

EcoTec, Inc.
ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

March 12, 2021

Mr. Haim Senior
Concord Street Investments LLC
233 Needham Street
Newton, MA 02464

RE: Wetland Resource Evaluation and NOI Site Report for 192 Concord Street, Newton, Massachusetts

Dear Mr. Senior:

On February 25, 2021, EcoTec, Inc. inspected the above-referenced property and the land located along the Charles River across Concord Street to the south of the site for the presence of wetland resources as defined by the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the “Act”) and its implementing regulations (310 CMR 10.00 *et seq.*; the “Regulations”). The City of Newton does not have a Wetlands Protection Ordinance but does have a Floodplain Ordinance (the “Ordinance”; Section 22-22). John P. Rockwood, Ph.D., SPWS conducted the inspection.

The subject site consists of 0.315± acres (13,728± square feet) of land located to the north of Concord Street in Newton, Massachusetts. The site is previously developed and partially degraded with a one-story, single-family house with attached one-car garage, rear three-season room, and bulkhead; paved driveway; brick front stairs and stone and concrete front walkways; rear and side concrete stairs and rear concrete walkway/patio; a wooden stockade fence near the northern property line; and associated lawn and landscaping including several trees. Roof runoff from house is discharged to the ground surface via downspouts; driveway runoff is not controlled or treated. A concrete sidewalk and a strip of lawn with one street tree occur between the site and Concord Street. The wetland resources observed on or near the site are described below.

Wetland Resource Evaluation - Methodology

The subject site and the land located across Concord Street to the south of the houses at 187 and 199 Concord Street were inspected, and areas suspected to qualify as wetland resources were identified. Bordering Vegetated Wetlands were not observed on the subject site and were not delineated along the Charles River south of the site. The upper boundary of Bank and the Mean Annual High-water Line of the Charles River were delineated in the field with blue flags. The Regulations at 310 CMR 10.54(2)(c) states: “The upper boundary of Bank is the first observable break in the slope or the mean annual flood level, whichever is lower.” The plant taxonomy used in this report is based on the *National List of Plant Species that Occur in*

Wetlands: Massachusetts (Fish and Wildlife Service, U.S. Department of the Interior, 1988). As Bordering Vegetated Wetlands were not observed on the subject site or delineated along the subject reach of the Charles River, DEP Bordering Vegetated Wetland Delineation Field Data Forms were not completed and are not attached to this report. The table below lists the flag numbers and type and the resource area type and location for flags placed in the field.

Flag Numbers	Flag Type	Wetland Types and Locations
Start R1 to R13 Stop	Blue Flags	Mean Annual High-water Line (MAHWL) and upper boundary of Bank of the Charles River located near the southern boundary of 187 and 199 Concord Street, which are located across Concord Street to the south of the subject site.

Wetland Resource Evaluation - Findings

Land Under Water Bodies and Waterways, Bank, and Bordering Vegetated Wetlands: Land Under Water Bodies, Bank, and Bordering Vegetated Wetlands were not observed on the subject site. The Charles River, a perennially mapped stream, is located across Concord Street behind the houses at 187 and 199 Concord Street and flows generally to the west in this area. A band of Bordering Vegetated Wetlands was noted along the Charles River in this area; the Bordering Vegetated Wetlands were not delineated because the associated 100-foot Buffer Zone would not project onto the project site. The Charles River would be regulated as Bank and Land Under Water Bodies and Waterways under the Regulations. Again, a 100-foot Buffer Zone would extend horizontally outward from the edge of Bordering Vegetated Wetlands under the Regulations; however, this 100-foot Buffer Zone would be limited to the properties at 187 and 199 Concord Street and a small portion of Concord Street to the southeast of the subject site.

Bordering Land Subject to Flooding and Section 22-22 Floodplain: Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Section 10.57(2)(a)3. states that “The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm.” Based upon a review of the Flood Insurance Rate Map, Map Number 25017C0534E, Effective Date June 4, 2010 (attached), there is a mapped Zone AE (100-year floodplain) with a 100-year flood elevation of between 42 and 41 feet NAVD 1988 associated with the Charles River at the site. The Charles River and its mapped floodplain are located to the south of Concord Street. The site itself is mapped as Other Areas: Zone X (i.e., areas located outside of the 0.2% annual chance flood/areas outside of the 500-year floodplain). Based upon a review of the topography on the subject site, the 100-year floodplain does not extend onto the site; as such, Bordering Land Subject to Flooding does not occur on the site.

Under Section 22-22 of the Ordinance which identifies the Floodplain/Watershed Protection District, under Section (g)1. Floodplain/ Watershed Areas, the subject reach of the Charles River [i.e., (10) Washington Street Route 16 Bridge to M.D.C. RR Bridge] has a 100-year floodplain elevation ranging from 49.0 to 47.5 feet City of Newton Datum. Given the topography on the subject site, the 100-year Ordinance Floodplain does not extend onto the site. Section 22-22 does not establish any form of buffer zone.

Riverfront Area: The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. Based upon a review of the current USGS Map, Framingham Quadrangle, dated 1987 (attached), the Charles River, which is always a river, is located to the south of 187 and 199 Concord Street, which are located to the south across Concord Street from the subject site. Riverfront Area under the Act and Regulations would extend 200-foot horizontally outward from the Mean Annual High-water Line, which is represented by the R-series flags. Riverfront Area does not have a 100-foot Buffer Zone under the Act and Regulations but may overlap other wetland resources and their Buffer Zones.

Estimated Habitat and Certified Vernal Pools: The Regulations require that no project may be permitted that will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures set forth at 310 CMR 10.59. Based upon a review of the *Massachusetts Natural Heritage Atlas*, 14th edition, valid from August 1, 2017 and the Certified Vernal Pool layer from MassGIS (attached), there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq.*)], Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; "MESA") and MESA Regulations (321 CMR 10.00 *et seq.*)], or Certified Vernal Pools on or in the immediate vicinity of the subject site.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities.

Project Description and Analysis

The subject site is 13,728± square feet in size and the southern 4,550± square feet of the site is located within the outer portion of the Riverfront Area of the Charles River. No other wetland resource areas or the 100-foot Buffer Zone to a resource area occur on the subject site. Concord Street and two developed residential lots at 187 and 199 Concord Street occur between the subject site and the Charles River.

The proposed project consists of the partial demolition of the existing single-story, single-family house with attached one-car garage with both horizontal and vertical expansion of the house via addition to a two-story, single-family house with an attached two-car garage (see attached Architect Elevations). The majority of the proposed house expansion will occur as a second story addition or to the north and west of the existing house outside of the Riverfront Area. Work proposed within the Riverfront Area will include a portion of the proposed house

expansion, including a slight cantilever of the second story; removal and reconstruction of the paved driveway; removal and reconstruction of the existing stone and concrete front walkways with permeable paver front walkways; and utility installation. Additional work proposed outside of the Riverfront Area will include a covered deck and a patio. The total impervious area on the site is proposed to be increased by 958± square feet from 2,963± square feet under existing conditions to 3,921± square feet under proposed conditions; impervious/degraded area in the Riverfront Area is proposed to be increased by 170± square feet from 1,595± square feet under existing conditions to 1,765± square feet under proposed conditions, including work associated with the house, driveway, front stairs, and permeable paver front walkways. Tree protection will be provided for the Norway maple and the willow that are located to the front of the house. No trees are proposed to be removed from the Riverfront Area on the site as part of this project; a 43" deciduous tree (Existing Plan: 43" DEC STUMP) was removed from the eastern property line by the abutter without the knowledge of the Applicant/Owner within the past few month. The project also includes a proposed trench drain, manhole sump, and significant infiltration system to address driveway and roof runoff to meet City of Newton drainage requirements. Lastly, a 450± square foot enhancement planting area in the Riverfront Area, which is over-sized to retain the three existing eastern hemlock saplings in the area, is proposed to mitigate for the net 170± square foot increase in total impervious/ degraded surfaces within the Riverfront Area on the site. Any disturbed lawn and landscaped areas will be graded and will be loamed and seeded with a grass seed mixture to provide permanent cover or will be landscaped. Alternatively, sod may be used to establish lawn areas. The proposed limit of work will be demarcated in the field by the erosion control barrier as shown on the Site Plan. Soil will be temporarily stored on-site outside of the Riverfront Area in a covered stockpile within the limit of work on the site as shown on the Site Plan with excess soil trucked from the site.

Under existing conditions, the site is developed with a 1,732± square foot one-story, single-family house with attached one-car garage, rear three-season room, and bulkhead; paved driveway; brick front stairs and stone and concrete front walkways; rear and side concrete stairs and rear concrete walkway/patio; a wooden stockade fence near the northern property line; and associated lawn and landscaping including several trees. A total of 2,963± square feet of impervious surfaces associated with the house, driveway, and front stairs/walkway occur on the site with 1,595± square feet of impervious surface associated with the house, driveway, and front stairs/walkways located within the Riverfront Area. The existing house is located 185± feet, the existing paved driveway is located 161± feet, and the existing front walkway is located 156± feet from the Charles River. Existing driveway and roof runoff discharge unchecked to the ground surface.

Under proposed conditions, the site will be redeveloped with an expanded 2,558± square foot two-story, single-family house with an attached two-car garage; paved driveway; front stairs with permeable paver front walkways; rear covered deck; rear patio; and associated grading, lawn, and landscaping. The existing rear fence will be retained. A total of 3,921± square feet of impervious/degraded surfaces associated with the house, driveway, front stairs and walkways, rear deck, and rear patio are proposed on the site with 1,765± square feet of

impervious surfaces associated with the house, paved driveway, front stairs and front permeable paver walkways proposed within the Riverfront Area. The project includes the installation of new underground utilities and project associated grading, lawn, and landscaping. The proposed house is located 185± feet, the proposed driveway is located 161± feet, the front walkway is located 156± feet from the Charles River. Proposed driveway runoff, which is collected and pretreated through a trench drain and manhole sump, and roof runoff will be routed to a proposed infiltration system located to the north of the house outside of the Riverfront Area. A 450± square feet enhancement planting area which will contain three existing eastern hemlock saplings as well as proposed shrub and ground cover plantings is proposed to address the 170± square foot increase in impervious surfaces in the Riverfront Area on the site. Compliance with the applicable performance standards for work in the Riverfront Area is discussed in a subsequent section of this letter.

Enhancement Planting Area Plan

An enhancement planting area totaling 450± square feet in size will be established within the Riverfront Area. The two existing trees in the front yard and the three eastern hemlock saplings in the southeastern corner of the site within the proposed enhancement planting area provide adequate coverage in this general area; as such, additional saplings are not proposed as part of the planting plan. The proposed plantings include fourteen (14) native shrubs of four species 3 to 5 feet in height and fourteen (14) small native shrubs and ground cover of three species 0.5 to 2 feet in height which will be established within the Riverfront Area in the southeastern corner of the site. These plantings will serve to stabilize this area, reduce stormwater runoff, and provide enhanced wildlife habitat, including cover, perching, and foraging habitat, compared to the existing condition. The existing landscape yew in this area will be removed and the lawn in this area will be cut very short/scalped prior to planting. The soil at the edges of the area will be removed such that the top of the proposed initial mulch application will be flush with the adjacent lawn or sidewalk surface. The proposed shrubs and ground cover will be spaced under the supervision of a qualified wetland scientist and planted in accordance with current landscaping practices (i.e., hole twice as wide and as deep as the root ball with the area around the root ball backfilled with high quality loamy top soil). The proposed plant species listing is provided in the planting table on the Site Plan; the selected species are native and have been selected based upon the conditions of the proposed planting area. If a species is not available, a substitution will be recommended by the wetland scientist and approved by Conservation Staff. The excess soil will be removed from the site. Following installation, the area will be initially mulched with a 3- to 4-inch-thick layer of partially decomposed leaf litter with some natural bark mulch as specified as a note to the planting table. This will aid in keeping the plantings moist and will provide temporary cover and habitat value until leaves begin to accumulate in this area. This area is not a landscaped area and mulch application in the area will diminish with time. The woody materials will be watered regularly for a period of four weeks, and will be watered, as necessary, if evidence of stress is observed. As shown on the Site Plan, the project side of the enhancement planting area will

be demarcated with three stone bounds set such that they extend a minimum of 6 inches above the ground surface.

Enhancement Planting Area Monitoring: The enhancement planting area will be monitored near the end of the growing season for two years after it is established. During each inspection, which will be conducted by a qualified wetland scientist, the condition of the area and the number and species of shrubs and ground cover and their condition will be documented. Photographs of the area shall be taken, and representative photographs shall be included in the report. To be considered a success, the shrub and ground cover plantings shall have a 75% survival rate by strata (or survival rate specified in the Order) at the end of the second growing season after establishment. The findings of each inspection will be documented in a report that will be submitted in a timely manner to the Commission. Each report will include any necessary recommendations to bring the area into compliance.

Compliance Evaluation under the Regulations

The proposed project is a mixture of new and redevelopment activities within the Riverfront Area to the Charles River. Concord Street and two existing developed single-family house lots occur between the site and the Charles River. Certain activities which are proposed within previously developed but not degraded areas of the site, are required to meet the general performance standards for Riverfront Area found at 310 CMR 10.58(4). Activities proposed within previously developed and degraded areas of the site are required to meet applicable standards at 310 CMR 10.58(4) and all the performance standards for a redevelopment project set forth at 310 CMR 10.58(5). The proposed project has been designed as shown on the Site Plan and described within this letter to meet applicable general performance standards for Riverfront Area found at 310 CMR 10.58(4) and the performance standards for redevelopment of the Riverfront Area at 310 CMR 10.58(5), as applicable. Due to the age of the lot, the amount of Riverfront Area on the site, and the proposed area of disturbance within the Riverfront Area, this project could simply be permitted under the general performance standards for Riverfront Area. A discussion of compliance with the above-referenced standards is as follows:

Riverfront Area: Section 10.58(4) of the Regulations provides the general performance standards for work within the Riverfront Area, which states:

(4) General Performance Standard. Where the presumption set forth in 310 CMR 10.58(3) is not overcome, the applicant shall prove by a preponderance of the evidence that there are no practicable and substantially equivalent economic alternatives to the proposed project with less adverse effects on the interests identified in M.G.L. c.131 § 40 and that the work, including proposed mitigation, will have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. In the event that the presumption is partially overcome, the issuing authority shall make a written determination setting forth its grounds in the Order of Conditions and the partial

rebuttal shall be taken into account in the application of 310 CMR 10.58 (4)(d)1.a. and c.; the issuing authority shall impose conditions in the Order that contribute to the protection of interests for which the riverfront area is significant.

(a) Protection of Other Resource Areas. The work shall meet the performance standards for all other resource areas within the riverfront area, as identified in 310 CMR 10.30 (coastal bank), 10.32 (salt marsh), 10.55 (Bordering Vegetated Wetland), and 10.57 (Land Subject to Flooding). When work in the riverfront area is also within the buffer zone to another resource area, the performance standards for the riverfront area shall contribute to the protection of the interests of M.G.L. c. 131, § 40 in lieu of any additional requirements that might otherwise be imposed on work in the buffer zone within the riverfront area.

Work is proposed within the outer portion of the Riverfront Area to the Charles River, which is located south of 187 and 199 Concord Street to the south of Concord Street south of the site. No other wetland resource areas occur on the site. As such, no work is proposed within Land Under Water Bodies and Waterways, Bank, Bordering Vegetated Wetlands, or Bordering or Isolated Land Subject to Flooding. The 100-foot Buffer Zone associated with the Bordering Vegetated Wetlands at 187 and 199 Concord Street does not project onto the subject site; the 100-foot Buffer Zone is not a wetland resource area under the Regulations.

(b) Protection of Rare Species. No project may be permitted within the riverfront area which will have any adverse effect on specified habitat sites of rare wetland or upland, vertebrate or invertebrate species, as identified by the procedures established under 310 CMR 10.59 or 10.37, or which will have any adverse effect on vernal pool habitat certified prior to the filing of the Notice of Intent.

Based upon the NHESP Atlas, 14th Edition, dated August 1, 2017, the site is not located within a mapped Estimated Habitat or Priority Habitat and no mapped Certified Vernal Pools occur on or near the site. As such, the proposed project will not have any adverse effect on specified habitat sites of rare wetland or upland, vertebrate or invertebrate species, and will not have any adverse effect on vernal pool habitat.

(c) Practicable and Substantially Equivalent Economic Alternatives. There must be no practicable and substantially equivalent economic alternative to the proposed project with less adverse effects on the interests identified in M.G.L. c. 131 § 40....”

The lot was created in 1952. The current owner acquired the site on November 5, 2020 and has no interest or control over adjacent or abutting properties. Again, the subject site is 13,728± square feet in size and 4,550± square feet of the site is located within the outer Riverfront Area of the Charles River. Concord Street and two existing developed single-family house lots occur between the site and the Charles River. The project purpose is to expand the existing single-family house and replace associated site features. Approximately 1,595± square feet of the proposed house, driveway, and front stairs/permeable paver front walkways

are located within the footprint of the existing house, driveway, front stairs, and front walkways in the Riverfront Area. The work proposed within degraded areas within the Riverfront Area is exempt from the requirements for an alternatives analysis and will be addressed under the redevelopment standards in a subsequent section of this letter. The balance of the proposed project, approximately 170± square feet of house, driveway, and front stairs/walkways is subject to the general performance standards.

The proposed house has a footprint that has been increased to 2,558± square feet from the existing house footprint of 1,732± square feet. The expansion of the house is proposed via a second story addition and via expansion to the north and west of the house, away from the Charles River. The existing foundation closer to the Charles River is proposed to be retained; as such, the house cannot be relocated further from the Charles River. This form of expansion limits the increase in impervious area within the Riverfront Area. The proposed house, driveway, and front walk are the same distance from the Charles River as the existing house, drive, and front walkway. The proposed driveway has been slightly expanded to allow safe access to and egress from the proposed two-car garage from Concord Street; the proposed front walkways have been slightly expanded and have been converted from impervious stone and concrete to permeable pavers. This proposed project, including mitigation measures for stormwater and plantings, represents an improvement over existing conditions relative to the protection of the statutory interests.

(d) No Significant Adverse Impact. The work, including proposed mitigation measures, must have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131, § 40...."

The subject site is 13,728± square feet in size and 4,550± square feet of the site is located within the outer Riverfront Area of the Charles River. Concord Street and two existing developed single-family house lots occur between the site and the Charles River. The project purpose is to expand the existing single-family house and replace associated site features. Approximately 1,595± square feet of the proposed house, driveway, and front stairs/permeable paver front walkways are located within the footprint of the existing house, driveway, front stairs, and front walkways in the Riverfront Area. The work proposed within degraded areas within the Riverfront Area is exempt from the requirements for a no significant adverse impact analysis and will be addressed under the redevelopment standards in a subsequent section of this letter. The balance of the proposed project, approximately 170± square feet of house, driveway, and front stairs/walkways is subject to the general performance standards.

The proposed house has a footprint that has been increased to 2,558± square feet from the existing house footprint of 1,732± square feet. The expansion of the house is proposed via a second story addition and via expansion to the west and north of the house, away from the Charles River. The existing foundation closer to the Charles River is proposed to be retained; as such, the house cannot be relocated further from the Charles River. This form of expansion limits the increase in impervious area within the Riverfront Area. The proposed house,

driveway, and front walk are the same distance from the Charles River as the existing house, drive, and front walkway. The proposed driveway has been slightly expanded to allow access to the proposed two-car garage; the proposed front walkways have been slightly expanded and have been converted from impervious stone and concrete to permeable pavers. The proposed project has been designed to and will result in an improvement over the existing condition. Redevelopment activities associated with the proposed project are located within the limit of the existing degraded areas. The total impervious area on the site is proposed to be increased by $958\pm$ square feet from $2,963\pm$ square feet under existing conditions to $3,921\pm$ square feet under proposed conditions; impervious/degraded area in the Riverfront Area is proposed to be increased by $170\pm$ square feet from $1,595\pm$ square feet under existing conditions to $1,765\pm$ square feet under proposed conditions, including work associated with the house, driveway, front stairs, and permeable paver front walkways. Significant stormwater improvements and a bounded $450\pm$ square foot enhancement planting area are proposed as mitigation and to serve as an improvement over the existing condition.

The total area of Riverfront Area on the site proposed to be altered, excluding proposed mitigation, is $2,145\pm$ square feet, including both new development and redevelopment activities. Given the age of the lot, the overall proposed Riverfront Area alteration is below the threshold of 5,000 square foot or 10%, whichever is greater. The proposed project is exempt from stormwater management standards under the Regulations; the proposed project includes significant stormwater management features to address driveway and roof runoff under City of Newton requirements. Stormwater Management Calculations prepared by Spruhan Engineering, P.C., dated January 12, 2021 are included with this NOI. This system has been reviewed by the City of Newton Engineering Department and an Approval Memorandum, dated February 17, 2021, has been issued for the system; a copy of this memorandum is included with the Notice of Intent. Lastly, an Operations and Maintenance Plan prepared by Spruhan Engineering, P.C., dated March 9, 2021, has been prepared and is included as part of this Notice of Intent. Given the previously developed nature of the Riverfront Area on and near the site and the presence of a Concord Street and two developed lots between the site and the Charles River, the proposed project will not impair the capacity of the Riverfront Area to provide important wildlife habitat functions. A bounded $450\pm$ square foot enhancement planting area will be established within the Riverfront Area on the site. The proposed project will serve to augment the wildlife habitat characteristics of the Riverfront Area on the site through proposed native shrub and ground cover plantings. The proposed project incorporates erosion control barriers at the limit of work. This barrier will serve as a limit of work and will serve to protect groundwater and surface water quality from non-point source pollution.

Section 10.58(5) of the Regulations provides the performance standards for redevelopment within previously developed and degraded Riverfront Area, which states:

Redevelopment Within Previously Developed Riverfront Areas; Restoration and Mitigation. Notwithstanding the provisions of 310 CMR 10.58(4)(c) and (d), the issuing authority may allow work to redevelop a previously developed riverfront area, provided

the proposed work improves existing conditions. Redevelopment means replacement, rehabilitation or expansion of existing structures, improvement of existing roads, or reuse of degraded or previously developed areas. A previously developed riverfront area contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds. Work to redevelop previously developed riverfront areas shall conform to the following criteria:

(a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. When a lot is previously developed but no portion of the riverfront area is degraded, the requirements of 310 CMR 10.58(4) shall be met.

The subject site is 13,728± square feet in size and 4,550± square feet of the site is located within the outer Riverfront Area of the Charles River. Concord Street and two existing developed single-family house lots occur between the site and the Charles River. The balance of the proposed project meets the general performance standards as detailed above.

The proposed project has been designed to and will result in an improvement over the existing condition. A total of 1,595± square feet of the proposed house (including part of the second story addition over the existing one-story structure), paved driveway, front stairs, and permeable paver front walkways are located within the Riverfront Area within existing impervious/degraded areas. Approximately 170± square feet of the proposed development are proposed to occur in lawn outside of the existing impervious/degraded areas. The proposed project includes stormwater management features not required under the Regulations to address both driveway and roof runoff; no such features are present under the existing condition. The project will also enhance a 450± square foot area of lawn with three existing eastern hemlocks to be retained in the Riverfront Area with additional native shrub and ground cover plantings which will serve to enhance wildlife habitat features and serve to improve the capacity of the Riverfront Area on the site to protect the statutory interests presumed to be significant within the Riverfront Area.

(b) Stormwater management is provided according to standards established by the Department.

The proposed project is exempt from stormwater management standards under the Regulations. The project includes a proposed trench drain, manhole sump, and significant infiltration system to address driveway and roof runoff in accordance with City of Newton requirements. Stormwater Management Calculations prepared by Spruhan Engineering, P.C., dated January 12, 2021 are included with this NOI. This system has been reviewed by the City of Newton Engineering Department and an Approval Memorandum, dated February 17, 2021, has been issued for the system; a copy of this memorandum is included with the Notice of Intent. Lastly, an Operations and Maintenance Plan prepared by Spruhan Engineering, P.C., dated March 9, 2021, has been prepared and is included as part of this Notice of Intent.

(c) Within 200-foot riverfront areas, proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less, or not closer than existing conditions within 25-foot riverfront areas, except in accordance with 310 CMR 10.58(5)(f) or (g).

Redevelopment activities associated with the proposed project are not closer to the river than the existing condition. The proposed house, driveway, and front walk are the same distance from the Charles River as the existing house, driveway, and front walkway. The balance of the proposed work meets the general performance standards at 310 CMR 10.58(4).

(d) Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58(5)(f) or (g).

Redevelopment activities associated with the proposed house total 1,595± square feet and are located within the limit of the existing degraded areas. The balance of the proposed work meets the general performance standards at 310 CMR 10.58(4).

(e) The area of proposed work shall not exceed the amount of degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58(5)(f) or (g).

Redevelopment activities associated with the proposed project do not exceed the amount of existing degraded area within the Riverfront Area on the site. The balance of the proposed work meets the general performance standards at 310 CMR 10.58(4).

(f) When an applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), and (e) at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Restoration shall include:

- 1. removal of all debris, but retaining any trees or other mature vegetation;*
- 2. grading to a topography which reduces runoff and increases infiltration;*
- 3. coverage by topsoil at a depth consistent with natural conditions at the site; and*
- 4. seeding and planting with an erosion control seed mixture, followed by plantings of herbaceous and woody species appropriate to the site.*

Restoration of degraded Riverfront Area on the site is not proposed as part of this project.

(g) When an applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), or (e) at a ratio in square feet of at least 2:1 of

mitigation area to area of alteration not conforming to the criteria or an equivalent level of environmental protection where square footage is not a relevant measure. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Mitigation may include off-site restoration of riverfront areas, conservation restrictions under M.G.L. c. 184, §§ 31 to 33 to preserve undisturbed riverfront areas that could be otherwise altered under 310 CMR 10.00, the purchase of development rights within the riverfront area, the restoration of bordering vegetated wetland, projects to remedy an existing adverse impact on the interests identified in M.G.L. c. 131, § 40 for which the applicant is not legally responsible, or similar activities undertaken voluntarily by the applicant which will support a determination by the issuing authority of no significant adverse impact. Preference shall be given to potential mitigation projects, if any, identified in a River Basin Plan approved by the Secretary of the Executive Office of Environmental Affairs.

An enhancement planting area totaling 450± square feet in size will be established within the Riverfront Area. Again, it must be noted that an existing paved road and two developed single-family house lots occur between the site and the Charles River. Three existing eastern hemlock saplings will be retained in this area. Additional proposed plantings include fourteen (14) native shrubs of four species 3 to 5 feet in height and fourteen (14) small native shrubs/ground cover of three species 0.5 to 2 feet in height which will be established within the Riverfront Area in the southeastern corner of the site. These plantings will serve to stabilize this area, reduce stormwater runoff, and provide enhanced wildlife habitat, including cover, perching, and foraging habitat, compared to the existing condition. The enhancement planting area will be monitored near the end of the growing season for two years after it is established with 75% survival by strata (or survival rate specified in the Order) after two growing seasons the threshold for success.

(h) The issuing authority shall include a continuing condition in the Certificate of Compliance for projects under 310 CMR 10.58(5)(f) or (g) prohibiting further alteration within the restoration or mitigation area, except as may be required to maintain the area in its restored or mitigated condition. Prior to requesting the issuance of the Certificate of Compliance, the applicant shall demonstrate the restoration or mitigation has been successfully completed for at least two growing seasons.

Enhancement of Riverfront Area is proposed as part of this project in the form of a bounded 450± enhancement planting area as shown on the Site Plan. As such, the applicant is not averse to the above-referenced continuing condition on these bounded areas.

Conclusion

In conclusion, it is EcoTec's opinion, based upon the information provided on the Site Plan and in this letter, that the proposed project meets the general performance standards and redevelopment standards for work within the Riverfront Area under the Regulations. The

Mr. Haim Senior
March 12, 2021
Page 13.

proposed project results in an increase in impervious area on the site and in the Riverfront Area; mitigation in the form of stormwater improvements and enhancement plantings have been provided as part of the project. This plan as proposed meets the applicable performance standards and by regulation serves to protect the statutory interests.

Cordially,
ECOTEC, INC.

A handwritten signature in blue ink that reads "John P. Rockwood". The signature is written in a cursive, flowing style.

John P. Rockwood, Ph.D., SPWS
Chief Environmental Scientist

Attachments (4; 7 pages)

18/wr/NEWTON192CONCORD WRE CMP EVAL