Description of Work

February 1, 2021

Notice of Intent Filing

Redmond Street Subdivision, Burlington, Massachusetts

EXISTING CONDITIONS

The Redmond Street project is a two lot subdivision, located off the east end of the Redmond Street right of way, a private and largely undeveloped street . The parcel is located to the south of Raymond Road, with forty feet of frontage at the end of the roadway. The subject property currently has no access or frontage on a constructed roadway. The property is bisected by an intermittently flowing stream, and system of Bordering Vegetated Wetlands which surrounds the upland acreage on the lot. There is no existing "upland" or formalized access to the property.

As noted above, there are two, potential alternatives for accessing the two building lots within the locus:

1. Extend Redmond Street; or
2. Extend Raymond Road.

While the applicant originally submitted Alternative 1 (the extension of Redmond Street) in the Notice of Intent application, during the public review of the filing, the Burlington Conservation Commission requested that the applicant explore the impacts of both alternatives. While both alternatives develop legal frontage and access to the upland portions of the lot, and both routes requires the alteration of wetlands, the impacts differ across resource areas and square footage of alterations.

Alternative 1 requires the crossing of an intermittent stream, as well as portions of the Bordering Vegetated Wetland; and Alternative 2 requires the alteration of Bordering Vegetated Wetland and alterations to a local Riverfront area resource. Either alternative creates the access and frontage for development of two, single family homes. The following chart shows the impacts of both Alternatives:

Resource Area			
Alteration:	**BVW**	**Buffer Zone**	**Stream Protection Zone**
Alternative 1			
(Redmond St)	4,257 sf	9,809 sf	0 sf
Alternative 2			
(Raymond Rd)	3,220 sf	15,986 sf	10, 383 sf

The property is not located within a mapped FEMA floodplain, and there are no known vernal pools, or any areas designated as potential habitat for rare or endangered species. FEMA maps show the 100-year flood plain at elevation 133, and no elevations on this lot are considered Bordering Land Subject to Flooding.

Alternative 1

The construction of the Redmond Street extension will require the alteration of a total of 4,257 square feet of Bordering Vegetated Wetlands. The alterations occur in two locations, to accommodate both the stream crossing (B series of wetlands) and a fingerlike projection of wetlands on the C series of wetlands. This alternative alters approximately 9,809 square feet of jurisdictional buffer zone.

The proposed wetlands crossing will allow the currently paved, 350 foot long Redmond Street to be extended approximately 300 additional feet, for an approximately 650 foot long finished length. This extension provides both frontage and access for the two lot subdivision. The width of the proposed roadway extension is twenty (20') feet.

As the crossing includes work atop the intermittently flowing stream, an aluminum box culvert has been proposed to pass the stream flow through the roadway crossing. The box culvert has been designed to meet the Massachusetts stream crossing guidelines, as found in the Massachusetts Stream Crossing Handbook, prepared by the Fisheries and Wildlife Service, Division of Ecological Restoration. Details concerning the sizing of the culvert are included in the Stormwater Calculations included with this Notice of Intent filing.

Alternative 2

The extension of the Raymond Road roadway, and the subsequent construction of a new subdivision roadway, will require the alteration of a total of 3,220 square feet of Bordering Vegetated Wetlands. The alteration to Bordering Vegetated Wetland occurs in a single location, through a finger like projection of the "C" series wetlands flags. This alternative requires the alteration of 15,980 sf of jurisdictional buffer zone, and the engineer for the project has roughly calculated that Alternative 2 requires 3 to 4 times as much filling/grading as Alternative 1.

Additional wetland impacts include the alteration of 10,383 sf of a local Stream Protection Zone. This resource area extends from a locally protected, regulatory stream, located to the north of this subdivision. Work within this resource area will include roadway construction; utility lines; storm water management facilities; and extensive filling to meet existing grades at Raymond Road.

The wetlands crossing will allow an approximately 430 foot long extension, off of Raymond Road to be constructed for both frontage and access for the two lot subdivision. The width of the proposed roadway extension is twenty (20') feet.

Regulatory Compliance
Impact Comparision

The applicant is proposing the approval of the wetland (and stream crossing) as a "Limited Project" as defined in 310 CMR 10.53:

"the construction and maintenance of a new roadway or driveway of minimum legal and practical width acceptable to the planning board, where reasonable alternative means of access from a public way to an upland area of the same owner is unavailable."

While either alternative allows the applicant to meet the Planning Boards request for safe access, and frontage, through the proposal of a twenty (20') foot wide roadway, the impacts of the alternatives differ with respect to wetland values. The following chart compares the impacts of each Alternative on the affected resource area and values:

Impact:	**BVW**	**RA**	**BZ**	**Grading/fill**	**Stream**
					Cross
Alternative 1	4257 sf	0 sf	9808 sf		
Redmond Street:	greater	none	less	less	yes
Alternative 2	3220 sf	10383 sf	15986 sf	3-4x	
Raymond Road	less	greater	greater	greater	none

As the chart depicts, the Raymond Road Alternative 2 requires the alteration of 3220 sf of Bordering Vegetated Wetland. This is less than the 4257 sf of alteration proposed to Bordering Vegetated Wetland in Alternative 1. Additionally, Alternative 1 requires a stream crossing, which is not needed in Alternative 2.

However, while the Raymond Road Alternative (Alternative 2) reduces the proposed alteration of Bordering Vegetated Wetlands, it requires significant additional alteration of jurisdictional buffer zone. The Redmond Street Alternative 1 requires the alteration of 9808 sf of jurisdictional buffer zone, and the Raymond Road Alternative 2 proposes the alteration of 15986 sf of jurisdictional buffer zone.

The Town of Burlington has a local bylaw, which regulates specific intermittent streams, as shown on a map available to the public. The regulatory stream to the north of this site has an associated 200 foot Stream Protection Zone (local Riverfront resource area). This resource area has rigorous performance standards, and a presumption of significance to a variety of wetland values. The local regulations require:

The applicant shall prove by a preponderance of the evidence that there are no practicable and substantially equivalent economic alternatives (as defined in 310 CMR 10.58) to the proposed project with less adverse effects on the interests identified in the Burlington Wetland Bylaw.

It is the applicants contention that the alteration of locally regulated Riverfront Area resource area required by the Raymond Road Alternative 2, requires the applicant to consider the Redmond Street alternative as being the lesser impact option. The Redmond Street Alternative 1 option does not intrude into the locally established Riverfront Area resource area.

Conclusion

While the Raymond Road Alternative 2 reduces the impact to Bordering Vegetated Wetlands, the cumulative wetland impacts and alterations to the site through the Raymond Road proposal has a greater overall impact than the Redmond Street Alternative 1 access plan. Under the local wetlands bylaw, and regulations, the applicant is required to evaluate impacts to both the jurisdictional one hundred foot buffer zone, and the two hundred foot resource area above the intermittent stream located north of the site. These areas are regulated as "resource areas" under the local code. When these resource area alterations are considered, it is the applicant's contention that the Redmond Street Alternative 1 proposal is the route of less impact to protectable resource areas.

While the Massachusetts Wetlands Protection Act considers the buffer zone to be a jurisdictional area, rather than a resource area, the Commission is allowed to use their professional discretion in allowing alterations to resource areas. The applicant is proposing a "limited project" status for the proposed alterations, but has kept the alteration of Bordering Vegetated Wetlands to well under the 5000 sf threshold for discretionary approval. While the owner of this property owns, and has owned, adjacent land parcels, none of the properties under his control can provide, or could ever have provided, upland access to these, two building lots.

The regulations found at 310 CMR 10.53 (e) require the Commission to determine the suitability of a project for a "limited project" designation. The regulations require that

> "the construction and maintenance of a new roadway or driveway of minimum legal and practicable width acceptable to the planning board, where reasonable means of access from a public way to an upland area of the same owner is unavailable. Such roadway or driveway shall be constructed in a manner which does not restrict the flow of water. Reasonable alternative means of access may include any previously or currently available alternatives such as realignment or reconfiguration of the project to conform to 310 CMR 10.54 to 310 CMR 10.58 or otherwise minimize adverse impacts on resource areas".

While the owner of this property owns, and has owned, adjacent land parcels, none of the properties under his control can provide, or could ever have provided, upland access to these, two building lots. The roadway has been designed to ensure the free passage of both water, and wildlife, and the width of the roadway has been set at 16 feet, the minimum width allowable by the Burlington Planning Board. It is the contention of the applicant that the performance standards for the "limited project" designation have been met.