-1/4 Date: 6-26-15 Time: 8:30 AM Weather: CLOUDY, 70'S

1. Location

Ground Elevation at Surface of Hole: \_\_\_\_\_ Location (identify on plan): \_\_\_\_\_

2. Land Use OPEN FIELD NONE 0-3%  
(e.g., woodland, agricultural field, vacant lot, etc.) Surface Stones Slope (%)  
GRASSES KAME TERRACE TOP  
Vegetation Landform Position on Landscape (attach sheet)

3. Distances from: Open Water Body 100'+ Drainage Way 100'+ Possible Wet Area 100'+  
feet feet feet  
Property Line 75'+/- Drinking Water Well 100'+ Other \_\_\_\_\_  
feet feet feet

4. Parent Material: PROGLACIAL OUTWASH Unsuitable Materials Present: ☐ Yes ☒ No

If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Impervious Layer(s) ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☐ No If yes: SEE LOGS SEE LOGS  
Depth Weeping from Pit Depth Standing Water in Hole

Estimated Depth to High Groundwater: \_\_\_\_\_ inches \_\_\_\_\_ elevation





Commonwealth of Massachusetts

City/Town of BOLTON

## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

### C. On-Site Review (continued)

Deep Observation Hole Number: 615-2

| Depth (in.) | Soil Horizon/<br>Layer | Soil Matrix: Color-<br>Moist (Munsell) | Redoximorphic Features<br>(mottles) |              |         | Soil Texture<br>(USDA) | Coarse Fragments<br>% by Volume |                     | Soil<br>Structure | Soil<br>Consistence<br>(Moist) | Other |
|-------------|------------------------|--|-------------------------------------|--------------|---------|------------------------|---------------------------------|---------------------|-------------------|--------------------------------|-------|
|             |                        |  | Depth                               | Color        | Percent |                        | Gravel                          | Cobbles &<br>Stones |                   |                                |       |
| 10          | A                      | 10YR 3/3                               |                                     |              |         | S.L.                   |                                 |                     | CRUMB             | FRIABLE                        |       |
| 20          | Bw                     | 10YR 5/8                               |                                     |              |         | L.S.                   |                                 |                     | S.A.B.            | FRIABLE                        |       |
| 64          | C1                     | 10YR 5/6                               | 64"                                 | 7.5YR<br>6/8 | 5%      | F-M S                  |                                 |                     | MASSIVE           | FRIABLE                        |       |
| 84          | C2                     | 10YR 5/3                               |                                     | 7.5YR<br>6/1 |         | F.S.L.                 |                                 |                     | MASSIVE           | FRIABL                         |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |

Additional Notes:

NO REFUSAL, N.G.W.O.

W/ PERC-B





Commonwealth of Massachusetts  
City/Town of BOLTON

### Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

#### C. On-Site Review (continued)

Deep Observation Hole Number: 615-4

| Depth (in.) | Soil Horizon/<br>Layer | Soil Matrix: Color-<br>Moist (Munsell) | Redox/morphic Features<br>(mottles) |              |         | Soil Texture<br>(USDA) | Coarse Fragments<br>% by Volume |                     | Soil<br>Structure | Soil<br>Consistence<br>(Moist) | Other |
|-------------|------------------------|--|-------------------------------------|--------------|---------|------------------------|---------------------------------|---------------------|-------------------|--------------------------------|-------|
|             |                        |  | Depth                               | Color        | Percent |                        | Gravel                          | Cobbles &<br>Stones |                   |                                |       |
| 12          | A                      | 10YR 3/3                               |                                     |              |         | S.L.                   |                                 |                     | CRUMB             | FRIABLE                        |       |
| 20          | Bw                     | 10YR 5/8                               |                                     |              |         | L.S.                   |                                 |                     | S.A.B.            | FRIABLE                        |       |
| 60          | C1                     | 10YR 5/6                               | 60"                                 | 7.5YR<br>6/8 | 5%      | F-M S                  |                                 |                     | MASSIVE           | FRIABLE                        |       |
| 88          | C2                     | 10YR 5/3                               |                                     | 7.5YR<br>6/1 |         | F.S.L.                 |                                 |                     | MASSIVE           | FRIABL                         |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |

Additional Notes:

NO REFUSAL, G.W.O. @ 88"

W/ PERC-D





Commonwealth of Massachusetts  
City/Town of BOLTON

## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

### D. Determination of High Groundwater Elevation

1. Method Used:

☒ Depth observed standing water in observation hole

A. SEE LOGS  
Inches

B. SEE LOGS  
Inches

☒ Depth weeping from side of observation hole

A. SEE LOGS  
Inches

B. SEE LOGS  
Inches

☒ Depth to soil redoximorphic features (mottles)

A. SEE LOGS  
Inches

B. SEE LOGS  
Inches

☐ Groundwater adjustment (USGS methodology)

A.  
Inches

B.  
Inches

2.

Index Well Number

Reading Date

Index Well Level

Adjustment Factor

Adjusted Groundwater Level

### E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

☒ Yes ☐ No

b. If yes, at what depth was it observed?

Upper boundary: 10/12"  
Inches

Lower boundary: 58/64"  
Inches





Commonwealth of Massachusetts  
City/Town of BOLTON

## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

### Field Diagrams

Use this sheet for field diagrams:





# Exhibit I

## Site Plans



# LEGEND

| EXIST. FEATURE | DESCRIPTION       | EXIST. SYMB. DESCRIPTION |
|----------------|-------------------|--------------------------|
|                | EXIST. ROAD       |                          |
|                | EXIST. DRIVEWAY   |                          |
|                | EXIST. SIDEWALK   |                          |
|                | EXIST. CURB       |                          |
|                | EXIST. FENCE      |                          |
|                | EXIST. UTILITY    |                          |
|                | EXIST. POLE       |                          |
|                | EXIST. SIGN       |                          |
|                | EXIST. LIGHT      |                          |
|                | EXIST. MANHOLE    |                          |
|                | EXIST. DRAIN      |                          |
|                | EXIST. GUTTER     |                          |
|                | EXIST. PAVEMENT   |                          |
|                | EXIST. GRAVEL     |                          |
|                | EXIST. SAND       |                          |
|                | EXIST. CLAY       |                          |
|                | EXIST. SILT       |                          |
|                | EXIST. LOESS      |                          |
|                | EXIST. COBBLES    |                          |
|                | EXIST. BOULDERS   |                          |
|                | EXIST. ROCK       |                          |
|                | EXIST. CONCRETE   |                          |
|                | EXIST. BRICK      |                          |
|                | EXIST. MASONRY    |                          |
|                | EXIST. STONE      |                          |
|                | EXIST. WOOD       |                          |
|                | EXIST. METAL      |                          |
|                | EXIST. GLASS      |                          |
|                | EXIST. PLASTER    |                          |
|                | EXIST. GYPSUM     |                          |
|                | EXIST. CEMENT     |                          |
|                | EXIST. LIME       |                          |
|                | EXIST. SALT       |                          |
|                | EXIST. ACID       |                          |
|                | EXIST. ALKALI     |                          |
|                | EXIST. OIL        |                          |
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|                | EXIST. BORON      |                          |
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|                | EXIST. IODINE     |                          |
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|                | EXIST. CHLORINE   |                          |
|                | EXIST. SULFUR     |                          |
|                | EXIST. PHOSPHORUS |                          |
|                | EXIST. CARBON     |                          |
|                | EXIST. NITROGEN   |                          |
|                | EXIST. OXYGEN     |                          |
|                | EXIST. HYDROGEN   |                          |
|                | EXIST. HELIUM     |                          |
|                | EXIST. NEON       |                          |
|                | EXIST. ARGON      |                          |
|                | EXIST. KRYPTON    |                          |
|                | EXIST. XENON      |                          |
|                | EXIST. RADIUM     |                          |
|                | EXIST. POLONIUM   |                          |
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|                | EXIST. LEAD       |                          |
|                | EXIST. TIN        |                          |
|                | EXIST. ANTIMONY   |                          |

# ABBREVIATIONS

| SYMB. | DESCRIPTION       |
|-------|-------------------|
| 1     | EXIST. ROAD       |
| 2     | EXIST. DRIVE      |
| 3     | EXIST. SIDEWALK   |
| 4     | EXIST. CURB       |
| 5     | EXIST. FENCE      |
| 6     | EXIST. UTILITY    |
| 7     | EXIST. POLE       |
| 8     | EXIST. SIGN       |
| 9     | EXIST. LIGHT      |
| 10    | EXIST. MANHOLE    |
| 11    | EXIST. DRAIN      |
| 12    | EXIST. GUTTER     |
| 13    | EXIST. PAVEMENT   |
| 14    | EXIST. GRAVEL     |
| 15    | EXIST. SAND       |
| 16    | EXIST. CLAY       |
| 17    | EXIST. SILT       |
| 18    | EXIST. LOESS      |
| 19    | EXIST. COBBLES    |
| 20    | EXIST. Boulders   |
| 21    | EXIST. ROCK       |
| 22    | EXIST. CONCRETE   |
| 23    | EXIST. BRICK      |
| 24    | EXIST. MASONRY    |
| 25    | EXIST. STONE      |
| 26    | EXIST. WOOD       |
| 27    | EXIST. METAL      |
| 28    | EXIST. GLASS      |
| 29    | EXIST. PLASTER    |
| 30    | EXIST. GYPSUM     |
| 31    | EXIST. CEMENT     |
| 32    | EXIST. LIME       |
| 33    | EXIST. SALT       |
| 34    | EXIST. ACID       |
| 35    | EXIST. ALKALI     |
| 36    | EXIST. OIL        |
| 37    | EXIST. GREASE     |
| 38    | EXIST. RUBBER     |
| 39    | EXIST. LEAD       |
| 40    | EXIST. ZINC       |
| 41    | EXIST. COPPER     |
| 42    | EXIST. ALUMINUM   |
| 43    | EXIST. STEEL      |
| 44    | EXIST. IRON       |
| 45    | EXIST. NICKEL     |
| 46    | EXIST. CHROMIUM   |
| 47    | EXIST. MANGANESE  |
| 48    | EXIST. SILICON    |
| 49    | EXIST. BORON      |
| 50    | EXIST. FLUORINE   |
| 51    | EXIST. IODINE     |
| 52    | EXIST. BROMINE    |
| 53    | EXIST. CHLORINE   |
| 54    | EXIST. SULFUR     |
| 55    | EXIST. PHOSPHORUS |
| 56    | EXIST. CARBON     |
| 57    | EXIST. NITROGEN   |
| 58    | EXIST. OXYGEN     |
| 59    | EXIST. HYDROGEN   |
| 60    | EXIST. HELIUM     |
| 61    | EXIST. NEON       |
| 62    | EXIST. ARGON      |
| 63    | EXIST. KRYPTON    |
| 64    | EXIST. XENON      |
| 65    | EXIST. RADIUM     |
| 66    | EXIST. POLONIUM   |
| 67    | EXIST. ASTATINE   |
| 68    | EXIST. BISMUTH    |
| 69    | EXIST. THALLIUM   |
| 70    | EXIST. LEAD       |
| 71    | EXIST. TIN        |
| 72    | EXIST. ANTIMONY   |
| 73    | EXIST. ARSENIC    |
| 74    | EXIST. SELENIUM   |
| 75    | EXIST. TELLUR     |
| 76    | EXIST. BISMUTH    |
| 77    | EXIST. THALLIUM   |
| 78    | EXIST. LEAD       |
| 79    | EXIST. TIN        |
| 80    | EXIST. ANTIMONY   |
| 81    | EXIST. ARSENIC    |
| 82    | EXIST. SELENIUM   |
| 83    | EXIST. TELLUR     |
| 84    | EXIST. BISMUTH    |
| 85    | EXIST. THALLIUM   |
| 86    | EXIST. LEAD       |
| 87    | EXIST. TIN        |
| 88    | EXIST. ANTIMONY   |
| 89    | EXIST. ARSENIC    |
| 90    | EXIST. SELENIUM   |
| 91    | EXIST. TELLUR     |
| 92    | EXIST. BISMUTH    |
| 93    | EXIST. THALLIUM   |
| 94    | EXIST. LEAD       |
| 95    | EXIST. TIN        |
| 96    | EXIST. ANTIMONY   |
| 97    | EXIST. ARSENIC    |
| 98    | EXIST. SELENIUM   |
| 99    | EXIST. TELLUR     |
| 100   | EXIST. BISMUTH    |

# GENERAL NOTES:

1. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
2. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
3. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
4. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
5. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
6. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
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10. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.

# NOTES/SPECIFICATIONS:

1. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
2. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
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10. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.

# 1.0 SITE PREPARATION

- 1.1. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.2. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.3. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.4. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.5. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.6. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.7. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.8. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.9. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 1.10. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.

# 2.0 MATERIALS

- 2.1. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 2.2. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 2.3. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 2.4. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
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- 2.6. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 2.7. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 2.8. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 2.9. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.
- 2.10. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE CONTRACT DOCUMENTS.

# ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

**DUCHARME & DILLIS**  
Civil Design Group, Inc.  
CIVIL ENGINEERING - LAND SURVEYORS - WETLAND CONSULTANTS  
100 MAIN STREET, F.B. BOX 438  
BOSTON, MASSACHUSETTS 02111  
PHONE: (617) 775-3333  
FAX: (617) 775-3334  
WWW.DUCHARMEANDDILLIS.COM

PROJECT: TURN LEFT, LOC. 12, PAVEMENT, LAWRENCE, MASSACHUSETTS  
STILL RIVER ROAD PROJECT, LOC. 28, COUNTRY CLUB LANE, WILMINGTON, MASSACHUSETTS

DATE: 7/9/08  
DESIGN BY: JFL  
CHECKED BY: JFL  
SCALE: AS SHOWN

NOTES: SYMBOLS AND ABBREVIATIONS  
STILL RIVER COMMONS  
BOSTON, MASSACHUSETTS

DATE NO. 3339-9  
DRAWING NO. 3339-9  
SHEET NO. C1.1





### ACCESS, DRAINAGE & UTILITY EASEMENT DETAIL



APPELLANT, NOT INCORPORATED UNDER  
THE NATIONAL COOPERATIVE LAND  
ACT  
BO. TWIN ZONING BOARD OF APPEALS

RESERVED FOR FUTURE USE

**RECORD OWNER:**  
TURN LBT, LLC  
130 PARKER STREET, UNIT 12  
LAURENCE, MA  
**DEED REFERENCES:**  
NONE

01. PLAIN ROCK RD. 195  
 02. PLAIN ROCK RD. 195  
 03. PLAIN ROCK RD. 195  
 04. PLAIN ROCK RD. 195  
 05. PLAIN ROCK RD. 195  
 06. PLAIN ROCK RD. 195  
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 94. PLAIN ROCK RD. 195  
 95. PLAIN ROCK RD. 195  
 96. PLAIN ROCK RD. 195  
 97. PLAIN ROCK RD. 195  
 98. PLAIN ROCK RD. 195  
 99. PLAIN ROCK RD. 195  
 100. PLAIN ROCK RD. 195

1 CERTIFY THAT THIS PLAN CONFORMS TO THE RULES  
AND REGULATIONS OF THE REGISTERS OF DEEDS OF  
THE COMMONWEALTH OF MASSACHUSETTS



**FOOTNOTES AND REFERENCES**

# DUCHARME & DILLIS

Civil Design Group, Inc.

92 MAIN STREET, P.O. BOX 438  
ALBION, MASSACHUSETTS 01745  
PHONE: (978) 779-0211 FAX: (978) 779-0260  
www.DucharmeDrill.com

**Canon**

TURN LEFT, LOC  
130 PARKER STREET, UNIT 12  
LAWRENCE, MASSACHUSETTS

STILL RIVER ROAD NEVER OPENED 110

MIDDLETON, MASSACHUSETTS

2004



COEFFICIENT DETERMINING A PILLS WILL BECOME ABOUT 10%

7/3/18

DESIGN BY:

2

### LOT LAYOUT PLAN

STILL RIVER COMMONS  
DOLTON, MASSACHUSETTS

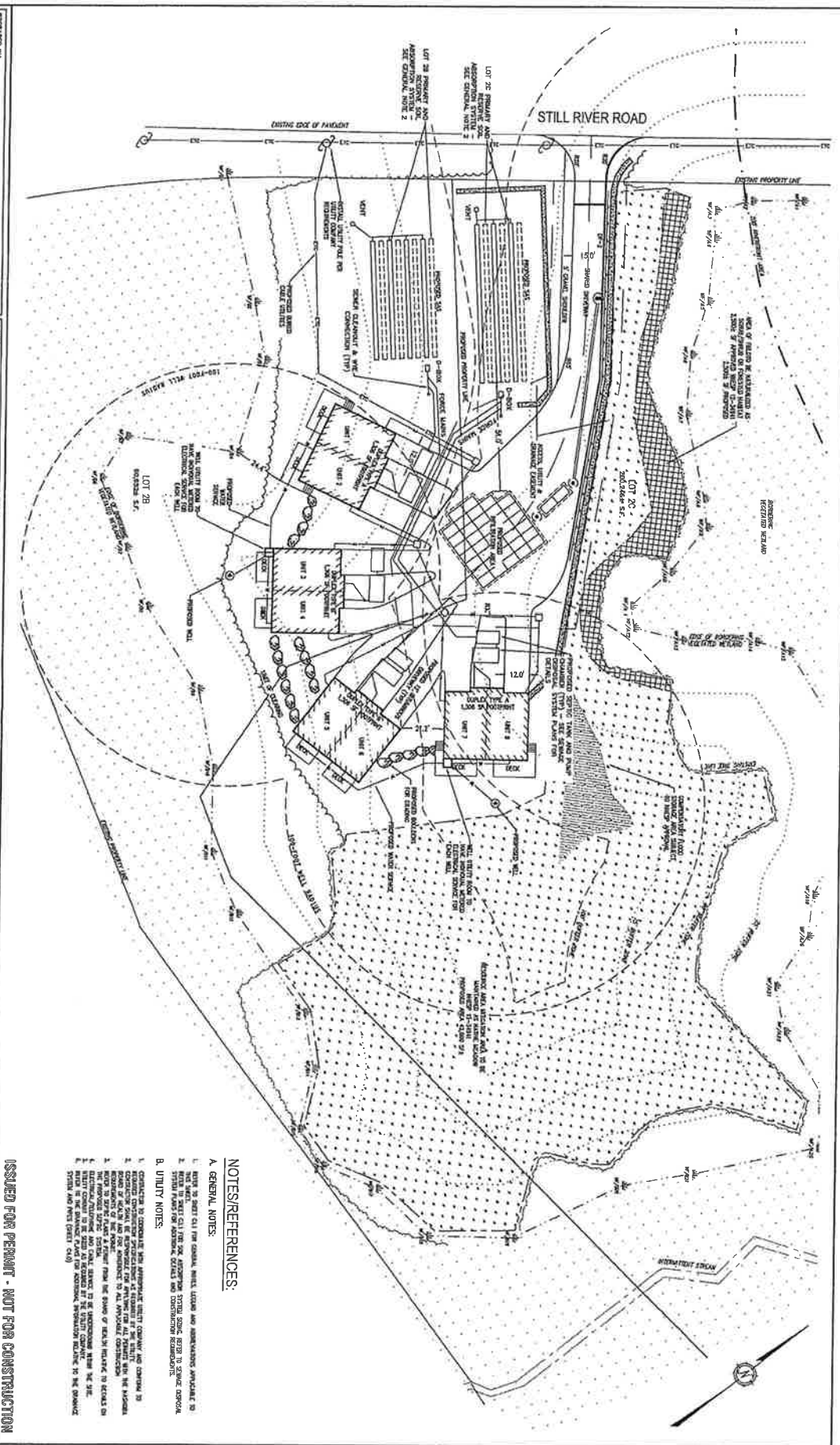
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NO. 100

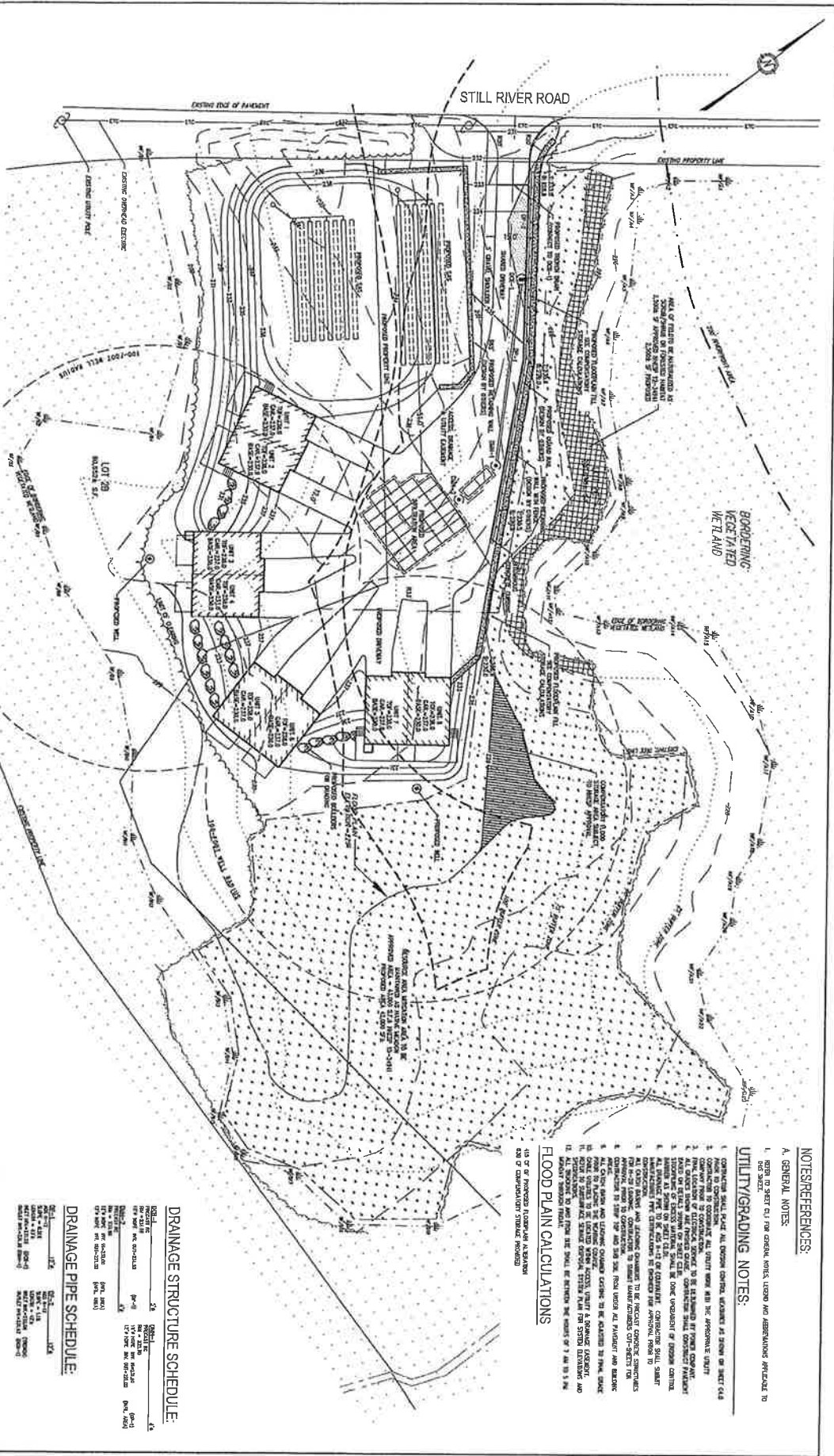
DRAWING NO.

3









- NOTES/REFERENCES:**
- A. GENERAL NOTES:**
1. REFER TO SHEET C-1 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS APPLICABLE TO THIS PROJECT.
- UTILITY/GRADING NOTES:**
1. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  2. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  3. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  4. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  5. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  6. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  7. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  8. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  9. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  10. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  11. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.
  12. CONSTRUCTION SHALL PLACE ALL UTILITY CONTROL STRUCTURES AS SHOWN ON SHEET C-4A.

**FLOOD PLAIN CALCULATIONS**

1.00 OF PROPOSED LOT AREA IN FLOOD PLAIN  
1.00 OF PROPOSED LOT AREA IN FLOOD PLAIN

**DRAINAGE STRUCTURE SCHEDULE:**

| NO. | STRUCTURE | SIZE | LOCATION |
|-----|-----------|------|----------|
| 1   | MANHOLE   | 48"  | LOT 28   |
| 2   | MANHOLE   | 48"  | LOT 29   |
| 3   | MANHOLE   | 48"  | LOT 30   |
| 4   | MANHOLE   | 48"  | LOT 31   |
| 5   | MANHOLE   | 48"  | LOT 32   |
| 6   | MANHOLE   | 48"  | LOT 33   |
| 7   | MANHOLE   | 48"  | LOT 34   |
| 8   | MANHOLE   | 48"  | LOT 35   |
| 9   | MANHOLE   | 48"  | LOT 36   |
| 10  | MANHOLE   | 48"  | LOT 37   |
| 11  | MANHOLE   | 48"  | LOT 38   |
| 12  | MANHOLE   | 48"  | LOT 39   |
| 13  | MANHOLE   | 48"  | LOT 40   |
| 14  | MANHOLE   | 48"  | LOT 41   |
| 15  | MANHOLE   | 48"  | LOT 42   |
| 16  | MANHOLE   | 48"  | LOT 43   |
| 17  | MANHOLE   | 48"  | LOT 44   |
| 18  | MANHOLE   | 48"  | LOT 45   |
| 19  | MANHOLE   | 48"  | LOT 46   |
| 20  | MANHOLE   | 48"  | LOT 47   |
| 21  | MANHOLE   | 48"  | LOT 48   |
| 22  | MANHOLE   | 48"  | LOT 49   |
| 23  | MANHOLE   | 48"  | LOT 50   |
| 24  | MANHOLE   | 48"  | LOT 51   |
| 25  | MANHOLE   | 48"  | LOT 52   |
| 26  | MANHOLE   | 48"  | LOT 53   |
| 27  | MANHOLE   | 48"  | LOT 54   |
| 28  | MANHOLE   | 48"  | LOT 55   |
| 29  | MANHOLE   | 48"  | LOT 56   |
| 30  | MANHOLE   | 48"  | LOT 57   |
| 31  | MANHOLE   | 48"  | LOT 58   |
| 32  | MANHOLE   | 48"  | LOT 59   |
| 33  | MANHOLE   | 48"  | LOT 60   |
| 34  | MANHOLE   | 48"  | LOT 61   |
| 35  | MANHOLE   | 48"  | LOT 62   |
| 36  | MANHOLE   | 48"  | LOT 63   |
| 37  | MANHOLE   | 48"  | LOT 64   |
| 38  | MANHOLE   | 48"  | LOT 65   |
| 39  | MANHOLE   | 48"  | LOT 66   |
| 40  | MANHOLE   | 48"  | LOT 67   |
| 41  | MANHOLE   | 48"  | LOT 68   |
| 42  | MANHOLE   | 48"  | LOT 69   |
| 43  | MANHOLE   | 48"  | LOT 70   |
| 44  | MANHOLE   | 48"  | LOT 71   |
| 45  | MANHOLE   | 48"  | LOT 72   |
| 46  | MANHOLE   | 48"  | LOT 73   |
| 47  | MANHOLE   | 48"  | LOT 74   |
| 48  | MANHOLE   | 48"  | LOT 75   |
| 49  | MANHOLE   | 48"  | LOT 76   |
| 50  | MANHOLE   | 48"  | LOT 77   |
| 51  | MANHOLE   | 48"  | LOT 78   |
| 52  | MANHOLE   | 48"  | LOT 79   |
| 53  | MANHOLE   | 48"  | LOT 80   |
| 54  | MANHOLE   | 48"  | LOT 81   |
| 55  | MANHOLE   | 48"  | LOT 82   |
| 56  | MANHOLE   | 48"  | LOT 83   |
| 57  | MANHOLE   | 48"  | LOT 84   |
| 58  | MANHOLE   | 48"  | LOT 85   |
| 59  | MANHOLE   | 48"  | LOT 86   |
| 60  | MANHOLE   | 48"  | LOT 87   |
| 61  | MANHOLE   | 48"  | LOT 88   |
| 62  | MANHOLE   | 48"  | LOT 89   |
| 63  | MANHOLE   | 48"  | LOT 90   |
| 64  | MANHOLE   | 48"  | LOT 91   |
| 65  | MANHOLE   | 48"  | LOT 92   |
| 66  | MANHOLE   | 48"  | LOT 93   |
| 67  | MANHOLE   | 48"  | LOT 94   |
| 68  | MANHOLE   | 48"  | LOT 95   |
| 69  | MANHOLE   | 48"  | LOT 96   |
| 70  | MANHOLE   | 48"  | LOT 97   |
| 71  | MANHOLE   | 48"  | LOT 98   |
| 72  | MANHOLE   | 48"  | LOT 99   |
| 73  | MANHOLE   | 48"  | LOT 100  |

**DRAINAGE PIPE SCHEDULE:**

| NO. | PIPE SIZE | LENGTH | LOCATION |
|-----|-----------|--------|----------|
| 1   | 12"       | 100'   | LOT 28   |
| 2   | 12"       | 100'   | LOT 29   |
| 3   | 12"       | 100'   | LOT 30   |
| 4   | 12"       | 100'   | LOT 31   |
| 5   | 12"       | 100'   | LOT 32   |
| 6   | 12"       | 100'   | LOT 33   |
| 7   | 12"       | 100'   | LOT 34   |
| 8   | 12"       | 100'   | LOT 35   |
| 9   | 12"       | 100'   | LOT 36   |
| 10  | 12"       | 100'   | LOT 37   |
| 11  | 12"       | 100'   | LOT 38   |
| 12  | 12"       | 100'   | LOT 39   |
| 13  | 12"       | 100'   | LOT 40   |
| 14  | 12"       | 100'   | LOT 41   |
| 15  | 12"       | 100'   | LOT 42   |
| 16  | 12"       | 100'   | LOT 43   |
| 17  | 12"       | 100'   | LOT 44   |
| 18  | 12"       | 100'   | LOT 45   |
| 19  | 12"       | 100'   | LOT 46   |
| 20  | 12"       | 100'   | LOT 47   |
| 21  | 12"       | 100'   | LOT 48   |
| 22  | 12"       | 100'   | LOT 49   |
| 23  | 12"       | 100'   | LOT 50   |
| 24  | 12"       | 100'   | LOT 51   |
| 25  | 12"       | 100'   | LOT 52   |
| 26  | 12"       | 100'   | LOT 53   |
| 27  | 12"       | 100'   | LOT 54   |
| 28  | 12"       | 100'   | LOT 55   |
| 29  | 12"       | 100'   | LOT 56   |
| 30  | 12"       | 100'   | LOT 57   |
| 31  | 12"       | 100'   | LOT 58   |
| 32  | 12"       | 100'   | LOT 59   |
| 33  | 12"       | 100'   | LOT 60   |
| 34  | 12"       | 100'   | LOT 61   |
| 35  | 12"       | 100'   | LOT 62   |
| 36  | 12"       | 100'   | LOT 63   |
| 37  | 12"       | 100'   | LOT 64   |
| 38  | 12"       | 100'   | LOT 65   |
| 39  | 12"       | 100'   | LOT 66   |
| 40  | 12"       | 100'   | LOT 67   |
| 41  | 12"       | 100'   | LOT 68   |
| 42  | 12"       | 100'   | LOT 69   |
| 43  | 12"       | 100'   | LOT 70   |
| 44  | 12"       | 100'   | LOT 71   |
| 45  | 12"       | 100'   | LOT 72   |
| 46  | 12"       | 100'   | LOT 73   |
| 47  | 12"       | 100'   | LOT 74   |
| 48  | 12"       | 100'   | LOT 75   |
| 49  | 12"       | 100'   | LOT 76   |
| 50  | 12"       | 100'   | LOT 77   |
| 51  | 12"       | 100'   | LOT 78   |
| 52  | 12"       | 100'   | LOT 79   |
| 53  | 12"       | 100'   | LOT 80   |
| 54  | 12"       | 100'   | LOT 81   |
| 55  | 12"       | 100'   | LOT 82   |
| 56  | 12"       | 100'   | LOT 83   |
| 57  | 12"       | 100'   | LOT 84   |
| 58  | 12"       | 100'   | LOT 85   |
| 59  | 12"       | 100'   | LOT 86   |
| 60  | 12"       | 100'   | LOT 87   |
| 61  | 12"       | 100'   | LOT 88   |
| 62  | 12"       | 100'   | LOT 89   |
| 63  | 12"       | 100'   | LOT 90   |
| 64  | 12"       | 100'   | LOT 91   |
| 65  | 12"       | 100'   | LOT 92   |
| 66  | 12"       | 100'   | LOT 93   |
| 67  | 12"       | 100'   | LOT 94   |
| 68  | 12"       | 100'   | LOT 95   |
| 69  | 12"       | 100'   | LOT 96   |
| 70  | 12"       | 100'   | LOT 97   |
| 71  | 12"       | 100'   | LOT 98   |
| 72  | 12"       | 100'   | LOT 99   |
| 73  | 12"       | 100'   | LOT 100  |

**ISSUED FOR PERMIT - NOT FOR CONSTRUCTION**

**DUCHARME & DILLIS**  
Civil Design Group, Inc.  
CIVIL ENGINEER - LAND SURVEYOR - WETLAND CONSULTANT  
100 STATE STREET, SUITE 200  
BOSTON, MASSACHUSETTS 02109  
PHONE: (617) 778-0000 FAX: (617) 778-0001  
WWW.DUCHARMEANDDILLIS.COM

**CLIENT:** TURN LEFT, LLC  
100 PARKER STREET, UNIT 12  
LAWRENCE, MASSACHUSETTS  
**PROJECT:** STILL RIVER ROAD DEVELOPMENT, LLC  
100 PARKER STREET, UNIT 12  
LAWRENCE, MASSACHUSETTS

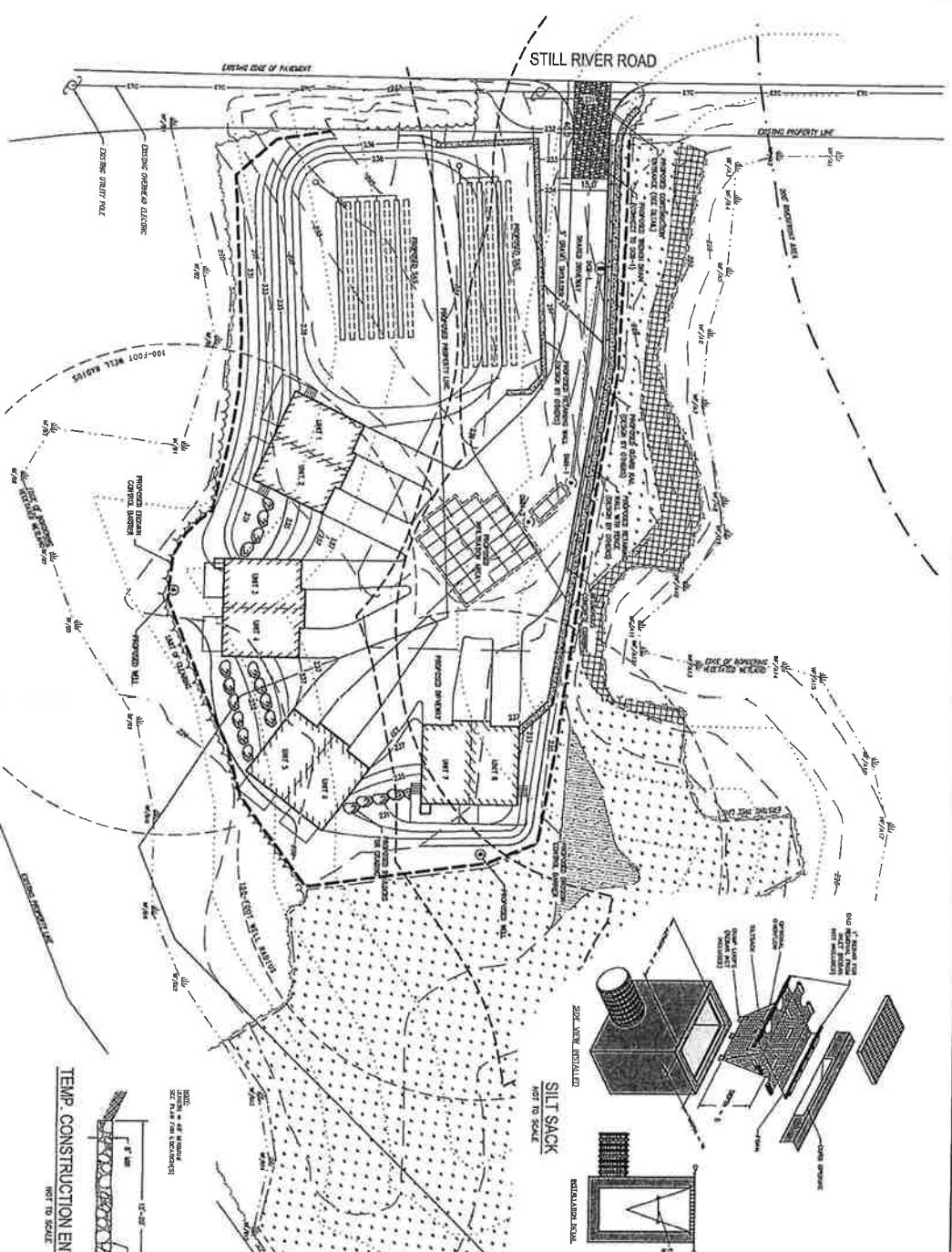
**SCALE:**  
1" = 20' HORIZONTAL  
1" = 20' VERTICAL

**DATE:** 7/2/18  
**DESIGN BY:** JLD  
**CHECKED BY:** JLD  
**DATE:** 7/2/18  
**DESIGN BY:** JLD  
**CHECKED BY:** JLD

**PROJECT NO.:** 2339-01-01  
**SHEET NO.:** C4.0

**PROJECT NO.:** 2339-01-01  
**SHEET NO.:** C4.0





EROSION CONTROL NOTES:

- [illegible]

#### D. TEMPORARY MEASURES

- PERMANENT STABILIZATION**

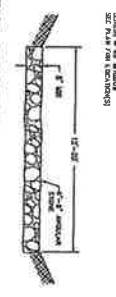
**1** MATCHING OR OTHER APPROPRIATE TESTS PERFORMED  
IMMEDIATELY FOLLOWING RESCUE WERE ALL NORMAL.  
CONDUCT'S VARIATION FROM THE OTHER GROUPS MAY BE

- [illegible]

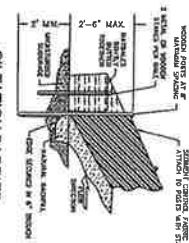
SEEKING AS SOON AS POSSIBLE AFTER OFFENSE IS COMPLETED.

- [illegible]

TEMP. CONSTRUCTION ENTRANCE DETAIL



**SILTATION BARRIER**  
**NOT TO SCALE**

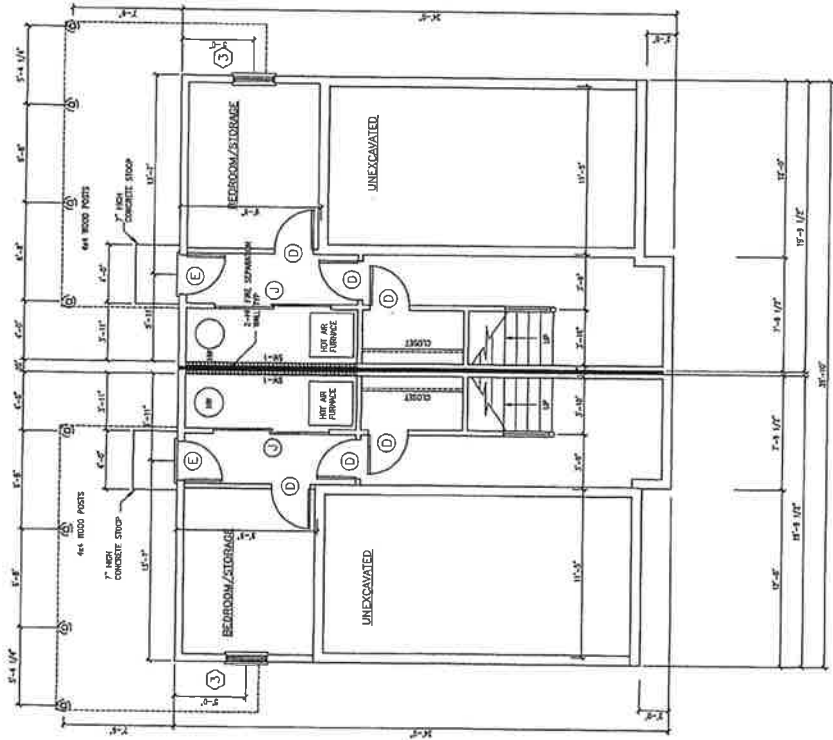


ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

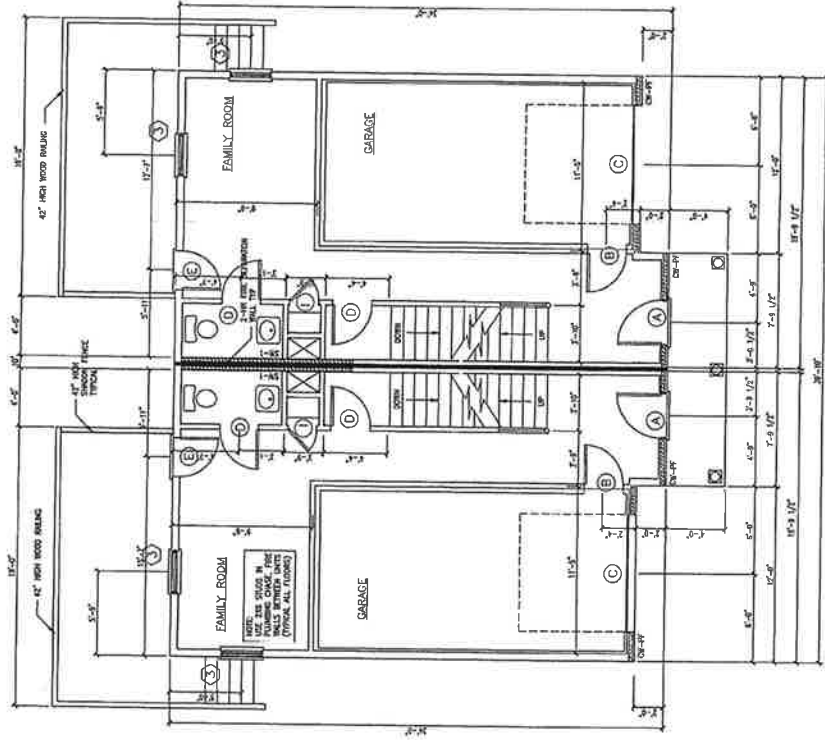
|                                      |      |              |         |
|--------------------------------------|------|--------------|---------|
| EROSION & SEDIMENTATION CONTROL PLAN |      | JOB NO.      | 3339-01 |
| STILL RIVER COMMONS                  |      | CHANGING NO. |         |
| BOLTON, MASSACHUSETTS                |      | SHEET NO.    | C5.0    |
| NO.                                  | DATE | DESCRIPTION  | BY      |
|                                      |      |              |         |
|                                      |      |              |         |
|                                      |      |              |         |
|                                      |      |              |         |



# DUPLEX TYPE A



1 BASEMENT PLAN  
SCALE 1/4"=1'-0"



2 GROUND FLOOR PLAN  
SCALE 1/4"=1'-0"

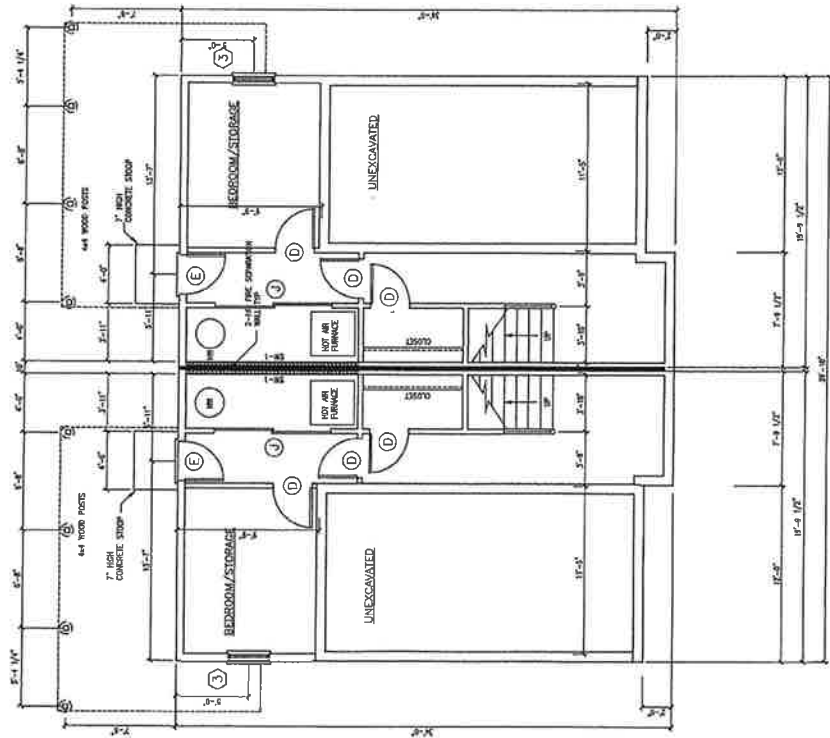
STILL RIVER ROAD  
BOLTON, MASSACHUSETTS

Proj. No. 18-007  
Drawn by J.C.  
Checked by J.C.  
Date 1-2-10-2010

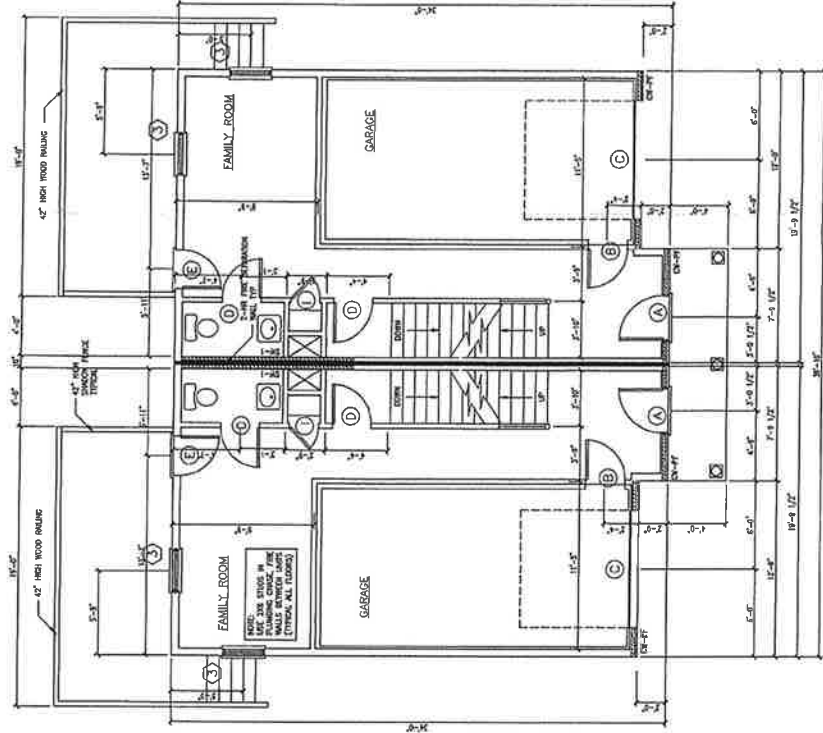
A-100



# DUPLEX TYPE A



1 BASEMENT PLAN  
SCALE 1/4" = 1'-0"



2 GROUND FLOOR PLAN  
SCALE 1/4" = 1'-0"

STILL RIVER ROAD  
BOLTON, MASSACHUSETTS

Proj. Mgr.: J.C.  
Checked: J.C.  
Drawn: J.C.  
Designed: J.C.  
Date: 3-18-2018

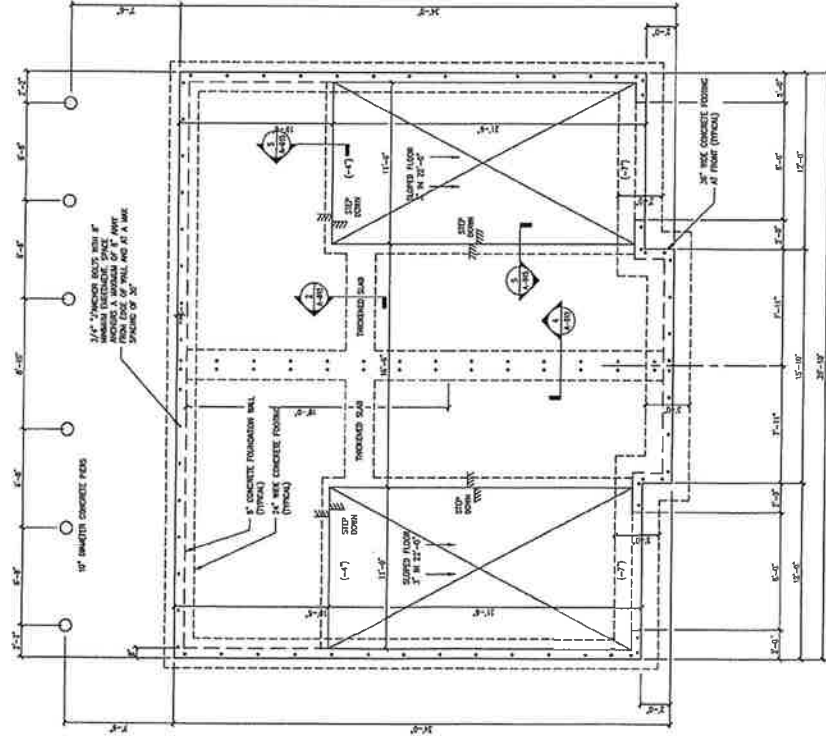
Revisions:  
1

Proj. No. 18-007  
Dwg. No.

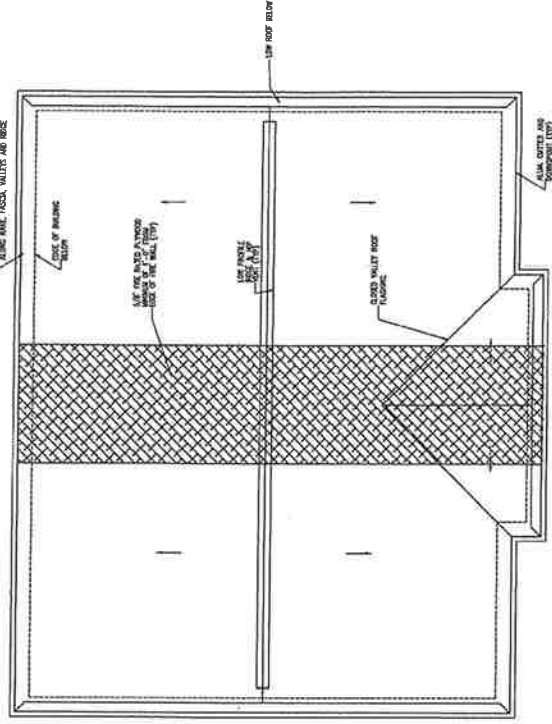
A-100



**DUPLEX  
 TYPE A**

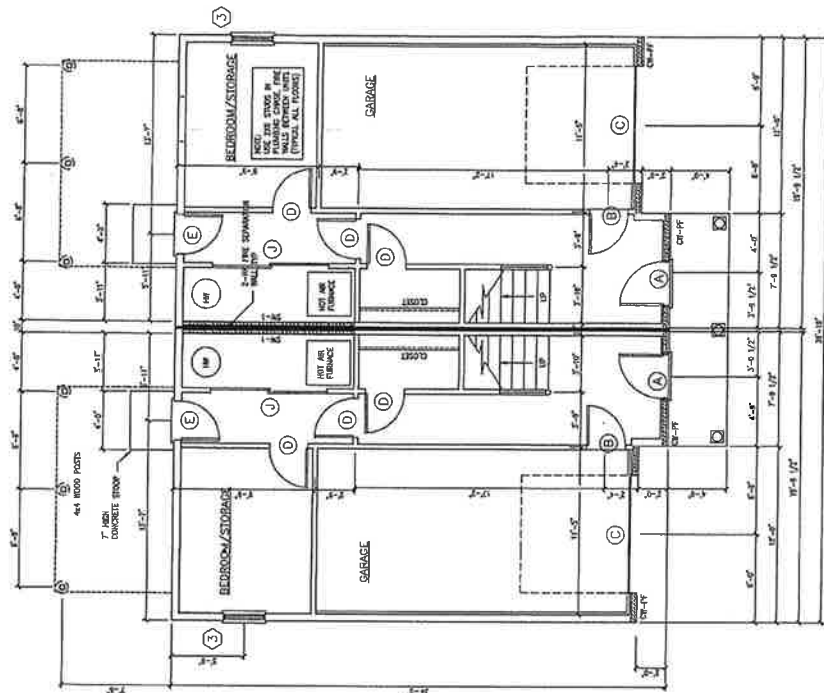


1 FOUNDATION PLAN  
 SCALE 1/4"=1'-0"

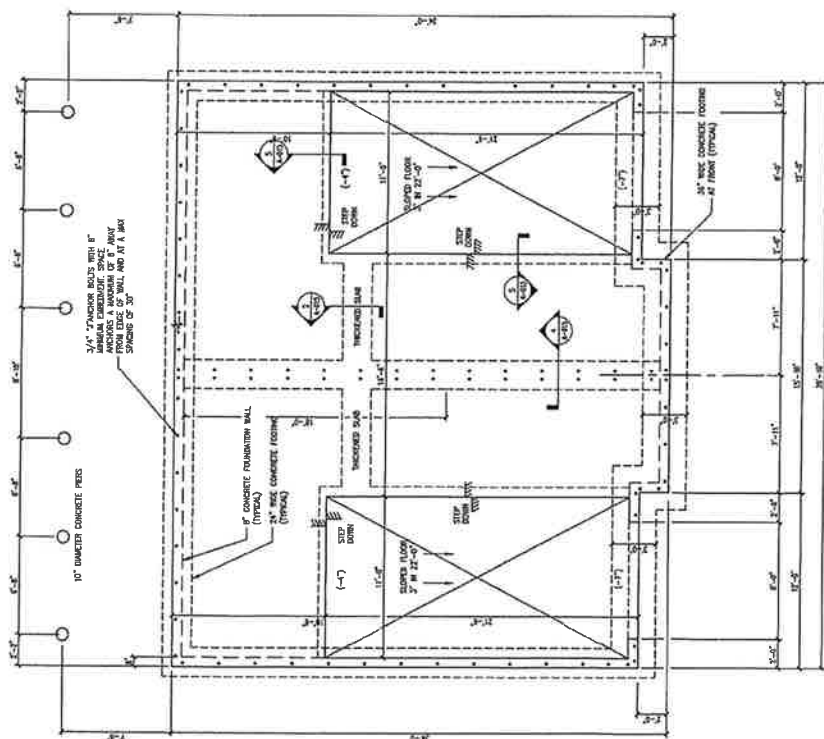


2 ROOF PLAN  
 SCALE 1/4"=1'-0"





2 GROUND FLOOR PLAN  
SCALE 1/4"=1'-0"



1 BASEMENT PLAN  
SCALE 1/4"=1'-0"

DUPLEX  
TYPE B

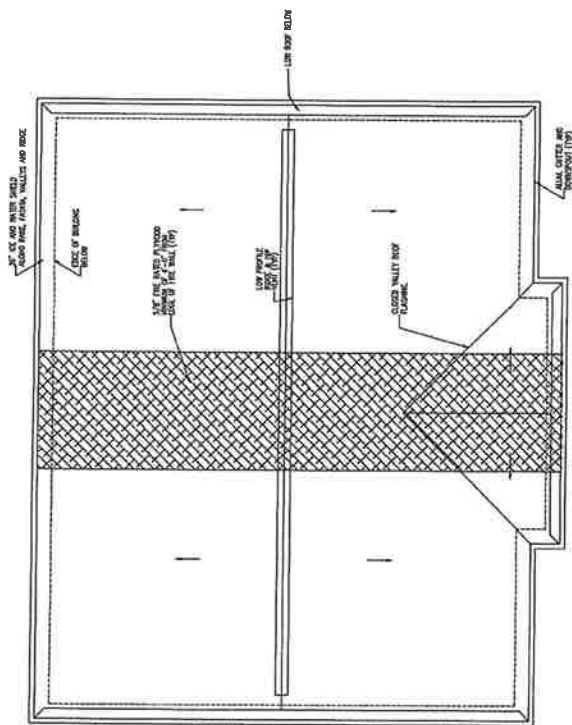


STILL RIVER ROAD  
BOLTON, MASSACHUSETTS

Proj. Mgr.: JC  
Design: JC  
Check: JC  
Scale: 1/8"=1'-0"

Revisions:  
Approved:

2 ROOF PLAN  
SCALE 1/8"=1'-0"





## Exhibit K

### Drainage Calculations



**STORMWATER REPORT**  
**FOR**  
**STILL RIVER COMMONS**  
*STILL RIVER ROAD, MAP 8B PARCEL 32*  
**IN**  
**BOLTON,**  
**MASSACHUSETTS**

**PREPARED BY:** DUCHARME & DILLIS  
CIVIL DESIGN GROUP, INC.  
P.O. Box 428  
Bolton, MA 01740

**PREPARED FOR:** STILL RIVER ROAD DEVELOPMENT, LLC  
28 Country Club Lane  
Middleton, MA 01949

**JUNE 27<sup>TH</sup>, 2018**

**CDG PROJECT # 3339-P**





## **1.0 Project Narrative**

### **1.1 Project Type**

The proposed project includes the development of the 6.7-acre site located off Still River Road in the town of Bolton. The site will consist of eight (8) units in four (4) duplex-style buildings with a shared driveway and a stormwater drainage system.

### **1.2 Purpose and Scope**

This report has been prepared to comply with the requirements of the Stormwater Management Standards incorporated in the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00. These standards are intended to promote increased groundwater recharge and prevent stormwater discharges from causing or contributing to the pollution of surface waters and ground waters of the Commonwealth. The standards aim to accomplish these goals by encouraging the greater use of low impact development techniques and improving the operation and maintenance of stormwater best management practices.

This report addresses compliance of the proposed development with each of the ten stormwater standards, it provides calculations to support the compliance information, and it provides an Operation and Maintenance Plan and Long-Term Pollution Prevention Plan for the stormwater management system.

### **1.3 Proposed Development**

As mentioned, the proposed project is the development of four (4) duplex-style buildings with a shared driveway. The project is being proposed pursuant to the Massachusetts General Laws Chapter 40B.

The driveway will have access off Still River Road approximately 310 feet north of the intersection of Vaughn Hill Road and Still River Road. The proposed development will include private wells and on-site septic systems.

### **1.4 LID Measures**

Care has been taken to lay out the proposed site in a manner that works with existing topography. BMPs such as subsurface infiltration chambers are used to manage the stormwater runoff. Stormwater from the impervious areas are routed via curb and gutter systems and storm drains to subsurface infiltration chambers which contain a sediment forebay for pretreatment. This system will be used to promote groundwater recharge and limit the runoff.



deep sump hooded catch basin where it will begin treatment before infiltration.

### **1.7 *Methods of Analysis***

United States Department of Agriculture Natural Resources Conservation Service (NRCS) soil cover complex methods (TR-20) were employed to compute runoff quantities for the subject property and, where appropriate, adjacent property that drains toward a common discharge point with runoff from the subject site. HydroCAD 10.0 computer software was employed in this hydrologic analysis. A comparison of pre- and post-development runoff quantities at two different analysis points was performed in order to design a stormwater management system that will limit peak rates of runoff from the development to predevelopment levels for 24-hour rainfall events of 2-, 10-, and 100-year return frequencies. Watershed boundaries for existing conditions are depicted on the attached Predevelopment Watershed Plan. Post-Developed watershed boundaries are indicated on the Post-development Watershed Plan.

## **2.0 Stormwater Standards Compliance**

### **2.1 *Standard 1 – Untreated Discharges***

The stormwater management system for the proposed development will not result in any new discharges of untreated stormwater to wetland resource areas. Stormwater management structures have been designed such that there is no erosion or scour to wetland resource areas or waters of the Commonwealth.

### **2.2 *Standard 2 – Peak Rate Attenuation***

Hydrologic calculations for existing and proposed site conditions are included in Appendices D and E respectively. Calculations for 24-hour rainfall events of 2-, 10- and 100-year return frequencies are provided. The following table provides a summary of peak rates of runoff related to each of these storms for a design point at the wetland boundary through which all runoff from the subject property must flow. For all rainfall events considered, the proposed stormwater management system will control runoff from the development such that corresponding peak flows at the design point will match pre-developed rates to the maximum extent practical.

As seen in the table below, the post-development rate for the 2-yr, 24-hr storm event is 0.06 cfs greater than the pre-development rate. This flow is negligible when spread out across the entire 2.9 acres modeled.

|      | 2 YR, 24 HR |      | 10 YR, 24 HR |      | 100 YR, 24 HR |      |
|------|-------------|------|--------------|------|---------------|------|
|      | PRE         | POST | PRE          | POST | PRE           | POST |
| DP-A | 0.93        | 0.99 | 2.18         | 2.17 | 4.80          | 4.76 |



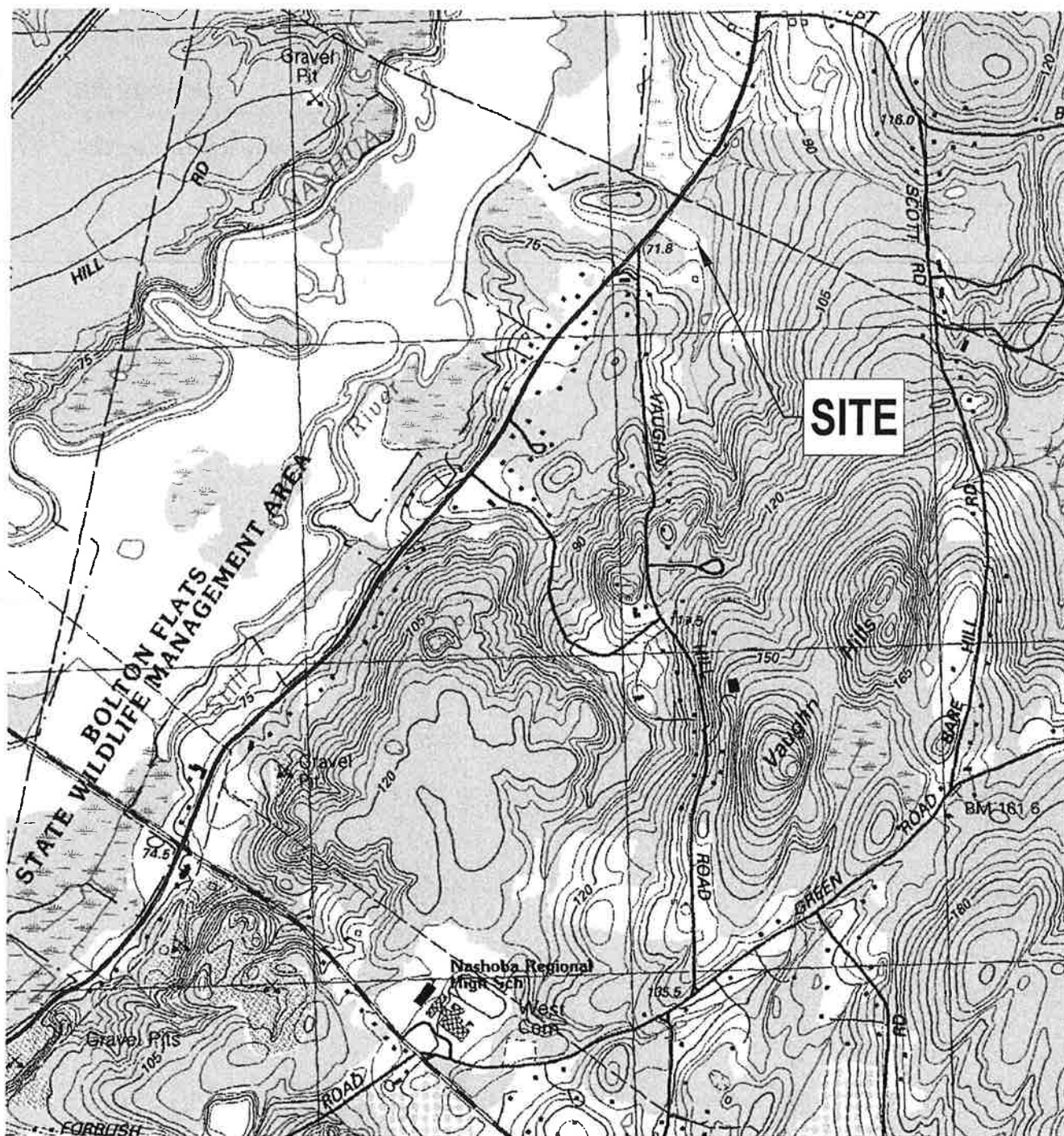
**2.9    *Standard 9 – Operation and Maintenance Plan***

Refer to Appendix G for a complete copy of the Stormwater Operation and Maintenance Plan.

**2.10   *Standard 10 – Prohibition of Illicit Discharges***

An illicit discharge statement will be prepared after approvals are received and prior to construction.





## LOCUS MAP

Prepared By: Ducharme & Dillis, Civil Design Group, Inc.  
1092 Main Street  
P.O. Box 428  
Bolton, Massachusetts

DATE: JUNE 2018

Prepared For: Still River Road Development, LLC  
28 Country Club Lane  
Middleton, Massachusetts

**DUCHARME & DILLIS**  
Civil Design Group, Inc.  
CIVIL ENGINEERS • LAND SURVEYORS • WETLAND CONSULTANTS

SCALE: 1" = 800'





Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands Program

## Checklist for Stormwater Report

### B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

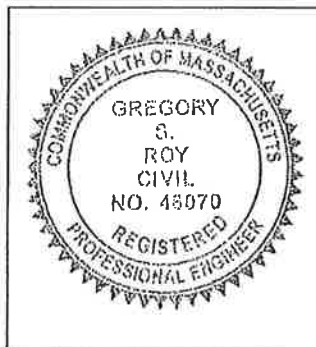
*Note:* Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

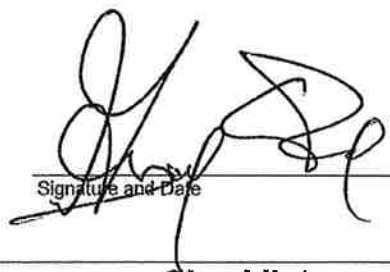
A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

### Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



 6/27/18  
Signature and Date

### Checklist

**Project Type:** Is the application for new development, redevelopment, or a mix of new and redevelopment?

- ☒ New development
- ☐ Redevelopment (Although the project is considered redevelopment, it meets all of the Standards below)
- ☐ Mix of New Development and Redevelopment





## Checklist for Stormwater Report

### Checklist (continued)

#### Standard 2: Peak Rate Attenuation

- ☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- ☒ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- ☒ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

#### Standard 3: Recharge

- ☒ Soil Analysis provided.
- ☒ Required Recharge Volume calculation provided
- ☐ Required Recharge volume reduced through use of the LID site Design Credits.
- ☒ Sizing the infiltration, BMPs is based on the following method: Check the method used.
  - ☒ Static
  - ☐ Simple Dynamic
  - ☐ Dynamic Field<sup>1</sup>
- ☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.
- ☒ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- ☒ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- ☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
  - ☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
  - ☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
  - ☐ Solid Waste Landfill pursuant to 310 CMR 19.000
  - ☐ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- ☒ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- ☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

<sup>1</sup> 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.





# Checklist for Stormwater Report

## Checklist (continued)

### Standard 4: Water Quality (continued)

- ☒ The BMP is sized (and calculations provided) based on:
  - ☒ The ½" or 1" Water Quality Volume or
  - ☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- ☐ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- ☐ A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

### Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- ☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- ☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior** to the discharge of stormwater to the post-construction stormwater BMPs.
- ☐ The NPDES Multi-Sector General Permit does **not** cover the land use.
- ☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- ☐ All exposure has been eliminated.
- ☐ All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- ☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

### Standard 6: Critical Areas

- ☐ The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- ☐ Critical areas and BMPs are identified in the Stormwater Report.





# Checklist for Stormwater Report

## Checklist (continued)

### Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- ☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- ☐ The project is **not** covered by a NPDES Construction General Permit.
- ☐ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- ☒ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

### Standard 9: Operation and Maintenance Plan

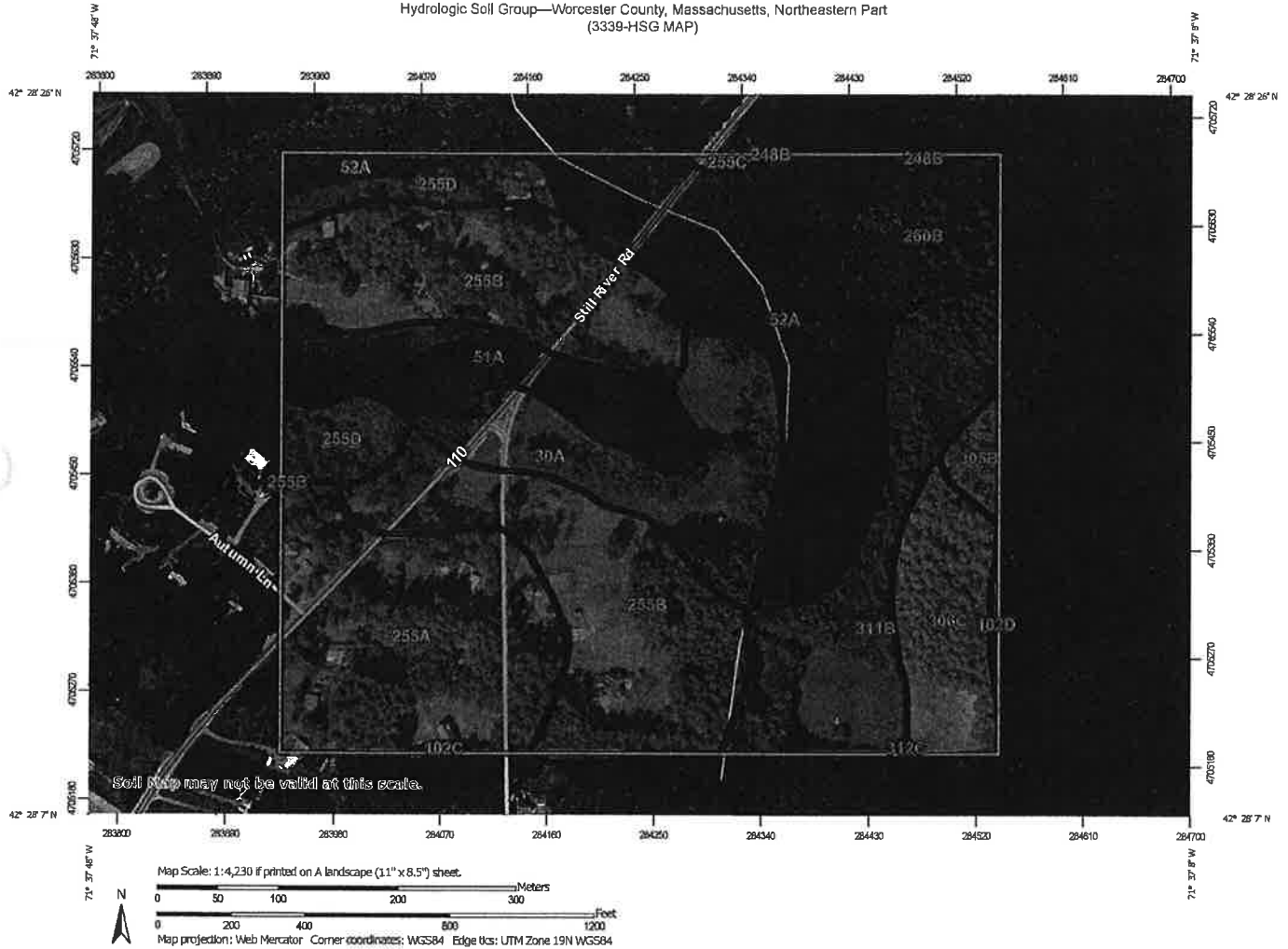
- ☒ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
  - ☒ Name of the stormwater management system owners;
  - ☒ Party responsible for operation and maintenance;
  - ☒ Schedule for implementation of routine and non-routine maintenance tasks;
  - ☒ Plan showing the location of all stormwater BMPs maintenance access areas;
  - ☒ Description and delineation of public safety features;
  - ☒ Estimated operation and maintenance budget; and
  - ☒ Operation and Maintenance Log Form.
- ☐ The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
  - ☐ A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
  - ☐ A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

### Standard 10: Prohibition of Illicit Discharges

- ☐ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- ☐ An Illicit Discharge Compliance Statement is attached;
- ☒ NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.



Hydrologic Soil Group—Worcester County, Massachusetts, Northeastern Part  
(3339-HSG MAP)





## Hydrologic Soil Group

| Map unit symbol                    | Map unit name   | Rating | Acres in AOI | Percent of AOI |
|------------------------------------|---|--------|--------------|----------------|
| 30A                                | Raynham silt loam, 0 to 3 percent slopes                            | C/D    | 6.8          | 9.2%           |
| 51A                                | Swansea muck, 0 to 1 percent slopes                                 | B/D    | 5.2          | 6.9%           |
| 52A                                | Freetown muck, 0 to 1 percent slopes                                | B/D    | 12.9         | 17.3%          |
| 102C                               | Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes       | B      | 0.1          | 0.1%           |
| 102D                               | Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes      | D      | 0.2          | 0.3%           |
| 248B                               | Amostown and Belgrade soils, 3 to 8 percent slopes                  | B      | 0.1          | 0.2%           |
| 255A                               | Windsor loamy sand, 0 to 3 percent slopes                           | A      | 10.8         | 14.5%          |
| 255B                               | Windsor loamy sand, 3 to 8 percent slopes                           | A      | 18.1         | 24.2%          |
| 255C                               | Windsor loamy sand, 8 to 15 percent slopes                          | A      | 0.2          | 0.3%           |
| 255D                               | Windsor loamy sand, 15 to 25 percent slopes                         | A      | 3.4          | 4.5%           |
| 260B                               | Sudbury fine sandy loam, 3 to 8 percent slopes                      | B      | 3.7          | 4.9%           |
| 305B                               | Paxton fine sandy loam, 3 to 8 percent slopes                       | C      | 0.8          | 1.1%           |
| 306C                               | Paxton fine sandy loam, 8 to 15 percent slopes, very stony          | C      | 4.3          | 5.7%           |
| 311B                               | Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony       | C/D    | 8.1          | 10.8%          |
| 312C                               | Woodbridge fine sandy loam, 8 to 15 percent slopes, extremely stony | C/D    | 0.0          | 0.1%           |
| <b>Totals for Area of Interest</b> |   |        | <b>74.7</b>  | <b>100.0%</b>  |





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**A. Facility Information**

STEVE ELKINSON  
Owner Name  
STILL RIVER ROAD  
Street Address  
BOLTON  
City  
MA  
State  
Map/Lot #  
01740  
Zip Code

**B. Site Information**

- (Check one) ☒ New Construction ☐ Upgrade ☐ Repair  
2. Soil Survey Available? ☒ Yes ☐ No  
Soil Name: WINDSOR LOAMY FINE SAND  
Soil Limitations: NONE  
If yes: NCRS Source: 255B  
Soil Map Unit: 255B  
3. Surficial Geological Report Available? ☐ Yes ☐ No  
Geologic/Parent Material: KAME TERRACE  
Landform: KAME TERRACE  
If yes: Year Published/Source: Publication Scale: Map Unit:  
4. Flood Rate Insurance Map  
Above the 500-year flood boundary? ☐ Yes ☒ No  
Within the 500-year flood boundary? ☒ Yes ☐ No  
Within a velocity zone? ☐ Yes ☒ No  
5. Wetland Area: Wetlands Conservancy Program Map  
Map Unit: Name:  
6. Current Water Resource Conditions (USGS):  
Range: ☐ Above Normal ☒ Normal ☐ Below Normal  
JUNE '15  
Month/Year  
7. Other references reviewed:





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**C. On-Site Review (continued)**

Deep Observation Hole Number: 615-1

| Depth (in.) | Soil Horizon/<br>Layer | Soil Matrix: Color-<br>Moist (Munsell) | Redoximorphic Features<br>(mottles) |              |         | Soil Texture<br>(USDA) | Coarse Fragments<br>% by Volume |                     | Soil<br>Structure | Soil<br>Consistence<br>(Moist) | Other |
|-------------|------------------------|--|-------------------------------------|--------------|---------|------------------------|---------------------------------|---------------------|-------------------|--------------------------------|-------|
|             |                        |  | Depth                               | Color        | Percent |                        | Gravel                          | Cobbles &<br>Stones |                   |                                |       |
| 10          | A                      | 10YR 3/3                               |                                     |              |         | S.L.                   |                                 |                     | CRUMB             | FRIABLE                        |       |
| 20          | Bw                     | 10YR 5/8                               |                                     |              |         | L.S.                   |                                 |                     | S.A.B.            | FRIABLE                        |       |
| 58          | C1                     | 10YR 5/6                               | 58"                                 | 7.5YR<br>6/8 | 5%      | F-M S                  |                                 |                     | MASSIVE           | FRIABLE                        |       |
| 80          | C2                     | 10YR 5/3                               |                                     | 7.5YR<br>6/1 |         | F.S.L.                 |                                 |                     | MASSIVE           | FRIABLE                        |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |

Additional Notes:

NO REFUSAL, N.G.W.O.

W/ PERCA





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**C. On-Site Review (continued)**

Deep Observation Hole Number: 615-3

| Depth (in.) | Soil Horizon/<br>Layer | Soil Matrix: Color-<br>Moist (Munsell) | Redoximorphic Features<br>(mottles) |              |         | Soil Texture<br>(USDA) | Coarse Fragments<br>% by Volume |                     | Soil<br>Structure | Soil<br>Consistence<br>(Moist) | Other |
|-------------|------------------------|--|-------------------------------------|--------------|---------|------------------------|---------------------------------|---------------------|-------------------|--------------------------------|-------|
|             |                        |  | Depth                               | Color        | Percent |                        | Gravel                          | Cobbles &<br>Stones |                   |                                |       |
| 10          | A                      | 10YR 3/3                               |                                     |              |         | S.L.                   |                                 |                     | CRUMB             | FRIABLE                        |       |
| 24          | Bw                     | 10YR 5/8                               |                                     |              |         | L.S.                   |                                 |                     | S.A.B.            | FRIABLE                        |       |
| 60          | C1                     | 10YR 5/6                               | 60"                                 | 7.5YR<br>6/8 | 5%      | F-M S                  |                                 |                     | MASSIVE           | FRIABLE                        |       |
| 84          | C2                     | 10YR 5/3                               |                                     | 7.5YR<br>6/1 |         | F.S.L.                 |                                 |                     | MASSIVE           | FRIABLE                        |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |

Additional Notes:

NO REFUSAL, G.W.O. @ 82"

W/PERC-C





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**C. On-Site Review (continued)**

Deep Observation Hole Number:

615-5

| Depth (in.) | Soil Horizon/<br>Layer | Soil Matrix: Color-<br>Moist (Munsell) | Redoximorphic Features<br>(mottles) |              |         | Soil Texture<br>(USDA) | Coarse Fragments<br>% by Volume |                     | Soil<br>Structure | Soil<br>Consistence<br>(Moist) | Other |
|-------------|------------------------|--|-------------------------------------|--------------|---------|------------------------|---------------------------------|---------------------|-------------------|--------------------------------|-------|
|             |                        |  | Depth                               | Color        | Percent |                        | Gravel                          | Cobbles &<br>Stones |                   |                                |       |
| 10          | A                      | 10YR 3/3                               |                                     |              |         | S.L.                   |                                 |                     | CRUMB             | FRIABLE                        |       |
| 20          | Bw                     | 10YR 5/8                               |                                     |              |         | L.S.                   |                                 |                     | S.A.B.            | FRIABLE                        |       |
| 52          | C1                     | 10YR 5/6                               | 52"                                 | 7.5YR<br>6/8 | 5%      | F-M S                  |                                 |                     | MASSIVE           | FRIABLE                        |       |
| 84          | C2                     | 10YR 5/3                               |                                     | 7.5YR<br>6/1 |         | F.S.L.                 |                                 |                     | MASSIVE           | FRIABL                         |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |

Additional Notes:

NO REFUSAL, G.W.O. @ 60"

NOT WITNESSED BY BOH AGENT





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**F. Certification**

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.



Signature of Soil Evaluator

WILLIAM J. "JACK" MALONEY, JR.

Typed or Printed Name of Soil Evaluator / License #

BILL BROOKINGS

Name of Board of Health Witness

6/29/15

Date

7/2014

Date of Soil Evaluator Exam

NABOH FOR TOWN OF BOLTON

Board of Health

**Note:** In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Percolation Test**  
Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



**A. Site Information**

STEVE ELKINSON

Owner Name

STILL RIVER ROAD

Street Address or Lot #

BOLTON

City/Town

MA

State

01740

Zip Code

STEVE ELKINSON

Contact Person (if different from Owner)

Telephone Number

**B. Test Results**

|                    | 6/26/15<br>Date                                  | 10:15 AM<br>Time | 6/26/15<br>Date                                  | 10:15 AM<br>Time |
|--------------------|--|------------------|--|------------------|
| Observation Hole # | PA/PB  |                  | PC/PD  |                  |
| Depth of Perc      | 30"/45"  |                  | 44"/46"  |                  |
| Start Pre-Soak     | 10:45/10:46                                      |                  | 10:47/10:48                                      |                  |
| End Pre-Soak       | UNABLE   |                  | UNABLE   |                  |
| Time at 12"        | TO   |                  | TO   |                  |
| Time at 9"         | SATURATE   |                  | SATURATE   |                  |
| Time at 6"         |  |                  |  |                  |
| Time (9"-6")       |  |                  |  |                  |
| Rate (Min./Inch)   | 2 MPI  |                  | 2 MPI  |                  |
|                    | Test Passed: <input checked="" type="checkbox"/> |                  | Test Passed: <input checked="" type="checkbox"/> |                  |
|                    | Test Failed: <input type="checkbox"/>            |                  | Test Failed: <input type="checkbox"/>            |                  |

WILLIAM J. "JACK" MALONEY, JR

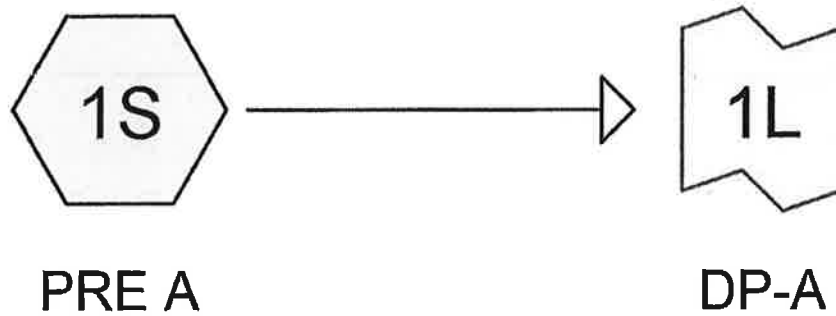
Test Performed By:

BILL BROOKINGS, NABOH AGENT-TOWN OF BOLTON

Witnessed By:

Comments:





**Routing Diagram for 3339-PRE**  
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Type III 24-hr 2-year Rainfall=3.10"

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Page 3

**Summary for Subcatchment 1S: PRE A**

Runoff = 0.93 cfs @ 12.13 hrs, Volume= 0.081 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-year Rainfall=3.10"

| Area (sf) | CN | Description               |
|-----------|----|---------------------------|
| 42,030    | 30 | Meadow, non-grazed, HSG A |
| 32,150    | 30 | Woods, Good, HSG A        |
| 39,848    | 71 | Meadow, non-grazed, HSG C |
| 12,759    | 70 | Woods, Good, HSG C        |
| 126,787   |    | Weighted Average          |
| 126,787   |    | 100.00% Pervious Area     |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---|
| 5.0      | 50            | 0.0280        | 0.17              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10"                |
| 0.3      | 18            | 0.0220        | 1.04              |                | Shallow Concentrated Flow,<br>Short Grass Pasture Kv= 7.0 fps |
| 2.8      | 114           | 0.0190        | 0.69              |                | Shallow Concentrated Flow,<br>Woodland Kv= 5.0 fps            |
| 8.1      | 182           | Total         |                   |                |   |

**Summary for Link 1L: DP-A**

Inflow Area = 2.911 ac, 0.00% Impervious, Inflow Depth = 0.33" for 2-year event

Inflow = 0.93 cfs @ 12.13 hrs, Volume= 0.081 af

Primary = 0.93 cfs @ 12.13 hrs, Volume= 0.081 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



**3339-PRE**

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Type III 24-hr 10-year Rainfall=4.50"

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**Summary for Subcatchment 1S: PRE A**

Runoff = 2.18 cfs @ 12.12 hrs, Volume= 0.174 af, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-year Rainfall=4.50"

| Area (sf) | CN | Description               |
|-----------|----|---------------------------|
| 42,030    | 30 | Meadow, non-grazed, HSG A |
| 32,150    | 30 | Woods, Good, HSG A        |
| 39,848    | 71 | Meadow, non-grazed, HSG C |
| 12,759    | 70 | Woods, Good, HSG C        |
| 126,787   |    | Weighted Average          |
| 126,787   |    | 100.00% Pervious Area     |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---|
| 5.0      | 50            | 0.0280        | 0.17              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10"                |
| 0.3      | 18            | 0.0220        | 1.04              |                | Shallow Concentrated Flow,<br>Short Grass Pasture Kv= 7.0 fps |
| 2.8      | 114           | 0.0190        | 0.69              |                | Shallow Concentrated Flow,<br>Woodland Kv= 5.0 fps            |
| 8.1      | 182           | Total         |                   |                |   |

**Summary for Link 1L: DP-A**

Inflow Area = 2.911 ac, 0.00% Impervious, Inflow Depth = 0.72" for 10-year event  
 Inflow = 2.18 cfs @ 12.12 hrs, Volume= 0.174 af  
 Primary = 2.18 cfs @ 12.12 hrs, Volume= 0.174 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



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Type III 24-hr 100-year Rainfall=7.00"

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**Summary for Subcatchment 1S: PRE A**

Runoff = 4.80 cfs @ 12.12 hrs, Volume= 0.402 af, Depth= 1.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-year Rainfall=7.00"

| Area (sf) | CN | Description               |
|-----------|----|---------------------------|
| 42,030    | 30 | Meadow, non-grazed, HSG A |
| 32,150    | 30 | Woods, Good, HSG A        |
| 39,848    | 71 | Meadow, non-grazed, HSG C |
| 12,759    | 70 | Woods, Good, HSG C        |
| 126,787   |    | Weighted Average          |
| 126,787   |    | 100.00% Pervious Area     |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---|
| 5.0      | 50            | 0.0280        | 0.17              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10"                |
| 0.3      | 18            | 0.0220        | 1.04              |                | Shallow Concentrated Flow,<br>Short Grass Pasture Kv= 7.0 fps |
| 2.8      | 114           | 0.0190        | 0.69              |                | Shallow Concentrated Flow,<br>Woodland Kv= 5.0 fps            |
| 8.1      | 182           | Total         |                   |                |   |

**Summary for Link 1L: DP-A**

Inflow Area = 2.911 ac, 0.00% Impervious, Inflow Depth = 1.66" for 100-year event  
 Inflow = 4.80 cfs @ 12.12 hrs, Volume= 0.402 af  
 Primary = 4.80 cfs @ 12.12 hrs, Volume= 0.402 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



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**APPENDIX E**

*Proposed Conditions – Hydrologic Calculations*



**3339-POST**

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Type III 24-hr 2-year Rainfall=3.10"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: POST A**Runoff Area=101,027 sf 3.20% Impervious Runoff Depth=0.51"  
Flow Length=60' Slope=0.0220 '/' Tc=12.3 min CN=WQ Runoff=0.99 cfs 0.099 af**Subcatchment 2S: POST B**Runoff Area=20,585 sf 61.82% Impervious Runoff Depth=1.77"  
Tc=6.0 min CN=WQ Runoff=0.86 cfs 0.070 af**Subcatchment 3S: POST C**Runoff Area=5,198 sf 14.47% Impervious Runoff Depth=0.41"  
Tc=6.0 min CN=WQ Runoff=0.05 cfs 0.004 af**Pond 1P: DCB-1**Peak Elev=232.02' Inflow=0.91 cfs 0.074 af  
18.0" Round Culvert n=0.013 L=83.0' S=0.0051 '/' Outflow=0.91 cfs 0.074 af**Pond 2P: INFIL. A**Peak Elev=231.33' Storage=0.024 af Inflow=0.91 cfs 0.074 af  
Outflow=0.12 cfs 0.074 af**Pond 3P: TRENCH DRAIN**Peak Elev=232.21' Storage=0.000 af Inflow=0.05 cfs 0.004 af  
4.5" Round Culvert n=0.013 L=42.0' S=0.0105 '/' Outflow=0.05 cfs 0.004 af**Link 1L: DP-A**Inflow=0.99 cfs 0.099 af  
Primary=0.99 cfs 0.099 afTotal Runoff Area = 2.911 ac Runoff Volume = 0.173 af Average Runoff Depth = 0.71"  
86.82% Pervious = 2.528 ac 13.18% Impervious = 0.384 ac



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Type III 24-hr 2-year Rainfall=3.10"

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**Summary for Subcatchment 3S: POST C**

Runoff = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Depth= 0.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-year Rainfall=3.10"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 752       | 98 | Paved parking, HSG A          |
| 4,446     | 39 | >75% Grass cover, Good, HSG A |
| 5,198     |    | Weighted Average              |
| 4,446     |    | 85.53% Pervious Area          |
| 752       |    | 14.47% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Summary for Pond 1P: DCB-1**

Inflow Area = 0.592 ac, 52.27% Impervious, Inflow Depth = 1.50" for 2-year event  
 Inflow = 0.91 cfs @ 12.09 hrs, Volume= 0.074 af  
 Outflow = 0.91 cfs @ 12.09 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.91 cfs @ 12.09 hrs, Volume= 0.074 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 232.02' @ 12.09 hrs  
 Flood Elev= 234.52'

| Device | Routing | Invert  | Outlet Devices  |
|--------|---------|---------|---|
| #1     | Primary | 231.52' | <b>18.0" Round Culvert</b><br>L= 83.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 231.52' / 231.10' S= 0.0051' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

Primary OutFlow Max=0.88 cfs @ 12.09 hrs HW=232.01' (Free Discharge)  
 1=Culvert (Barrel Controls 0.88 cfs @ 2.63 fps)

**Summary for Pond 2P: INFIL. A**

Inflow Area = 0.592 ac, 52.27% Impervious, Inflow Depth = 1.50" for 2-year event  
 Inflow = 0.91 cfs @ 12.09 hrs, Volume= 0.074 af  
 Outflow = 0.12 cfs @ 12.62 hrs, Volume= 0.074 af, Atten= 87%, Lag= 31.7 min  
 Discarded = 0.12 cfs @ 12.62 hrs, Volume= 0.074 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 231.33' @ 12.62 hrs Surf.Area= 0.032 ac Storage= 0.024 af  
 Flood Elev= 234.55' Surf.Area= 0.032 ac Storage= 0.076 af

Plug-Flow detention time= 61.8 min calculated for 0.074 af (100% of inflow)



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Type III 24-hr 2-year Rainfall=3.10"

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**Summary for Link 1L: DP-A**

Inflow Area = 2.319 ac, 3.20% Impervious, Inflow Depth = 0.51" for 2-year event  
Inflow = 0.99 cfs @ 12.19 hrs, Volume= 0.099 af  
Primary = 0.99 cfs @ 12.19 hrs, Volume= 0.099 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



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Type III 24-hr 10-year Rainfall=4.50"

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**Summary for Subcatchment 1S: POST A**

Runoff = 2.17 cfs @ 12.18 hrs, Volume= 0.204 af, Depth= 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-year Rainfall=4.50"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 684       | 98 | Paved parking, HSG A          |
| 2,550     | 98 | Roofs, HSG A                  |
| 18,011    | 39 | >75% Grass cover, Good, HSG A |
| 7,315     | 30 | Meadow, non-grazed, HSG A     |
| 19,860    | 30 | Woods, Good, HSG A            |
| 39,848    | 71 | Meadow, non-grazed, HSG C     |
| 12,759    | 70 | Woods, Good, HSG C            |
| 101,027   |    | Weighted Average              |
| 97,793    |    | 96.80% Pervious Area          |
| 3,234     |    | 3.20% Impervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                |
|----------|---------------|---------------|-------------------|----------------|--|
| 12.1     | 50            | 0.0220        | 0.07              |                | Sheet Flow,                                |
|          |               |               |                   |                | Woods: Light underbrush n= 0.400 P2= 3.10" |
| 0.2      | 10            | 0.0220        | 0.74              |                | Shallow Concentrated Flow,                 |
|          |               |               |                   |                | Woodland Kv= 5.0 fps                       |
| 12.3     | 60            | Total         |                   |                |  |

**Summary for Subcatchment 2S: POST B**

Runoff = 1.25 cfs @ 12.09 hrs, Volume= 0.105 af, Depth= 2.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-year Rainfall=4.50"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 10,050    | 98 | Paved parking, HSG A          |
| 2,676     | 98 | Roofs, HSG A                  |
| 7,859     | 39 | >75% Grass cover, Good, HSG A |
| 20,585    |    | Weighted Average              |
| 7,859     |    | 38.18% Pervious Area          |
| 12,726    |    | 61.82% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |



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Type III 24-hr 10-year Rainfall=4.50"

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Center-of-Mass det. time= 96.6 min ( 853.5 - 756.9 )

| Volume | Invert  | Avail.Storage | Storage Description  |
|--------|---------|---------------|--|
| #1A    | 230.17' | 0.032 af      | <b>30.50'W x 45.50'L x 3.88'H Field A</b><br>0.123 af Overall - 0.045 af Embedded = 0.079 af x 40.0% Voids   |
| #2A    | 230.67' | 0.045 af      | <b>Cultec R-330XLHD x 36 Inside #1</b><br>Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf<br>Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap<br>Row Length Adjustment= +1.50' x 7.45 sf x 6 rows |
|        |         | 0.076 af      | Total Available Storage  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert  | Outlet Devices   |
|--------|-----------|---------|--|
| #1     | Discarded | 230.17' | <b>2.410 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 228.17' |

**Discarded OutFlow** Max=0.15 cfs @ 12.77 hrs HW=231.95' (Free Discharge)  
 ↑1=Exfiltration ( Controls 0.15 cfs)

**Summary for Pond 3P: TRENCH DRAIN**

Inflow Area = 0.119 ac, 14.47% Impervious, Inflow Depth = 0.71" for 10-year event  
 Inflow = 0.07 cfs @ 12.09 hrs, Volume= 0.007 af  
 Outflow = 0.07 cfs @ 12.09 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.1 min  
 Primary = 0.07 cfs @ 12.09 hrs, Volume= 0.007 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 232.25' @ 12.09 hrs Surf.Area= 0.000 ac Storage= 0.000 af  
 Flood Elev= 233.00' Surf.Area= 0.000 ac Storage= 0.000 af

Plug-Flow detention time= 0.7 min calculated for 0.007 af (100% of inflow)  
 Center-of-Mass det. time= 0.7 min ( 790.9 - 790.2 )

| Volume | Invert  | Avail.Storage | Storage Description                        |
|--------|---------|---------------|--|
| #1     | 232.06' | 0.000 af      | <b>0.33'W x 13.33'L x 0.90'H Prismaoid</b> |

| Device | Routing | Invert  | Outlet Devices   |
|--------|---------|---------|--|
| #1     | Primary | 232.06' | <b>4.5" Round Culvert</b><br>L= 42.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 232.06' / 231.62' S= 0.0105 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.11 sf |

**Primary OutFlow** Max=0.07 cfs @ 12.09 hrs HW=232.24' (Free Discharge)  
 ↑1=Culvert (Barrel Controls 0.07 cfs @ 1.97 fps)



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Type III 24-hr 100-year Rainfall=7.00"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: POST A**Runoff Area=101,027 sf 3.20% Impervious Runoff Depth=2.34"  
Flow Length=60' Slope=0.0220 '/' Tc=12.3 min CN=WQ Runoff=4.76 cfs 0.451 af**Subcatchment 2S: POST B**Runoff Area=20,585 sf 61.82% Impervious Runoff Depth=4.47"  
Tc=6.0 min CN=WQ Runoff=2.02 cfs 0.176 af**Subcatchment 3S: POST C**Runoff Area=5,198 sf 14.47% Impervious Runoff Depth=1.64"  
Tc=6.0 min CN=WQ Runoff=0.15 cfs 0.016 af**Pond 1P: DCB-1**Peak Elev=232.32' Inflow=2.17 cfs 0.192 af  
18.0" Round Culvert n=0.013 L=83.0' S=0.0051 '/' Outflow=2.17 cfs 0.192 af**Pond 2P: INFIL. A**Peak Elev=233.96' Storage=0.075 af Inflow=2.17 cfs 0.192 af  
Outflow=0.22 cfs 0.192 af**Pond 3P: TRENCH DRAIN**Peak Elev=232.34' Storage=0.000 af Inflow=0.15 cfs 0.016 af  
4.5" Round Culvert n=0.013 L=42.0' S=0.0105 '/' Outflow=0.15 cfs 0.016 af**Link 1L: DP-A**Inflow=4.76 cfs 0.451 af  
Primary=4.76 cfs 0.451 afTotal Runoff Area = 2.911 ac Runoff Volume = 0.644 af Average Runoff Depth = 2.65"  
86.82% Pervious = 2.528 ac 13.18% Impervious = 0.384 ac



**3339-POST**

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Type III 24-hr 100-year Rainfall=7.00"

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**Summary for Subcatchment 3S: POST C**

Runoff = 0.15 cfs @ 12.11 hrs, Volume= 0.016 af, Depth= 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-year Rainfall=7.00"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 752       | 98 | Paved parking, HSG A          |
| 4,446     | 39 | >75% Grass cover, Good, HSG A |
| 5,198     |    | Weighted Average              |
| 4,446     |    | 85.53% Pervious Area          |
| 752       |    | 14.47% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Summary for Pond 1P: DCB-1**

Inflow Area = 0.592 ac, 52.27% Impervious, Inflow Depth = 3.90" for 100-year event  
 Inflow = 2.17 cfs @ 12.09 hrs, Volume= 0.192 af  
 Outflow = 2.17 cfs @ 12.09 hrs, Volume= 0.192 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.17 cfs @ 12.09 hrs, Volume= 0.192 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 232.32' @ 12.09 hrs  
 Flood Elev= 234.52'

| Device | Routing | Invert  | Outlet Devices  |
|--------|---------|---------|---|
| #1     | Primary | 231.52' | <b>18.0" Round Culvert</b><br>L= 83.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 231.52' / 231.10' S= 0.0051 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

Primary OutFlow Max=2.12 cfs @ 12.09 hrs HW=232.31' (Free Discharge)  
 1=Culvert (Barrel Controls 2.12 cfs @ 3.25 fps)

**Summary for Pond 2P: INFIL. A**

Inflow Area = 0.592 ac, 52.27% Impervious, Inflow Depth = 3.90" for 100-year event  
 Inflow = 2.17 cfs @ 12.09 hrs, Volume= 0.192 af  
 Outflow = 0.22 cfs @ 12.95 hrs, Volume= 0.192 af, Atten= 90%, Lag= 51.8 min  
 Discarded = 0.22 cfs @ 12.95 hrs, Volume= 0.192 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 233.96' @ 12.95 hrs Surf.Area= 0.032 ac Storage= 0.075 af  
 Flood Elev= 234.55' Surf.Area= 0.032 ac Storage= 0.076 af

Plug-Flow detention time= 153.8 min calculated for 0.192 af (100% of inflow)



**3339-POST***Type III 24-hr 100-year Rainfall=7.00"*

Prepared by Microsoft

Printed 7/10/2018

HydroCAD® 10.00-17 s/n 03590 © 2016 HydroCAD Software Solutions LLC

Page 16

**Summary for Link 1L: DP-A**

Inflow Area = 2.319 ac, 3.20% Impervious, Inflow Depth = 2.34" for 100-year event  
Inflow = 4.76 cfs @ 12.17 hrs, Volume= 0.451 af  
Primary = 4.76 cfs @ 12.17 hrs, Volume= 0.451 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



## Subsurface Infiltration

### Stormwater Recharge Calculations

#### CALCULATIONS

##### Recharge Volume, Rv:

$$R_v = A_i \times F$$

| Hydrologic Soil Group | Impervious Area (Ac) <sup>1</sup> | Target Depth (F) | Recharge Volume (Rv) Ac-feet |
|-----------------------|-----------------------------------|------------------|------------------------------|
| A                     | 0.384                             | 0.6              | 0.019                        |
|                       |                                   |                  |                              |
|                       |                                   |                  |                              |
|                       |                                   |                  |                              |
| Total                 | 0.384                             |                  | 0.019                        |

Total Recharge Volume Required = 0.019 Ac-ft  
Total Recharge Volume Required (Rv) = 836 C.ft

##### Required Sediment Forebay vol, Fv:

$$F_v = A_i (\text{cu. ft}) \times 0.1 \text{ inch of impervious area}$$

<sup>1</sup> Imp. area captured by ponds, Ap = 0.309 Ac  
Required Sediment Forebay vol, Fv = 112 C.ft

Sediment Volume Provided = 115.5 C.ft

\*Two Cullec 330 XLHD Chambers

##### Capture Area Adjustment, Rvadj:

$$R_{vadj} = \frac{A_t}{A_i} \times R_v$$

<sup>1</sup> Imp. area captured by ponds, Ap = 0.309 Ac

<sup>1</sup> Total impervious area on site, At = 0.384 Ac

Recharge volume required, Rv = 836 C.ft

Capture Rate = 80% OK

Capture Area Adjustment Factor = 1.24

Adjusted Recharge Volume Required Rvadj = 1,039 C.ft

<sup>1</sup> Total Recharge Volume Provided = 3,317.8 C.ft

#### NOTES:

##### Input Values

<sup>1</sup> = Refer to Proposed Conditions HydroCAD modeling report

#### REFERENCES

Table 2.3.2: Recharge Target Depth by Hydrologic Soil Group

| NRCS Hydrologic Soil Group | Approx. Soil Texture | Target Depth Factor (F) |
|----------------------------|----------------------|-------------------------|
| A                          | sand                 | 0.6 inch                |
| B                          | loam                 | 0.35 inch               |
| C                          | silty loam           | 0.25 inch               |
| D                          | clay                 | 0.1 inch                |



## Subsurface Infiltration

### Drawdown Calculations

#### CALCULATIONS

#### REFERENCES

##### Proposed Infiltration Area Calculations:

$$\text{Drawdown} = \frac{R_v}{(\text{Rawls Rate})(\text{Bottom Area})}$$

##### Drawdown Calculations:

Soil Texture: 2 Loamy Sand

<sup>1</sup>Bottom Surface Area (A): 1,401 SF

Rawls Rate: 2.41 in/hr

Total Adjusted Recharge Volume Required = 1,039 C.ft

Drawdown: 3.69 hr

Drawdown is less than 72  
Hours as Required

Table 2.3.3: 1982 Rawls Rates

| Texture Class     | NRCS<br>Hydrologic<br>Soil Group | Infiltration Rate |
|-------------------|----------------------------------|-------------------|
| 1 Sand            | A                                | 8.27 in/hr        |
| 2 Loamy Sand      | A                                | 2.41 in/hr        |
| 3 Sandy Loam      | B                                | 1.02 in/hr        |
| 4 Loam            | B                                | 0.52 in/hr        |
| 5 Silt Loam       | C                                | 0.27 in/hr        |
| 6 Sandy Clay Loam | C                                | 0.17 in/hr        |
| 7 Clay Loam       | D                                | 0.09 in/hr        |
| 8 Silty Clay Loam | D                                | 0.06 in/hr        |
| 9 Sandy Clay      | D                                | 0.05 in/hr        |
| 10 Silty Clay     | D                                | 0.04 in/hr        |
| 11 Clay           | D                                | 0.02 in/hr        |

##### NOTES:

###### Input Values

<sup>1</sup> = Refer to bottom surface area on the Site Plans. A non-reclangular infiltration area is proposed



7/10/2018

Mound Beneath Rectangular Recharge Area :: Aquifer Test Forum

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# MassDEP

## Well Completion Report

### WELL LOCATION

GPS North: 42.472610      GPS West: -71.628586      Assessors Map:  
 Address: 438 Still River Road      Assessors Lot:  
 Sub Division:      Permit Number:  
 City/Town: BOLTON      Date issued:  
 Board Of Health Permit Obtained:

| Work Performed | Well Type | Drilling Method Overburden | Drilling Method Bedrock |
|----------------|-----------|----------------------------|-------------------------|
|                | Domestic  | Air Rotary                 | Air Rotary              |

### ADDITIONAL WELL INFORMATION

Developed: No  
 Disinfected: No  
 Total Well Depth: 460.00  
 Fracture Enhancement: No  
 Well Seal Type:  
 Depth to Bedrock: 105.00

### PERMANENT PUMP (IF AVAILABLE)

Pump Description:  
 Type:  
 Nominal Pump Capacity:  
 Intake Depth:  
 Horsepower:  
 Comments: Gravel Pack Well: N

### CASING

| From(ft) | To(ft) | Type | Thickness | Diameter |
|----------|--------|------|-----------|----------|
| 0.00     | 120.00 |      |           | 6        |

### SCREEN

| From(ft) | To(ft) | Type | slotsize | Diameter |
|----------|--------|------|----------|----------|
|----------|--------|------|----------|----------|

### WELL SEAL / FILTER PACK / ABANDONMENT MATERIAL

| From(ft) | To(ft) | Material Description | Purpose |
|----------|--------|----------------------|---------|
|----------|--------|----------------------|---------|

### STATIC WATER LEVEL (ALL WELLS)

| Date Measured | Depth Below Ground Surface |
|---------------|----------------------------|
| 12/22/1987    | 20.00                      |

### WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)

| Date       | Method | Yield(GPM) | Time Pumped (hrs & min) | Pumping Level (Ft. BGS) | Time To Recover (Hrs & min) | Recovery |
|------------|--------|------------|-------------------------|-------------------------|-----------------------------|----------|
| 12/22/1987 |        | 4.00       |                         |                         |                             |          |

### OVER BURDEN

| From(ft) | To(ft) | Lithology | Color | Comment | Water Zone | Loss / Add of Fluid | Drill Stem Drop | Drill Rate |
|----------|--------|-----------|-------|---------|------------|---------------------|-----------------|------------|
| 0.00     | 10.00  |           |       | Sand    |            |                     |                 |            |
| 10.00    | 30.00  | Clay      |       |         |            |                     |                 |            |
| 30.00    | 50.00  | Clay      |       |         |            |                     |                 |            |
| 50.00    | 70.00  | Clay      |       |         |            |                     |                 |            |
| 70.00    | 90.00  | Clay      |       |         |            |                     |                 |            |
| 90.00    | 105.00 | Clay      |       |         |            |                     |                 |            |

### BEDROCK

| From(ft) | To(ft) | Lithology | Comment | Water Zone | Drill Stem Drop | Extra Large | Drill Rate | Rust Stain | Loss / Add Of Fluid | # of Fract Per Ft |
|----------|--------|-----------|---------|------------|-----------------|-------------|------------|------------|---------------------|-------------------|
|----------|--------|-----------|---------|------------|-----------------|-------------|------------|------------|---------------------|-------------------|



Stormwater Report  
Still River Commons – Bolton, MA

June 27, 2018  
Still River Road Development, LLC

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**APPENDIX G**

*Operation and Maintenance Plan*



**TABLE OF CONTENTS:**

**1.0 Project Narrative**

- 1.1 Overview of Drainage System*
- 1.2 Routine Operation & Maintenance Tasks*
- 1.3 O&M Schedule*

**2.0 Appendices**

- Appendix A – Cultec Operation & Maintenance*
- Appendix B – Stormwater Management System Owners/Operators*



accordance with local, state and federal guidelines for hazardous waste.

#### *1.2.2 Drain Manholes*

Manholes shall be inspected semi-annually for signs of wear, settling, cracking or other fatigue. Manhole casting should be inspected for signs of root intrusion, or significant water infiltration. Weirs shall be inspected for signs of cracking or other fatigue. Manhole sumps should be checked for silt /sediment buildup and cleaned as necessary. Cleaning should be performed by a vacuum truck. Manholes should be resealed as required and outlets should be inspected incidentally with all structure inspections.

#### *1.2.3 Storm Drain Lines*

Storm drainage inlets and outlets should be inspected incidentally with all structure inspections. Evidence of debris intrusion or excessive siltation or sedimentation could result in the need to clean a storm drain line. Flushing or jetting should be performed as required. All flushing and jetting should be performed in the direction away from any outlet devices. A vacuum truck should be used at the opposite end of the flushing or jetting to remove any silt or sediment that is cleaned from the storm drain.

#### *1.2.4 Deep Sump Catch Basin*

The deep sump catch basin shall be inspected at least semi-annually for signs of wear, settling, cracking or other fatigue. Catch basin castings should be inspected for signs of root intrusion, or significant water infiltration. Catch basin sump should be checked for silt/sediment buildup and cleaned as necessary. Cleaning should be performed by a vacuum truck. Catch basins should be resealed as required and outlets should be inspected incidentally with all structure inspections.

#### *1.2.5 Subsurface Infiltration System*

The subsurface infiltration system should be monitored and maintained regularly to ensure no obstructions in the systems are present. Any depressions noticed in the areas could indicate that the system has collapsed and should be inspected immediately. The system is equipped with an inspection port to monitor the buildup of sedimentation. If the depth of sedimentation is in excess of the manufacturer's guidelines, the system will need to be cleaned out with high pressure water. The high-pressure water should be used on one end and a vacuum truck will be used on the opposite end to remove any silt or sediment that is cleaned from the chambers. Other maintenance will include checking the inlets and outlet for debris, survey the surrounding area for depressions and confirm no

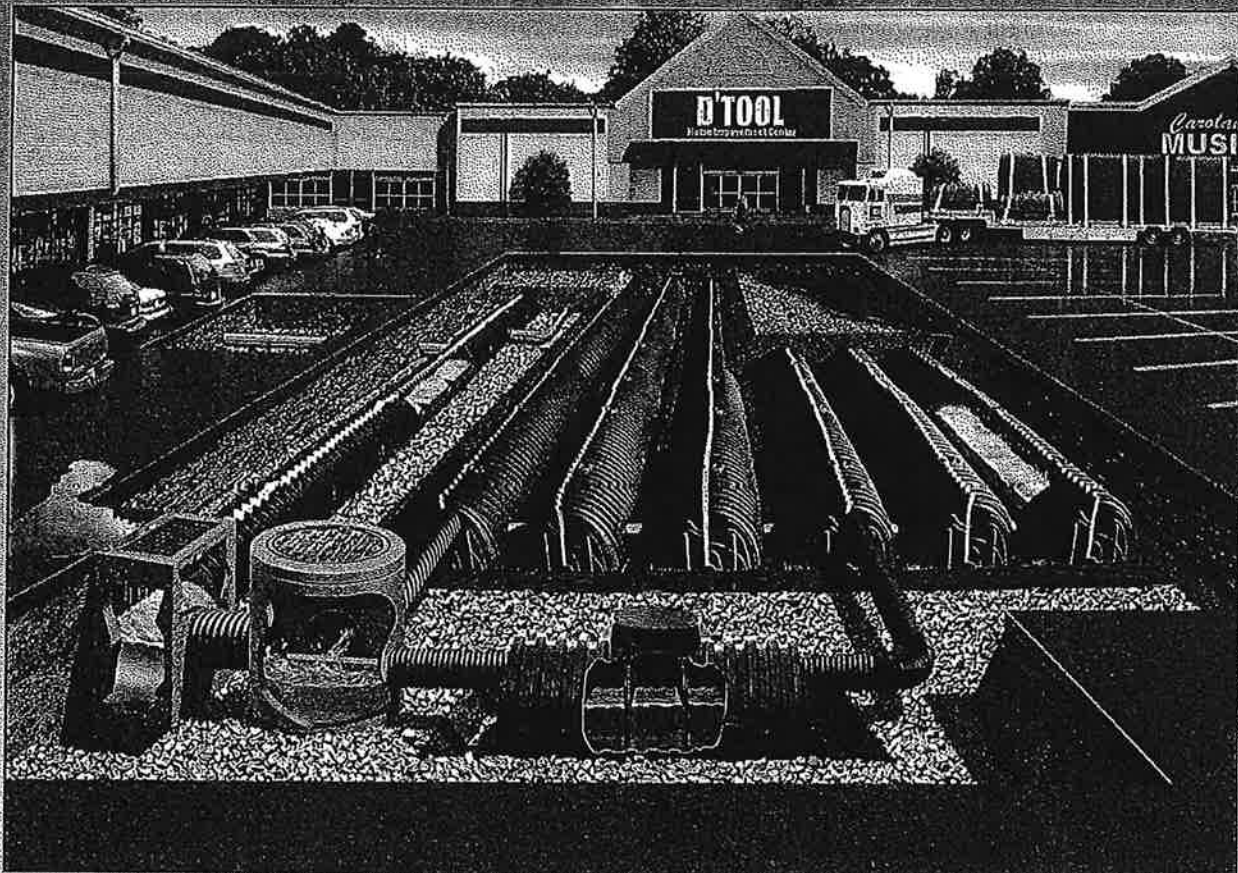


*O&M Schedule*

| O&M Task |  | Monthly          | Quarterly | Spring | Fall | 2-years | As-required |
|----------|--|------------------|-----------|--------|------|---------|-------------|
| 1.       | Street Sweeping                              |                  |           | X      | X    |         |             |
| 2.       | Drain Manholes                               |                  |           |        |      |         |             |
|          | <i>Inspect Rims</i>                          |                  |           | X      | X    |         |             |
|          | <i>Inspect inside/inlet and outlet pipes</i> |                  |           |        |      | X       |             |
|          | <i>Remove sediment</i>                       |                  |           |        |      | X       | X           |
| 3.       | Storm drain Lines                            |                  |           |        |      |         |             |
|          | <i>Inspection</i>                            |                  |           | X      |      |         | X           |
|          | <i>Clean</i>                                 |                  |           |        |      |         | X           |
| 4.       | Catch Basins                                 |                  |           |        |      |         |             |
|          | <i>Inspect Rims</i>                          |                  |           | X      | X    |         |             |
|          | <i>Inspect inside/inlet and outlet pipes</i> |                  |           |        |      | X       |             |
|          | <i>Remove sediment</i>                       |                  |           |        |      | X       | X           |
| 5.       | Underground Infiltration Area                | (See appendix A) |           |        |      |         |             |
| 6.       | Trench Drain                                 |                  |           |        |      |         |             |
|          | <i>Inspection</i>                            |                  |           |        |      |         | X           |
|          | <i>Clean</i>                                 |                  |           |        |      |         | X           |



# Contactor® & Recharger® Stormwater Chambers The Chamber With The Stripe®



## Operation and Maintenance Guidelines





# Operation & Maintenance



## 2. StormFilter Access

Remove the manhole cover to allow access to the unit. Typically a 30-inch (750 mm) pipe is used as a riser from the StormFilter to the surface. As in the case with manhole access, this access point requires a technician trained in confined space entry with proper gas detection equipment. This individual must be equipped with the proper safety equipment for entry into the StormFilter. The technician will be lowered onto the StormFilter unit. The hatch on the unit must be removed. Inside the unit are two filters which may be removed according to StormFilter maintenance guidelines. Once these filters are removed the Inspector can enter the StormFilter unit to launch the CCTV camera robot.

- C. The Inlet row of the CULTEC system is placed on a polyethylene liner to prevent scouring of the washed stone beneath this row. This also facilitates the flushing of this row with high pressure water through a culvert cleaning nozzle. The nozzle is deployed through a manhole or the StormFilter and extended to the end of the row. The water is turned on and the inlet row is back-flushed into the manhole or StormFilter. This water is to be removed from the manhole or StormFilter using a vacuum truck.

## III. Maintenance Guidelines

The following guidelines shall be adhered to for the operation and maintenance of the CULTEC stormwater management system:

- A. The owner shall keep a maintenance log which shall include details of any events which would have an effect on the system's operational capacity.
- B. The operation and maintenance procedure shall be reviewed periodically and changed to meet site conditions.
- C. Maintenance of the stormwater management system shall be performed by qualified workers and shall follow applicable occupational health and safety requirements.
- D. Debris removed from the stormwater management system shall be disposed of in accordance with applicable laws and regulations.

## IV. Suggested Maintenance Schedules

### A. Minor Maintenance

The following suggested schedule shall be followed for routine maintenance during the regular operation of the stormwater system:

| Frequency   | Action   |
|---|--|
| Monthly in first year                                       | Check inlets and outlets for clogging and remove any debris as required. |
| Spring and Fall   | Check inlets and outlets for clogging and remove any debris as required. |
| One year after commissioning and every third year following | Check inlets and outlets for clogging and remove any debris as required. |

### B. Major Maintenance

The following suggested maintenance schedule shall be followed to maintain the performance of the CULTEC stormwater management chambers. Additional work may be necessary due to insufficient performance and other issues that might be found during the inspection of the stormwater management chambers. (See table on next page)



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**APPENDIX B**

*Stormwater Management System Owners/Operators*



Stormwater Report  
Still River Commons – Bolton, MA

June 27, 2018  
Still River Road Development, LLC

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**APPENDIX H**

*Long Term Pollution Prevention Plan*



## **1.0 Summary**

This Long-Term Pollution Prevention Plan (LTPPP) has been prepared by Ducharme & Dillis Civil Design Group, Inc. pursuant to the Massachusetts Stormwater Regulations. The proposed project includes the development of 4 duplex-style apartments with a shared driveway. The project is being proposed pursuant to the Massachusetts General Laws Chapter 40B.

The layout of the proposed site has been carefully planned to reduce the amount of stormwater leaving the site. The stormwater management system has been designed in accordance with the Massachusetts Stormwater Regulations to provide pretreatment of the stormwater prior to discharge.

## **2.0 Spill Prevention Plan**

No hazardous materials other than normal cleaning items are expected to be stored on site after the construction period has ended.

It is expected that normal DEP notification procedures would be triggered for major spills such as heating oil or propane and natural gas leaks.

## **3.0 Stormwater System O&M**

A Stormwater Operation & Maintenance plan has been prepared for the proposed stormwater management system. Refer to this document for details pertaining to the required inspections, routine maintenance and operation details.

## **4.0 Fertilizers, herbicides and pesticides**

Application of fertilizer, herbicides and pesticides shall be performed in a manner consistent with the industry standards for the application.

No application of chemicals is to be performed within the stormwater management areas on the site.

## **5.0 Snow/Salt Management**

### **5.1 Snow Plowing**

It is expected that the site will be plowed by a private contractor. Refer to the Erosion Control Plans for snow storage locations

### **5.2 Salt/Sand Usage**

It is expected that sanding and salting will be performed on an infrequent basis



## Exhibit L

### Requested Exceptions



- To allow leaching facilities servicing a separate building to be located within 30' of each other (20' provided) as allowed by 310 CMR 15

### **Well Regulations**

A waiver from section 4.1 entitled "Well Location Requirements" is requested. More specifically, the following relief from section 4.1 is requested, to allow Lot 2B well to be located within 150' of a leaching facility in soils with percolation rates of two minutes per inch or less (122' provided).

### **Zoning Bylaws**

#### **§250-12 Zoning**

An exception is being requested, from section §250-12, as multiple duplex structures as proposed in the Comprehensive Permit is a permit/use that is not specifically stated as being allowed in the By-laws.

#### **§250-13 Dimensional Regulations**

An exception is being requested from this section to allow for the Development of the structures on the lot with a side yard setback (interior to the lots that are being created) of 6' on Lot 2B and 12.8' on lot 2C.

#### **§250-13 C. One Building Per Lot**

An exception is being requested, from section §250-13 (c) to allow for multiple principle structures on a lot.

#### **§250-13 G. Lot Shape**

An exception is being requested, from section §250-13(G To allow lot 2B to have a shape factor of .4 where .5 is required.

#### **§250-17 – Driveways and parking**

An exception is requested to allow a shared driveway to access eight (8) dwellings on two (2) lots.



# Worcester South District Registry of Deeds Electronically Recorded Document

This is the first page of the document – Do not remove

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## Recording Information

Document Number : 6786  
Document Type : DEED  
Recorded Date : January 22, 2018  
Recorded Time : 02:27:05 PM

Recorded Book and Page : 58346 / 149  
Number of Pages(including cover sheet) : 3  
Receipt Number : 1053653  
Recording Fee (including excise) : \$909.32

\*\*\*\*\*  
MASSACHUSETTS EXCISE TAX  
Worcester District ROD #20 001  
Date: 01/22/2018 02:27 PM  
Ctrl# 178443 27445 Doc# 00006786  
Fee: \$784.32 Cons: \$172,000.00  
\*\*\*\*\*

Worcester South District Registry of Deeds  
Anthony J. Vigliotti, Register  
90 Front St  
Worcester, MA 01608  
(508) 798-7717

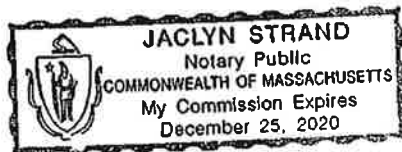


Executed as a sealed instrument this 16 day of JANUARY, 2018.

David Elkinson TRUSTEE  
DAVID ELKINSON, TRUSTEE OF  
EB REALTY TRUST

COMMONWEALTH OF MASSACHUSETTS  
County of Worcester

On this 16 day of JANUARY, 2018, before me, the undersigned notary public, personally appeared DAVID ELKINSON, TRUSTEE OF EB REALTY TRUST, proved to me through satisfactory evidence of identification, which was a driver's license, to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed and who swore or affirmed to me that the contents of the documents are truthful and accurate to the best of his knowledge and belief and on behalf of the Trust.



Jaclyn Strand  
Notary Public Jaclyn Strand  
My Commission Expires: December 25, 2020

ATTEST: WORC Anthony J. Vigliotti, Register



Exhibit N

Legal Existence





**The Commonwealth of Massachusetts**  
**William Francis Galvin**

Minimum Fee: \$500.00

Secretary of the Commonwealth, Corporations Division  
One Ashburton Place, 17th floor  
Boston, MA 02108-1512  
Telephone: (617) 727-9640

**Certificate of Organization**

(General Laws, Chapter )

Identification Number: 001320866

1. The exact name of the limited liability company is: STILL RIVER ROAD DEVELOPMENT LLC

**2a. Location of its principal office:**

No. and Street: 28 COUNTRY CLUB LANE  
City or Town: MIDDLETON State: MA Zip: 01949 Country: USA

**2b. Street address of the office in the Commonwealth at which the records will be maintained:**

No. and Street: 28 COUNTRY CLUB LANE  
City or Town: MIDDLETON State: MA Zip: 01949 Country: USA

**3. The general character of business, and if the limited liability company is organized to render professional service, the service to be rendered:**

TO INVEST IN REAL ESTATE; TO BUY, SELL, DEVELOP, MORTGAGE OR LEASE ANY PORTION OF REAL ESTATE WHETHER IMPROVED OR UNIMPROVED FROM OTHER INDIVIDUALS, CORPORATIONS, OR COMPANIES FOR ANY LAWFUL USE NECESSARY FOR THE PROMOTION OF ANY OF THE ABOVE OBJECTIVES; TO FORM, ENTER INTO AND PARTICIPATE IN PARTNERSHIPS AND JOINT VENTURES IN FURTHERANCE OF THE BUSINESS OF THIS COMPANY.

**4. The latest date of dissolution, if specified:**

**5. Name and address of the Resident Agent:**

Name: DAVID RUSSELL  
No. and Street: 28 COUNTRY CLUB LANE  
City or Town: MIDDLETON State: MA Zip: 01949 Country: USA

I, DAVID RUSSELL resident agent of the above limited liability company, consent to my appointment as the resident agent of the above limited liability company pursuant to G. L. Chapter 156C Section 12.

**6. The name and business address of each manager, if any:**

| Title   | Individual Name<br>First, Middle, Last, Suffix | Address (no PO Box)<br>Address, City or Town, State, Zip Code |
|---------|--|---|
| MANAGER | CHARLES DAVID RUSSELL                          | 28 COUNTRY CLUB LANE<br>MIDDLETON, MA 01949 USA               |

**7. The name and business address of the person(s) in addition to the manager(s), authorized to execute documents to be filed with the Corporations Division, and at least one person shall be named if there are no managers.**



THE COMMONWEALTH OF MASSACHUSETTS

I hereby certify that, upon examination of this document, duly submitted to me, it appears that the provisions of the General Laws relative to corporations have been complied with, and I hereby approve said articles; and the filing fee having been paid, said articles are deemed to have been filed with me on:

April 03, 2018 10:48 AM

A handwritten signature in cursive script, reading "William Francis Galvin". The signature is written in dark ink and is centered on the page.

WILLIAM FRANCIS GALVIN

*Secretary of the Commonwealth*



# Abutters List Report

Town of Bolton, MA

June 06, 2018

## Subject Properties:

008.B-0030.0  
008.B-0000-0030.0  
305 VAUGHN HILL RD 1A

PICARIELLO ROBIN A & JOSEPH  
P O BOX 191  
HARVARD, MA 01451

Parcel Number: 008.B-0005.0  
Cama Number: 008.B-0000-0005.0  
Property Address: 422 STILL RIVER RD

Mailing Address: BROWN MARY W  
422 STILL RIVER RD  
BOLTON, MA 01740

Parcel Number: 008.B-0006.0  
Cama Number: 008.B-0000-0006.0  
Property Address: 438 STILL RIVER RD 1-C

Mailing Address: SILVER KEITH H & MARCY  
438 STILL RIVER RD  
BOLTON, MA 01740

Parcel Number: 008.B-0009.0  
Cama Number: 008.B-0000-0009.0  
Property Address: 448 STILL RIVER RD

Mailing Address: ANESTIS JASON T, TR  
THE ANESTIS FAMILY TR  
448 STILL RIVER RD  
BOLTON, MA 01740

Parcel Number: 008.B-0010.0  
Cama Number: 008.B-0000-0010.0  
Property Address: 302 VAUGHN HILL RD

Mailing Address: MARTEL ROBERT C & MICHELLE L S  
302 VAUGHN HILL RD  
BOLTON, MA 01740

Parcel Number: 008.B-0012.0  
Cama Number: 008.B-0000-0012.0  
Property Address: 409 STILL RIVER RD

Mailing Address: SKOREZESKI THOMAS L & MARY  
409 STILL RIVER RD  
BOLTON, MA 01740

Parcel Number: 008.B-0014.0  
Cama Number: 008.B-0000-0014.0  
Property Address: 295 VAUGHN HILL RD 2

Mailing Address: LEVIN MARA E & BARRY  
295 VAUGHN HILL RD  
BOLTON, MA 01740

Parcel Number: 008.B-0015.0  
Cama Number: 008.B-0000-0015.0  
Property Address: 0 RTE 110 TOWN LINE PAR C

Mailing Address: BOLTON CONSERVATION TRUST  
P O BOX 14  
BOLTON, MA 01740

Parcel Number: 008.B-0016.0  
Cama Number: 008.B-0000-0016.0  
Property Address: 286 VAUGHN HILL RD

Mailing Address: FULLER KYLE W  
286 VAUGHN HILL RD  
BOLTON, MA 01740

Parcel Number: 008.B-0017.0  
Cama Number: 008.B-0000-0017.0  
Property Address: 294 VAUGHN HILL RD

Mailing Address: FARINELLA MICHAEL D & SUSAN A  
294 VAUGHN HILL RD  
BOLTON, MA 01740

Parcel Number: 008.B-0018.0  
Cama Number: 008.B-0000-0018.0  
Property Address: 440 STILL RIVER RD 2A

Mailing Address: MYLER JOSHUA & HEATHER  
440 STILL RIVER RD  
BOLTON, MA 01740

Parcel Number: 008.B-0026.0  
Cama Number: 008.B-0000-0026.0  
Property Address: 436 STILL RIVER RD 1-B

Mailing Address: JOHNSON ERIC S & SHARON L  
436 STILL RIVER RD  
BOLTON, MA 01740

Parcel Number: 008.B-0029.0  
Cama Number: 008.B-0000-0029.0  
Property Address: 421 STILL RIVER RD

Mailing Address: ICKES CYNTHIA  
421 STILL RIVER RD  
BOLTON, MA 01740





# Abutters List Report

Town of Harvard, MA

Date: July 31, 2018

Parcel Number: 029-005-000-000

Property Address: Still River Rd., Harvard, MA 01451

Abutters To: 300 feet

The above Certified Abutters List is a true copy of the records in the Town of Harvard Assessor's office for the last known names and addresses of owners of land located within the above stated range of the subject property.

Signed: MS

Date: 7/31/2018

Marina A. Scheid  
Assistant Assessor  
(978) 456-4100 x315

FINANCE DEPARTMENT - ACCOUNTANT, ASSESSORS, TREASURER/COLLECTOR  
13 Ayer Road, Harvard, Massachusetts 01451-1458  
[www.harvard.ma.us](http://www.harvard.ma.us)



ANESTIS, JHN T., TRUSTEE  
148 STILL RIVER RD  
BOLTON, MA 01740

ELKINSON, DAVID  
10 SCHIPPER FARM LANE  
SOUTHBOROUGH, MA 01772

HARVARD CONSERVATION TRUS  
PO BOX 31  
HARVARD, MA 01451

ROUSSEL, PATRICK  
340 STILL RIVER RD  
HARVARD, MA 01451

WHELAN, JOHN K & WAGNER,  
PO BOX 52  
STILL RIVER, MA 01467



## Exhibit P

### Filing Fee's



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### **1.0 Project Narrative**

|   |          |
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| <i>1.1 Project Type .....</i>                         | <i>3</i> |
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| <i>1.5 Site Description.....</i>                      | <i>4</i> |
| <i>1.6 Proposed Stormwater Management System.....</i> | <i>4</i> |
| <i>1.7 Method of Analysis.....</i>                    | <i>5</i> |

### **2.0 Stormwater Standards Compliance**

|  |          |
|--|----------|
| <i>2.1 Standard 1 – Untreated Discharges .....</i>   | <i>6</i> |
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| <i>2.7 Standard 7 – Redevelopment .....</i>  | <i>8</i> |
| <i>2.8 Standard 8 – Construction Period Pollution Prevention<br/>and Erosion and Sediment Control.....</i> | <i>8</i> |
| <i>2.9 Standard 9 – Operation and Maintenance Plan.....</i>  | <i>8</i> |
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### **3.0 Appendices**

|   |  |
|---|--|
| <i>Appendix A – Locus Map</i>   |  |
| <i>Appendix B – Checklist for Stormwater Report &amp; Redevelopment Checklist</i> |  |
| <i>Appendix C – NRCS Soils Data</i>   |  |
| <i>Appendix D – Existing Conditions Hydrologic Calculations</i>                   |  |
| <i>Appendix E – Proposed Conditions Hydrologic Calculations</i>                   |  |
| <i>Appendix F – Recharge volume / WQV / TSS Removal Calculations</i>              |  |
| <i>Appendix G – Operation and Maintenance Plan</i>                                |  |
| <i>Appendix H – Long Term Pollution Prevention Plan</i>                           |  |

### **4.0 Plans**

|  |  |
|--|--|
| <i>Pre-development Watershed Plans</i> |  |
| <i>Post-development Watershed Plan</i> |  |



### ***1.5 Site Description***

The current property is vacant consisting of a grass/brush area and a wooded area. The site is located on Still River Road approximately 310 feet north of the intersection of Vaughn Hill Road and Still River Road. The abutting properties consist of residential homes and undeveloped woods and wetlands.

A large Bordering Vegetated Wetland exists on the property as depicted on the plans. The wetland wraps around the north, east and southern sides of the property. The middle portion of the property consists of an unmaintained meadow. The site generally has mild slopes with a ridge that runs down the center of the meadow area. The grades drain to the north, south and east towards the wetland.

The Natural Resource Conservation Service (NRCS) soil survey information indicates that the site is underlain by soils classified as belonging to Hydrologic Soil Groups A and C.

### ***1.6 Proposed Stormwater Management System***

Runoff from the proposed impervious areas will be conveyed and treated through a combination of BMP's and infiltrated to the groundwater. The infiltration will help to recharge the groundwater and ensure that the proposed development will not cause any off-site flooding. The following is a brief discussion of each conveyance and treatment BMP proposed.

#### **Deep Sump Hooded Catch Basin**

A deep sump hooded catch basin is proposed to convey the runoff from the proposed paved areas and roofs to the subsurface infiltration chambers. The catch basin will discharge to manholes and conventional storm drains.

#### **Subsurface Infiltration Chambers**

A subsurface infiltration system is included on site. Cultec pre-fabricated chambers, model 330XLHD, will be installed to collect the run off from the roofs and pavement after pretreatment in the deep sump hooded catch basin. The runoff will first be directed into a small group of chambers. These chambers will be wrapped in a geotextile fabric and will act as a sediment forebay for additional pre-treatment. The runoff will then be directed towards the larger infiltration area. The chambers have been designed to accommodate the runoff associated with the 100-year storm event and have enough volume to accommodate the required recharge and water quality volumes.

#### **Trench Drain**

A trench drain will be installed across the shared driveway near the entrance. This drain is designed to capture additional runoff that would otherwise flow onto Still River Road. The runoff collected from the trench drain will be directed into the



### **2.3     *Standard 3 – Recharge***

As discussed in the Introduction, Natural Resource Conservation Service data indicates that the areas within the proposed development consist of soils from Hydrologic Groups A and C. On site soil testing was also performed and the logs can be found in Appendix C.

A subsurface infiltration chamber area has been designed to provide infiltration of the required recharge and water quality volumes. Recharge calculations can be found in Appendix F. Mounding Calculations can also be found in Appendix F.

### **2.4     *Standard 4 – Water Quality***

A total of 85% TSS removal was achieved using BMPs. As part of the proposed project, infiltration requires a minimum of 44% TSS removal provided prior to discharge. Two TSS calculation sheets have been provided. The sheet with a deep sump catch basin into a sediment forebay shows proper pre-treatment before entering the subsurface infiltration chambers and infiltration basin. The sheet with deep sump catch basin into an infiltration basin shows there is enough TSS removal within the whole system. See Appendix F for detailed calculations.

### **2.5     *Standard 5 – Land Uses with Higher Pollutant Loads***

The current and proposed uses of the subject site do not constitute land use with higher potential pollutant load, thus Standard 5 does not apply to the proposed project.

### **2.6     *Standard 6 – Critical Areas***

The proposed project does not involve a stormwater discharge within or near to any of the areas defined as “Critical Areas” at 314 CMR 9.02 and 310 CMR 10.04.

### **2.7     *Standard 7 – Redevelopment***

The project does not qualify for redevelopment provisions.

### **2.8     *Standard 8 – Construction Period Pollution Prevention and Erosion and Sediment Control***

Because the project is subject to the filing of an Environmental Protection Agency Notice of Intent (EPA NOI), the Stormwater Pollution Prevention Plan (SWPPP) will be prepared prior to construction. This document will be prepared to satisfy the requirements of the EPA NOI and the Standard 8 Construction Period Pollution prevention and Erosion and Sedimentation Control Plan.



## **APPENDIX A**

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### *Locus Map*



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**APPENDIX B**

*Checklist for Stormwater Report Checklist*





# Checklist for Stormwater Report

---

## Checklist (continued)

**LID Measures:** Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- ☒ No disturbance to any Wetland Resource Areas
- ☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- ☐ Reduced Impervious Area (Redevelopment Only)
- ☐ Minimizing disturbance to existing trees and shrubs
- ☐ LID Site Design Credit Requested:
  - ☐ Credit 1
  - ☐ Credit 2
  - ☐ Credit 3
- ☐ Use of "country drainage" versus curb and gutter conveyance and pipe
- ☐ Bioretention Cells (includes Rain Gardens)
- ☐ Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- ☐ Treebox Filter
- ☐ Water Quality Swale
- ☐ Grass Channel
- ☐ Green Roof
- ☒ Other (describe): Subsurface Infiltration

## Standard 1: No New Untreated Discharges

- ☒ No new untreated discharges
- ☒ Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- ☒ Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.





# Checklist for Stormwater Report

## Checklist (continued)

### Standard 3: Recharge (continued)

- ☒ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- ☒ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

### Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
  - Provisions for storing materials and waste products inside or under cover;
  - Vehicle washing controls;
  - Requirements for routine inspections and maintenance of stormwater BMPs;
  - Spill prevention and response plans;
  - Provisions for maintenance of lawns, gardens, and other landscaped areas;
  - Requirements for storage and use of fertilizers, herbicides, and pesticides;
  - Pet waste management provisions;
  - Provisions for operation and management of septic systems;
  - Provisions for solid waste management;
  - Snow disposal and plowing plans relative to Wetland Resource Areas;
  - Winter Road Salt and/or Sand Use and Storage restrictions;
  - Street sweeping schedules;
  - Provisions for prevention of illicit discharges to the stormwater management system;
  - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
  - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
  - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- ☒ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
  - ☒ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
    - ☐ is within the Zone II or Interim Wellhead Protection Area
    - ☐ is near or to other critical areas
    - ☒ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
    - ☐ involves runoff from land uses with higher potential pollutant loads.
  - ☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.
  - ☒ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.





# Checklist for Stormwater Report

## Checklist (continued)

### Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- ☐ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
  - ☐ Limited Project
  - ☐ Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
  - ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
  - ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
  - ☐ Bike Path and/or Foot Path
  - ☐ Redevelopment Project
  - ☐ Redevelopment portion of mix of new and redevelopment.
- ☐ Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- ☐ The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

### Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
  - Construction Period Operation and Maintenance Plan;
  - Names of Persons or Entity Responsible for Plan Compliance;
  - Construction Period Pollution Prevention Measures;
  - Erosion and Sedimentation Control Plan Drawings;
  - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
  - Vegetation Planning;
  - Site Development Plan;
  - Construction Sequencing Plan;
  - Sequencing of Erosion and Sedimentation Controls;
  - Operation and Maintenance of Erosion and Sedimentation Controls;
  - Inspection Schedule;
  - Maintenance Schedule;
  - Inspection and Maintenance Log Form.
- ☐ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



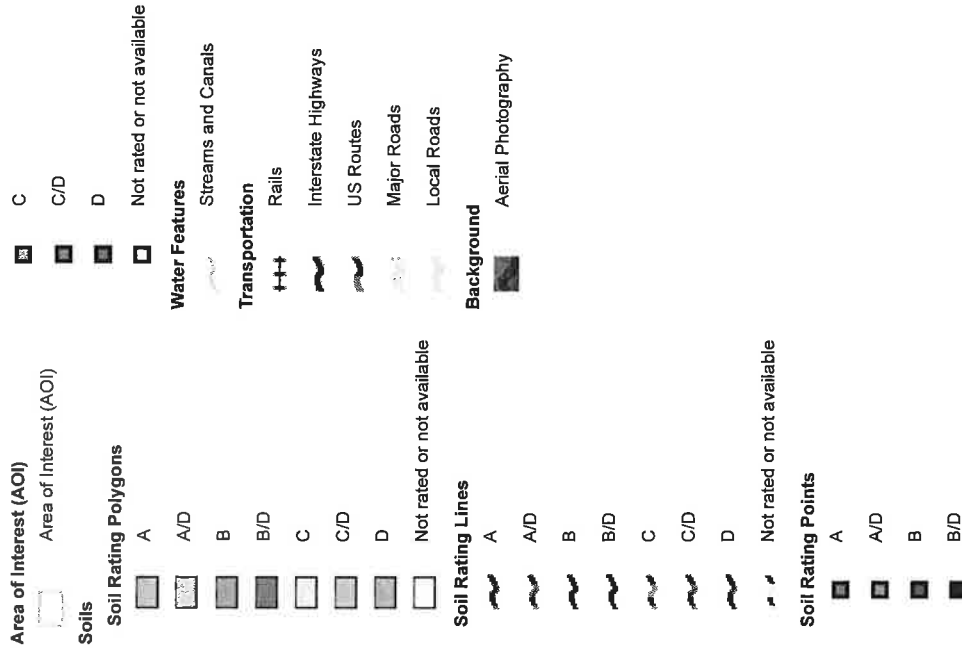
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**APPENDIX C**

*NRCS Soils Data*



## MAP LEGEND



## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Worcester County, Massachusetts, Northeastern Part

Survey Area Data: Version 12, Oct 6, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 12, 2014—Sep 28, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**C. On-Site Review** (*minimum of two holes required at every proposed primary and reserved disposal area*)

Deep Observation Hole Number: 615-1/4 Date: 6-26-15 Time: 8:30 AM Weather: CLOUDY, 70'S

1. Location

Ground Elevation at Surface of Hole: \_\_\_\_\_ Location (Identify on plan): \_\_\_\_\_

2. Land Use

OPEN FIELD NONE 0-3%  
(e.g., woodland, agricultural field, vacant lot, etc.) Surface Stones Slope (%)  
GRASSES KAME TERRACE TOP  
Vegetation Landform Position on Landscape (attach sheet)

3. Distances from:

Open Water Body 100'+ Drainage Way 100'+ Possible Wet Area 100'+  
feet feet feet  
Property Line 75'+/- Drinking Water Well 100'+ Other feet  
feet feet

4. Parent Material:

PROGLACIAL OUTWASH Unsuitable Materials Present ☐ Yes ☒ No  
If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Impervious Layer(s) ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☐ Yes ☐ No

If yes: SEE LOGS Depth Weeping from Pit SEE LOGS Depth Standing Water in Hole

Estimated Depth to High Groundwater: inches elevation





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**C. On-Site Review (continued)**

Deep Observation Hole Number: 615-2

| Depth (in.) | Soil Horizon/<br>Layer | Soil Matrix Color-<br>Moist (Munsell) | Redoximorphic Features<br>(mottles) |              |         | Soil Texture<br>(USDA) | Coarse Fragments<br>% by Volume |                     | Soil<br>Structure | Soil<br>Consistence<br>(Moist) | Other |
|-------------|------------------------|---------------------------------------|-------------------------------------|--------------|---------|------------------------|---------------------------------|---------------------|-------------------|--------------------------------|-------|
|             |                        |                                       | Depth                               | Color        | Percent |                        | Gravel                          | Cobbles &<br>Stones |                   |                                |       |
| 10          | A                      | 10YR 3/3                              |                                     |              |         | S.L.                   |                                 |                     | CRUMB             | FRIABLE                        |       |
| 20          | Bw                     | 10YR 5/8                              |                                     |              |         | L.S.                   |                                 |                     | S.A.B.            | FRIABLE                        |       |
| 64          | C1                     | 10YR 5/6                              | 64"                                 | 7.5YR<br>6/8 | 5%      | F-M S                  |                                 |                     | MASSIVE           | FRIABLE                        |       |
| 84          | C2                     | 10YR 5/3                              |                                     | 7.5YR<br>6/1 |         | F.S.L.                 |                                 |                     | MASSIVE           | FRIABL                         |       |
|             |                        |                                       |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |                                       |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |                                       |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |                                       |                                     |              |         |                        |                                 |                     |                   |                                |       |

Additional Notes:

NO REFUSAL, N.G.W.O.

W/ PERC-B





Commonwealth of Massachusetts  
City/Town of BOLTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**C. On-Site Review (continued)**

Deep Observation Hole Number: 615-4

| Depth (in.) | Soil Horizon/<br>Layer | Soil Matrix: Color-<br>Moist (Munsell) | Redoximorphic Features<br>(mottles) |              |         | Soil Texture<br>(USDA) | Coarse Fragments<br>% by Volume |                     | Soil<br>Structure | Soil<br>Consistence<br>(Moist) | Other |
|-------------|------------------------|--|-------------------------------------|--------------|---------|------------------------|---------------------------------|---------------------|-------------------|--------------------------------|-------|
|             |                        |  | Depth                               | Color        | Percent |                        | Gravel                          | Cobbles &<br>Stones |                   |                                |       |
| 12          | A                      | 10YR 3/3                               |                                     |              |         | S.L.                   |                                 |                     | CRUMB             | FRIABLE                        |       |
| 20          | Bw                     | 10YR 5/8                               |                                     |              |         | L.S.                   |                                 |                     | S.A.B.            | FRIABLE                        |       |
| 60          | C1                     | 10YR 5/6                               | 60"                                 | 7.5YR<br>3/8 | 5%      | F-M S                  |                                 |                     | MASSIVE           | FRIABLE                        |       |
| 88          | C2                     | 10YR 5/3                               |                                     | 7.5YR<br>3/1 |         | F.S.L.                 |                                 |                     | MASSIVE           | FRIABL                         |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |
|             |                        |  |                                     |              |         |                        |                                 |                     |                   |                                |       |

Additional Notes:

NO REFUSAL, G.W.O. @ 88"

W/ PERC-D





Commonwealth of Massachusetts  
City/Town of BOLTTON  
**Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal**

**D. Determination of High Groundwater Elevation**

1. Method Used:

- ☒ Depth observed standing water in observation hole      A. SEE LOGS      B. SEE LOGS  
inches      inches  
☒ Depth weeping from side of observation hole      A. SEE LOGS      B. SEE LOGS  
inches      inches  
☒ Depth to soil redoximorphic features (mottles)      A. SEE LOGS      B. SEE LOGS  
inches      inches  
☐ Groundwater adjustment (USGS methodology)      A.      B.  
inches      inches

2.

Index Well Number      Reading Date      Index Well Level  
Adjustment Factor      Adj. used Groundwater Level

**E. Depth of Pervious Material**

1. Depth of Naturally Occurring Pervious Material

- a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

☒ Yes      ☐ No

- b. If yes, at what depth was it observed?      Upper boundary: 10/12"      Lower boundary: 58/64"  
inches      inches      inches



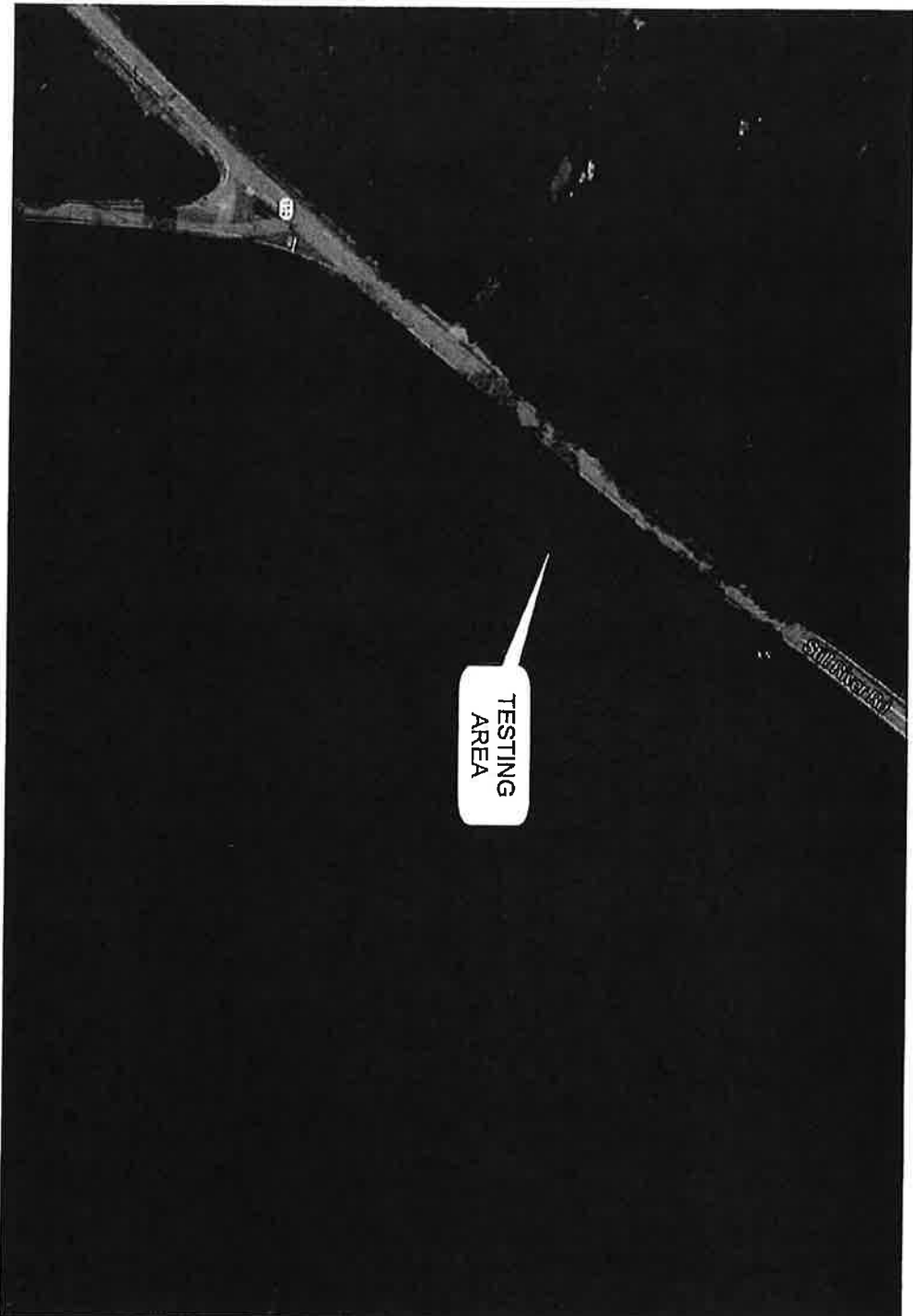


Commonwealth of Massachusetts  
City/Town of BOLTON

## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

### Field Diagrams

Use this sheet for field diagrams:





## **APPENDIX D**

---

### *Existing Conditions – Hydrologic Calculations*



**3339-PRE***Type III 24-hr 2-year Rainfall=3.10"*

Prepared by Microsoft

Printed 7/10/2018

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Page 2

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE A**Runoff Area=126,787 sf 0.00% Impervious Runoff Depth=0.33"  
Flow Length=182' Tc=8.1 min CN=WQ Runoff=0.93 cfs 0.081 af**Link 1L: DP-A**Inflow=0.93 cfs 0.081 af  
Primary=0.93 cfs 0.081 afTotal Runoff Area = 2.911 ac Runoff Volume = 0.081 af Average Runoff Depth = 0.33"  
100.00% Pervious = 2.911 ac 0.00% Impervious = 0.000 ac



**3339-PRE***Type III 24-hr 10-year Rainfall=4.50"*

Prepared by Microsoft

Printed 7/10/2018

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Page 4

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE A**Runoff Area=126,787 sf 0.00% Impervious Runoff Depth=0.72"  
Flow Length=182' Tc=8.1 min CN=WQ Runoff=2.18 cfs 0.174 af**Link 1L: DP-A**Inflow=2.18 cfs 0.174 af  
Primary=2.18 cfs 0.174 afTotal Runoff Area = 2.911 ac Runoff Volume = 0.174 af Average Runoff Depth = 0.72"  
100.00% Pervious = 2.911 ac 0.00% Impervious = 0.000 ac



**3339-PRE***Type III 24-hr 100-year Rainfall=7.00"*

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Page 6

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE A**

Runoff Area=126,787 sf 0.00% Impervious Runoff Depth=1.66"

Flow Length=182' Tc=8.1 min CN=WQ Runoff=4.80 cfs 0.402 af

**Link 1L: DP-A**

Inflow=4.80 cfs 0.402 af

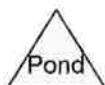
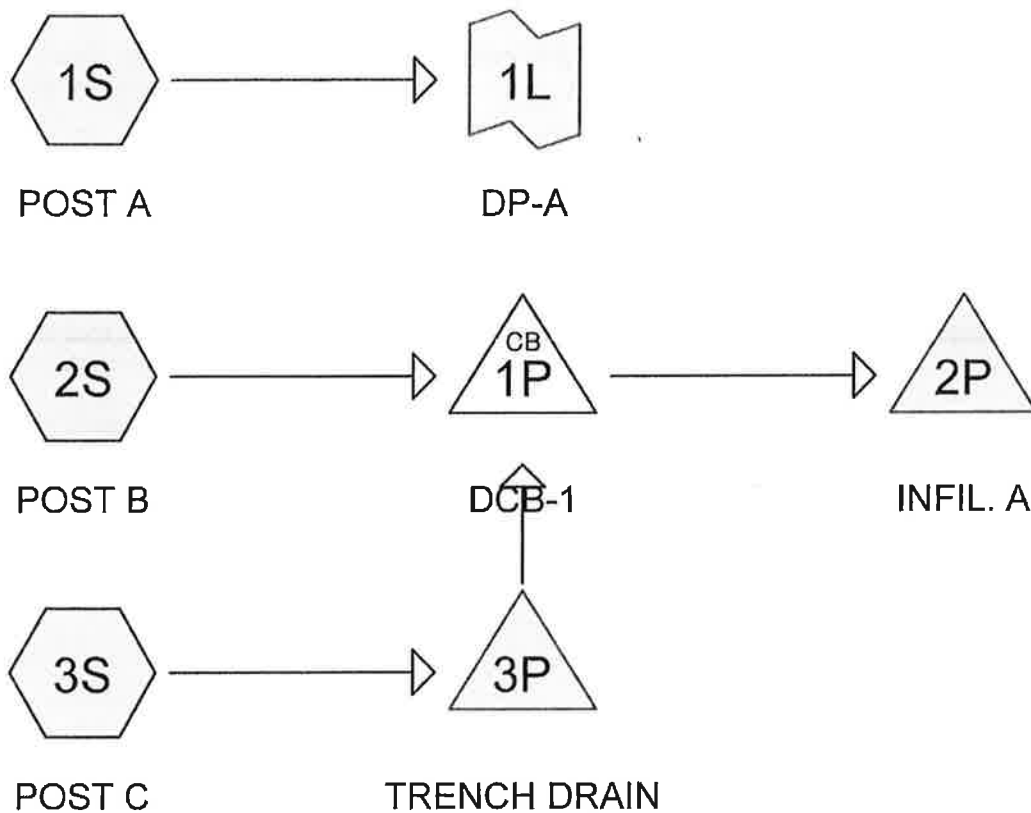
Primary=4.80 cfs 0.402 af

**Total Runoff Area = 2.911 ac Runoff Volume = 0.402 af Average Runoff Depth = 1.66"****100.00% Pervious = 2.911 ac 0.00% Impervious = 0.000 ac**









**Routing Diagram for 3339-POST**  
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**3339-POST**

Type III 24-hr 2-year Rainfall=3.10"

Prepared by Microsoft

Printed 7/10/2018

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Page 3

**Summary for Subcatchment 1S: POST A**

Runoff = 0.99 cfs @ 12.19 hrs, Volume= 0.099 af, Depth= 0.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-year Rainfall=3.10"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 684       | 98 | Paved parking, HSG A          |
| 2,550     | 98 | Roofs, HSG A                  |
| 18,011    | 39 | >75% Grass cover, Good, HSG A |
| 7,315     | 30 | Meadow, non-grazed, HSG A     |
| 19,860    | 30 | Woods, Good, HSG A            |
| 39,848    | 71 | Meadow, non-grazed, HSG C     |
| 12,759    | 70 | Woods, Good, HSG C            |
| 101,027   |    | Weighted Average              |
| 97,793    |    | 96.80% Pervious Area          |
| 3,234     |    | 3.20% Impervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description  |
|----------|---------------|---------------|-------------------|----------------|--|
| 12.1     | 50            | 0.0220        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 0.2      | 10            | 0.0220        | 0.74              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 12.3     | 60            | Total         |                   |                |  |

**Summary for Subcatchment 2S: POST B**

Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.070 af, Depth= 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-year Rainfall=3.10"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 10,050    | 98 | Paved parking, HSG A          |
| 2,676     | 98 | Roofs, HSG A                  |
| 7,859     | 39 | >75% Grass cover, Good, HSG A |
| 20,585    |    | Weighted Average              |
| 7,859     |    | 38.18% Pervious Area          |
| 12,726    |    | 61.82% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description          |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 6.0      |               |               |                   |                | <b>Direct Entry,</b> |



**3339-POST**

Type III 24-hr 2-year Rainfall=3.10"

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Center-of-Mass det. time= 61.8 min ( 818.9 - 757.1 )

| Volume | Invert  | Avail.Storage | Storage Description  |
|--------|---------|---------------|--|
| #1A    | 230.17' | 0.032 af      | <b>30.50'W x 45.50'L x 3.88'H Field A</b><br>0.123 af Overall - 0.045 af Embedded = 0.079 af x 40.0% Voids   |
| #2A    | 230.67' | 0.045 af      | <b>Cultec R-330XLHD x 36 Inside #1</b><br>Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf<br>Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap<br>Row Length Adjustment= +1.50' x 7.45 sf x 6 rows |
|        |         | 0.076 af      | Total Available Storage  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert  | Outlet Devices   |
|--------|-----------|---------|--|
| #1     | Discarded | 230.17' | <b>2.410 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 228.17' |

Discarded OutFlow Max=0.12 cfs @ 12.62 hrs HW=231.33' (Free Discharge)

↑1=Exfiltration ( Controls 0.12 cfs)

**Summary for Pond 3P: TRENCH DRAIN**

Inflow Area = 0.119 ac, 14.47% Impervious, Inflow Depth = 0.41" for 2-year event  
 Inflow = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af  
 Outflow = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.1 min  
 Primary = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 232.21' @ 12.09 hrs Surf.Area= 0.000 ac Storage= 0.000 af  
 Flood Elev= 233.00' Surf.Area= 0.000 ac Storage= 0.000 af

Plug-Flow detention time= 0.9 min calculated for 0.004 af (100% of inflow)  
 Center-of-Mass det. time= 0.9 min ( 757.9 - 757.1 )

| Volume | Invert  | Avail.Storage | Storage Description                         |
|--------|---------|---------------|---|
| #1     | 232.06' | 0.000 af      | <b>0.33'W x 13.33'L x 0.90'H Prismatoid</b> |

| Device | Routing | Invert  | Outlet Devices  |
|--------|---------|---------|---|
| #1     | Primary | 232.06' | <b>4.5" Round Culvert</b><br>L= 42.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 232.06' / 231.62' S= 0.0105 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.11 sf |

Primary OutFlow Max=0.05 cfs @ 12.09 hrs HW=232.21' (Free Discharge)

↑1=Culvert (Barrel Controls 0.05 cfs @ 1.79 fps)



**3339-POST**

Type III 24-hr 10-year Rainfall=4.50"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: POST A**Runoff Area=101,027 sf 3.20% Impervious Runoff Depth=1.06"  
Flow Length=60' Slope=0.0220 '/' Tc=12.3 min CN=WQ Runoff=2.17 cfs 0.204 af**Subcatchment 2S: POST B**Runoff Area=20,585 sf 61.82% Impervious Runoff Depth=2.68"  
Tc=6.0 min CN=WQ Runoff=1.25 cfs 0.105 af**Subcatchment 3S: POST C**Runoff Area=5,198 sf 14.47% Impervious Runoff Depth=0.71"  
Tc=6.0 min CN=WQ Runoff=0.07 cfs 0.007 af**Pond 1P: DCB-1**Peak Elev=232.13' Inflow=1.33 cfs 0.113 af  
18.0" Round Culvert n=0.013 L=83.0' S=0.0051 '/' Outflow=1.33 cfs 0.113 af**Pond 2P: INFIL. A**Peak Elev=231.95' Storage=0.040 af Inflow=1.33 cfs 0.113 af  
Outflow=0.15 cfs 0.113 af**Pond 3P: TRENCH DRAIN**Peak Elev=232.25' Storage=0.000 af Inflow=0.07 cfs 0.007 af  
4.5" Round Culvert n=0.013 L=42.0' S=0.0105 '/' Outflow=0.07 cfs 0.007 af**Link 1L: DP-A**Inflow=2.17 cfs 0.204 af  
Primary=2.17 cfs 0.204 af**Total Runoff Area = 2.911 ac Runoff Volume = 0.317 af Average Runoff Depth = 1.31"**  
**86.82% Pervious = 2.528 ac 13.18% Impervious = 0.384 ac**



**3339-POST**

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Type III 24-hr 10-year Rainfall=4.50"

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**Summary for Subcatchment 3S: POST C**

Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.007 af, Depth= 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-year Rainfall=4.50"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 752       | 98 | Paved parking, HSG A          |
| 4,446     | 39 | >75% Grass cover, Good, HSG A |
| 5,198     |    | Weighted Average              |
| 4,446     |    | 85.53% Pervious Area          |
| 752       |    | 14.47% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Summary for Pond 1P: DCB-1**

Inflow Area = 0.592 ac, 52.27% Impervious, Inflow Depth = 2.28" for 10-year event  
 Inflow = 1.33 cfs @ 12.09 hrs, Volume= 0.113 af  
 Outflow = 1.33 cfs @ 12.09 hrs, Volume= 0.113 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.33 cfs @ 12.09 hrs, Volume= 0.113 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 232.13' @ 12.09 hrs  
 Flood Elev= 234.52'

| Device | Routing | Invert  | Outlet Devices  |
|--------|---------|---------|---|
| #1     | Primary | 231.52' | <b>18.0" Round Culvert</b><br>L= 83.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 231.52' / 231.10' S= 0.0051 ' S= 0.0051 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

Primary OutFlow Max=1.29 cfs @ 12.09 hrs HW=232.12' (Free Discharge)  
 1=Culvert (Barrel Controls 1.29 cfs @ 2.89 fps)

**Summary for Pond 2P: INFIL. A**

Inflow Area = 0.592 ac, 52.27% Impervious, Inflow Depth = 2.28" for 10-year event  
 Inflow = 1.33 cfs @ 12.09 hrs, Volume= 0.113 af  
 Outflow = 0.15 cfs @ 12.77 hrs, Volume= 0.113 af, Atten= 89%, Lag= 40.8 min  
 Discarded = 0.15 cfs @ 12.77 hrs, Volume= 0.113 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 231.95' @ 12.77 hrs Surf.Area= 0.032 ac Storage= 0.040 af  
 Flood Elev= 234.55' Surf.Area= 0.032 ac Storage= 0.076 af

Plug-Flow detention time= 96.7 min calculated for 0.112 af (100% of inflow)



**3339-POST***Type III 24-hr 10-year Rainfall=4.50"*

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**Summary for Link 1L: DP-A**

Inflow Area = 2.319 ac, 3.20% Impervious, Inflow Depth = 1.06" for 10-year event  
Inflow = 2.17 cfs @ 12.18 hrs, Volume= 0.204 af  
Primary = 2.17 cfs @ 12.18 hrs, Volume= 0.204 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs



**3339-POST**

Type III 24-hr 100-year Rainfall=7.00"

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**Summary for Subcatchment 1S: POST A**

Runoff = 4.76 cfs @ 12.17 hrs, Volume= 0.451 af, Depth= 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-year Rainfall=7.00"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 684       | 98 | Paved parking, HSG A          |
| 2,550     | 98 | Roofs, HSG A                  |
| 18,011    | 39 | >75% Grass cover, Good, HSG A |
| 7,315     | 30 | Meadow, non-grazed, HSG A     |
| 19,860    | 30 | Woods, Good, HSG A            |
| 39,848    | 71 | Meadow, non-grazed, HSG C     |
| 12,759    | 70 | Woods, Good, HSG C            |
| 101,027   |    | Weighted Average              |
| 97,793    |    | 96.80% Pervious Area          |
| 3,234     |    | 3.20% Impervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                |
|----------|---------------|---------------|-------------------|----------------|--|
| 12.1     | 50            | 0.0220        | 0.07              |                | Sheet Flow,                                |
|          |               |               |                   |                | Woods: Light underbrush n= 0.400 P2= 3.10" |
| 0.2      | 10            | 0.0220        | 0.74              |                | Shallow Concentrated Flow,                 |
|          |               |               |                   |                | Woodland Kv= 5.0 fps                       |
| 12.3     | 60            | Total         |                   |                |  |

**Summary for Subcatchment 2S: POST B**

Runoff = 2.02 cfs @ 12.09 hrs, Volume= 0.176 af, Depth= 4.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-year Rainfall=7.00"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 10,050    | 98 | Paved parking, HSG A          |
| 2,676     | 98 | Roofs, HSG A                  |
| 7,859     | 39 | >75% Grass cover, Good, HSG A |
| 20,585    |    | Weighted Average              |
| 7,859     |    | 38.18% Pervious Area          |
| 12,726    |    | 61.82% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |



**3339-POST**

Type III 24-hr 100-year Rainfall=7.00"

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Center-of-Mass det. time= 153.7 min ( 914.4 - 760.6 )

| Volume | Invert  | Avail.Storage | Storage Description  |
|--------|---------|---------------|--|
| #1A    | 230.17' | 0.032 af      | <b>30.50'W x 45.50'L x 3.88'H Field A</b><br>0.123 af Overall - 0.045 af Embedded = 0.079 af x 40.0% Voids   |
| #2A    | 230.67' | 0.045 af      | <b>Cultec R-330XLHD x 36 Inside #1</b><br>Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf<br>Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap<br>Row Length Adjustment= +1.50' x 7.45 sf x 6 rows |
|        |         | 0.076 af      | Total Available Storage  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert  | Outlet Devices   |
|--------|-----------|---------|--|
| #1     | Discarded | 230.17' | <b>2.410 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 228.17' |

Discarded OutFlow Max=0.22 cfs @ 12.95 hrs HW=233.96' (Free Discharge)

↑1=Exfiltration ( Controls 0.22 cfs)

**Summary for Pond 3P: TRENCH DRAIN**

Inflow Area = 0.119 ac, 14.47% Impervious, Inflow Depth = 1.64" for 100-year event  
 Inflow = 0.15 cfs @ 12.11 hrs, Volume= 0.016 af  
 Outflow = 0.15 cfs @ 12.11 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.1 min  
 Primary = 0.15 cfs @ 12.11 hrs, Volume= 0.016 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs  
 Peak Elev= 232.34' @ 12.11 hrs Surf.Area= 0.000 ac Storage= 0.000 af  
 Flood Elev= 233.00' Surf.Area= 0.000 ac Storage= 0.000 af

Plug-Flow detention time= 0.4 min calculated for 0.016 af (100% of inflow)  
 Center-of-Mass det. time= 0.5 min ( 818.9 - 818.4 )

| Volume | Invert  | Avail.Storage | Storage Description                         |
|--------|---------|---------------|---|
| #1     | 232.06' | 0.000 af      | <b>0.33'W x 13.33'L x 0.90'H Prismatoid</b> |

| Device | Routing | Invert  | Outlet Devices  |
|--------|---------|---------|---|
| #1     | Primary | 232.06' | <b>4.5" Round Culvert</b><br>L= 42.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 232.06' / 231.62' S= 0.0105 ' S= 0.0105 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.11 sf |

Primary OutFlow Max=0.15 cfs @ 12.11 hrs HW=232.34' (Free Discharge)

↑1=Culvert (Barrel Controls 0.15 cfs @ 2.35 fps)



**APPENDIX F**

---

*Recharge Volume / Water Quality Volume / TSS Removal / Mounding Calculations*



## Subsurface Infiltration

### Water Quality Calculations

#### CALCULATIONS

##### Water Quality Calculation:

$$V_{WQ} = D_{WQ}(ft) \times A_T(ft^2)$$

Water Quality Depth = 0.5 in  
Water Quality Depth, DWQ = 0.04 ft.  
Total impervious area on site, AT = 0.384 Ac.  
= 16,727 ft<sup>2</sup>  
Required Water Quality Volume, VWQ = 697 C.ft.  
Total Treatment Volume Provided = 3,317.8 C.ft.

#### REFERENCES

|                                    |
|------------------------------------|
| 1 inch depth                       |
| Zone II discharges                 |
| IWPA discharges                    |
| Critical Area                      |
| Runoff from LUHPPL                 |
| Infiltration rate >2.4 inches/hour |
| 1/2 inch depth                     |
| Discharge to other areas           |
| 8 inch                             |
| 9 inch                             |
| 10 inch                            |
| 11 inch                            |



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## Groundwater Mound Beneath Rectangular Recharge Area

by Glenn M. Duffield, President, HydroSOLVE, Inc.

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Hantush (1967) presented the following equations for predicting the maximum height of the water table beneath a rectangular recharge area:

$$h_m^2 - h_i^2 = Z_m(t) = (2w/K)vtS^*(0.5A/(4vt)^{1/2}, 0.5B/(4vt)^{1/2}) \dots (1)$$

$$v = Kb/\varepsilon \dots (2)$$

$$\bar{b} = 0.5[h_i(0) + h(t)] \dots (3)$$

where  $h_m$  is maximum height of mound above aquifer base (i.e., maximum saturated thickness of aquifer beneath recharge area);  $h_i$  is initial height of water table above aquifer base (i.e., initial saturated thickness of aquifer);  $K$  and  $\varepsilon$  are hydraulic conductivity and storativity (specific yield) of aquifer, respectively;  $w$  is constant rate of percolation from rectangular recharge area of length  $A$  and width  $B$ ;  $\bar{b}$  is a constant of linearization; and the function  $S^*$  is an integral expression (see Hantush 1967). The aquifer is unconfined and assumed to have Infinite extent.

If infiltration ends at time  $t=t_0$ , Hantush (1967) applied the principle of superposition to compute the decay of the mound as follows:

$$h_m^2 - h_i^2 = Z_m(t) - Z_m(t-t_0) \dots (4)$$

Equation (1) is nonlinear owing to the definition of  $\bar{b}$  in Equation (3); however, the solution is readily obtained by successive approximation.

### Results of Groundwater Mounding Calculation

#### Solution by Successive Approximation

| Iteration | $\bar{b}$        | $h_m^*$          | % Change             |
|-----------|------------------|------------------|----------------------|
| 1         | 16               | 16.2888968101816 | 1.8056050636353      |
| 2         | 16.1444484050908 | 16.2889265428232 | 1.82533181392053E-04 |
| 3         | 16.1444632714116 | 16.2889265458959 | 1.88636439801826E-08 |

| K [L/T] | $\varepsilon$ | $h_i$ [L] | A [L] | B [L] | w [L/T] | t [T] | $h_m$ [L]        |
|---------|---------------|-----------|-------|-------|---------|-------|------------------|
| 2.00    | 0.25          | 16        | 45.5  | 30.5  | 0.20    | 72    | 16.2889265458959 |

maximum water-table rise ( $h_m - h_i$ ) at time  $t = 72$  is 0.288926545895894  
decay of mound computed after time  $t = 25$

[Return to Groundwater Mounding Calculator](#)Click [here](#) for a benchmark for this calculator.Hantush mounding calculations with contouring now available in [AQTESOLV](#).**AQTESOLV**

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L = LENGTH = FEET

T = TIME = HOURS

★ USE RAWLS RATE OF  
2.41 IN/HR (0.20 FT/HR)  
FOR W.

★ K = W × 10

★ REFER TO WELL LOGS  
FOR  $H_i$  ASSUMPTION★ A 0.29 FT RISE IN  
GW DOES NOT REACH  
THE CHAMBERSTIME THAT THE POND  
STOPS INFILTRATING  
(SEE HYDROCAD)



# MassDEP Well Completion Report

## WELL LOCATION

GPS North: 42.477100      GPS West: -71.621883      Assessors Map:  
 Address: 320 Still River Road      Assessors Lot:  
 Sub Division:      Permit Number: 5477  
 City/Town: HARVARD      Date Issued: 01/24/2008  
 Board Of Health Permit Obtained: Y

## Work Performed

New Well

## Well Type

Domestic

## Drilling Method Overburden

Air Hammer

## Drilling Method Bedrock

Air Hammer

## ADDITIONAL WELL INFORMATION

Developed: Yes  
 Disinfected: Yes  
 Total Well Depth: 600.00  
 Fracture Enhancement: No  
 Well Seal Type: None  
 Depth to Bedrock: 18.00

Assume  $h_i = 16'$   
 FOR MOUNDING CALCS.  
 MOST CONSERVATIVE  
 VALUE FROM  
 NEIGHBORING WELLS

## PERMANENT PUMP (IF AVAILABLE)

Pump Description: 3WVS  
 Type:  
 Nominal Pump Capacity: 10.00  
 Intake Depth: 500.00  
 Horsepower: 1.5  
 Comments:

## CASING

| From(ft)            | To(ft) | Type  | Thickness | Diameter |
|---------------------|--------|-------|-----------|----------|
| 2.00 (Above Ground) | 98.00  | Steel | 17#       | 6        |

## SCREEN

| From(ft) | To(ft) | Type | slotsize | Diameter |
|----------|--------|------|----------|----------|
|----------|--------|------|----------|----------|

## WELL SEAL / FILTER PACK / ABANDONMENT MATERIAL

| From(ft) | To(ft) | Material Description | Purpose |
|----------|--------|----------------------|---------|
|----------|--------|----------------------|---------|

## STATIC WATER LEVEL(ALL WELLS)

| Date Measured | Depth Below Ground Surface |
|---------------|----------------------------|
| 02/08/2008    | 65.00                      |

## WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)

| Date       | Method             | Yield(GPM) | Time Pumped<br>(hrs & min) | Pumping Level<br>(Ft. BGS) | Time To Recover<br>(Hrs & min) | Recovery |
|------------|--------------------|------------|----------------------------|----------------------------|--------------------------------|----------|
| 02/07/2008 | Variable Rate Pump | 6.00       | 008:00                     | 440                        | 024:00                         | 65       |

## OVER BURDEN

| From(ft) | To(ft) | Lithology | Color | Comment | Water Zone | Loss / Add<br>of Fluid | Drill Stem<br>Drop | Drill Rate |
|----------|--------|-----------|-------|---------|------------|------------------------|--------------------|------------|
| 0.00     | 18.00  | Clay      |       |         | No         |                        |                    |            |

## BEDROCK

| From(ft) | To(ft) | Lithology | Comment | Water Zone | Drill Stem<br>Drop | Extra<br>Large | Drill Rate | Rust Stain | Loss / Add<br>Of Fluid | # of Fract.<br>Per Ft |
|----------|--------|-----------|---------|------------|--------------------|----------------|------------|------------|------------------------|-----------------------|
| 16       | 100    | Shale     |         | No         |                    |                |            |            |                        |                       |
| 100      | 200    | Shale     |         | No         |                    |                |            |            |                        |                       |
| 200      | 300    | Shale     |         | No         |                    |                |            |            |                        |                       |
| 300      | 400    | Shale     |         | No         |                    |                |            |            |                        |                       |
| 400      | 420    | Shale     |         | Yes        |                    |                |            |            | Addition               |                       |
| 420      | 500    | Shale     |         | No         |                    |                |            |            |                        |                       |
| 500      | 600    | Shale     |         | No         |                    |                |            |            |                        |                       |



# MassDEP Well Completion Report

## WELL LOCATION

GPS North:                      GPS West:                      Assessors Map:  
 Address: 401 Still River Road                      Assessors Lot:  
 Sub Division:                      Permit Number:  
 City/Town: BOLTON                      Date Issued:  
 Board Of Health Permit Obtained: NR

## Work Performed

## Well Type

## Drilling Method Overburden

## Drilling Method Bedrock

## ADDITIONAL WELL INFORMATION

Developed:  
 Disinfected:  
 Total Well Depth: 120.00  
 Fracture Enhancement:  
 Well Seal Type:  
 Depth to Bedrock: ASSUME >120

## PERMANENT PUMP (IF AVAILABLE)

Pump Description:  
 Type:  
 Nominal Pump Capacity:  
 Intake Depth:  
 Horsepower:  
 Comments: Nashoba BOH Report Source of water: Drilled Method of drawing water: Electric

## CASING

| From(ft) | To(ft) | Type | Thickness | Diameter |
|----------|--------|------|-----------|----------|
|----------|--------|------|-----------|----------|

## SCREEN

| From(ft) | To(ft) | Type | slotsize | Diameter |
|----------|--------|------|----------|----------|
|----------|--------|------|----------|----------|

## WELL SEAL / FILTER PACK / ABANDONMENT MATERIAL

| From(ft) | To(ft) | Material Description | Purpose |
|----------|--------|----------------------|---------|
|----------|--------|----------------------|---------|

## STATIC WATER LEVEL(ALL WELLS)

| Date Measured | Depth Below Ground Surface |
|---------------|----------------------------|
|---------------|----------------------------|

## WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)

| Date | Method | Yield(GPM) | Time Pumped<br>(hrs & min) | Pumping Level<br>(Ft. BGS) | Time To Recover<br>(Hrs & min) | Recovery |
|------|--------|------------|----------------------------|----------------------------|--------------------------------|----------|
|------|--------|------------|----------------------------|----------------------------|--------------------------------|----------|

## OVER BURDEN

| From(ft) | To(ft) | Lithology | Color | Comment | Water Zone | Loss / Add<br>of Fluid | Drill Stem<br>Drop | Drill Rate |
|----------|--------|-----------|-------|---------|------------|------------------------|--------------------|------------|
|----------|--------|-----------|-------|---------|------------|------------------------|--------------------|------------|

## BEDROCK

| From(ft) | To(ft) | Lithology | Comment | Water Zone | Drill Stem<br>Drop | Extra<br>Large | Drill Rate | Rust Stain | Loss / Add<br>Of Fluid | # of Fract<br>Per Ft |
|----------|--------|-----------|---------|------------|--------------------|----------------|------------|------------|------------------------|----------------------|
|----------|--------|-----------|---------|------------|--------------------|----------------|------------|------------|------------------------|----------------------|



# **STORMWATER OPERATION & MAINTENANCE MANUAL**

**FOR**

**STILL RIVER COMMONS**

*STILL RIVER ROAD, MAP 8B PARCEL 32*

**IN**

**BOLTON,  
MASSACHUSETTS**

**PREPARED BY:** DUCHARME & DILLIS  
CIVIL DESIGN GROUP, INC.  
P.O. Box 428  
Bolton, MA 01740

**PREPARED FOR:** STILL RIVER ROAD DEVELOPMENT, LLC  
28 Country Club Lane  
Middleton, MA 01949

**JUNE 27<sup>TH</sup>, 2018**

**CDG PROJECT # 3339-P**



## **1.0 Project Narrative**

### ***1.1 Proposed Stormwater Management System***

Runoff from the proposed development will be conveyed and treated through a combination of Best Management Practices (BMP's). The following is a brief discussion of each conveyance and treatment BMP proposed.

#### Deep Sump Hooded Catch Basin

A deep sump hooded catch basin is proposed to convey the runoff from the proposed roadway to the subsurface infiltration system. This catch basin will discharge to manholes and conventional storm drains.

#### Subsurface Infiltration Chambers

A subsurface infiltration system is included on site. Cultec pre-fabricated chambers, model 330XLHD, will be installed to collect the run off from the roofs and pavement after pretreatment in the deep sump hooded catch basin. The runoff will first be directed into a small group of chambers. These chambers will be wrapped in a geotextile fabric and will act as a sediment forebay for additional pre-treatment. The runoff will then be directed towards the larger infiltration area. The chambers have been designed to accommodate the runoff associated with the 100-year storm event and have enough volume to accommodate the required recharge and water quality volumes.

#### Trench Drain

A trench drain will be installed across the shared driveway near the entrance. This drain is designed to capture additional runoff that would otherwise flow onto Still River Road. The runoff collected from the trench drain will be directed into the deep sump hooded catch basin where it will begin treatment before infiltration.

### ***1.2 Operation & Maintenance Tasks***

The following activities should be performed routinely to allow for proper functioning of the stormwater system. The following are guidelines referring to each major component of the stormwater management system.

#### ***1.2.1 Street Sweeping***

Street sweeping should be performed at least semi annually. For most effective results, sweeping should be performed by a vacuum style truck in the early spring before spring rain events can wash silt and sediment into the stormwater system. Silt and sediment should be disposed of in



unauthorized modifications have been performed to the system. See Appendix A for the Cultec Operation and Maintenance Guidelines.

#### *1.2.6 Trench Drain*

The trench drain shall be inspected semi-annually for any signs of wear or cracking. The grates and outlet pipe should be inspected for any debris that could block flow and should be removed as needed. The drain should be checked for silt/sediment buildup and cleaned as necessary.



***APPENDIX A***

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*Cultec Operation & Maintenance*



# Operation & Maintenance

*This manual contains guidelines recommended by CULTEC, Inc. and may be used in conjunction with, but not to supersede, local regulations or regulatory authorities. OSHA Guidelines must be followed when inspecting or cleaning any structure.*

## Introduction

The CULTEC Subsurface Stormwater Management System is a high-density polyethylene (HDPE) chamber system arranged in parallel rows surrounded by washed stone. The CULTEC chambers create arch-shaped voids within the washed stone to provide stormwater detention, retention, infiltration, and reclamation. Filter fabric is placed between the native soil and stone interface to prevent the intrusion of fines into the system. In order to minimize the amount of sediment which may enter the CULTEC system, a sediment collection device (stormwater pretreatment device) is recommended upstream from the CULTEC chamber system. Examples of pretreatment devices include, but are not limited to, an appropriately sized catch basin with sump, pretreatment catchment device, oil grit separator, or baffled distribution box. Manufactured pretreatment devices may also be used in accordance with CULTEC chambers. Installation, operation, and maintenance of these devices shall be in accordance with manufacturer's recommendations. Almost all of the sediment entering the stormwater management system will be collected within the pretreatment device.

Best Management Practices allow for the maintenance of the preliminary collection systems prior to feeding the CULTEC chambers. The pretreatment structures shall be inspected for any debris that will restrict inlet flow rates. Outfall structures, if any, such as outlet control must also be inspected for any obstructions that would restrict outlet flow rates. OSHA Guidelines must be followed when inspecting or cleaning any structure.

## Operation and Maintenance Requirements

### I. Operation

CULTEC stormwater management systems shall be operated to receive only stormwater run-off in accordance with applicable local regulations. CULTEC subsurface stormwater management chambers operate at peak performance when installed in series with pretreatment. Pretreatment of suspended solids is superior to treatment of solids once they have been introduced into the system. The use of pretreatment is adequate as long as the structure is maintained and the site remains stable with finished impervious surfaces such as parking lots, walkways, and pervious areas are properly maintained. If there is to be an unstable condition, such as improvements to buildings or parking areas, all proper silt control measures shall be implemented according to local regulations.

### II. Inspection and Maintenance Options

- A. The CULTEC system may be equipped with an inspection port located on the Inlet row. The inspection port is a circular cast box placed in a rectangular concrete collar. When the lid is removed, a 6-inch (150 mm) pipe with a screw-in plug will be exposed. Remove the plug. This will provide access to the CULTEC Chamber row below. From the surface, through this access, the sediment may be measured at this location. A stadia rod may be used to measure the depth of sediment if any in this row. If the depth of sediment is in excess of 3 inches (76 mm), then this row should be cleaned with high pressure water through a culvert cleaning nozzle. This would be carried out through an upstream manhole or through the CULTEC StormFilter Unit (or other pre-treatment device). CCTV inspection of this row can be deployed through this access port to determine if any sediment has accumulated in the inlet row.
- B. If the CULTEC bed is not equipped with an inspection port, then access to the Inlet row will be through an upstream manhole or the CULTEC StormFilter.
  1. **Manhole Access**

This inspection should only be carried out by persons trained in confined space entry and sewer inspection services. After the manhole cover has been removed a gas detector must be lowered into the manhole to ensure that there are not high concentrations of toxic gases present. The inspector should be lowered into the manhole with the proper safety equipment as per OSHA requirements. The inspector may be able to observe sediment from this location. If this is not possible, the inspector will need to deploy a CCTV robot to permit viewing of the sediment.



## Major Maintenance (continued)

|                            | Frequency   | Action   |
|----------------------------|---|--|
| Inlets and Outlets         | Every 3 years                                       | <ul style="list-style-type: none"><li>Obtain documentation that the inlets, outlets and vents have been cleaned and will function as intended.</li></ul>   |
|                            | Spring and Fall                                     | <ul style="list-style-type: none"><li>Check inlet and outlets for clogging and remove any debris as required.</li></ul>  |
| CULTEC Stormwater Chambers | 2 years after commissioning                         | <ul style="list-style-type: none"><li>Inspect the interior of the stormwater management chambers through inspection port for deficiencies using CCTV or comparable technique.</li><li>Obtain documentation that the stormwater management chambers and feed connectors will function as anticipated.</li></ul>   |
|                            | 9 years after commissioning every 9 years following | <ul style="list-style-type: none"><li>Clean stormwater management chambers and feed connectors of any debris.</li><li>Inspect the interior of the stormwater management structures for deficiencies using CCTV or comparable technique.</li><li>Obtain documentation that the stormwater management chambers and feed connectors have been cleaned and will function as intended.</li></ul>  |
|                            | 45 years after commissioning                        | <ul style="list-style-type: none"><li>Clean stormwater management chambers and feed connectors of any debris.</li><li>Determine the remaining life expectancy of the stormwater management chambers and recommended schedule and actions to rehabilitate the stormwater management chambers as required.</li><li>Inspect the interior of the stormwater management chambers for deficiencies using CCTV or comparable technique.</li></ul> |
|                            | 45 to 50 years after commissioning                  | <ul style="list-style-type: none"><li>Replace or restore the stormwater management chambers in accordance with the schedule determined at the 45-year inspection.</li><li>Attain the appropriate approvals as required.</li><li>Establish a new operation and maintenance schedule.</li></ul>  |
| Surrounding Site           | Monthly in 1 <sup>st</sup> year                     | <ul style="list-style-type: none"><li>Check for depressions in areas over and surrounding the stormwater management system.</li></ul>  |
|                            | Spring and Fall                                     | <ul style="list-style-type: none"><li>Check for depressions in areas over and surrounding the stormwater management system.</li></ul>  |
|                            | Yearly  | <ul style="list-style-type: none"><li>Confirm that no unauthorized modifications have been performed to the site.</li></ul>  |

For additional information concerning the maintenance of CULTEC Subsurface Stormwater Management Chambers, please contact CULTEC, Inc. at 1-800-428-5832.



**CULTEC**

Chamber of Choice™

CULTEC, Inc.

878 Federal Road • P.O. Box 280 • Brookfield, CT 06804

Phone: 203-775-4416 • Toll Free: 800-4-CULTEC • Fax: 203-775-1462

Web: [www.cultec.com](http://www.cultec.com) • E-mail: [custservice@cultec.com](mailto:custservice@cultec.com)



1. Stormwater Management System Owners: To be determined
2. Current and future operators: To be determined
3. Emergency contact information: To be determined
4. Change of trustee: To be determined
5. Financial Responsible Party: To be determined
6. Routine Maintenance: To be determined
7. O&M activities: To be determined
8. Record keeping To be determined



**LONG-TERM POLLUTION PREVENTION PLAN**

**FOR**

**STILL RIVER COMMONS**  
*STILL RIVER ROAD, MAP 8B PARCEL 32*

**IN**

**BOLTON,  
MASSACHUSETTS**

**PREPARED BY:** DUCHARME & DILLIS  
CIVIL DESIGN GROUP, INC.  
P.O. Box 428  
Bolton, MA 01740

**PREPARED FOR:** STILL RIVER ROAD DEVELOPMENT, LLC  
28 Country Club Lane  
Middleton, MA 01949

**JUNE 27<sup>TH</sup>, 2018**

**CDG PROJECT # 3339-P**



during times when unusually icy conditions persist for periods of time.

### **5.3     *Street Sweeping***

The Stormwater Operation & Maintenance Plan calls for the shared driveway to be swept in the spring, after the threat of winter precipitation has passed, and in the fall.

## **6.0     Waste Management**

### **6.1     *Solid Waste***

A dumpster will be located on the site during construction. This area will be the primary area for the on-site storage of solid waste prior to pick-up by a waste management company.

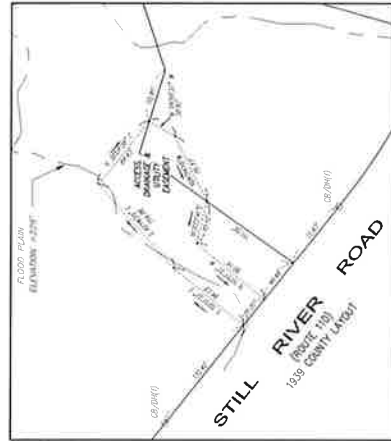








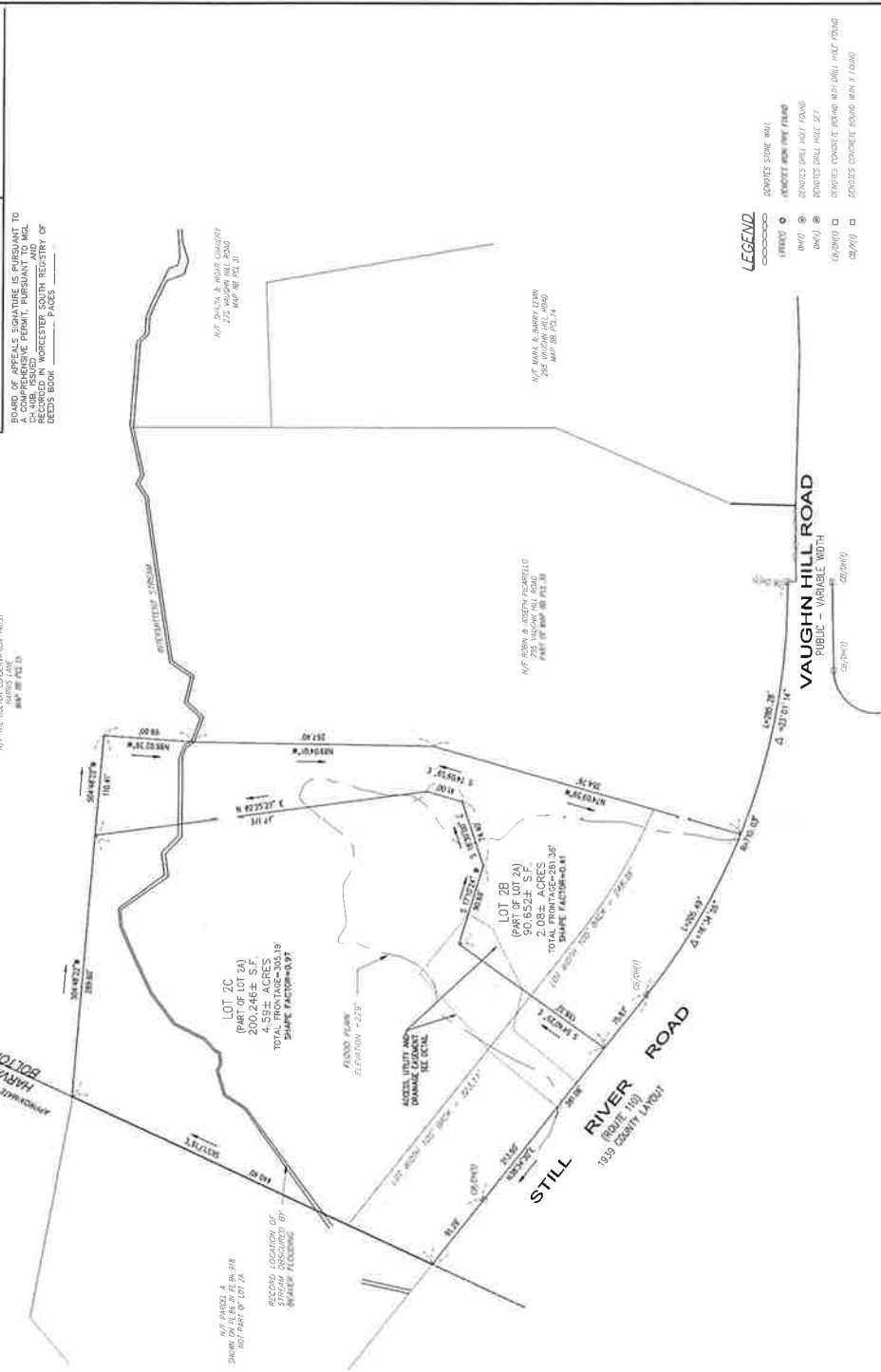




APPROVAL NOT REQUIRED UNDER  
BOLTON ZONING BOARD OF APPEALS

DATE: \_\_\_\_\_

BOARD OF APPEALS SIGNATURE IS PURSUANT TO  
CH. 40A, § 10B, MASS. GEN. STAT. (G.S.)  
CH. 40A, § 10B, MASS. GEN. STAT. (G.S.)  
RECORDED IN WORCESTER SOUTH REGISTRY OF  
DEEDS BOOK \_\_\_\_\_ PAGE \_\_\_\_\_



DATE: 7/5/18

DESIGN BY: JPL

DRAWN BY: JPL

CHECKED BY: JPL

LOT LAYOUT PLAN  
STILL RIVER COMMONS  
BOLTON, MASSACHUSETTS

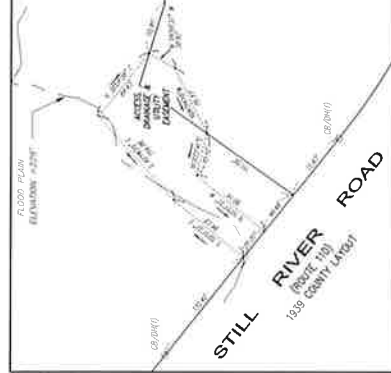
NO. DATE DESCRIPTION

1 7/5/18 LOT LAYOUT PLAN

JOB NO. 3333-P

DRAWING NO. 3333-EASTING

SHEET NO. C2.0



ACCESS, DRAINAGE & UTILITY EASEMENT DETAIL  
1"=40'

NOTES:

- RECORDS: 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

PREPARED BY: **DUCHARME & DILLIS**  
Civil Design Group, Inc.  
CIVIL ENGINEERS - LAND SURVEYORS - WETLAND CONSULTANTS  
1002 MAIN STREET, #100, BOSTON, MA 02111  
TELEPHONE: (617) 552-1111 FAX: (617) 552-1112  
WWW.DUCHARMEANDDILLIS.COM

OWNER: TURN LEFT, LLC  
130 PARK STREET, SUITE 102  
LAURENCE, MASSACHUSETTS

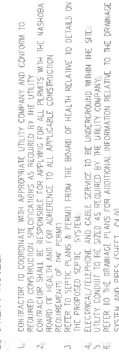
APPLICANT: STILL RIVER ROAD DEVELOPMENT, LLC  
130 PARK STREET, SUITE 102  
LAURENCE, MASSACHUSETTS



I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES  
AND REGULATIONS OF THE REGISTER OF DEEDS OF  
THE COMMONWEALTH OF MASSACHUSETTS.



PROFESSIONAL LAND SURVEYOR





|   |  |  |
|---|--|--|
| <b>DUCHARME &amp; DILLIS</b><br><b>Civil Design Group, Inc.</b><br><small>CIVIL ENGINEERS • LAND SURVEYORS • METEOROLOGICAL CONSULTANTS</small><br>1082 MAIN STREET, 2 <sup>ND</sup> FLOOR, BOX 428<br>BOLTON, MASSACHUSETTS 07400<br>PHONE: (978) 779-6891 FAX: (978) 779-6269<br><a href="http://www.DuCharme-Dillis.com">www.DuCharme-Dillis.com</a> |  | PREPARED BY:<br>          |
| <b>OWNER:</b><br>TURN LEFT, LLC<br>130 PARKER STREET, UNIT 12<br>LAWRENCE, MASSACHUSETTS  |  | <b>APPLICANT:</b><br>STILL RIVER ROAD DEVELOPMENT, LLC<br>28 COUNTRY CLUB LANE<br>MADOLETON, MASSACHUSETTS     |
| <b>SCALE:</b><br>  |  | <b>DATE:</b> 7/27/11<br><b>DESIGN BY:</b> JLL<br><b>DRAWN BY:</b> JLL<br><b>CHECKED BY:</b> JLL<br><b>CSR:</b> |
| <b>UTILITY PLAN</b><br>STILL RIVER COMMONS<br>BOLTON, MASSACHUSETTS   |  | <b>JOB NO.</b> 2339-3<br><b>DRAWING NO.</b> 339-3-UTILITY<br><b>SHEET NO.</b> C3.0                             |







A. MANAGEMENT STRATEGIES:

- CONSTRUCTION SHALL BE RECOGNIZED THAT DRIVING ORIENTATIONS 2-4° BEYOND AND UP TO 5° QUICKELY AS POSSIBLE. APPROXIMATIONS SHALL BE USED TO DETERMINE THAT IT LEGALLY HANDLED BY PLACING, STAKES, ETC. BEHIND EXISTING VEGETATION WHERE FEASIBLE. THERE SHALL BE NO STORAGE OF ANY KIND OF ANY CHAINS, POSTHOLES, PILES AND OTHER POTENTIALLY HAZARDOUS MATERIALS ON SITE.
- NO EXCESSIVE OFFICE HOURS OR OTHER WASTE MATERIALS SHALL BE SHIPPED ON THE 9°C
- ALL WASTE MATERIALS SHALL BE REMOVED AND DISPOSED OF ACCORDANCE WITH THE POLICY IN THE DISPOSAL OF WOODWASTES<sup>1</sup> PUBLISHED BY THE NEW SOUTH WALES GOVERNMENT. THE DISPOSAL OF WASTE MATERIALS SHALL BE ACCORDANCE WITH THE POLICY IN THE DISPOSAL OF WOODWASTES<sup>1</sup> PUBLISHED BY THE NEW SOUTH WALES GOVERNMENT. THE DISPOSAL OF WASTE MATERIALS SHALL BE ACCORDANCE WITH THE POLICY IN THE DISPOSAL OF WOODWASTES<sup>1</sup> PUBLISHED BY THE NEW SOUTH WALES GOVERNMENT.

## B. MAINTENANCE/ PERFORMANCE STANDARDS:

- [illegible]

### D. TEMPORARY MEASURES:

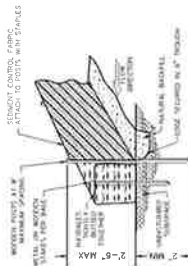
- PLATES OF THE FIRST AND SECOND TYPE WITH CYRILIC CHARACTERS ON THEM ARE NOT ALLOWED. THE PLATES OF THE THIRD AND FOURTH TYPE OF THE VEHICLE DRIVING CATEGORY OF THE FIRST GROUP MODELS SHALL BE PLACED BEHIND THE LEAD AREA. THE PLATES OF THE FIRST AND SECOND TYPE WITH CYRILIC CHARACTERS ON THEM ARE NOT ALLOWED. THE PLATES OF THE THIRD AND FOURTH TYPE OF THE VEHICLE DRIVING CATEGORY OF THE FIRST GROUP MODELS SHALL BE PLACED BEHIND THE LEAD AREA. THE PLATES OF THE FIRST AND SECOND TYPE WITH CYRILIC CHARACTERS ON THEM ARE NOT ALLOWED. THE PLATES OF THE THIRD AND FOURTH TYPE OF THE VEHICLE DRIVING CATEGORY OF THE FIRST GROUP MODELS SHALL BE PLACED BEHIND THE LEAD AREA.

E. PERMANENT STABILIZATION:

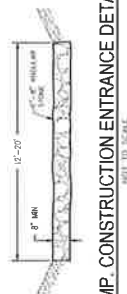
- THESE RESULTS WERE REPRODUCED BY OTHER RESEARCHERS. FOR EXAMPLE, IN A STUDY BY KIM AND KIM (2002), THE EFFECT OF THE RATIO OF THE NUMBER OF VOTES TO THE NUMBER OF CANDIDATES ON THE VOTING BEHAVIOR OF VOTERS WAS EXAMINED. THE RESULTS OF THEIR STUDY WERE SIMILAR TO THE RESULTS OF THE PRESENT STUDY. IN ADDITION, THE EFFECT OF THE RATIO OF THE NUMBER OF VOTES TO THE NUMBER OF CANDIDATES ON THE VOTING BEHAVIOR OF VOTERS WAS EXAMINED IN A STUDY BY KIM AND KIM (2003). THE RESULTS OF THEIR STUDY WERE ALSO SIMILAR TO THE RESULTS OF THE PRESENT STUDY.

#### F. CONSTRUCTION SEQUENCE:

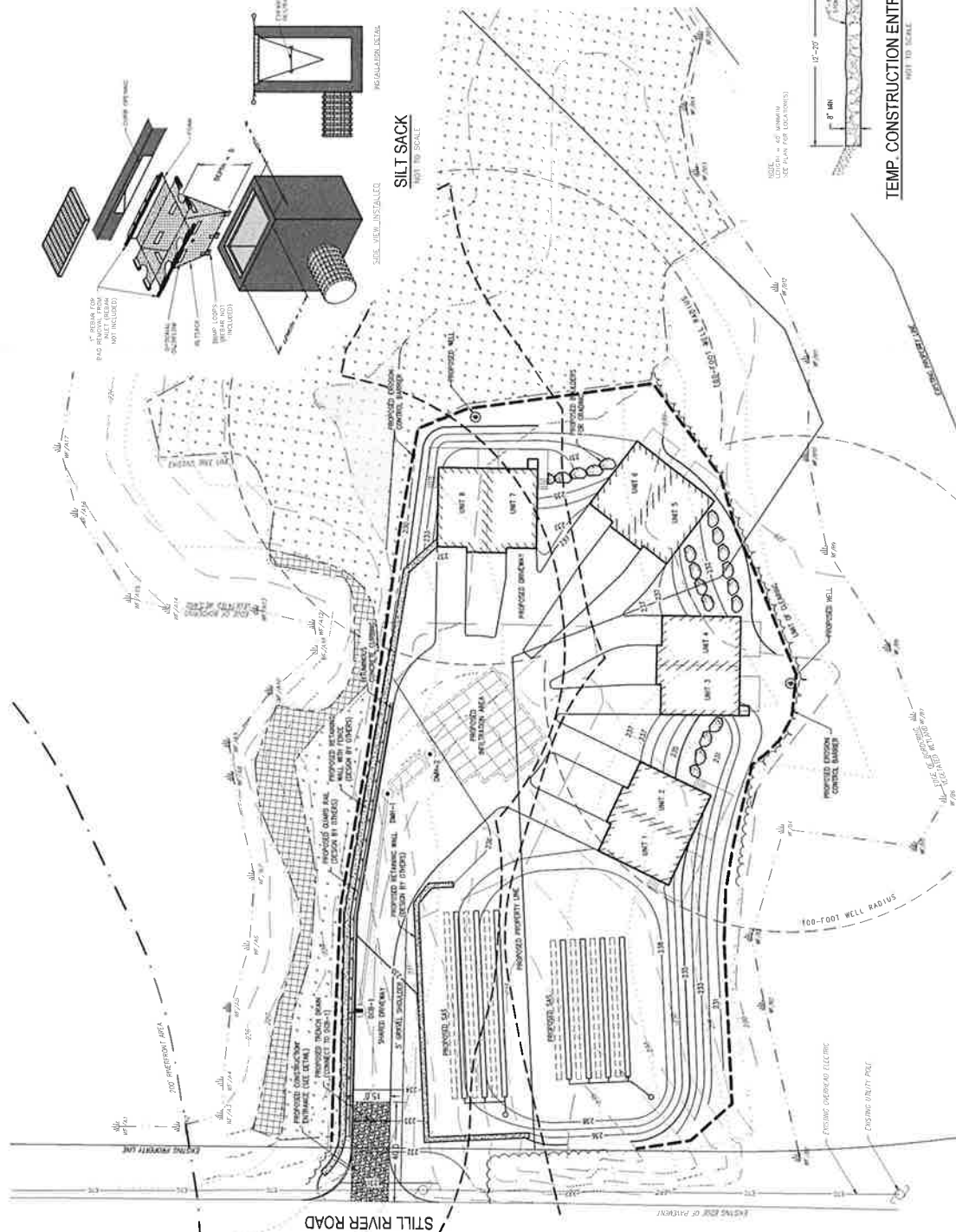
- whereas, as discussed, all nitrogen columns shall be calibrated by means of a nitrogen standard. The nitrogen standard shall be located in the same location as the oxygen standard and shall be calibrated by the same method.



## SILTATION BARRIER



TEMP. CONSTRUCTION ENTRANCE DETAIL



PREPARED BY:

**DUCHARME & DILLIS**  
Civil Design Group, Inc.

**CIVIL ENGINEERS • LAND SURVEYORS • WETLAND CONSULTANTS**

0042 MAIN STREET, P.O. BOX 42B  
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PHONE (978) 778-6091 FAX (978) 779-0260  
[www.DruchmanDallis.com](http://www.DruchmanDallis.com)

9: FAX: (978) 779-0260  
www.DuchymeandDallas.com

OWNER:  
TURN LEFT, LLC  
130 PARKER STREET, UNIT 12  
LAWRENCE, MASSACHUSETTS

APPLICANT:  
STILL RIVER ROAD DEVELOPMENT, LLC  
28 COUNTRY CLUB LANE

CAI C



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|             |        |
|-------------|--------|
| DATE:       | 7/5/18 |
| DESIGN BY:  | JPL    |
| DRAWN BY:   | JPL    |
| CHECKED BY: |        |

[illegible]

15.0



Exhibit B









## TOWN OF BOLTON

### ZONING BOARD OF APPEALS

Town Hall, 663 Main Street, Bolton, MA 01740  
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#### DECISION ON APPLICATION FOR COMPREHENSIVE PERMIT

**RE:** Application to the Bolton Zoning Board of Appeals (the "Board") for a Comprehensive Permit (the "Application") submitted by Still River Road Development, LLC (the "Applicant") and Deschenes & Farrell, PC for the property located on Still River Road, Bolton, Massachusetts 01740 identified by Bolton Assessor's Map 8.B as Parcel 32.

#### A. PROCEDURAL HISTORY

1. On August 21, 2018, the Applicant submitted an application for Comprehensive Permit, pursuant to Massachusetts General Laws c.40B, §§ 20 through 23 ("Chapter 40B"), to construct eight (8) condominium dwelling units, on a site containing approximately 6.68 acres, located on Still River Road, Bolton, Massachusetts described in a deed dated January 16, 2018, to Turn Left LLC recorded with the Worcester District Registry of Deeds, at Book 58346, Page 150, (the "Property"). The condominium development consists of four (4) two-unit duplex style buildings located on two lots each containing two (2) duplex buildings. The Applicant proposes two (2) of the eight (8) units to be affordable.
2. The site plans referenced herein are entitled "Comprehensive Permit Plan, Still River Road, Map 8.B Parcel 32, Bolton, MA, Still River Commons" (the "Site Plans") prepared by Ducharme & Dillis Civil Design Group, Inc. dated July 5, 2018, as revised on December 10, 2018, January 10, 2019, January 30, 2019, February 28, 2019, and March 13, 2019.
3. On August 30, 2018, the Applicant granted an extension to allow the Board to open the public hearing on the Comprehensive Permit after the statutory time period required under Chapter 40B and 760 CMR 56. The time period was extended to September 24, 2018, thirty five (35) days from the date on which the Application was received by the Board.
4. A public hearing on the Comprehensive Permit was noticed for September 24, 2018. Notice of the public hearing was published in The Clinton Item on September 7, 2018 and September 14, 2018. Both notices were posted for 14 days in the Bolton Town Hall, and mailed to parties of interest at least 14 days before the public hearing.



5. The Board commenced the public hearing on the Comprehensive Permit on September 24, 2018 at the Houghton Building, 697 Main Street, Bolton, MA at 7:00 p.m. at which time all those opposed or in favor could be heard. The hearing was continued to the following dates: October 17, 2018, November 19, 2018, November 26, 2018, December 18, 2018, January 17, 2019, February 12, 2019, February 19, 2019, March 6, 2019, March 19, 2019 and April 2, 2019. The Board closed the public hearing on April 2, 2019.
6. The hearings on October 17, 2018 and November 19, 2018 were continued without discussion. The hearing on February 12, 2019 was cancelled due to bad weather and rescheduled for February 19, 2019.
7. Members of the Board attending the public hearing, deliberating and voting on the Comprehensive Permit were Chairman Gerard Ahearn and Members Bradley Reed, Bryan Holmes, Kay Stoner and Andy Kischitz.
8. On January 17, 2019, pursuant to M.G.L. c.39, §23.D, Andy Kischitz, a member of the Board, certified in writing that he examined all of the evidence received by the Board including a video recording of the hearing held on December 18, 2018 which he failed to attend.
9. The Applicant and/or their representatives were in attendance at the public hearing. The Applicant's representatives attending the hearing on September 24, 2018, December 18, 2018, January 17, 2019, February 19, 2019, March 6, 2019, March 19, 2019 and April 2, 2019 were Douglas Deschenes, Esq. from Deschenes & Farrell, P.C. and Seth Donohoe from Ducharme & Dillis Civil Design Group, Inc. Adam J. Costa from Mead, Talermin & Costa, LLC also attended the hearing on March 6, 2019, March 19, 2019 and April 2, 2019. The Applicant's representatives attending the hearing on November 26, 2018 were Melissa Robbins, Esq. from Deschenes & Farrell, P.C. and Seth Donohoe.
10. The Board requested the assistance of a consultant through the Massachusetts Housing Partnership's Chapter 40B Technical Assistance Program to aid in the comprehensive permit application process. Joseph Peznola, P.E., from Hancock Associates, Inc. was selected as the Board's consultant. Mr. Peznola provided letters to the Board dated October 23, 2018, November 23, 2018, December 17, 2018, January 14, 2019, February 6, 2019 and March 4, 2019 as guidance and preparation of the hearing. Mr. Peznola attended the hearing on September 24, 2018, November 26, 2018, December 17, 2018, January 17, 2019, March 6, 2019 and March 19, 2019.
11. As allowed by 76 CMR 56.05(5), the Board employed an outside consultant to provide technical advice unavailable from municipal employees. Horsley Witten Group was hired to conduct a technical peer review of the Application for civil engineering and environmental impact. Representatives from Horsley Witten Group conducting the peer review were Janet Carter Bernardo, P.E., LEED AP, and Amy Ball, PWS, CWS. Horsley Witten Group provided an initial review letter dated October 11, 2018 and subsequent letters dated December 18, 2018, January 15, 2019 and February 19, 2019.



12. Representatives from Horsley Witten Group along with Rebecca Longvall, Bolton's Conservation Agent, and Erica Uriarte, Bolton's Town Planner, conducted a site visit on Thursday, September 27, 2018, at 1:00 p.m. to observe the existing conditions of the Property.
13. The Board conducted a site visit on Saturday, September 29, 2018, at 9:30 a.m. with Brandon Ducharme from Ducharme & Dillis Civil Design Group, Inc. to observe the existing conditions of the Property.
14. The Bolton Planning Board provided comment to MassHousing during MassHousing's review of the Applicant's application for Project Eligibility/Site Approval. The Planning Board requested the Development be reviewed by Bolton's Design Review Board.
15. The Board solicited comments from Town boards, commissions, departments, and officials. Comments were received from the Conservation Commission, Conservation Administrator, Board of Health, Department of Public Works, Police Department, Fire Department, Historical Commission, Planning Board and Board of Selectmen. Board of Health, Planning Board and Board of Selectmen discussed the Application during their regularly scheduled public meetings. Comments received were made part of the public record.
16. The Board received comments from the Bolton Conservation Trust dated November 25, 2018. These comments were made part of the public record.
17. The Board received comments from the Sudbury Valley Trustees dated February 19, 2019. These comments were made part of the public record.
18. The Board received comments from the Town of Harvard Conservation Commission dated November 1, 2018 and the Town of Harvard Planning Director received November 6, 2018. These comments were made part of the public record.
19. The Board received comments from abutters and residents throughout the course of the public hearing and were made part of the public record. The abutters/residents expressed concerns relating to site control, subdivision of land, area archeology, endangered and rare species, filing with the Natural Heritage Endangered Species Program, fire and safety, landscaping, stormwater management, impact to wetland resource areas including floodplain, wetland resource area delineation, filing with the Bolton Conservation Commission, implications to waiving local bylaws and regulations, groundwater protection, sewage disposal system design and offsets to neighboring wells, traffic, and architectural design, among other issues.
20. Throughout its deliberations, the Board was mindful of the statements of the Applicant, the Applicant's representatives, and the comments of the general public, all as made or received at the public hearing.



## **B. GOVERNING LAW**

M.G.L. c. 40B, §20 through 23 known as Chapter 40B or the Comprehensive Permit Law, 760 CMR 56.00 and the Guidelines for G.L. c.40B Comprehensive Permit Projects and the Subsidized Housing Inventory published by the Massachusetts Department of Housing Community Development (“DHCD”).

## **C. FINDINGS OF FACT**

1. The Applicant satisfies the requirements set forth in Chapter 40B and 760 CMR 56.04(1) for eligibility to submit the Application.
  - a. The Applicant is a “limited dividend corporation” as defined by 760 CMR 56.02 with a place of business at 28 Country Club Lane, Middleton, MA 01949.
  - b. A Project Eligibility/Site Approval letter dated June 20, 2018 was provided by MassHousing (the “Subsidizing Agency”) for Still River Commons (the “Project”) through the New England Fund (“NEF”) housing subsidy program of the Federal Home Loan Bank of Boston (“FHLBB”). The Applicant submitted a pro forma with its Application
  - c. The Applicant has control of the site based on evidence that a related entity known as Turn Left LLC owns the site as identified in a deed dated January 16, 2018, or holds an option or contract to acquire such interest in the site.
2. The Town of Bolton has not met the Statutory Minima set forth in Chapter 40B or 76 CMR 56.03(3). The total number of eligible housing units provided on the Town’s Subsidized Housing Inventory (SHI) does not exceed ten percent (10%) of its total housing units as reported in the latest decennial census. In addition, the Town of Bolton does not currently have a DHCD approved Housing Production Plan.
3. The condominium development known as “Still River Commons” consists of four (4) two-unit duplex style buildings located on two lots each containing two (2) duplex buildings (the “Development”). A total of eight (8) units are provided with six (6) two-bedroom units and two (2) three-bedroom units. Each building is three (3) stories in height with garages provided underneath each unit.
4. As proposed, twenty-five percent (25%) of eight (8) units or two (2) units (the “Affordable Units”) shall be reserved in perpetuity for sale to households earning no more than eighty percent (80%) of the Median Family Income for the Eastern Worcester County, MA HUD Metro FMR Area, as determined by the U.S. Department of Housing and Urban Development (HUD) and as adjusted for household size. The Affordable Units will include one (1) two-bedroom unit and one (1) three-bedroom unit. Both units will count towards the Town of Bolton’s SHI.
5. The Property consists of 6.68 acres. Approximately one (1) acre will be developed with 17,860 sq. ft. of impervious area. The remaining undeveloped land will stay in its natural



state. The Applicant proposes to subdivide the Property into two (2) separate lots; Lot 2B contains 90,652 sq. ft. (approximately 2.08 acres) and Lot 2C contains 200,246 sq. ft. (approximately 4.6 acres). Each lot contains a sewage disposal system and potable well to accommodate the four (4) units on each lot. The sewage disposal systems are designed to accommodate nine (9) bedrooms each for a total of eighteen (18) bedrooms for the Development.

6. The Bolton Design Review Board (DRB) conducted a review of the Development on July 17, 2018 prior to submission of the Application. Their comments included:
  - a. Wrap the lower roof around each dwelling.
  - b. Add columns at the front entrances to be non-fluted.
  - c. Modify the doors to be a craftsman style such as a french door or half glass. The doors in the back should match the doors in the front of each dwelling.
  - d. Wrap the corners of the stone front at the entrance ways.
  - e. Increase the roof overhang of each dwelling.
  - f. Increase the peak in the gable of each dwelling.
  - g. Drop down the sills of the top windows.
  - h. Provide color samples of the vinyl siding for the DRB's review. The DRB requested additional colors to be used.
  - i. Provide a window schedule indicating the size of the windows.
  - j. Provide renderings of the Development from the street.
  - k. Provide the design of the retaining wall.
  - l. Provide a landscape plan.
  - m. Recommend showing snow storage areas.
  - n. Recommend not to include light poles along the driveway.
  - o. Recommend a second meeting to review changes.
7. The Applicant responded to the DRB comments on March 1, 2019. The Applicant provided the following:
  - a. "Wrapped" the roof around, "Kicking roof to outside".
  - b. Provided columns at front entrances.
  - c. Added more glass to the front doors.
  - d. Wrapped stone at entrances around the corners of entranceway.
  - e. Bumped out roof overhang by six (6) inches.
  - f. Will provide two different unit colors.
  - g. Have proposed no driveway pole lighting. All outside lighting will be wall mounted lights on units, unless required by the Comprehensive Permit to install pole lighting.
  - h. Updated site plans including drainage design, landscaping, lighting and snow storage.
  - i. Renderings.
8. The Applicant declined to provide updated building elevations to show the changes that were incorporated into the building design at the request of the DRB. In addition, the



Applicant declined to provide color options for the vinyl siding, a window schedule and design for the retaining walls.

9. In a letter dated February 5, 2019, The Board of Selectmen recommended the Board deny the Comprehensive Permit stating that the Town of Bolton had a strong record of supporting affordable housing projects, but the Development raises several concerns:
  - a. Impact from the septic system and stormwater management system to groundwater, private wells and wetland resource areas given their close proximity.
  - b. The surrounding area of the Development is subject to flooding and alters the 100-year flood zone.
  - c. The tight building site configured within one (1) acre.
  - d. Ecological resources surrounding the Property.
10. Under Regulation 4 of the Town of Bolton, Massachusetts Board of Health Regulations, Requirements for the Subsurface Disposal of Sanitary Sewage require a one hundred (100) ft. separation from the leaching facilities to bordering vegetated wetlands. The Regulations also state that if one hundred (100) ft., as required, is not possible, seventy-five (75) ft. is considered so as long as enhanced nitrogen reduction is provided as part of the design of the sewage disposal system. The Development provides less than one hundred (100) ft. of separation from the leaching facilities to the wetlands. The leaching field associated with Lot 2C is approximately eighty (80) ft. from bordering vegetated wetlands. The leaching field associated with Lot 2B is approximately fifty (50) ft. from bordering vegetated wetlands. The Applicant added secondary treatment to the systems as required by the Board of Health regulations. The secondary treatment was incorporated into the Site Plans dated January 30, 2019.
11. In a letter dated March 13, 2019, the Board of Health requested that the Board of health regulations be upheld due to the Development's proximity to resource areas. For the protection of potable water and groundwater, the leaching facility within fifty (50) ft. of bordering vegetated wetlands would not be permitted under Bolton's Board of Health Regulations.
12. Under Bolton Well Regulations, §4.1 Well Location Requirements, wells are required to be one hundred fifty (150) ft. from a leaching facility in soils with percolation rates of two minutes per inch or less. The well for Lot 2B is approximately one hundred twenty (120) ft. from the leaching facility. The Applicant failed to provide evidence that the 120 ft. offset is adequate for the protection of potable water.
13. Based on the evidence at the public hearing, the Board concluded that compliance with the Bolton Well Regulations was necessary for the protection of private potable water systems and public health, particularly in the absence of any alternative public water source. The Board concluded these concerns, despite requests to the Applicant, were not adequately addressed by the Applicant. The Board further concluded that these concerns require denial of the Application, are not adequately addressed by compliance with more relaxed State standards, and are not outweighed by the need for regional affordable housing.



14. An Order of Conditions (DEP File No. 112-636) was issued by the Bolton Conservation Commission in 2015 for a single family home on the Property. The Order of Conditions was extended in 2018. The Commission will require the Order to be closed out prior to the Applicant making a new submission.
15. The existing delineated bordering vegetated wetland boundary as shown on the Site Plans was obtained from DEP File No. 112-636. In the peer review letter dated October 11, 2018, Horsley Witten Group indicated that The Massachusetts Wetlands Protection Act regulations allow for consideration of new information pursuant to 310 CMR 10.05(8), if that information will lead to greater protection of jurisdictional areas.
16. The Property contains significant resource areas as defined by M.G.L. c.131, §40 (the "Wetlands Protection Act"), 310 CMR 10.00 and/or the Town of Bolton's Wetlands Bylaw, Chapter 233 and the Town of Bolton Conservation Commission Wetlands Bylaw Regulations:
  - a. A stream subject to the Wetlands Protection Act is present along the eastern portion (rear) of the Property as well as to the north of the Property.
    - i. According to the Site Plans and USGS mapping, the Applicant identifies the stream as intermittent for the portion of the stream to the east and identifies the stream as perennial for the portion of the stream to the north.
    - ii. The Bolton Conservation Commission, through written and oral testimony to the Board, considers the entire stream perennial based on previous filings, StreamStats results and site observations.
  - b. Bordering vegetated wetlands subject to the Wetlands Protection Act are present on the Property to the south, east and north. Almost the entire Development is located within the one hundred (100) ft. buffer zone.
  - c. The Property is located within the 100 year flood zone (bordering land subject to flooding) subject to the Wetlands Protection Act as shown on the Flood Insurance Rate Map 25027C0457E & 25027C0476E, Effective Date July 4, 2011. The base flood elevation is 229 ft. referenced to vertical datum N.A.V.D. 1988.
    - i. The Development alters 415 cubic ft. of floodplain and provides 630 cubic ft. of compensatory flood storage.
    - ii. Approximately 337 sq. ft. of the compensatory flood storage is provided within the first twenty-five (25) ft. of wetland resource area located near Wetland Flags AA24 through AA26 as defined by the Town of Bolton's Wetlands Bylaw.
  - d. Almost the entire Development resides within the Adjacent Upland Resource Areas (AURAs) as defined by the Town of Bolton's Wetlands Bylaw as land extending between 25 and 100 ft. from wetland resource areas (excepting riverfront area).
  - e. A portion of the Development is located within twenty-five (25) ft. of the wetland resource areas (excepting riverfront area). The Town of Bolton Conservation Commission Wetlands Bylaw Regulations establish this first twenty-five (25) ft. from wetlands as part of the wetland resource area and is considered an area of no disturbance.



- i. The Development will alter 2,822 sq. ft. of the twenty-five (25) ft. prohibition area near wetland flags AB14 through AB18, AB3 through AB5 and AA24 through AA26.
17. In a letter from the Conservation Commission received September 20, 2019, the Commission asked the Applicant to clarify how sensitive resource areas and ecosystems will be protected as part of the Development. Specifically, the Commission asked how parking will be deterred within these areas, how material will be deterred from being placed within these areas, and how the Applicant will prevent negative impact to resource areas. The Applicant failed to respond to these questions in the response letter from Ducharme & Dillis Civil Design Group, Inc. dated December 11, 2018 in which the Applicant responded to Conservation Commission comments dated September 20, 2018 and November 14, 2018.
18. In a letter dated January 16, 2019, the Conservation Commission requested to the Board to deny waivers under the Town of Bolton's Wetlands Bylaw given the sensitivity of the wildlife, habitat and resource areas existing on the Property. The Commission considers the request for waivers to be extensive and waiving these local requirements would lack protection of these resources. The purpose of Bolton's Wetlands Bylaw and associated regulations are to ensure the conservation and protection of resource areas, resource interests and natural resource services: not every town protected under the Wetlands Protection Act has private wells and septic systems. The Commission referenced the 2017 Bolton Open Space & Recreation Plan which indicates that Bolton is one of only 50 of the 351 cities and towns in Massachusetts that does not have public water supply. Nor does Bolton have a town sewer system. Bolton residents have private water and sewage disposal systems.
19. In a letter dated March 16, 2019, the Conservation Commission state "*AURAs are presumed to protect private and/or public water supplies; protect groundwater; protect water quality; protect fisheries; protect wildlife habitat; preserve rare species habitat including rare plant species; provide flood control; prevent storm damage; prevent pollution and sedimentation; provide natural resource services and public services, and are best left in an undisturbed and natural state. However, the Commission may find that temporary or limited disturbance is appropriate when the Applicant can demonstrate to the Commission's satisfaction that the proposed work or activity will not affect wetland and habitat values singularly or cumulatively and that reasonable alternatives to the proposed work or activity do not exist*".
20. The majority of the Development resides within the AURA as defined by the Town of Bolton's Wetlands Bylaw as land extending between 25 and 100 ft. from wetland resource areas (excepting riverfront area). The Applicant has not demonstrated that the proposed work or activity will not affect wetland and habitat values singularly or cumulatively and that reasonable alternatives to the proposed work or activity do not exist.



21. In the peer review letter dated October 11, 2018, Horsley Witten Group recommended the Board retain §1.18 of the Town of Bolton's Wetlands Bylaws to require the Applicant to consider project alternatives. Horsley Witten stated *"The project as proposed will involve impacts within BLSF. Proposed alterations will occur within the locally-regulated land within 25-feet of protected resource areas, including within 25-feet of the BVW and within 25 feet of lands subject to flooding or inundation by groundwater or surface water (BLSF). It is unclear whether the previous approval by the Conservation Commission (under DEP File No. 112-0636) included the need for fill within the floodplain or within the locally-regulated 25-foot prohibited buffer. However, the previously-approved project appears to be a viable alternative to the proposed comprehensive project that requests alteration of these resource areas"*.
22. In a letter from the Bolton Conservation Commission dated March 19, 2019, the Commission stated *"The Commission, under the local bylaw on any project, is faced with assessing three concepts: 1) to avoid, where feasible, altering a resource area, 2) minimize alteration to a resource area, and 3) where alteration is unavoidable, complete full mitigation."*
23. In a letter from the Bolton Conservation Commission dated March 19, 2019, the Commission indicated that §233.3 of the Bolton Wetlands Bylaw requires the applicant to show *"that there are no practicable and substantially equivalent economic alternatives to the proposed project with fewer adverse impacts on the interests," and that the "work including proposed mitigation will have no significant adverse or cumulative adverse effect on the resource areas or resource interests."*
24. Discrepancies in the resource area delineation were identified in the peer review letter prepared by Horsley Witten Group dated October 11, 2018. These discrepancies include two areas observed in the field where wetland characteristics occurred, but were not part of the existing delineated bordering vegetated wetland boundary. Preliminary observations of wetland indicator vegetation, hydric soils and/or hydrology extended considerably further into the Property than shown in the Site Plans. The two areas observed included the boundary near wetland flagging stations WF A11 and WFA12 where sensitive fern (*Onoclea sensibilis*) extended upgradient of the delineated boundary and low-chroma hydric soils were observed; and in the eastern portion of the Property where a hydrophilic plan community, low chroma soils and groundwater within nine (9) to twelve (12) inches of the soil surface were observed.
25. In the peer review letter dated October 11, 2018, Horsley Witten Group identified a discrepancy in the status of the stream flowing along the eastern portion of the Property. The Applicant classified the perennial stream as intermittent. It was noted by Horsley Witten that the perennial stream would be afforded a two hundred (200) ft. riverfront area that would extend westward into the Property.



26. In comments prepared by Rebecca Longvall (Conservation Agent) received September 20, 2018, she identified the same discrepancy in the status of the stream flowing along the eastern portion of the Property. Based on her observations in the field, the stream has a well-defined bank and bed typical of a perennial stream. In addition, this stream was classified as perennial in previous filings with the Conservation Commission. The Applicant has not yet contested the resource area as intermittent before the Commission and therefore the perennial classification still stands.
27. The Applicant failed to update the Site Plans with the correct classification of the stream flowing along the eastern portion of the Property and to show the two hundred (200) ft. riverfront area that would be associated with a perennial stream. It is unclear from the Site Plans whether the Development is located outside this riverfront area.
28. During the public hearing held on January 17, 2019, through oral testimony, Rebecca Longvall noted that the Site Plans show a break between the perennial stream to the north and the intermittent stream to the east where the channel had not been defined. In addition, the historical location of the perennial stream as shown on the Site Plans has not been verified in the field by the Applicant. It is unclear whether the Development is located outside the two hundred (200) ft. riverfront area of the portion of the stream to the north or along the break.
29. In the peer review letter dated October 11, 2018, Horsley Witten Group recommended the Applicant file with the Bolton Conservation Commission either an Abbreviated Notice of Resource Area Delineation (ANRAD) or Request for Determination of Applicability (RDA) to confirm the wetland resource area boundaries. Horsley Witten Group strongly recommended that this be done early in the permitting process.
30. In the peer review letter dated December 17, 2018, Horsley Witten Group stated "*The Applicant has noted multiple times in its response letter that it will file with the Conservation Commission after completion of the Comprehensive Permit process. The confirmed location and potential impacts to the wetlands is a critical element in the permitting of this development. In October, HW had strongly recommended that the Applicant pursue confirmation of the resource areas early in the process. However, it appears that the Applicant has opted to complete this additional permitting at a later date.*"
31. In a letter from the Bolton Conservation Commission received November 14, 2019, the Commission strongly suggested that the Applicant file an ANRAD early in the Board's review process.
32. The Applicant declined to file with the Bolton Conservation Commission early in the permitting process. The Applicant intends to submit filings with the Commission after the comprehensive permit application process is complete.



33. A "possible wet area" was incorporated into the Site Plans dated December 10, 2018 as response to Horsley Witten Group's comment summarized in Paragraph 24 above.
34. In an email from Rebecca Longvall (Conservation Agent) dated December 11, 2018 and in a letter from the Bolton Conservation Commission dated January 16, 2019, data sheets supporting wetland flags A11 & A12 were requested. The location of these wetland flags were questioned by Horsley Witten Group in their peer review letter dated October 11, 2018.
35. The Applicant failed to provide data sheets for wetland flags A11 and A12.
36. During the public hearing held on January 17, 2019, the Applicant indicated that EcoTec, Inc. was hired to review the existing wetland resource area delineation. Based on EcoTec's delineation, wetland flags were updated on the Site Plans dated January 30, 2019. The boundary of the bordering vegetated wetlands identified by wetland flags WF/B1 through WF/B12 and wetland flags WF/A1 through WF/A22 were replaced with wetland flags AA1 through AA28 and AB1 through AB20. The edge of wetlands on the eastern portion of the Property were unchanged based on DEP File No.112-636 which include wetland flags WF/A23 through WF/A25 and WF/B13 through WF/B21.
37. In an email from Rebecca Longvall (Conservation Agent) dated February 19, 2019, she asked for a copy of the data sheets supporting the revised wetland delineation for wetland flags AA1 through AA28 and AB1 through AB20. In addition, she asked why the eastern portion of the Property was not also re-delineated at the same time.
38. In a letter dated March 14, 2019 prepared by Deschenes & Farrell, PC, the Applicant declined Rebecca Longvall's request for a copy of the data sheets stating that EcoTec, Inc. had not yet completed their full re-delineation of the wetlands on the Property. EcoTec declined to release partial or incomplete work. The Applicant indicated that a written report would be provided when submissions are filed with the Conservation Commission.
39. During the public hearing held on January 17, 2019, through oral testimony, Rebecca Longvall (Conservation Agent) stated that the Conservation Commission discourages wetland delineations during winter months when wetland vegetation may not be easily identified. All three wetland indicators including vegetation, hydrology and soils must be present to delineate a bordering vegetated wetland.
40. Based on the evidence at the public hearing, the Board concluded that compliance with the requirements of the Bolton Wetlands Bylaw and Board of Health Regulations was necessary for the protection of private potable water systems and public health, particularly in the absence of any public water source, and for the protection of wildlife, habitat and wetland resource areas. The Board found these concerns were not adequately addressed by the Applicant and its consultants, despite multiple requests by the Board. The Board further concluded that these concerns require denial of the Application, are not adequately



addressed by compliance with more relaxed State standards, and are not outweighed by the need for regional affordable housing.

41. The entire Property is located within areas designated as both Estimated Habitat (EH1154) and Priority Habitat of Rare Species (PH 1677). The Development is subject to a review by the Natural Heritage Endangered Species Program (NHESP) under the Massachusetts Endangered Species Act (M.G.L. c.131A).
  - a. A previous review by NHESP for a single family home on the Property confirmed the need for mitigation. NHESP required a resource area mitigation area of approximately 43,000 sq. ft. to be maintained as native meadow (NHESP 15-34941). The proposed compensatory flood storage area for the Development is provided within this area. In addition, NHESP required approximately 2,500 sq. ft. of field to be naturalized as scrub/shrub or forested habitat (NHESP 12-34941). These areas are shown on the Site Plans.
  - b. NHESP issued a letter dated March 22, 2019 stating that the Division finds the Site Plans and additional information do not change their previous determination. NHESP determined that the Development will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species and will not result in a prohibited take of state-listed rare species.
42. The Property is identified in the following Figures from the 2017 Bolton Open Space and Recreation Plan (OSRP):
  - a. Figure 10 entitled "Floodplain Overlay District, Town of Bolton".
    - i. The Floodplain Overlay District is identified on the Property.
  - b. Figure 11 entitled "Wetlands, Town of Bolton".
    - i. Wetlands are identified on the Property.
  - c. Figure 17 entitled "Unprotected Parcels with Habitat Significance, Town of Bolton".
    - i. The Property is identified as an unprotected parcel with habitat significance.
  - d. Figure 18 entitled "Unprotected Area of Habitat Significance, Town of Bolton".
    - i. The Property is identified as an unprotected parcel with habitat significance.
  - e. Figure 25 entitled "Unprotected Parcels with Agricultural Significance, Town of Bolton".
    - i. The Property is identified as an unprotected parcel with agricultural significance.
  - f. Figure 27 entitled "Parcels Important for Linking Protected Lands, Town of Bolton".
    - i. The Property is identified as a parcel important for the linkage of protected and undeveloped lands.
  - g. Figure 29 entitled "Parcel of Surface Water and Groundwater Significance, Town of Bolton".
    - i. The Property is identified as a parcel with surface and groundwater significance.
  - h. Figure 31 entitled "Unprotected Parcels with Scenic Significance, Town of Bolton".



- i. The Property is identified as an unprotected parcel with scenic significance.
43. In a letter from the Bolton Conservation Commission received November 14, 2018, the Commission stated that the goals within the OSRP to preserve environmentally significant parcels such as this Property should be upheld given the OSRP, upon its approval, was fully supported by the Town, regional planning committees, state representative, non-profits, etc.
44. In a letter from the Bolton Conservation Trust dated November 25, 2018, the Trust questioned the location of the Development for the following reasons:
- a. The Property is located entirely within NHESP's Priority Habitat of Rare Species and Estimated Habitat of Rare Wildlife and designated Core Habitat Area.
  - b. 3.8 acres of the Property is designated as DEP Wetlands "wooded marsh".
  - c. The majority of the Development is located within the one hundred (100) ft. wetland buffer.
  - d. Portions of the Property have a very high water table.
45. In a letter from the Bolton Conservation Trust dated November 25, 2018, the Trust questioned the use of Chapter 40B to ignore groundwater protection. The Trust states that change in water quality and stormwater runoff from the Development could adversely affect the State's Bolton Flats Wildlife Management Area and the Still and Nashua Rivers to the west. All eleven (11) of the Massachusetts towns that the Nashua River flows through voted to recommend that it be designated as part of the Wild and Scenic Rivers System. The Trust stated that protection of the river corridors is an important local and regional effort.
46. In a letter from the Bolton Conservation Trust dated November 25, 2018, the Trust indicated that it is an abutter to the Property owning 15.9 acres to the southeast (Parcel 8.B-15). Their land is conveyed with a Conservation Restriction which states "*...the Premises is adjacent and proximate to the other public and private conservation land thereby contributing to a corridor of protected open space and enhancing the ecological viability of the area.*" The Trust land is connected by a trail easement to the core conservation area of Vaughn Hills and the adjacent properties of Bowers Springs, representing one of the largest contiguous corridors for wildlife habitat and recreation in Bolton. The Trust stated "*Development of this lot could make it more difficult, or even impossible for the BCT to carry out the conditions of the Conservation Restriction.*"
47. The Sudbury Valley Trustees (SVT) identified the Property as one of the highest priority properties for conservation in the region through analysis conducted by SVT to identify critical properties of undeveloped and unprotected open spaces. The analysis considered areas identified as Priority Habitat by the Natural Heritage and Endangered Species Program, BioMap2 Core Habitat and Critical Natural Landscapes, adjacency of properties to existing conservation land, UMass CAPS index of ecological integrity, and areas identified by the Nature Conservancy as being most resilient to climate change. SVT identified several of these attributes on the Property deeming it critical for protection and



noted that the site was ecologically valuable considering its proximity to protected lands including land owned by the Bolton Conservation Trust, land owned by the Harvard Conservation Trust, and the Bolton Flats Wildlife Management Area.

48. The archaeological sensitivity of the Still River Road area is identified in the Community-Wide Archaeological Reconnaissance Survey of Bolton (2001).
49. In a letter received from the Bolton Conservation Commission on November 14, 2018, the Commission stated that the Property is located within an area of Bolton significant to local history. The Nashua River is part of the National Wild and Scenic Rivers System in Massachusetts and the corridor through Bolton is considered historical.
50. Access to the Development includes a fifteen (15) ft. wide shared driveway with a five (5) ft. gravel shoulder. After the first one hundred and ten (110) ft. of the shared driveway, the width expands to twenty four (24) ft. and terminates into a cul-de-sac. The Development is projected to generate 45 vehicle trips per day.
51. During the public hearing, through oral testimony, there was significant concern from the Board, elected officials and abutters regarding the ingress and egress of the Development. The Applicant failed to provide evidence to the Board that 45 vehicle trips per day would not negatively impact Still River Road, also known as Route 110. In addition, there were concerns with insufficient parking. Each resident will have a garage space and a space within their driveway for tandem parking. No additional spaces will be provided. Visitors will park within the shared driveway of the Development potentially impacting adequate access for public safety vehicles.
52. Stormwater runoff generated from the Development will be retained within an underground infiltration system. Runoff from the shared driveway will be collected by either a trench drain, double catch basin or pre-treatment unit. The pre-treatment unit will provide the removal of suspended solids prior to discharging the runoff to the subsurface infiltration system. Roof runoff generated from the buildings will be discharged directly into the underground system which is sized to handle up to the one hundred (100) year, twenty-four (24) hour storm event. A small portion of runoff generated by the driveway entrance will flow to the road.
53. Horsley Witten Group conducted a review of the stormwater management system for the Development to verify compliance with the MassDEP Stormwater Handbook. Additional soil testing was conducted to confirm soils within the area of the subsurface infiltration system. A forty (40) ft. landing was provided at the entrance of the shared driveway and the slope of the entrance was reduced from eight percent (8%) to four percent (4%). The bottom elevation of the subsurface infiltration system was modified to provide the required two (2) ft. separation from estimated seasonal high groundwater.
54. During the public hearing held on December 18, 2019, through oral testimony, Erica Uriarte requested the Applicant conduct a permeability test to confirm the infiltration rate



of the soil in which the subsurface infiltration system would be located. She noted that if the system did not infiltrate as designed, the system has the potential to overflow to Still River Road impacting road drainage and downstream wetlands. Horsley Witten Group, attending the meeting, supported this additional testing.

55. During the public hearing held on January 17, 2019, through oral testimony, the Applicant declined to conduct a permeability test stating that it was too costly and was not required by the MassDEP Stormwater Handbook.
56. In a letter from the Planning Board dated November 26, 2018, the Planning Board recommended that an overflow outlet be provided for the subsurface infiltration system so that any overflow runoff from the system could be discharged to an appropriate area on site. As designed, the system will overflow to Still River Road.
57. The Applicant failed to provide an appropriate overflow for the subsurface infiltration system.
58. As noted in the Stormwater Operation & Maintenance Manual revised January 10, 2019, the maintenance of the stormwater management system requires quarterly inspections of the trench drain, double catch basin and pre-treatment unit. The subsurface infiltration system must be monitored on a regular basis to ensure no obstructions are present in the system. Any depressions noticed in the area could indicate that the system has collapsed and should be inspected immediately. The system is equipped with an inspection port to monitor the buildup of sedimentation. If the depth of sedimentation is in excess of the manufacturer's guidelines, the system will need to be cleaned out with high pressure water and a vacuum truck.
59. During the public hearing, through oral testimony, there was significant concern from the Board and neighboring abutters regarding the level of maintenance required for the stormwater management system. The components of the stormwater management system to be maintained by the condominium association are mainly subsurface and cannot be seen or easily monitored. System failure due to lack of maintenance by the condominium association would directly impact the water quality of the surrounding resource areas as well as the drainage in Still River Road.
60. In the peer review letter dated December 18, 2018, Horsley Witten Group recommended the Applicant provide a water sampling program be created and conducted on a regular basis to monitor the use of fertilizers, herbicides or pesticides for the Development. Horsley Witten indicated that the resource areas surrounding the dwelling units are sensitive and use of these products may negatively impact the wetlands and the habitat.
61. In a letter from the Bolton Conservation Commission received November 14, 2018, the Commission requested that no herbicides or pesticides be permitted within one hundred (100) feet of the resource area in accordance with the Town of Bolton Conservation Commission Wetlands Bylaw Regulations, § 3.03(3)(1).



62. In the response letter dated January 17, 2019, Ducharme & Dillis Civil Design Group, Inc. requested that the use of fertilizers, herbicides or pesticides be allowed consistent other residential projects in Bolton. The Applicant declined to provide a water sampling program as recommended by Horsley Witten Group to protect the surrounding resource areas.
63. Based on the comments and evidence received, the Board members deliberated among themselves before the Chair called for a motion.

#### **D. REQUESTED WAIVERS AND EXEMPTIONS**

| Reference   | Description   | Disposition by Board |
|---|---|----------------------|
| Code of the Town of Bolton<br>§147-1B(3) - Groundwater Protection | To allow for the construction of the Development, which includes multiple duplex style structures.  | Approval             |
| Bolton Wetlands Bylaw<br>§233-2. Jurisdiction                     | To allow Unit 1 to be located 35 ft. from the edge of wetlands and the deck of Unit 1 to be located 31 ft. from the edge of wetlands;               | Denial               |
| Bolton Wetlands Bylaw<br>§233-2. Jurisdiction                     | To allow Unit 2 to be located 26 ft. from the edge of wetlands and the deck of Unit 2 to be located 18 ft. from the edge of wetlands;               | Denial               |
| Bolton Wetlands Bylaw<br>§233-2. Jurisdiction                     | To allow Unit 3 to be located to be located 30 ft. from the edge of wetlands and the deck of Unit 3 to be located 32 ft. from the edge of wetlands; | Denial               |
| Bolton Wetlands Bylaw<br>§233-2. Jurisdiction                     | To allow Unit 4 to be located 38' from the edge of wetlands & Unit 4 deck to be located to be located 34' from the edge of wetlands;                | Denial               |
| Bolton Wetlands Bylaw<br>§233-2. Jurisdiction                     | To allow Unit 5 to be located 31 ft. from the edge of wetlands & Unit 5 deck to be located to 25 ft. from the edge of wetlands;                     | Denial               |
| Bolton Wetlands Bylaw<br>§233-2. Jurisdiction                     | To allow Unit 6 to be located 44 ft. from the edge of wetlands & Unit 6 deck to be  | Denial               |



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|  | located to be located 40 ft. from the edge of wetlands;   |        |
| Bolton Wetlands Bylaw §233-2. Jurisdiction | To allow Unit 7 to be located 65 ft. from the edge of wetlands & Unit 7 deck to be located to be located 75 ft. from the edge of wetlands;  | Denial |
| Bolton Wetlands Bylaw §233-2. Jurisdiction | To allow Unit 8 to be located 48 ft. from the edge of wetlands & Unit 8 deck to be located to be located 53 ft. from the edge of wetlands;  | Denial |
| Bolton Wetlands Bylaw §233-2. Jurisdiction | To allow the proposed well on Lot 2B to be located 41 ft. from the edge of wetlands as allowed by the Town of Bolton Well Regulations;  | Denial |
| Bolton Wetlands Bylaw §233-2. Jurisdiction | To allow the proposed well on Lot 2C to be located 60 ft. from the edge of wetlands as allowed by the Town of Bolton Well Regulations;  | Denial |
| Bolton Wetlands Bylaw §233-2. Jurisdiction | To allow the sewage disposal system (leaching area and tanks) on Lot 2B to be located 50 ft. from the edge of wetlands as allowed by 310 CMR 15;  | Denial |
| Bolton Wetlands Bylaw §233-2. Jurisdiction | To allow the sewage disposal system (leaching area & tanks) on Lot 2C to be located 56 ft. from the edge of wetlands as allowed by 310 CMR 15;  | Denial |
| Bolton Wetlands Bylaw §233-2. Jurisdiction | To allow the access driveway to be located 36 ft. from the edge of wetlands, to allow retaining walls to be located 25 ft. from the edge of wetlands, to allow subsurface utilities to be located 15 ft. from the edge of wetlands, and to allow stormwater infrastructure to be located 38 | Denial |



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|  | ft. from the edge of wetlands as depicted on the Site Plans;   |          |
| Bolton Wetlands Bylaw §233-2. Jurisdiction   | To allow grading and clearing on Lot 2B to occur 2 ft. from the edge of wetlands to allow construction of the sewage disposal system and dwelling units as depicted on the Site Plans;   | Denial   |
| Bolton Wetlands Bylaw §233-2. Jurisdiction   | To allow grading and clearing on Lot 2C to occur 25 ft. from the edge of wetlands to allow the construction of the sewage disposal system and dwelling units as depicted on the Site Plans;  | Denial   |
| Bolton Wetlands Bylaw §233-2. Jurisdiction   | To allow grading for compensatory flood storage to occur 12 ft. from the edge of wetlands;   | Denial   |
| Bolton Wetlands Bylaw §233-2. Jurisdiction   | To allow 2,500 SF of field to be naturalized as scrub/shrub forested habitat in accordance with NHESP 12-3491;   | Approval |
| Bolton Wetlands Bylaw §233-7. Regulations  | To allow only the definitions of the Wetlands Protection Act (310 CMR 10) to apply.  | Denial   |
| Bolton Board of Health Regulations Requirements for the Subsurface Disposal of Sanitary Sewage Regulation 4: Distances | To allow leaching facilities to be located 10 ft. from a property line as allowed by 310 CMR 15 (10 ft. proposed) as allowed by 310 CMR 15;  | Denial   |
| Bolton Board of Health Regulations Requirements for the Subsurface Disposal of Sanitary Sewage Regulation 4: Distances | To allow leaching facility to be located within 35 ft. of access driveway (13 ft. provided, note: retaining wall is located between driveway and leaching facility) and to allow septic tanks and pump chambers to be located within unit driveways (tanks to be rated | Denial   |



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|  | for H2O loading) as allowed by 310 CMR 15;   |          |
| Bolton Board of Health Regulations Requirements for the Subsurface Disposal of Sanitary Sewage Regulation 4: Distances | To allow Lot 2B leaching area to be located within 100 ft. of a bordering vegetated wetland (50 ft. provided) as allowed by 310 CMR 15;  | Denial   |
| Bolton Board of Health Regulations Requirements for the Subsurface Disposal of Sanitary Sewage Regulation 4: Distances | To allow Lot 2C leaching area to be located within 100 ft. of a bordering vegetated wetland (75 ft. provided) as allowed by 310 CMR 15;  | Denial   |
| Bolton Board of Health Regulations Requirements for the Subsurface Disposal of Sanitary Sewage Regulation 4: Distances | To allow leaching facilities servicing a separate building to be located within 30 ft. of each other (20 ft. provided) as allowed by 310 CMR 15;                               | Approval |
| Bolton Board of Health Regulations Requirements for the Subsurface Disposal of Sanitary Sewage Regulation 4: Distances | To allow the septic tank serving Units 1 & 2 to be located within 50 ft. of wetlands (41 ft. provided) as allowed by 310 CMR 15;   | Denial   |
| Bolton Well Regulations, §4.1 Well Location Requirements   | To allow Lot 2B well to be located within 150 ft. of a leaching facility in soils with percolation rates of two minutes per inch or less (120 ft. provided).                   | Denial   |
| Bolton Zoning Bylaw, §250-12. Schedule of Permitted Uses   | An exception is being requested as multiple structures as proposed in the Comprehensive Permit is a permit/use that is not specifically stated as being allowed in the Bylaws. | Approval |
| Bolton Zoning Bylaw, §250-13. Dimensional Regulations  | Minimum Other Yards – to allow a sideline setback (interior to the lots that are being created) of 6 ft. on Lot 2B and 12.8 ft. on Lot 2C.                                     | Approval |
| Bolton Zoning Bylaw, §250-13.C. One Building Per Lot   | An exception is being requested to allow for multiple principle structures on a lot.   | Approval |



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| Bolton Zoning Bylaw, §250-13.G. Lot Shape           | An exception is being requested to allow Lot 2B to have a shape factor of 0.4 where 0.5 is required. | Approval |
| Bolton Zoning Bylaw, §250-17. Driveways and Parking | An exception is requested to allow a shared driveway to access eight (8) dwellings on two (2) lots.  | Approval |

#### **E. DECISION**

During a public meeting held on April 18, 2019, Bradley Reed made a motion, seconded by Bryan Holmes, that the Board Deny the Comprehensive Permit for Still River Commons based on the following reasons:

1. As designed, the Development would endanger the natural environment due to the proximity of sensitive wetlands resource areas that may only be adequately protected through a proper delineation of wetlands and riverfront areas and compliance with the Town's Wetlands Bylaw.
2. As designed, the Development would endanger the natural environment and the protection of private drinking water wells and wetlands resource areas that may only be adequately protected through compliance with the Board of Health's Regulations for Requirements for the Subsurface Disposal of Sanitary Sewage.
3. As designed, the Development would endanger the natural environment; as the stormwater system was not designed based upon a permeability test, raising a significant risk that stormwater will overflow to Still River Road and impact road drainage and downstream wetlands.
4. The Development would endanger the natural environment and undermine the Town's Open Space & Recreation Plan as a result of the project's design and its close proximity to protected land owned by Bolton Conservation Trust, Harvard Conservation Trust and Bolton Flats Wildlife Management Area.
5. As designed, the Development would endanger the archeological significance of the property and surrounding area.
6. The Development's ingress/egress as designed would potentially endanger public safety.


#### **F. RECORD VOTE**

The Comprehensive Permit for Still River Commons is Denied with a vote of five (5) votes in favor and zero (0) votes opposed.



Gerard Ahearn – yes  
Bradley Reed – yes  
Andy Kischitz – yes

Bryan Holmes – yes  
Kay Stoner – yes

  
Gerard Ahearn, Chairman  
On behalf of the Zoning Board of Appeals

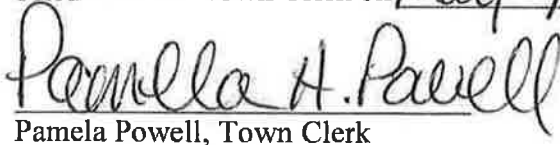
5/9/2019  
Dated

Appeals, if any, to this Decision must be made pursuant to M.G.L. c. 40B, § 22 & M.G.L. c.40A, §17 and must be filed within twenty (20) days after the date of filing of this Decision in the office of the Bolton Town Clerk.

This Decision shall not take effect until a copy of this Decision bearing the certification of the Town Clerk that twenty (20) days have elapsed after this Decision has been filed in the office of the Town Clerk, and that no appeal has been filed within said twenty (20) days; or that, if such appeal has been filed, that it has been dismissed or denied.

**G. FILED WITH THE TOWN CLERK**

Filed with the Town Clerk on May 9, 2019.

  
Pamela Powell, Town Clerk

2019 MAY -9 PM 12:36

**H. CERTIFICATE OF NO APPEAL**

The undersigned, being the Town Clerk of the Town of Bolton, certifies that the 20-day appeal period on this Decision has passed and there have been no appeals made to this office.

Date: \_\_\_\_\_, 2019.

\_\_\_\_\_  
Pamela Powell, Town Clerk

Copy of Decision mailed to:  
Abutters  
Surrounding Towns  
Bolton Boards and Committees  
Still River Road Development, LLC



Deschenes & Farrell, PC  
Ducharme & Dillis Civil Design Group, Inc.

## **APPENDIX A: RECORD DOCUMENTS**

### **Original Submission**

1. Application entitled "Still River Commons, Still River Road, Bolton, MA 01740, Comprehensive Permit Application (8 units of Homeownership Housing)" submitted by Still River Road Development, LLC and Attorney Melissa E. Robbins, Deschenes & Farrell, PC; received August 21, 2018.
2. Stormwater Report for Still River Commons, Still River Road, Map 8B Parcel 32 in Bolton, Massachusetts prepared by Ducharme & Dillis Civil Design Group, Inc. for Still River Road Development, LLC dated June 27, 2018.
3. Site Plans entitled "Comprehensive Permit Plan, Still River Road, Map 8.B Parcel 32, Bolton, MA, Still River Commons" prepared by Ducharme & Dillis Civil Design Group, Inc. dated July 5, 2018 (10 sheets).

### **September 24, 2018 Public Hearing**

4. Plan entitled "Exhibit Plan – Firefighting Water Supply, Still River Commons, Bolton, Massachusetts" prepared by Ducharme & Dillis Civil Design Group, Inc. dated August 30, 2018.
5. Letter from Deschenes & Farrell, P.C. to Town of Bolton Zoning Board of Appeals, RE: Still River Commons Comprehensive Permit Application, dated August 30, 2018.
6. Email from Warren Nelson (Police Chief) to Erica Uriarte (Town Planner), Subject: Re: Request for Comments – ZBA Comprehensive Permit Application for Still River Commons, dated September 10, 2018.
7. Letter entitled "Still River Commons" from Jeffrey M. Legendre (Interim Fire Chief) dated September 17, 2018.
8. Email from Jenny Jacobsen (Board of Health and Permitting Assistant) to Erica Uriarte (Town Planner), Subject: Still River Road comments, dated September 18, 2018.
9. Email from Marth Remington to Erica Uriarte (Town Planner), Subject: Re: Request for Comments – ZBA Comprehensive Permit Application for Still River Commons, dated September 19, 2018.
10. Email from Rebecca Longvall (Conservation Agent) to Erica Uriarte (Town Planner), Subject: first look comments, Attachment: FirstLookQuestions.Concerns.Thoughts.18.docx, dated September 20, 2018.
11. Email from Jonathan Keep to Erica Uriarte (Town Planner), Subject: Still River Commons Pace Tree Cutting, dated September 21, 2018.
12. Email from Melissa E. Robbins, Esq. (Deschenes & Farrell, P.C.) to Erica Uriarte (Town Planner), Subject: Outstanding Items, Attachments: Still River Road narrative.docx, dated September 24, 2019.

### **October 17, 2018 Public Hearing**



13. Email from Jonathan Keep to Linda Day (Town Secretary), Subject: RE: Request for Comments – ZBA Comprehensive Permit Application for Still River Commons, dated September 20, 2018.
14. Email from Robert Martel to Erica Uriarte (Town Planner), Subject: Re: Still River Commons – 40B Project, dated September 24, 2018.
15. Email from Robert Martel to Erica Uriarte (Town Planner), Subject: Re: Still River Commons - 40B Project, dated September 25, 2018.
16. Email from Stan Wysocki to Erik Neyland, Subject: Still River Commons – Comments, dated September 26, 2018.
17. Email from Robert Martel to Erica Uriarte (Town Planner), Subject: Re: Still River Commons - 40B Project, dated September 26, 2018.
18. Letter and Attachments from Anastasia Downy to the Zoning Board of Appeals dated September 26, 2018.
19. Email from Robert Martel to Erica Uriarte (Town Planner), Subject: Re: Still River Commons - 40B Project, dated September 27, 2018.
20. Email from Robert Martel to Rebecca Longvall (Conservation Administrator) and Erica Uriarte (Town Planner), Subject: LLC addressing, Attachment: Turn Left LLC MA Business record.pdf, dated October 2, 2018.
21. Letter from John and Kathy Anestis of 448 Still River Road to Chairman Ahearn dated October 4, 2018.
22. Peer Review Letter from Horsley Witten Group to Erica Uriarte (Town Planner), Re: Initial Stormwater & Wetlands Peer Review Comprehensive Permit Application Still River Commons, Bolton MA, dated October 11, 2018.
23. Email from Robert Martel to Erica Uriarte (Town Planner), Subject: Storm water run-off concerns for Still River 40B proposal – Clip1, Attachments: MOV02A.MOD, dated October 15, 2018.
24. Email from Kay Stoner to Erica Uriarte (Town Planner), Subject: Re: Still River Commons – Comments to Date, dated October 16, 2018.
25. Letter from Joe & Robin Picariello to Town of Bolton, received October 16, 2018.
26. Email from Robert Martel to Erica Uriarte (Town Planner), Subject: New wetlands and drink water concerns with respect to Still River 40B proposed development, dated October 17, 2018.

#### **November 19, 2018 Public Hearing**

27. Letter from Hancock Associates to Mr. Gerard Ahearn, Chairman (Board of Appeals), Subject: Comprehensive Permit Still River Commons, dated October 23, 2018.
28. Email from Edward Sterling to Erica Uriarte (Town Planner), Subject: Flooding evidence on Still River Road March 2010, re: “Still River Commons”, Attachments: March22Flood10.jpg; March22Flood11.jpg, dated October 23, 2018.
29. Letter from Harvard Conservation Commission to Gerard Ahearn, Chair (Board of Appeals), RE: Comprehensive Permit – Still River Commons, Still River Road, dated November 1, 2018.



30. Email from Christopher Ryan (Town of Harvard Director of Community and Economic Development) to Erica Uriarte (Town Planner), Subject: Comments on 40B Project, Attachments: Proposed Bolton 40B Comments.docx, dated November 6, 2018.
31. Email from Rebecca Longvall (Conservation Agent) to Erica Uriarte (Town Planner), Subject: comments, Attachments: LocalWaiver & Comments.pdf, dated November 14, 2018.
32. Letter from Bolton Historical Commission to Gerard Ahearn, Chairman (Board of Appeals), Re: Still River Commons 40B, dated November 15, 2018.
33. Letter from Deschenes & Farrell, P.C. to Whom It May Concern, RE: Still River Commons – Comprehensive Permit Application, dated November 15, 2019.

#### **November 26, 2019 Public Hearing**

34. Letter from Deschenes & Farrell, P.C. to Whom It May Concern, RE: Still River Commons – Comprehensive Permit Application, dated November 21, 2018.
35. Email from Joseph Lynch (DPW Director) to Erica Uriarte (Town Planner), Subject: RE: Still River Commons – Hearing to be CONTINUED, dated November 21, 2018.
36. Letter from Hancock Associates to Mr. Gerard Ahearn, Chairman (Board of Appeals), Subject: Comprehensive Permit Still River Commons, dated November 23, 2018.
37. Letter from Robert Martel to Zoning Board of Appeals dated November 24, 2018.
38. Letter from Bolton Conservation Trust to Gerard Ahearn, Chair (Board of Appeals), Re: Comprehensive Permit – Still River Commons, Still River Road, Bolton, dated November 25, 2018.
39. Letter from Bolton Planning Board to Gerard Ahearn, Chair (Board of Appeals), Subject: Still River Commons – Comprehensive Permit Application, dated November 26, 2018.
40. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Video 1, Stream between properties, dated November 26, 2018.
41. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Video 1, Stream between properties, Attachments: IMG\_8880.MOV, dated November 26, 2018.
42. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Video 2, stream between properties, Attachments: IMG\_8896.MOV, dated November 26, 2018.
43. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Video 3, back of properties, Attachments: IMG\_8923.MOV, dated November 26, 2018.
44. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Video 4, back of properties culvert, Attachments: IMG\_8935.MOV, dated November 26, 2018.
45. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Video 5, back of property culvert, Attachments: IMG\_8936.MOV, dated November 26, 2019.

#### **December 18, 2018 Public Hearing**

46. Site Plans entitled “Comprehensive Permit Plan, Still River Road, Map 8.B Parcel 32, Bolton, MA, Still River Commons” prepared by Ducharme & Dillis Civil Design Group, Inc., revised December 10, 2018 (10 sheets).
47. Response to Peer Review Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons, dated December 10, 2018.+



48. Stormwater Report for Still River Commons, Still River Road, Map 8B Parcel 32 in Bolton, Massachusetts prepared by Ducharme & Dillis Civil Design Group, Inc. for Still River Road Development, LLC revised December 10, 2018.
49. Response to Town Comments Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons, dated December 11, 2018.
50. Email from Rebecca Longvall (Conservation Agent) to Erica Uriarte (Town Planner), Subject: RE: Still River Commons – Revised Site Plans/Request for Additional Comments, dated December 11, 2018.
51. Letter from Deschenes & Ferrell, P.C. to Bolton Zoning Board of Appeals, RE: STILL RIVER COMMONS - Response to Comment Letters, dated December 13, 2018.
52. Letter from Hancock Associates to Mr. Gerard Ahearn, Chairman (Board of Appeals), Subject: Comprehensive Permit Still River Commons, dated December 17, 2018.
53. Peer Review Letter from Horsley Witten Group to Erica Uriarte (Town Planner), Re: Second Stormwater & Wetlands Peer Review Comprehensive Permit Application Still River Commons, Bolton MA, dated December 18, 2018.
54. Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons, dated December 18, 2018.
55. Letter from Bob Martel to the Zoning Board of Appeals, Re: Still River Commons, dated December 18, 2018.

#### **January 17, 2019 Public Hearing**

56. Email from Jonathan Keep to Donald Lowe (Town Administrator), Subject: Re: FW: Still River Commons – Request for Comments from the Board of Selectmen, dated December 20, 2018.
57. Site Plans entitled “Comprehensive Permit Plan, Still River Road, Map 8.B Parcel 32, Bolton, MA, Still River Commons” prepared by Ducharme & Dillis Civil Design Group, Inc., revised January 10, 2019 (11 sheets).
58. Stormwater Operation & Maintenance Manual prepared by Ducharme & Dillis Civil Design Group, Inc. revised January 10, 2019.
59. Stormwater calculations and TSS removal calculations prepared by Ducharme & Dillis Civil Design Group, Inc. dated January 10, 2019.
60. Response to Peer Review Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons, dated January 11, 2019.
61. Letter from Hancock Associates to Mr. Gerard Ahearn, Chairman (Board of Appeals), Subject: Comprehensive Permit Still River Commons, dated January 14, 2019.
62. Peer Review Letter from Horsley Witten Group to Erica Uriarte (Town Planner), Re: Third Stormwater & Wetlands Peer Review Comprehensive Permit Application Still River Commons, Bolton MA, dated January 15, 2019.
63. Letter from Bolton Conservation Commission to Zoning Board of Appeals, RE: Draft waiver request regarding proposed Still River Commons, dated January 16, 2019.
64. Response to Peer Review Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons Peer Review, dated January 17, 2019.



## **February 12, 2019 Public Hearing**

65. Email from Bob Martel to Erica Uriarte (Town Planner), Subject: newly documented flooding concerns with respect to Still River 40B, Attachments: 20190124\_153208[1].jpg; 20190124\_153229[1].jpg; 20190124\_153322[1].jpg; 20190124\_153357[1].jpg; 20190124\_153440[1].jpg, dated January 24, 2019.
66. Email from Bob Martel to Erica Uriarte (Town Planner), Subject: stormwater run-off concerns with respect to Still River 40B, Attachments: 20190124\_153024[1].jpg; 20190124\_153103[1].jpg, dated January 24, 2019.
67. Site Plans entitled "Comprehensive Permit Plan, Still River Road, Map 8.B Parcel 32, Bolton, MA, Still River Commons" prepared by Ducharme & Dillis Civil Design Group, Inc., revised January 30, 2019 (11 sheets).
68. Letter from Bolton Fire Department to Seth Donohoe (Ducharme & Dillis Civil Design Group, Inc.) received January 31, 2019.
69. Site Plan entitled "Still River Rd. Drainage Improvement Plan, Still River Commons, Bolton, Massachusetts" prepared by Ducharme & Dillis Civil Design Group, Inc., dated January 31, 2019 (1 sheet).
70. Letter from Ducharme & Dillis Civil Design Group, Inc. to Joseph Lynch, Director (Department of Public Works), Re: Still River Road Drainage Improvements, dated February 5, 2019.
71. Response to Peer Review Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons Peer Review & Revised Plans, dated February 5, 2019.
72. Letter from Hancock Associates to Mr. Gerard Ahearn, Chairman (Board of Appeals), Subject: Comprehensive Permit Still River Commons, dated February 6, 2019.

## **February 19, 2019 Public Hearing**

73. Letter from Board of Selectmen to Zoning Board of Appeals, Subject: Proposed Still River Common, dated February 5, 2019.
74. Peer Review Letter from Horsley Witten Group to Erica Uriarte (Town Planner), Re: Fourth Stormwater & Wetlands Peer Review Comprehensive Permit Application Still River Commons, Bolton MA, dated February 14, 2019.
75. Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons Requested Exceptions, dated February 19, 2019.
76. Email from Joe Lynch (DPW Director) to Erica Uriarte (Town Planner), Subject: 4<sup>th</sup> peer review Still River, dated February 19, 2019.
77. Email from Rebecca Longvall (Conservation Agent) to Erica Uriarte (Town Planner), Subject: ZBA, dated February 19, 2019.
78. Letter from Robert Martel to Zoning Board of Appeals, Subj: Still River Commons 40B development proposal, dated February 19, 2019.
79. Email from Martha Remington to Erica Uriarte (Town Planner) and Joseph Lynch (DPW Director), Subject: Underlining – page 8 of 8 HWG 4<sup>th</sup> peer review, dated February 19, 2019.



### **March 6, 2019 Public Hearing**

80. Letter from Sudbury Valley Trustees to Erica Uriarte (Town Planner), RE: Still River Commons Chapter 40B Comprehensive Permit, dated February 19, 2019.
81. Email from Rebecca Longvall (Conservation Agent) to Erica Uriarte (Town Planner), Subject: note, Attachments: 310 CMR 10.docx, dated February 20, 2019.
82. Email from Bob Martel to Erica Uriarte (Town Planner), Subject: Some thoughts to share with ZBA on Still River 40B, dated February 20, 2019.
83. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Re: Still River Commons – Waivers, dated February 25, 2019.
84. Email from Joseph D. Peznola (Hancock Associates) to Erica Uriarte (Town Planner), Subject: Still River Commons – Waivers, dated February 25, 2019.
85. Letter from Joe & Robin Picariello, 305 Vaughn Hill Road, Bolton, MA 01740 to Zoning Board of Appeals dated February 27, 2019.
86. Site Plans entitled “Comprehensive Permit Plan, Still River Road, Map 8.B Parcel 32, Bolton, MA, Still River Commons” prepared by Ducharme & Dillis Civil Design Group, Inc., revised February 28, 2019 (12 sheets).
87. Site Plan entitled “25’ Buffer Zone Alteration Exhibit Plan, Still River Commons, Bolton, Massachusetts” prepared by Ducharme & Dillis Civil Design Group, Inc., dated February 28, 2019.
88. Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons, dated February 28, 2019.
89. Letter from Hancock Associates to Mr. Gerard Ahearn, Chairman (Board of Appeals), Subject: Comprehensive Permit Still River Commons, dated March 4, 2019.
90. Draft Condominium Documents prepared by Deschenes & Farrell, P.C received March 6, 2019.

### **March 19, 2019 Public Hearing**

91. Email from Erica Uriarte (Town Planner) to Doug Deschenes (Deschenes & Farrell, P.C) and Seth Donohoe (Ducharme & Dillis Civil Design Group, Inc.), Subject: Still River Commons – EcoTec Data Forms, dated March 7, 2019.
92. Letter from Board of Health to Planning Board, Subject: Still River Commons Proposal before ZBA, dated March 13, 2019.
93. Site Plans entitled “Comprehensive Permit Plan, Still River Road, Map 8.B Parcel 32, Bolton, MA, Still River Commons” prepared by Ducharme & Dillis Civil Design Group, Inc., revised March 13, 2019 (12 sheets).
94. Site Plan entitled “25’ Buffer Zone Alteration Exhibit Plan, Still River Commons, Bolton, Massachusetts” prepared by Ducharme & Dillis Civil Design Group, Inc., revised March 13, 2019.
95. Letter from Deschenes & Farrell, P.C. to Zoning Board of Appeals, RE: STILL RIVER COMMONS Response to Board of Selectmen letter dated February 14, 2019, dated March 14, 2019.



96. Letter from Deschenes & Farrell, P.C. to Zoning Board of Appeals, RE: STILL RIVER COMMONS Response to Conservation Email dated February 19, 2019, dated March 14, 2019.
97. Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons, dated March 15, 2019.
98. Email from Michelle Tuck (Design Review Board) to Erica Uriarte (Town Planner), Subject: RE: Still River Commons – Design Review Board Update, dated March 17, 2019.
99. Email from Bob Martel to Erica Uriarte (Town Planner), Subject: Re: ZBA Meeting - Still River Commons Hearing, Attachments: Still River Commons 1a.jpg; Still River Commons 1a\_reverse angle.jpg; Still River Commons 1b.jpg; Still River Commons 1b\_reverse angle.jpg; Still River Commons 2.jpg, dated March 18, 2019.
100. Letter from Ducharme & Dillis Civil Design Group, Inc. to Zoning Board of Appeals, Re: Still River Commons, dated March 19, 2019.
101. Draft Letter from Conservation Commission to Zoning Board of Appeals, RE: Waiver Request Regarding Proposed Still River Commons, dated March 19, 2019.
102. Letter from Hancock Associates to Mr. Gerard Ahearn, Chairman (Board of Appeals), Subject: Comprehensive Permit Still River Commons, dated March 19, 2019.

#### **April 2, 2019 Public Hearing**

103. Gregory Reynolds vs. Zoning Board of Appeals of Stow & Another. No. 14-P-663. Middlesex. January 13, 2015 – September 15, 2015.
104. Letter from Anastacia Downey (Bolton Resident) to Lynn Harper (Mass Wildlife Field Headquarters) dated June 4, 2018.
105. Letter from Deschenes & Farrell, P.C. to Zoning Board of Appeals, RE: STILL RIVER COMMONS Comprehensive Permit Application, dated March 20, 2019.
106. Email from Robin Picariello to Erica Uriarte (Town Planner), Subject: Still River Commons, dated March 20, 2019.
107. Letter from Division of Fisheries & Wildlife to Bolton Conservation Commission, RE: Applicant: Turn Left, LLC, Project Location: Still River Road, Bolton, Lot 2A, Book 58346, Page 149, Worcester District Registry of Deeds, Project Description: Construct Eight (8) Unit Residential Development, DEP Wetlands File No.: 112-0636, NHESP Tracking No.: 15-34941, dated March 22, 2019.
108. Email from Douglas Deschenes (Deschenes & Farrell, P.C.) to Erica Uriarte (Town Planner) and Seth Donohoe (Ducharme & Dillis Civil Design Group, Inc.), Subject: RE: Still River Commons – Comment regarding rendering, dated March 26, 2019.
109. Memorandum to the ZBA Members from Erica Uriarte, Town Planner, RE: Still River Commons (40B Project) – Meeting with Board of Health on March 26th, dated March 27, 2019.
110. Email from Rebecca Longvall (Conservation Agent) to Erica Uriarte (Town Planner), Subject: inquiry, dated April 1, 2019.
111. Email from Seth Donohoe (Ducharme & Dillis Civil Design Group, Inc.) to Erica Uriarte (Town Planner), RE: Still River Road Waivers, Attachments: Waiver List 040119.docx; Waiver List 040119.pdf, dated April 2, 2019.



112.2017 Bolton Open Space and Recreation Plan, Figures 11, 18, 27, and 31.



