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VIA EMAIL

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Norton Town Hall
70 East Main Street
Norton, MA 02766

RE: Project Narrative
MA DEP#250-1023 – NOI Application Lot 1
MA DEP#250-1024 – NOI Application Lot 2
MA DEP#250-1025 – NOI Application Lot 3
MA DEP#250-1026 – NOI Application Lot 4
MA DEP#250-1027 – NOI Application Lot 5
MA DEP#250-1028 – NOI Application Lot 6

Leonard Street South – Project Narrative

Bluestar Business Park is being developed by Condyne Construct, Inc. of Braintree, Massachusetts; also the master developer of Norton Commerce Center, one exit south of the proposed project. The Park is ideally situated directly off Route 495 Exit 10 at the southeast corner of the intersection at Leonard and East Main Streets in the Town of Norton. The existing land uses of the site include commercial, residential, undeveloped and agricultural areas. The site is zoned for industrial use. The Project team consists of; CEG Engineering, BSC Group, Environmental Consulting and Restoration (ECR), Oxbow Associates, Halnon Land Surveying and Polar Design Build, Inc.

1.0 Existing Conditions

The locus properties are at the southeasterly corner of East Main (Route 123) and Leonard Streets and is south of, and along Leonard Street for approximately 2,055 feet. The land consists of the five (5) existing properties identified on Sheet 1 of the Project Site Plans. Existing improvements include four (4) residential dwellings, one (1) day care facility, one (1) landscape

company office building and a golf training center / driving range. The wetland resource areas that exist on site have been delineated and identified in the ANRAD submitted for the Project. An ORAD was issued on June 12, 2018 by the Norton Conservation Commission.

2.0 Proposed Conditions

The Project consists of the construction of five (5) buildings including three (3) commercial buildings and two (2) warehouse buildings across the site. Building five (5) has been reduced from 258,800 s.f. to 220,000 s.f. with the building reduced at the southeasterly end. Table 1 is a summary of proposed jurisdictional impacts and mitigation by lot.

Lot	Impacts	Mitigation Proposed	Other Lots/File #'s Affected
Lot 1 (DEP File #250-1023)	Buffer Zone (only)	N/A	DEP File #250-1026 ¹ DEP File #250-1027 ²
Lot 2 (DEP File #250-1024)	Buffer Zone (only)	N/A	DEP File #250-1026 ¹ DEP File #250-1027 ²
Lot 3 (DEP File #250-1025)	Buffer Zone	N/A	DEP File #250-1027 ²
	Riverfront Area 7,757 SF (redevelopment & restore degraded areas) in 100-200 ft RF And 0 SF in 0-100 ft RF	5,613 SF - Redevelopment of previously degraded area 2,144 SF – Restoration of previously degraded area	
Lot 4 (DEP File #250-1026)	Buffer Zone (only)	N/A	DEP File #250-1027 ²
Lot 5 (DEP File # 250-1027)	Buffer Zone (only)	N/A	
	Riverfront Area 98,719 SF alteration (storage & mit.) 23,985 SF alteration in 0-100 ft. 74,734 SF alteration in 100-200 ft.	Redevelopment; RA restoration; compensatory flood storage; grassland management (No proposed development in the RFA)	
	BLSF 257,882 SF alteration 187,953 CF Flood storage lost 232,977 CF Flood storage replaced	Compensatory flood storage	DEP File #250-1028 ³
Lot 6 (DEP File # 250-1028)	Riverfront Area 920 SF in 100 FT to 200 FT (restore degraded area)	Restoration of previously degraded area (No proposed development in the RFA)	
	BLSF 12,110 SF (compensatory storage for DEP File #250-1027)	30,502 CF replaced (compensatory storage for DEP File #250-1027)	DEP File #250-1027 ³

Table 1 - Summary of proposed jurisdictional impacts and mitigation by lot

¹ Emergency overflow from the proposed subsurface infiltration system drains to an outlet on Lot 4

² A portion of the proposed pavement drains to a pipe system that drains to the basin at the rear of Lot 5

³ Flood plain flood storage lost and the compensatory storage proposed as mitigation utilizes a portion of both Lots 5 and 6 for the tabulation.

3.0 Resource Areas

This section outlines and summarizes the entire Project and the existing impacts to the wetland resource areas and describes the proposed post-development changes.

3.1 Bordering Vegetated Wetlands – Overall Project Summary

Description	Square Feet	Acres
Total Area of 100' Buffer Zone On-Site	607,000	13.9
Existing Driving Range & Landscape Yard Usage in 100' Buffer Zone	218,423	5.01
Proposed Work in 100' Buffer Zone -		
8-29-18 Submitted Plans	194,174	4.4
12-6-18 Revised Plans	168,362	3.9
Reduction of Work in 100' Buffer Zone -		
Per Revised Plan	25,812	0.5
Total Reduction of Dev. In 100' Buffer Zone from existing to proposed conditions	<50,061>	<1.11>

Table A – Bordering Vegetated Wetland (BVW) Buffer Zone Summary

Additional Buffer Zone and BVW notes:

No work is proposed within the BVW unless otherwise referenced to another separate NOI file number (Leonard Street Widening File #250-1035). Work associated with restoration (no new development) is proposed within the 25' No Disturb zone in the following areas:

1. Along the southwest edge of the golf driving range – the existing gravel drive and 20' high fence/netting are to be removed and pair spots to be loamed, seeded and re-vegetated,
2. Along the proposed walking path at the northeast portion of the site were it will cross over an existing culvert along an existing cart path.
3. At the location of the existing golf range driveway in order to remove existing pavement per the demolition plan.

Vernal Pool notes:

No development is proposed within 100' to vernal pool. See sketch within Attachment C for additional information regarding vernal pool location and documentation that no work will be performed within 100'.

3.2 FEMA Floodzone A/E with Base flood Elevation 73.5

The proposed development consists of areas that include floodplain modification and displacement. The Applicant understands that Bordering Land Subject to Flooding (BLSF) is a regulated under the Wetlands Protection Act. The Applicant also acknowledges the importance of minimizing impacts to this resource area. Provided in **Attachment A** is an overall park Master Plan summary outlining general industry requirements, site selection, building design, mitigation costs, acquisition costs, soft costs and projected revenue. These factors guided the development of the Master Plan and specifically the size of Building 5.

Based on the Applicant's required size of Building 5 (which has been reduced from 258,800 s.f. to 220,000 s.f.), the site design was configured such that the Project footprint would minimize work in the BLSF, while meeting the Performance Standards for that resource area. Performance Standards for BLSF in the area of Building 5 are outlined in **Section 4.0**

The following table identifies the changes in the proposed development plans in response to Town and Peer Review comments.

Description	Square Feet	Acres
Flood Alteration (total) 8-29-18 Plans	287,496	6.6
Flood Alternation (total) 12-6-18 Plans	266,127	6.1
Flood Alternation (total) 2-4-19	257,882	5.9
Flood Plain Impervious Area Existing	12,464	0.28
Flood Plain Impervious Area 8-29-18 Plans	119,296	2.74
Flood Plain Impervious Area 12-6-18 Plans	117,542	2.69
Flood Plain Impervious Area Increase 12-6-18	105,078	2.41

Table B – Flood Plain Development Summary - Overall

The following table identifies the Flood Storage displaced and Compensatory Storage provided at the specific elevation intervals.

FLOOD ZONE - STORAGE TABLE		
ELEVATION RANGE	FLOOD ZONE FILL (CF)	COMPENSATORY STORAGE (CF)
73.5		
	51,631	54,250
73		
	79,811	111,601
72		
	43,754	46,064
71		
	12,757	21,062
70		
	187,953	232,977

Table C – Flood Zone Storage Table

Riverfront Area (RFA)

The following table summarizes the comprehensive impacts the proposed within the 200' Riverfront Area. Impacts from the existing commercial driving range will be eliminated and a grassland Management Plan, provided in **Attachment B, will be implemented.**

Description	Square Feet	Acres
Overall Existing Use/Dev Within RFA at Landscape Business Gravel Drive, Shed and Stockpiles	12,972	0.297
Existing Commercial Golf Range, Including 20' Netting Fence, Gravel Drive, Sheds, Vending and Lighting	247,021	5.67
Total Existing Commercial Use Within RFA	259,993	5.97
Proposed Use Within Previously Degraded RFA	8,234	0.18
Reduction in Use/Dev Within Riverfront Area	251,759	5.77

Table D – Riverfront Area Summary

A 97% reduction in Riverfront Area use is proposed by this development plan. The compensatory storage areas are not included as they will be temporary. Re-establishment of these areas are identified in the Area Management Plan attached as Attachment B.

The only proposed development in the Riverfront area is being performed on Lot 3 in an existing degraded Riverfront Area consisting of gravel parking, a shed, concrete slab, wood processing, and stock piles. This work is classified as Riverfront Redevelopment Work. Historical imagery has been reviewed and these features existed prior to August 7, 1996. This existing area has been determined to be “A previously developed riverfront area that contains areas degraded prior to August 7, 1996 as defined in WPA 310 CMR 10.58. Photos attached below depict the existing conditions of the degraded RFA.



Photo 1 – Degraded area facing North



Photo 2 - Degraded area facing West



Photo 3 – Degraded area – stockpiles – facing east

The work proposed in the Riverfront Area is subject to the requirements at 310 CMR 10.58(5); Redevelopment Within Previously Developed Riverfront Areas: Restoration and Mitigation, and shall conform to the criteria in Sections 10.58(5)(a through h). A summary of Lot 3 Riverfront Area work is provided in **Section 4.0**, below.

In summary, the only development in the RFA is within a previously degraded portion of the RFA and is a net reduction over existing degraded conditions.

Other work within the RFA consists of mitigation and restoration of existing degraded areas associated with Lot 5 and lot 6 as outlined in the summary of those lots in Section 4.0 below.

For the entire locus area there is a reduction of impact to the Riverfront Area of over 97%.

3.3 Other Impacts

Nitrogen

The following is a table summary of Nitrogen usage for the subject property (Lot 5 and a portion of Lot 4). Note this is expressed in pounds (lbs) of Nitrogen, not pounds of fertilizer. Nitrogen is the number one pollutant of groundwater.

Description	lbs / year	lbs / 20 years
Existing Golf Driving Range (17.9 Acres) -		
Typical Fairway Usage (40lbs / Acre / Year)	716 lbs	14,320 lbs
6 Septic Systems (approx. 3 bedrooms ea.)	120 lbs	2,400 lbs
Total Estimated Nitrogen Used at Existing Property	836 lbs/year	16,720 lbs/20 years
Proposed Development -		
Landscaped Lawn (approx. 100,000 sf), Use Same Loading (40 lbs / Acre / Year)	91 lbs	1,820 lbs
0 Septic Systems	0 lbs	0 lbs
Total Estimated Nitrogen Used for Proposed Development	91 lbs/year	1,820 lbs/year

Table E – Nitrogen Loading Summary

The proposed Project will have a 90% nitrogen reduction in comparison to the existing use. The values used above may also be conservative in that there is documentation that putting greens may require up to 300 lbs / acre / year to maintain and there are/were a significant number of putting greens on this site. The existing areas that have been used agriculturally for many years were presumably fertilized and irrigated but these areas have not been included in this calculation.

Irrigation

The following is a summary of the area to be irrigated for the project locus.

Existing irrigated area approximately = 780,051 SF (17.9 acres)

Proposed irrigated area approximately = 100,000 SF (2.29 acres)

Proposed reduction in irrigated areas = 88%

A proposed irrigation well to serve both buildings four and five will be installed near Infiltration Basins four (4) and eight (8) where groundwater will be recharged locally adjacent to the well. Two components of the site design with respect to irrigation are described below:

1. A rainwater collection system for irrigation is not proposed. Due to the velocity and peak flow rate of the roof runoff, significant back pressure from a collection system could cause issues with the roof drainage system and building safety concerns if water is not getting off the roof quick enough therefore a collection system is not proposed. Both the structural and plumbing engineers reviewed our request for rainwater collection and both engineers expressed the same safety concerns and potential liability risks.
2. Lawn seed mix is mainly tall fescues and drought resistant. The proposed seed mix is called out as RUGBY II LS HYBRID BY NORTHEAST NURSERY, INC. in the Landscape Plan. This seed mix is advertised as: A turfgrass seed mixture for residential or commercial lawns which feature little to no irrigation or extreme hot conditions; can also tolerate shade and performs well in low maintenance areas proprietary turf type tall fescue seed varieties are featured in this mix and further bolstered by Hybrid Thermal Bluegrass. All Varieties are highly rated in the NTEP trials for drought and heat situations, as well as highly disease resistant. The mix is 75% tall fescues, which is ideal for the project and requires less irrigation.

4.0 Individual Lot Summary – Wetland Resource Area Impacts

A table has been provided for individual Notices of Intent that includes: Resource area, a description of work within those areas, whether there is/is not jurisdiction and performance standards for that work. Also included is a description of the permitting requirements under the WPA.

Lot 1- MA DEP File #250-1023

Resource Area	Description of Work	Jurisdiction	Performance Standards
Bank	None	No	NA
Bordering Vegetated Wetland	Emergency outlet pipe within Buffer Zone	Yes	NA (Buffer zone only)
Land Under Water	None	No	NA
Bordering Land Subject to Flooding	None	No	NA
Isolated Land Subject to Flooding	None	No	NA
Riverfront Area	None	No	NA

Lot 1 requires an Order of Conditions for work within the 100' Buffer Zone to a Bordering Vegetated Wetland in order to install a drainage pipe.

A portion of runoff from Lot 1 drains to Basin #5 on Lot #5. (MA DEP File #250-1027)

Lot 2 – MA DEP File #250-1024

Resource Area	Description of Work	Jurisdiction	Performance Standards
Bank	None	No	NA
Bordering Vegetative Wetland	Emergency outlet pipe within buffer zone	Yes	NA (buffer zone only)
Land Under Water	None	No	NA
Bordering Land Subject to Flooding	None	No	NA
Isolated Land Subject to Flooding	None	No	NA
Riverfront Area	None	No	NA

Lot 2 requires an Order of Conditions for work within the 100' buffer Zone to a Bordering Vegetated Wetland in order to install a drainage pipe.

A portion of runoff from Lot 2 drains to Basin #5 on Lot #5. (MA DEP File #250-1027)

Lot 3 – MA DEP File #250-1024

Resource Area	Description of Work	Jurisdiction	Performance Standards
Bank	None	No	NA
Bordering Vegetative Wetland	Work within 100' Buffer Zone	Yes	NA (Buffer zone only)
Land Under Water	None	No	NA
Bordering Land Subject to Flooding	None	No	NA
Isolated Land Subject to Flooding	None	No	NA
Riverfront Area	5,613 alteration in previously degraded area	Yes	None - must meet criteria within 10.58(5)

Lot 3 requires an Order of Conditions for work:

- 1) Within the 100' Buffer Zone to a Bordering Vegetated Wetland in order to install drainage, parking and utilities
- 2) Within the Riverfront Area that consists of 5,613 s.f. alteration in a previously degraded area. The remaining existing degraded Riverfront Area which is 2,144 s.f. will be cleaned, loamed and seeded and will no longer be used. This work must meet the criteria identified within 10.58(5) as summarized below. The degraded areas and proposed redevelopment area are identified in the figures below.

Figure F below shows existing conditions in 1995 of the degraded Riverfront area. Based on available data there was approximately 7,757 s.f. of degraded area consisting of exposed dirt, stockpiles and structures.

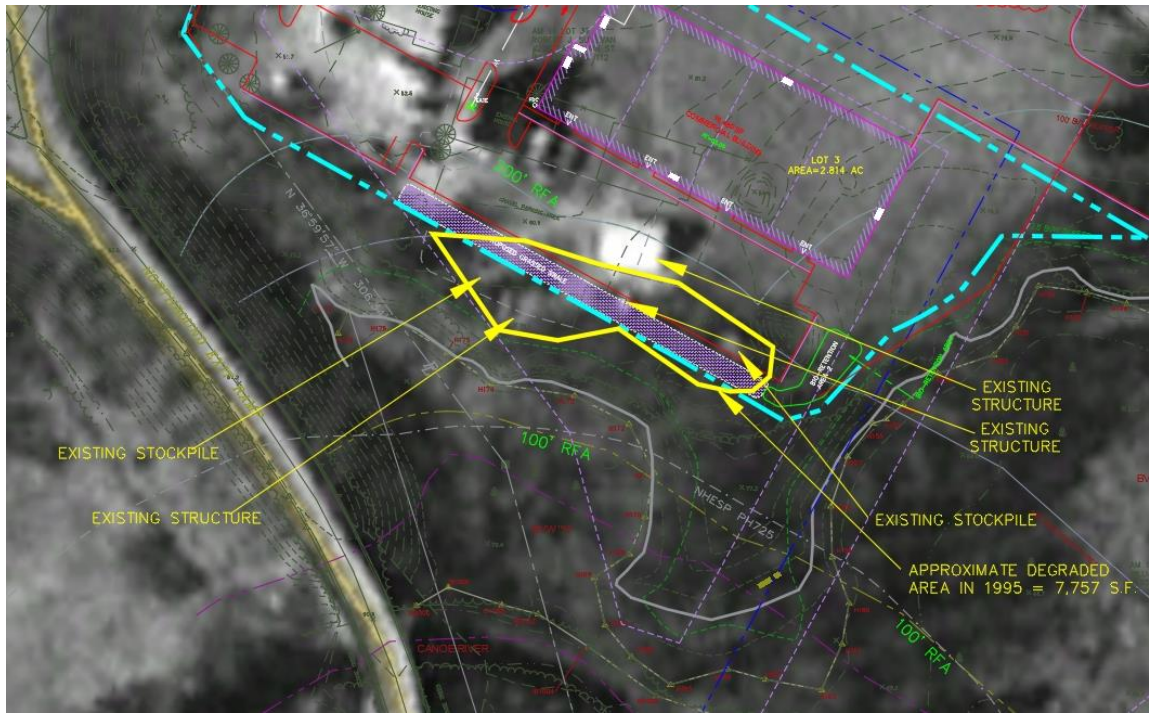


Figure F – Lot 3 – RFA - Existing Conditions in 1995

Figure G below depicts the current conditions on the site. Based on topographic locations, site visit inspection and aerial photography there is approximately 11,045 s.f. of degraded riverfront area existing on the property today.



Figure G - Lot 3 – RFA – Existing Conditions 2018 Figure H below shows the proposed redevelopment work on Lot 3 that is entirely within, and a reduction from, the previously developed and degraded Riverfront Area. Note that this is less impact than currently exists. The proposed redevelopment footprint of 5,613 s.f. consists of a lined grass swale, bio-retention area and small portion of parking lot.



Figure H – Lot 3 – RFA – Proposed redevelopment

The proposed redevelopment work must meet the criteria identified within 10.58(5) as summarized below:

- (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.*
 - Approximately 36% of the previously degraded area will be cleared of debris and stockpiles and allowed to revegetate. The proposed work will 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, and 310 CMR § 10.58.
- (b) *Stormwater management is provided according to standards established by the Department.*
 - Grass swale and portion of a Bio-retention area have been designed according to Stormwater Standards

- (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).*
- No work is proposed within 100 feet of the Canoe River. Proposed work will be 171 feet away from the River, the existing degraded conditions are as close as 132 feet from the River. Therefore, there is a 39 foot increase in buffer to the River and improvements to stormwater treatment resulting in an improvement and compliance with these criteria.
- (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).*
- All work will result in less degraded land in the Riverfront Area. No proposed expansion of structures is proposed within the RFA. An existing shed is to be removed.
- (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).*
- The area of proposed work is 5,613 s.f. which is less than the 7,757 s.f. existing degraded area. All the proposed work is contained within the footprint of existing, degraded area.
- (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;*
- Debris will be removed by hand where possible to limit ground disturbance. Trees outside the limit of work will not be touched.
 - Regrading is not proposed in an effort to minimize disturbance to areas that are already stabilized. Furthermore, the work area is relatively flat already.
 - Any patches of disturbed land resulting from temporary debris removal will be loamed and seeded with erosion control seed mix.
- (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.

- Mitigation is not proposed within the RFA on lot 3. Any work related to restoration and or compensatory storage shall be performed as described in the Grassland Management Plan in Attachment B - NA

(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.

- The Applicant will comply with these conditions.

Lot 4 – MA DEP File #250-1026

Resource Area	Description of Work	Jurisdiction	Performance Standards
Bank	None	No	NA
Bordering Vegetated Wetland	Work within 100' Buffer Zone	Yes	NA (Buffer Zone only)
Land Under Water	None	No	NA
Bordering Land Subject to Flooding	None	No	NA
Isolated Land Subject to Flooding	None	No	NA
Riverfront Area	None	No	NA

Lot 4 requires an Order of Conditions for work within the 100' buffer-zone to a Bordering Vegetated Wetland in order to install parking and drainage infrastructure.

A portion of runoff from Lot 4 drains to Basins #4 and #5 on Lot #5. (MA DEP File #250-1027)

Lot 5 – MA DEP File #250-1027

Resource Area	Description of Work	Jurisdiction	Performance Standards
Bank	None	No	NA
Bordering Vegetated Wetland	Work within 100' Buffer Zone	Yes	NA (Buffer Zone only)
Land Under Water	None	No	NA
Bordering Land Subject to Flooding	Alteration of 5.9 Acres of floodplain	Yes	Yes
Isolated Land Subject to Flooding	None	No	NA
Riverfront Area	Compensatory storage mitigation, degraded area restoration and grassland management plan implementation	Yes	YES

Lot 5 requires an Order of Conditions for work:

1) Within the 100' Buffer Zone to a Bordering Vegetated Wetland in order to install drainage, parking and utilities

2) Within the Riverfront Area work. The work must meet the performance standards within 310 CMR 10.54. These performance standards are outlined below.

10.58(4) (a) Protection of Other Resource Area 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 s. 40 in lieu of any additional requirements that might otherwise be imposed on work in the buffer zone within the riverfront areas.

There is no proposed development in the RFA. The only work proposed is restoration and mitigation. The performance standards for other resource areas are met.

10.58(4) (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

adverse effect on vernal pool habitat certified prior to the filing of the Notice of Intent.

There is no proposed development in the RFA. There is also no work performed for mitigation or restoration within the mapped NHESP rare habitat areas or documented rare habitat areas.

10.58(4)(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 s 40.

There is no proposed development in the RFA. Although a Substantially Equivalent Economic Alternatives Analysis is not required, Attachment A has been provided to document the required size and scope of these buildings to make an economically viable development given the amount of proposed mitigation.

10.58(4)(d) No Significant Adverse Impact – The work must have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131 s. 40

There is no proposed development in the RFA and therefore meets 10.58(4)(d). Only degraded area restoration, compensatory storage mitigation and site clean-up is proposed within the RFA. Work performed in the RFA will only enhance habitat and RFA features. This work is further outlined below.

The existing Riverfront Area on Lot 5 is summarized in the table below.

Lot 5 Riverfront Area	Area (SF)
Existing 0' – 100' Riverfront Area on Site	442,997 s.f.
Existing 100'-200' Riverfront Area on Site	213,082 s.f.
Existing Degraded Riverfront Area on Site	10,083 s.f.

The previously developed existing degraded areas on Lot 5 include golf sand traps (2,927 s.f.), gravel driveway (6,670 s.f.) and existing structures (486 s.f.) for a total of 10,083 s.f.

Work within the RFA on Lot 5 will consist only of the restoration of degraded areas, compensatory storage and implementation of the Grassland & Greenbelt Management Plans. The degraded area will be restored by removing the gravel driveway, existing fence and existing structures and will be loamed and seeded per the Grassland & Greenbelt Management Plan.

In summary, the work will be performed per 310 CMR 10.58 (4) (d) No significant Adverse Impact and Includes:

- a. *At a minimum, a 100 foot wide area of undisturbed vegetation is provided.*
 - i. *Work within the RFA on Lot 5 will consist only of the restoration of degraded areas, compensatory storage and implementation of the Grassland & Greenbelt Management Plans. The RFA will be left undisturbed once the restoration and mitigation has been completed.*
- b. *Stormwater is managed according to standards established by the Department in its Stormwater Policy.*
 - i. *The proposed project has been designed in accordance with all applicable stormwater standards.*
- c. *Proposed work does not impair the capacity of the riverfront area to provide important wildlife habitat functions....*
 - i. *The proposed project does not impair the capacity of the riverfront area to provide important wildlife habitat functions. The proposed project includes restoration of degraded riverfront areas and the implementation of a grassland management plan and greenbelt management plan which will increase the overall capacity of wildlife habitat within the riverfront area.*
- d. *Proposed work shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.*
 - i. *The proposed project has been designed to include appropriate erosion control measures during construction to protect wetland resource areas and all said interest including groundwater and surface water quality.*

In summary to quantify this work, the work will be performed per 310 CMR 10.58 (4) (d) No Significant Adverse Impact and includes:

- e. Existing 10,083 SF of degraded areas will be restored and become part of the grassland management plan included in Attachment B.
- f. 23,985 SF of compensatory storage as mitigation for fill in the floodplain within the 0-100 ft riverfront area
- g. 74,734 SF of compensatory storage as mitigation for fill in the floodplain within the 100-200 ft riverfront area
- h. Total alteration for mitigation and restoration is 98,719 s.f.
- i. Grassland management

There is no proposed new development within the 200' RFA

3) Within the Bordering Land Subject to flooding (BLSF). The work within the BLSF must meet the Performance Standards set forth in section 10.57(4)(a). These Performance Standards are summarized as follows:

10.57(4)(a)1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to flooding.

Compensatory storage has been provided as shown on the site plans in an area and at the required elevation to meet the performance standards. Table B provided in Section 3.2 above is a summary of flood storage lost and compensatory storage added.

10.57(4)(a)2. Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.

The Project does not restrict flows or increase flood stage or velocity. The required compensatory storage is provided and pre- and post- runoff calculations with outlet controls have been provided for the project. Subsurface drainage systems have been added to the project in the areas of Buildings one (1) through four (4) in order to reduce the amount of runoff that is routed to Basin #5 that is within the BLSF. Subsurface systems at building five (5) have not been proposed due to high groundwater, existing topography and the building/lot configuration.

10.57(4)(a)3. – Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions.

Per section 10.57(1)(a) 3, a majority of the locus parcel is considered an area “so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated (such altered lands include paved and graveled areas, golf courses, lawns, etc).

The remaining area where work is being performed, also in the BLSF, has been investigated by Environmental Consulting and Restoration, LLC (ECR) and their report is included as **Attachment C**. Per the report there are no important habitat features within this area such as the features listed in DEP’s wildlife habitat protection guidance such as trees with large cavities, existing nest trees for birds, land containing freshwater mussel beds, etc. Based on ECR’s past and additional wildlife habitat evaluations, ECR has confirmed that the proposed work within the area described above will not have adverse impacts to wildlife habitat.

All work for compensatory storage is proposed within the limits of work as shown on the plans. Signs are proposed at the limit of development around the proposed basins as shown on the Grassland Management Plan, no further plantings are proposed at the basin limits. The final pathway location is located as noted and shown on the plans.

Lot 6 – MA DEP File #250-1028

Resource Area	Description of Work	Jurisdiction	Performance Standards
Bank	None	No	NA
Bordering Vegetated Wetland	Work within 100' Buffer Zone	Yes	NA (Buffer Zone only)
Land Under Water	None	No	NA
Bordering Land Subject to Flooding	Compensatory storage for DEP File #250-1027	Yes	NA
Isolated Land Subject to Flooding	None	No	NA
Riverfront Area	Compensatory storage mitigation, degraded area restoration and grassland management plan implementation	Yes	Yes

Lot 6 requires an Order of Conditions for:

1. Work within the 100' Bufferzone to BVW which includes installation of a walking path and compensatory storage related to DEP File #250-1027.
2. Work within Bordering Land Subject to flooding which is for mitigation purposes only (no new development) includes creation of Compensatory Storage for file #250-1027
3. Work within the 100-200' RFA consisting of 12,500 s.f. alteration for compensatory storage mitigation, degraded area restoration and Grassland Management Plan implementation. This work meets the Performance Standards set forth in section 10.58 (4) (d) No Significant Adverse Impact. **No Development is proposed within the RFA.**

All work for compensatory storage is proposed within the limits of work as shown on the plans. Signs are proposed at the limit of development around the proposed basins as shown on the Grassland Management Plan, no further plantings are proposed at the basin limits. The final pathway location is located as noted and shown on the plans.

5.0 Construction Phasing

The following is a general construction sequence for the work proposed on Lots 1 through 6.

1. Attend preconstruction meeting with local officials
2. Stake and install erosion control / limit of work (to be inspected prior to construction start)
3. Site demolition per plan
4. Strip existing topsoil for parking lot, building and compensatory storage areas.
5. Rough grade site

- a. Regrade compensatory storage area to proposed grades
 - b. Begin building pad and parking area grading
 - c. Restoration of degraded areas
 - d. Loam and seed compensatory storage areas
6. Building foundation work
 7. Site utility and drainage installation
 8. Building construction
 9. Parking lot installation
 10. Final grading and landscaping
 11. Final paving

6.0 Summary

There are significant extant environmental impacts related to the existing on-site golf course use. Although they sometimes categorized as green space, the amount of mowing, fertilization and irrigation needed for their maintenance demeans their ecological and environmental values and adversely affects ground, and surface water quality. As acknowledged in the Wetlands Protection Act, golf courses provide very little wildlife habitat function.

The proposed development will reduce impacts, reduce degradation of sensitive areas of the site and replace a managed, low-value ecological landscape with an uncommon, early successional habitat in proximity to Canoe River. Greater than 15 acres will be converted to an ecotype no longer common in Eastern Massachusetts that will support grassland birds, and diverse amphibians, reptiles, small mammals, and invertebrates while improving local surface and groundwater quality in the Canoe River drainage.

Sincerely,

Condyne Engineering Group, LLC



Mark Dibb, P.E.

Environmental Consulting and Restoration, LLC



Brad Holmes, PWS, MCA

Attachment A

Masterplan Business Park Summary

Blue Star Business Park

Bluestar Business Park Overview

Bluestar Business Park is being developed by Condyne Construct, Inc. of Braintree, Massachusetts also the master developer of Norton Commerce Center one exit south of the proposed project. Bluestar Business Park will comprise 475,000 SF of high bay warehouse buildings and 41,815 SF of commercial retail buildings in Phase I of the project. Phase II of the park comprised of flex and warehouse facilities will be developed on partial completion of Phase I. The park is ideally located situated directly off Route 495 Exit 10 at the southeast corner of the intersection at Leonard and East Main Street in the town of Norton. Total square feet to be developed in Phase I as proposed is 516,815 SF. The existing land uses of the site include commercial, residential, undeveloped and agricultural areas. The site is zoned for industrial use. The project team consists of; CEG Engineering, BSC Group, Wetland Resources, Halnon Surveying and Polar Design Build, Inc.

History

Bluestar Business Park was rezoned from R-80 Residential to Industrial in 2017 by vote at the Annual Town Meeting by the residents of Norton. The rezoning occurred because of the benefits the proposed business park would bring to the community consisting of increased real estate tax base, increased excise taxes, permit fees, the creation of new permanent jobs and construction jobs, attracting first class corporations within the warehousing, fulfillment, pharma, life science, flex and commercial/retail markets. At a time when Norton is seeking additional financial opportunity to support the growing population and aging infrastructure, new revenue growth has become vital for the community. As supported by Condyne's track record at Norton Commerce Center tax growth has occurred through the following new developments and tenants, including: Horizon Beverage, Waste Management, Penske Truck Leasing, Ryder Truck Leasing, NOAA, Alnylam Pharmaceuticals, Spears Manufacturing and the continued leasing of its existing 10, 15 & 50 Commerce assets.

Why Here

The decision to develop the Houghton Farm and Golf Learning Center Driving range into the Blue Star Business Park, a first-class Business Park, is supported for many reasons. Land availability in Southeastern, MA is scarce. With limited land availability to the South there is one 13-acre lot remaining for life science at the 700-acre Myles Standish Industrial Park. There are two small lots at Norton Commerce Center able to accommodate 15,000 SF and 25,000 SF respectively and to the North both the large available tracts in Plainville and the other at Hopping Brook Park under contract and being permitted for 350,000 SF buildings. Also, to the North, 431 Washington Street in Franklin is under construction for a 300,000 SF high bay facility. The Route 495 South industrial market is at its lowest vacancy rate in history hovering in the 4-5% range. The Park's ideal location directly off Route 495 provides great highway access, mitigates traffic and encourages flow for all vehicles to exit via the ramps traveling North/South on the highway. With utilities nearby, the development will be serviced by National Grid Electric, Columbia Gas and Comcast Fiber. With the ability to attract labor, Bluestar will be able to draw upon Norton residents, Wheaton College graduates and many nearby regional cities consisting of Taunton, Brockton, Fall River, New Bedford and Attleboro to fulfill much needed labor requirements. Based on the above, Bluestar Business Park is strategically located and not replicable within the Route 495 South market. As Condyne Construct, Inc. has

developed in excess of 15 million SF of industrial space, the firm maintains deep knowledge of every available land site within Eastern Massachusetts. This area are running out of land. Finally, Condyne will remain the owner of the this property and will continue to own and manage it long term. There are no other suitable lots that provide the location, zoning, availability, price, access to highways within the Route 495 South market with the ability to accommodate the proposed Bluestar Business Park buildings.

Overall Design

Building 5 – 220,000 SF

Building 5 is designed for a specific tenant with the general characteristics of a modern-day fulfillment and warehouse facility. Please note we have reduced the footprint of the building from its original 258,800 SF to 220,000 SF a reduction of 38,800 SF and moved the building away from the wetlands. Constructed out of tilt-up concrete, the width of the building is set at 300', which is required for large rear-loading facilities and interior material handling equipment. The 60 dock doors are served by a concrete truck apron while the 20 trailer staging spaces will be using non-porous pavement. The facility provides separate car parking for its employees at the front of the building, all designed with glass storefront entrances for the small office areas. Designed with a 32' clear height and reinforced with a solar-ready roof carrying an extra 10 lbs. per SF in steel, the building will provide one of the area's newest and most modern warehouse distribution centers. Its functionality is flexible in design to accommodate many types of tenants on lease roll-over. Access to shared driveways have reduced overall impacts of the site as well as the utilization of common detention basins. The building was situated on the site to mitigate environmental resources and its proposed 220,000 SF footprint is needed to support the overall financial feasibility.

Building 4 – 125,000 SF

Building 4 is designed as a multi-tenant warehouse with the same features of a modern-day fulfillment and warehouse facility, except it will have the ability to accommodate smaller tenants. At 125,000 SF the building is designed for up to four tenants ranging in size from 25,000 – 35,000 SF. The width of the building is narrower set at 232' so as not to create a long bowling alley effect for each of the tenants within the building but be able to accommodate a variety of uses. The building is rear loaded with 15 truck dock doors. The truck court includes ample space to accommodate truck traffic entering and exiting both the retail and building 4 docks providing a safety pattern for traffic flow. The facility provides separate car parking for its employees at the front and the office area is designed with similar storefront glass entrances. This building includes a 32' clear height, supported with a steel solar ready roof carrying 10 extra lbs. per SF and provides one of the area's newest and most modern warehouse distribution centers located along Route 495 with the ability to attract smaller tenants on completion.

Costs

As defined below in the summary of project costs for the entire Bluestar Business Park including the proposed mitigation, the 220,000 SF Building #5 is the main engine to the Park providing financial viability to both equity, debt and all stakeholders. It is also important as its size attracts larger credit tenants seeking space in the Route 495 market ultimately creating job growth and increased revenues and taxes for the Town of Norton. As part of the effort to minimize, previous submittals included a 258,800 SF building where a practical effort was requested and

designed to reduce to 220,000 SF. This adjustment allowed the building to be located further away from the wetland resource area and further enhanced by allowing the life safety fire apparatus lane to be located within the truck court as it was previously located outside causing greater environmental impact.

Existing Technology

By placing underground storage chambers within the truck court of Building 4, the detention basin on the proposed Lot 5 has been reduced in size to minimize environmental impacts. Proprietary BMPs, such as Stormceptor Treatment units have also been incorporated into the design in order to lessen development footprint and provide the best possible treatment of runoff. Porous pavement has been used for a trailer parking area that requires a firm stable surface but that will not have motor vehicle parking.

Proposed Use

The land was zoned from R-80 residential to industrial. The industrial zoning provides for a wide variety of uses consisting of warehousing, manufacturing, retail and office. Building #5 designed as a warehouse requires parking of 1/3,000 SF. Minimal parking is required reducing overall site impacts. Today, the industrial market is one of the strongest segments within the four major types of real estate.

With limited manufacturing companies located in Massachusetts, supported with a high parking space requirement of 1/800 SF, some buildings may be slightly smaller but require more parking fields throughout while increasing traffic generation to and from the site and require more sewer and water capacity. With little tenant interest this is not a viable option.

As we know there is a strong push by companies to locate back into the city of Boston for their office requirements. A recent economic feasibility analysis for the I-495 area concluded that the office market, which was devastated during the 2008 financial downturn, has yet to recover. Several failed or struggling office developments in the immediate Project area illustrate the situation, as described below.

- The Park at Great Woods is a proposed development located on 90 acres of land in Norton at the intersection of Arnold Palmer Boulevard and Route 140, less than one mile from I-495. The development's master plan included over one-million square feet of office space. The development never materialized, and the master plan has expanded to include industrial uses.
- The Cabot Business Park in Mansfield, a 900-acre industrial/office park located at the junction of I-495 and I-95, has struggled to replace office tenants, and existing land and building parcels have been redeveloped for high-bay industrial tenants.
- Condyne owns an office park north of I-90 (the Massachusetts Turnpike) and directly on I-495 which has experienced limited leasing activity since it was acquired in 2008.

With office vacancy rates exceeding 25% in the south market, a proposed office development at the Leonard Street site is financially unfeasible due to the following reasons:

- Banks are unwilling to lend funds for office park developments in the current market;
- There is limited equity capital support available from real estate investment firms; and

- There is low interest from potential tenants.

Conversely, the market for high-bay warehousing and flex space in this area are extremely sought-after due to excellent access to major highways.

As for retail, exit 11 located on Route 140 north of Bluestar Business Park supports most of the big box stores with many separate developments in Norton, Mansfield and Foxboro. As for the retail segment, big box stores remain large, require increased parking lots, resulting in more traffic adversely impacting the environmental resources.

Lastly, structured parking cannot be financially viable for a warehouse development and multi-story warehouse is too expensive to construct at \$250.00 per SF average.

Logistics

The overall design of the facility on Lot 5 was situated to minimize impacts to the floodplain. A majority of the proposed building was sited in the upland area, which includes car parking on the front and trucks to the rear. With car parking rows designed around 19' in length spaces, the building can be pulled forward minimizing impact to the flood zone. If the building was reversed, and trucks placed on the front of the building with the included truck court and with trucks averaging 75' in length, the building would be pushed far into the flood zone increasing impacts. Also, the natural site topography provides for a lower elevation at the truck court rising toward the building which is more suitable to construction of truck docks where the foundation and slab of the building is located 4' above grade. This also reduces environmental impacts to the site. A common drive was created to reduce the necessary impervious surface for access to and from buildings 5 and 4, and a waiver has been requested from the Planning Board to provide for a 36' drive in lieu of the required 50' zoning by-law.

Building 1, 2 & 3 – 41,815 SF

The three commercial retail buildings are comprised of Building 1, with 10,935 SF, Building 2 with 14,400 SF, and Building 3 with 16,480 SF. These commercial/retail buildings are part of the overall Phase I development of Bluestar Business Park. They were designed in such a way to provide flexibility based on tenant demand for small uses including general retail, food, business services, pharmacy and banking. Situated at the entrance of the Park, the three buildings are located on what will be separate parcels and include internal circulation to service the needs of both Phase I and II of the Park. To minimize parking and impervious surfaces, shared parking within the Park was provided with common area easements for access. The commercial/retail are important service amenities for the Park and assist in limiting trip generation outside of the area by providing retail, food, banking and business services for occupants of the Park. With the addition of underground drainage, and with costs to be incurred by Condyne and its tenants as further described below, the three buildings cannot absorb increased project costs or will be priced outside of the market competitive market with limited ability to attract tenants.

Development & Mitigation Costs

Due to the high land and development costs, this project is at the top of the market in terms of cost per SF and lease rates. The following describes several cost drivers that are impacting the high project costs:

Sewer – Provide a gravity fed sewer on Leonard Street to a new pump station with back-up power on Lot 5 then pumped through a force main to Route 123, over route 495 and down the center of Route 123 to the culvert connecting to the Waste Water Treatment Center. Included in these costs are future stubs for additional connections to the system both at the intersection of Leonard and S. Washington Streets. **Estimated Cost: \$1,700,000**

Leonard Street Widening and Reconstruction – This mitigation involves the widening of Leonard Street, moving of electric utility poles, grind and repave with new asphalt and the reconstruction of three existing culverts traversing under the roadway. **Estimated Cost: \$1,500,000**

Traffic Signal – To include new signals, mast arms, lights, traffic sensors, striping and reconfiguration of the intersection at Leonard Street and Route 123. **Estimated Cost: \$300,000**

Electric Charging Stations – Each of building #5, #4, & #7 will be provided with an electric charging station with two charging ports. **Estimated Cost: \$75,000**

Fire Department Communications System – Provide a new signalization system at the fire station to allow building communications systems for Bluestar Business Park and other future projects in the Town. The fire department communications system is maxed at capacity and cannot accept additional buildings in Norton without the much-needed upgrade. **Estimated Cost \$40,000**

Riverfront Clean Up of Debris – This will include clean up of the area around and adjacent to the driving range where old antiquated machinery, debris and equipment have been left. **Estimated Cost \$40,000**

Archeological Digs – Provide archeological dig throughout various areas of Phase I and II of the park requested by MHC and to include a resource area for the artifacts uncovered. **Estimated Costs - \$300,000**

Solar Ready Roofs – To include 10 extra lbs. per sf in steel to accommodate future solar installations on the roof. This condition will be provided on buildings 5, 4 & 7 located in Phase I of the park. **Estimated Cost \$950,000**

Conservations Signs – provide wetland area conservation signs throughout the site for visible identification. **Estimated Cost - \$25,000**

Revegetation & Planting – to provide an accepted seed mix to revegetate and plant the remaining open area north and south of building #5. **Estimated Cost - \$125,000**

In total through various development costs consisting of engineering, construction, and soft costs an estimated **\$5,055,000** is being invested for various mitigation purposes. The project cannot absorb additional costs for this type of industrial use. Below you will see Bluestar Business Parks total land acquisition and ground infrastructure project costs. To commence Phase I construction of the park, Buildings 5, 4, 7, 1, 2, & 3 ground infrastructure costs exceed \$12 million.

LAND INFRASTRUCTURE		
Land Acquisition		\$ 6,649,359
Legal		\$ 361,343
Engineering		\$ 833,491
Peer Review		\$ 49,500
Road Construction		\$ 1,883,769
Sewer Installation		\$ 1,706,670
Other		\$ 66,235
Management		\$ 346,430
Contingency		\$ 346,430
TOTAL		\$ 12,243,228

Taking the total Land Infrastructure costs and dividing among the 6 buildings to be developed in Phase I an average FAR (floor area ratio) price of \$23.68 per SF per building is well above the average industrial transaction where FAR ranges from \$14.00 - \$16.00 depending on type and location of the project.

Phase I	Cost Per
SF Build	Land Site
10,935	\$ 259,048
14,400	\$ 341,133
16,480	\$ 390,407
125,000	\$ 2,961,221
220,000	\$ 5,211,749
130,000	\$ 3,079,670
516,815	\$ 12,243,228

Development Costs	
Land	\$12,240,528
Hard Costs	\$39,992,878
Soft Costs	\$ 4,048,225
Management	\$ 1,320,089
Total	\$57,601,720

All in project costs for Phase I are approximately \$111.45 per SF. In today's industrial market project costs range from \$90 to \$100.00 per SF while fully leased buildings with credit Tenants are trading for \$105 per SF. These costs are supported with above market lease rates in the range of \$7.00 to \$7.75 per SF. At \$111.45 per SF the Bluestar Business Park is well above the Route 495 south market sale comps in the area. Both in terms of project costs and lease rates these are new highs for the industrial market as we look to control costs for Bluestar Business Park and to make this a viable project for the benefit of Norton.

EDA Grant Application:

Bluestar Business Park has applied for an EDA Grant application in the amount of \$1,817,584. While the solicitation of a grant and the award would be appreciated and much needed for the project, in Condyne's 20 years of development an EDA Grant has never been awarded for one of our projects. The Grant also requires a supporting commitment letter from a Tenant and a Form ED 900B committing to a new job creation level. At this point we do not believe we have

the support for such a request from prospective Tenants at Bluestar Business Park. Lastly, reviewing 2018 EDA Grant awards over a six-month period from July 1st to December 31st twenty-one (21) EDA Grants were awarded to similar projects throughout the country where infrastructure was required for various industrial/business park job creation and tax growth. Out of the twenty-one (21) EDA Grants none were awarded to a Massachusetts development. To understand the number of grants issued a total of two hundred thirty-six (236) were awarded during that same six-month period.

Conclusion

The Bluestar Business Park provides several substantial benefits to the Town of Norton including a growing real estate tax base and new job creator. As stated above the Project includes an abundance of mitigation benefits ranging from traditional construction to conservation of natural resources, all to make this a first-class Business Park similar to Norton Commerce Center. The concentration of the proposed mitigation centers around conservation, wildlife, habitat and stormwater including new culverts traversing underneath Leonard Street. The Project has been designed within the disturbed area of the existing farmland and golf driving range to minimize impacts to the environmental resources.

Attachment B

Grassland Management Plan & Greenbelt Management Plan

Proposed Grassland Management Area

Grassland habitats are important ecosystems that are being lost to development, reduction in farming, and protection of open space as forested woodlands, which were once managed as fields. Grassland habitats are essential to many avian species with many grassland birds now listed as threatened or endangered. Grassland habitats also provide a diversity of plant species ranging from native grasses to native wildflowers providing biodiversity and habitat for pollinators such as bees, butterflies, etc. Pollinators are also in decline and are an integral component of natural ecosystems and agriculture.

Proposed Grassland Management Task 1:

1. Upon completion of compensatory storage construction, loam and seed area with native seed mix to create proposed grassland areas. See seed mix profile below. Seeding to occur in the mid spring season after soil temperatures are above 45 degrees. Spot reseeding will be needed into areas are fully germinated.
2. Existing hayfield and wet meadows to be maintained as grassland areas.
3. Perform annual fall mowing to maintain grassland areas. Mowing is to occur at the end of September/beginning of October of each year. Cutting grasslands during the early part of the growing season is detrimental to grassland wildlife, particularly birds. To reduce nest and fledgling mortality, cutting should be delayed until nesting activity has finished. Mowing is proposed as an annual event but could be left uncut only every two to three years depending on monitoring recommendations. Prior to each mowing event, the area should be swept to ensure that wildlife is not impacted.



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Eastern Ecotype Native Grass Mix

Mix Composition

35.0% *Andropogon gerardii*, Albany Pine Bush-NY Ecotype (Big Bluestem, Albany Pine Bush-NY Ecotype)

30.0% *Sorghastrum nutans*, New England 2 Ecotype (Indiangrass, New England 2 Ecotype)

20.0% *Panicum virgatum*, 'Shelter' (Switchgrass, 'Shelter')

15.0% *Elymus virginicus*, PA Ecotype (Virginia Wildrye, PA Ecotype)

General Product Information:

A mix of native warm and cool season grasses for wildlife habitat. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Item Number: ERNMX-177

Product Categories:

Uplands & Meadows

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Proposed Naturalized Greenbelt Area

Create a naturalized greenbelt area within the buffer zone and Riverfront Area by allowing the maintained fairways to transform to naturalized areas. This task will require addition of new native seed stock and leaving the area undisturbed. Additional wildlife enhancements and access trails will also be created.

Proposed Naturalized Greenbelt Area Task 2:

1. Removal debris, old equipment, etc. located within the wetland and areas abutting the existing fairways.
2. Upon completion of compensatory storage construction, loam and seed area with native seed mix to create proposed naturalized area. See seed mix profile below. Seeding to occur in the mid spring season after soil temperatures are above 45 degrees. Spot reseeding will be needed into areas are fully germinated.
3. Perform slit seeding tasks within the existing maintained fairways. Slit seeding introduces new seed stock into the turf and minimizes soil disturbance activities. Removal of the turf to expose bare soil could allow for the opportunity for non-native invasive plant infestation.
4. Remove the lights from the existing utility poles. On several of the utility poles, install cross arms to create perch sites for raptors.
5. Create brush piles to provide cover habitat that often takes years to occur within a newly created restoration area. Brush piles will consist of tree and shrub cutting salvaged from nearby areas. Smaller limbs and branches will then be placed on top of the larger branches and then evergreen boughs will be laid across the top to provide cover for songbirds and other wildlife. Although these structures are not intended to provide permanent wildlife habitat, they are intended to bridge the gap until the planted vegetation can become better established and create more natural habitat features.
6. The area would be left undisturbed or a periodic mowing program (every 5 to 10 years) could be pursued. A periodic mowing program over a longer term interval between mowing would help to prevent establishment of larger trees and maintain more of a shrub habitat.



The header features the Ernst Seeds logo on the left, a navigation menu with links for Catalog, Price List, Project Planner, Contact, and 800-873-3321 in the center, and a prominent orange 'Seed Finder TOOL' button on the right. Below the navigation menu is a secondary bar with icons for home, products, resource center, about us, news & media, and social media links for Twitter, Facebook, Instagram, LinkedIn, YouTube, and Email.

Native Upland Wildlife Forage & Cover Meadow Mix

Mix Composition

- 35.0% *Andropogon gerardii*, 'Niagara' (Big Bluestem, 'Niagara')
- 27.0% *Panicum virgatum*, 'Shawnee' (Switchgrass, 'Shawnee')
- 21.0% *Elymus virginicus*, PA Ecotype (Virginia Wildrye, PA Ecotype)
- 9.0% *Sorghastrum nutans*, NY4 Ecotype (Indiangrass, NY4 Ecotype)
- 3.0% *Rudbeckia hirta*, Coastal Plain NC Ecotype (Blackeyed Susan, Coastal Plain NC Ecotype)
- 2.0% *Chamaecrista fasciculata*, PA Ecotype (Partridge Pea, PA Ecotype)
- 1.5% *Heliopsis helianthoides*, PA Ecotype (Oxeye Sunflower, PA Ecotype)
- 1.0% *Coreopsis tinctoria* (Plains Coreopsis)
- 0.5% *Desmodium canadense*, PA Ecotype (Showy Ticktrefoil, PA Ecotype)

General Product Information:

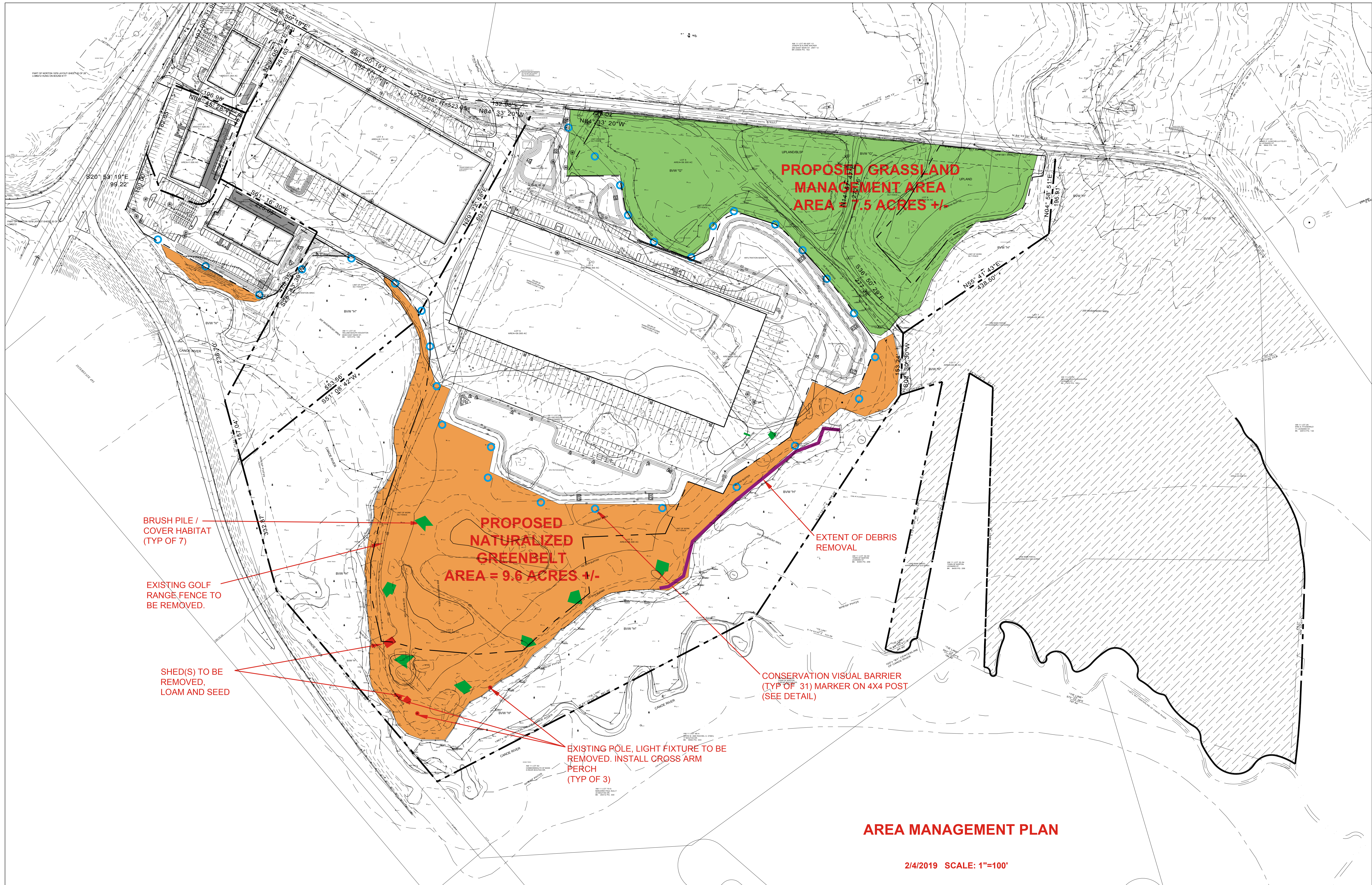
This perennial grass mix with re-seeding annual forbs creates attractive first-year color and perennial cover when planted in full sun or partially shaded areas. Seed from October-May in rich well-drained soils. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Item Number: ERNMX-123

Product Categories:

Uplands & Meadows

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**PROPOSED GRASSLAND
MANAGEMENT AREA
AREA = 7.5 ACRES +/-**

**PROPOSED
NATURALIZED
GREENBELT
AREA = 9.6 ACRES +/-**

BRUSH PILE /
COVER HABITAT
(TYP OF 7)

EXISTING GOLF
RANGE FENCE TO
BE REMOVED.

SHED(S) TO BE
REMOVED,
LOAM AND SEED

EXISTING POLE, LIGHT FIXTURE TO BE
REMOVED. INSTALL CROSS ARM
PERCH
(TYP OF 3)

EXTENT OF DEBRIS
REMOVAL

CONSERVATION VISUAL BARRIER
(TYP OF 31) MARKER ON 4X4 POST
(SEE DETAIL)

AREA MANAGEMENT PLAN

2/4/2019 SCALE: 1"=100'

Mark Dibb

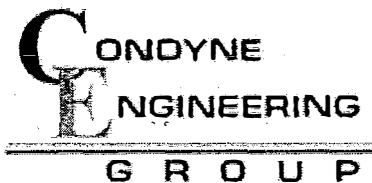
From: Mark Dibb
Sent: Tuesday, January 29, 2019 10:28 AM
To: 'Jennifer Carlino'
Cc: 'Janet Bernardo'; Amy Ball; Jeffrey O'Neill; Donald O'Neill; susan@sabernlaw.com; 'Brad Holmes'
Subject: FW: Ernst Seed Order 638651

Hi Amy,





Please see the below summary for information regarding the seed mix specified within the Area Management Plan. If you feel this is still not suitable, please identify the exact species/ecotypes that are a problem so we can document and assess. Also if it is not suitable, we would appreciate a recommendation for use at this site.

Thanks
Mark

Mark Dibb, P.E.
Director of Civil Engineering



100 Grandview Road Suite 312
Braintree, MA 02184
Phone: (781) 552-4205
Cell: (774) 238-6875

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From: Brad Holmes <Brad@ecrholmes.com>
Sent: Tuesday, January 29, 2019 9:52 AM
To: Mark Dibb <mdibb@condyne.com>
Cc: cameron@ecrholmes.com
Subject: FW: Ernst Seed Order 638651

Response to seed profile from Ernst Conservation Seeds. Feel free to forward this onward. If they feel this is still not suitable, maybe they could offer a recommendation.

Thanks,
Brad

Environmental Consulting & Restoration, LLC

P.O. Box 4012
Plymouth, MA 02361
617-529-3792
www.ecrholmes.com

From: Tracy Scott [<mailto:tscott@ernstseed.com>]
Sent: Tuesday, January 29, 2019 9:44 AM
To: 'Brad Holmes' <Brad@ecrholmes.com>
Subject: RE: Ernst Seed Order 638651

Good Morning Brad,

Looking at the list of species, all found in the ERNMX-123 Native Upland Wildlife Forage & Cover Meadow Mix are native to Norton, MA to a county level minus the *Coreopsis tinctoria* which is only native to the state of MA, VA, CT, NY, NH and several surrounding counties. I would not be concerned that the ecotypes in the ERNMX-128 would pose a problem to growing in MA, as most of them are grown in at our production farm in Northwestern PA under similar (if not harsher) growing conditions. Even the Coastal Plain NC Ecotype has not been harder to grow in the Mid-Atlantic or coastal NE as *Rudbeckia hirta* tends to be a very widespread native with lots of plasticity.

If there are more specific concerns, I am happy to answer any additional questions and please feel free to let me know!

Thanks,
Tracy

Tracy Scott | Sales Representative
Ernst Conservation Seeds
800-873-3321 x 240
814-336-5191 (fax)
tscott@ernstseed.com

Attachment C

Habitat Study for areas of work in BLSF
(that are not part of the Golf Facility)



January 31, 2019

Town of Norton
Conservation Commission
70 East Main Street
Norton, MA 02766

RE: Additional Wildlife Habitat Evaluation, Proposed Stormwater Basin Areas, Off Leonard Street, Norton

Dear Members of the Conservation Commission:

Pursuant to Horsely Witten Group Inc.'s (HWG) January 16, 2019 Wetlands and Wildlife Peer Review #2, Environmental Consulting & Restoration, LLC (ECR) performed an additional site review on January 30, 2019 at the Leonard Street proposed project areas. The purpose of this additional site review was to respond to HWG's request to revisit the site and perform additional wildlife evaluations within the areas of Bordering Land Subject to Flooding (BLSF) that are not exclusive to the golf course and driving range. In order to define these areas, Condyne Engineering Group prepared a figure (see attached) showing the area of proposed stormwater basin and parking area that is not within the existing golf course and is within BLSF. This area is hatched in red and is located to the north of the existing parking lot within the mowed field area that is agriculturally used for hay. ECR's site review on January 30th was focused in this designated area for evidence of wildlife habitat.

1.0 Existing Conditions

The proposed work area (red hatched area) avoids impacts to the wet meadow and is within the upland field area. This portion of the site is bordered by a large parking lot to the south and agricultural field (upland and wet meadow) leading to Leonard Street. Beyond the existing parking lot facing the field edge exists a row of landscape trees consisting of Norway Maple and Kwanzan Cherry. Both species are non-native and Norway Maples are a listed invasive species. Based on ECR's observations of the site, the field area is maintained as a mowed area closely resembling a lawn. ECR has not observed herbaceous growth within this field more than 1 or 2 feet high. This field appears to be routinely mowed during the growing season in order to maintain appearances for customers visiting the golf course. The majority of this area is currently mowed very close to the ground and contains a very limited diversity of plant species (fescues, rye grasses, etc.). Review of historic aerial imagery indicates this area has been maintained in a similar mowed condition. Some of this area was used as putting greens and golf practice areas in the past. For more information, please refer to the Photograph Pages attached.

2.0 Wildlife Habitat Considerations

Wildlife habitat is any land that can be used as a shelter, breeding ground, food source, etc. for wildlife. While most agricultural land provides at least one of these requirements. However, forested woodlands, wetlands, and natural land for support more wildlife species and rank higher in terms of habitat value. From what ECR has seen of this area, the area is maintained generally as a lawn with very limited plant diversity. This creates a very low habitat value. There are no important habitat features within this area such as the features listed in DEP's wildlife habitat protection guidance such as trees with large cavities, existing nest trees for birds, land containing freshwater mussel beds, etc. Based on ECR's past and additional wildlife habitat evaluations, ECR is able to confirm that the proposed work within the area described above will not have adverse impacts to wildlife habitat.

However, the conversion of the existing area to proposed stormwater drainage basins could improve wildlife habitat value at the site by implementing many of ECR's proposed grassland and greenbelt management area tasks. The proposed stormwater basins could be constructed to improve wildlife habitat value at the site by increasing plant diversity, adding wildlife habitat features, and managing the area to promote wildlife use. The proposed grassland and greenbelt management area tasks will improve existing wildlife habitat value at the site. Additional improvements could be proposed within the red hatched areas of the site to include the following additional wildlife enhancements:

1. Seeding of the upland side slopes of the stormwater basins with the same seed mix proposed for use in the Naturalized Greenbelt Area, which is Ernst Conservation Seeds Inc.'s Native Upland Wildlife Forage & Cover Meadow Mix.
2. Seeding of the interior of the stormwater basins with a native stormwater basin seed mix including a diversity of native grass species. ECR recommends using Ernst Conservation Seeds Inc.'s Native Retention Basin Wildlife Mix (ERNMX-127 attached). All except two species of the species (*Aster prenanthoides* and *Lobelia siphilitica*) are native to the area. All of the species are native to Massachusetts.
3. Management of the interior and exterior of the stormwater basins similar to what is proposed within the grassland and greenbelt areas, which would be to perform annual fall mowing. Mowing is to occur at the end of September/beginning of October of each year. Mowing is proposed as an annual event but could be left uncut only every two to three years depending on monitoring recommendations. Prior to each mowing event, the area should be swept to ensure that wildlife is not impacted.
4. Placement of perch poles along the outer basins with signage regarding managed areas. Due to the lack of tree canopy in this area, perch poles would be a beneficial wildlife enhancement tool for raptors.
5. Additional native saplings and shrubs could be planted around the exterior of the stormwater basins to create a new plant stratification (tree canopy, saplings, shrubs, etc.) and increased plant biodiversity. If this task were to be pursued, ECR would recommend using native fruit and nut producers.

3.0 Summary

The proposed stormwater basin work within the areas described above will not have an adverse impact to wildlife habitat at the site. Proposed wildlife enhancements could be implemented to increase plant biodiversity and increase wildlife habitat value at the site. These proposed wildlife enhancements would benefit a variety of wildlife species ranging from avian species, small mammals, pollinators, etc.

The overall project proposal including the grassland management area tasks, greenbelt management area tasks, and stormwater basin enhancement tasks described above would significantly improve the existing conditions of the site as compared to the managed golf course and agricultural fields. The site is situated in the Canoe River ACEC and past reporting by the Town of Norton recommends preserving a substantial (more than 500 feet) forested buffer on either side of the Canoe River to include efforts to protect water quality. Currently the golf course is maintained within feet of the Canoe River. The current conditions of the site does not include stormwater management and maintenance of the golf course includes normal uses of fertilizers, pesticides, etc. The proposed development at the site includes management of stormwater, eliminates the use of fertilizers, pesticides, etc., and proposes to restore naturalized areas. The distance of new naturalized areas exceeds 500 feet from the Canoe River. In fact the proposed project at the site meets, to the extent possible, the recommendations from the Wildlife Habitat Evaluation of the Canoe River produced by the Town of Norton such as:

1. Maintain forested buffer on either side of the Canoe River (500 feet or more)

Project Analysis – Proposed grassland, greenbelt, and stormwater basin enhancements will achieve this.

2. Require greater than 90% TSS removal rates and as much recharge and infiltration of storm water for all new developments and construction along the Canoe River.

Project Analysis – Proposed stormwater management achieves this as documented in the Stormwater Management Design and confirmed by peer review.

3. Preserve a contiguous forested area along the Canoe River through purchase, donation, conservation restriction, or transfer of property to Conservation Commission management.

Project Analysis – The applicants are proposing to create new naturalized areas to be maintained in perpetuity.

4. Encourage residents to recharge their own storm water generated by the impervious surfaces on their own property (i.e. house, driveway, garage) with drywells, rain gardens, or rain barrels and the planting of drought resistant, native plants.

Project Analysis – Proposed stormwater management and revegetation achieves this.

5. Continue to investigate the wildlife and plant communities of Norton to gain better understanding of the ecosystem and encourage residents to attend nature walks.

Project Analysis – Access along and through the management areas will be maintained.

6. Continue to bring conservation and watershed related issues to Town Meeting for resident's education and approval.

Project Analysis – Upon completion of the project, the Town of Norton can use this project as an educational tool on how working together with developers can achieve redevelopment while creating new conservation and restoration ecosystems.

If you have any questions or require additional information, please contact me at (617) 529-3792.

Attachments:

1. Project Area Figure
2. Photograph Pages
3. Seed Mix Profile

Sincerely,
Environmental Consulting & Restoration, LLC



Brad Holmes, PWS, MCA
Manager

CC: Mark Dibb, PE, Condyne Engineering Group, Inc.



Wildlife Habitat Protection Guidance

Appendix A: Simplified Wildlife Habitat Evaluation

Project Information

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

Off Leonard Street, Norton (Lot 5)	
Project Location (from NOI)	
Brad Holmes, PWS	1/31/ 2019
Name of Person Completing Form	Date

Important Habitat Features

Direct alterations to the following important habitat features in resource areas may be permitted only if they will have no adverse effect (refer to Section V).



- None Habitat for state-listed animal species (receipt of a positive opinion or permit from MNHESP shall be presumed to be correct. Do not refer to Section V).
 - None Sphagnum hummocks and pools suitable to serve as nesting habitat for four-toed salamanders
 - None Trees with large cavities (≥ 18 " tree diameter at cavity entrance)
 - None Existing beaver, mink or otter dens
 - None observed Areas within 100 feet of existing beaver, mink or otter dens (if significant disturbance)
 - None Existing nest trees for birds that traditionally reuse nests (bald eagle, osprey, great blue heron)
 - None Land containing freshwater mussel beds
 - None Wetlands and waterbodies known to contain open water in winter with the capacity to serve as waterfowl winter habitat
 - None Turtle nesting areas
 - None Vertical sandy banks (bank swallows, rough-winged swallows or kingfishers)
- The following habitat characteristics when not commonly encountered in the surrounding area:
- None Stream bed riffle zones (e.g. in eastern MA)
 - None Springs
 - None Gravel stream bottoms (trout and salmon nesting substrate)
 - None Plunge pools (deep holes) in rivers or streams
 - None Medium to large, flat rock substrates in streams



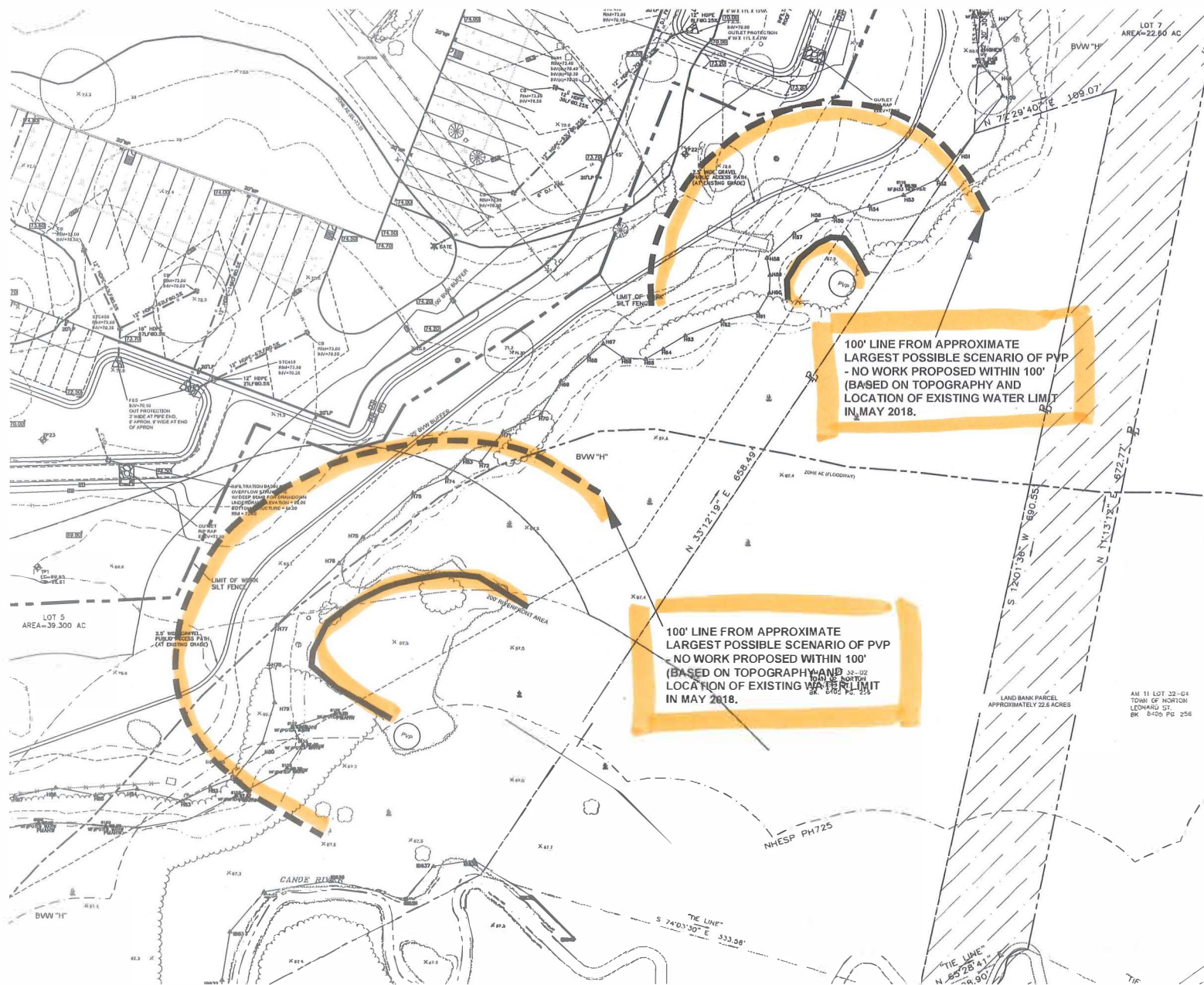
Wildlife Habitat Protection Guidance

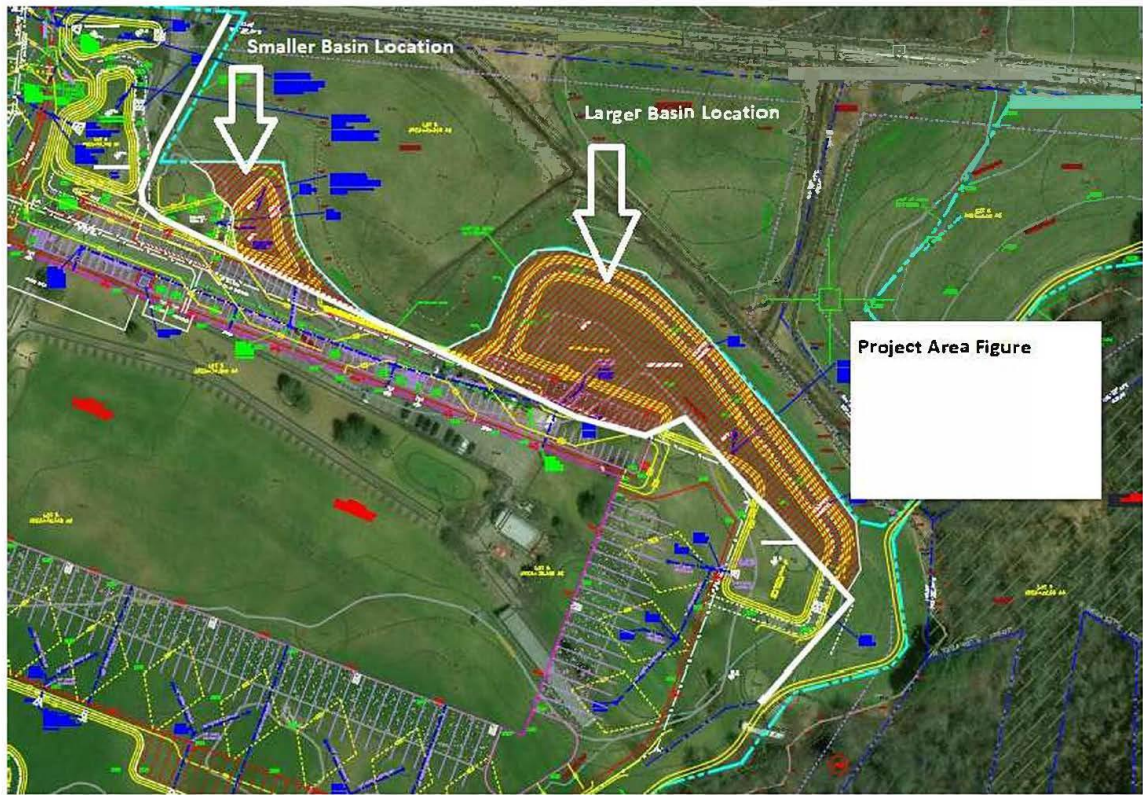
Appendix A: Simplified Wildlife Habitat Evaluation

Activities

When any one of the following activities is proposed within resource areas, applicants should complete a Detailed Wildlife Habitat Evaluation (refer to Appendix B).

- None Activities located in mapped "Habitat of Potential Regional or Statewide Importance"
- None Activities affecting certified or documented vernal pool habitat, including habitat within 100' of a certified or documented vernal pool when within a resource area
- None Activities in bank, land under water, bordering land subject to flooding (presumed significant) where alterations are more than twice the size of thresholds
- None Activities affecting vegetated wetlands >5000 sq. ft. occurring in resource areas other than Bordering Vegetated Wetland
- None Activities affecting the sole connector between habitats >50 acres in size
- None Installation of structures that prevent animal movement
- None Activities for the purpose of bank stabilization using hard structure solutions that significantly affect ability of stream channel to shift and meander, or disrupt continuity in cover that would inhibit animal passage
- None Dredging (greater than 5,000 sf)





January 30, 2019 Additional Wildlife Habitat Evaluation - Site Photographs
Off Leonard Street, Norton



Photograph #1 – View east across the smaller stormwater basin area near the existing parking lot. This portion of the agricultural field is within the flood zone and is normally maintained as a mowed area.



Photograph #2 – Another view northeast across the across the smaller stormwater basin area. Notice Leonard Street beyond the wet meadow and drainage ditch/intermittent stream.

**January 30, 2019 Additional Wildlife Habitat Evaluation - Site Photographs
Off Leonard Street, Norton**



Photograph #3 – View east across the larger stormwater basin area. This portion of the agricultural field is within the flood zone and is normally maintained as a mowed area.



Photograph #4 – View from within the proposed stormwater basin area looking southwest towards the golf buildings. The taller field grass is within the area previously used as putting greens and golf practice areas.

Attachment D

ECR Performance Standard Summary



ANALYSIS OF RIVERFRONT AREA PERFORMANCE STANDARDS

Leonard Street LOT 3
Norton, Massachusetts
MA DEP #520-1025

In accordance with 310 CMR 10.58(5), the project located at LOT 3 on Leonard Street, Norton (the site) is subject to the performance standards for redevelopment within previously developed riverfront areas to ensure the protection of interests for which the Riverfront Area is significant. The intention of this commentary is to detail how the proposed project meets the applicable performance standards as identified in 310 CMR 10.58(5).

10.58(5) 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 condition 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 proposed project will result in a net reduction of degraded Riverfront Area on the site. The proposed project includes redevelopment as well as mitigation to restore previously degraded areas which results in an improvement over the existing conditions of the capacity of the Riverfront Area to protect the interest identified in M.G.L. c. 131 § 40.

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

The project has been designed in accordance with stormwater standards. This includes a grass swale and a portion of a bio-retention area that have been designed according to stormwater standards

(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).

The proposed project does not include any work closer to the river than the existing conditions, with the exception of proposed mitigation to restore previously degraded areas. Proposed work will be 171 feet away from the river, the existing degraded conditions are as close as 132 feet from the river. Therefore, there is a 39 foot increase in buffer to the Canoe River.

(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).

The proposed project has been designed as far landward within the Riverfront Area as practically possible. The exception to that, includes the proposed mitigation to restore areas of previously degraded Riverfront Area. Overall, the work will result in less degraded land in the Riverfront Area. No proposed expansion of structures is proposed within the RFA and an existing shed is proposed to be removed as part of the reduction of degraded area.

(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).

The proposed project will result in a net reduction of degraded Riverfront Area on the site. The proposed project includes redevelopment as well as mitigation to restore previously degraded areas which results in an improvement over the existing conditions of the capacity of the Riverfront Area to protect the interest identified in M.G.L. c. 131 § 40. The area of proposed work is 5,613 s.f. which is less than the 7,757 s.f. existing degraded area. All the proposed work is contained within the footprint of existing, degraded area.

(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;*

The proposed project includes mitigation to restore portions of previously degraded riverfront area following 10.58(5)(f)(1.) thru (4.). Specifically, debris will be removed by hand where possible to limit ground disturbance; Trees outside the limit of work will not be touched; Regrading is not proposed in an effort to minimize disturbance to areas that are already stabilized, furthermore, the work area is relatively flat already; And any patches of disturbed land resulting from temporary debris removal will be loamed and seeded with erosion control seed mix.

(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 through 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 Energy and Environmental Affairs.

Not applicable. Any work related to restoration and or compensatory storage shall be performed as described in the Grassland Management Plan & Greenbelt Management Plan in Attachment B – NA.

(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.

Further alteration within the restoration or mitigation area, except as may be required to maintain the area in its restored or mitigated condition is prohibited.

If you have any questions or concerns please contact me at 617-529-3792 or brad@ecrholmes.com.

Sincerely,



A handwritten signature in cursive script that reads "Brad Holmes".

Brad Holmes, PWS, MCA
Environmental Consulting & Restoration, LLC
Manager



ANALYSIS OF RIVERFRONT AREA & BORDERING LAND SUBJECT TO FLOODING PERFORMANCE STANDARDS

Leonard Street LOT 5
Norton, Massachusetts
MA DEP #250-1027

PART I. RIVERFRONT AREA

In accordance with 310 CMR 10.58(4), the project located at LOT 5 on Leonard Street, Norton (the site) is subject to the performance standards for work within a riverfront area to ensure the protection of interests for which the Riverfront Area is significant. The intention of this commentary is to detail how the proposed project meets the applicable performance standards as identified in 310 CMR 10.58(4).

10.58(4) General Performance Standards.

(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.

There is no proposed development in the RFA. The only work proposed is restoration and mitigation. The performance standards for other resource areas are met.

(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.

There is no proposed development in the RFA. There is also no work performed for mitigation or restoration within the mapped NHESP rare habitat areas or documented rare habitat areas.

(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.

There is no proposed development in the RFA. Although a Substantially Equivalent Economic Alternatives Analysis is not required, Attachment A has been provided to document the required size and scope of these buildings to make an economically viable development given the amount of proposed mitigation.

(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.

There is no proposed development in the RFA and therefore meets 10.58(4)(d). Only

degraded area restoration, compensatory storage mitigation and site clean-up is proposed within the RFA. Work performed in the RFA will only enhance habitat and RFA features. This work is further outlined below.

LOT 5 RIVERFRONT AREA	AREA (SF)
EXISTING 0' – 100' RIVERFRONT AREA ON SITE	442,997 s.f.
EXISTING 100'-200' RIVERFRONT AREA ON SITE	213,082 s.f.
EXISTING DEGRADED RIVERFRONT AREA ON SITE	10,083 s.f.

The previously developed existing degraded areas on Lot 5 includes golf sand traps (2,927 s.f.), gravel driveway (6,670 s.f.) and existing structures (486 s.f.) for a total of 10,083 s.f.

Work within the RFA on Lot 5 will consist only of the restoration of degraded areas, compensatory storage and implementation of the Grassland & Greenbelt Management Plans. The degraded area will be restored by removing the gravel driveway, existing fence and existing structures and will be loamed and seeded per the Grassland & Greenbelt Management Plan.

In summary, the work will be performed per 310 CMR 10.58 (4) (d) No Significant Adverse Impact and includes:

- a. *At a minimum, a 100 foot wide area of undisturbed vegetation is provided.*
Work within the riverfront area on Lot 5 will consist only of the restoration of degraded areas, compensatory storage and implementation of the Grassland & Greenbelt Management Plans. The riverfront area will be left undisturbed once the restoration and mitigation has been completed.
- b. *Stormwater is managed according to standards established by the Department in its Stormwater Policy.*
The proposed project has been designed in accordance with all applicable stormwater standards.
- c. *Proposed work does not impair the capacity of the riverfront area to provide important wildlife habitat functions. Work shall not result in an impairment of the capacity to provide vernal pool habitat identified by evidence from a competent source, but not yet certified. For work within an undeveloped riverfront area which exceeds 5,000 square feet, the issuing authority may require a wildlife habitat evaluation study under 310 CMR 10.60.*
The proposed project does not impair the capacity of the riverfront area to provide important wildlife habitat functions. The proposed project includes restoration of degraded riverfront areas and the implementation of a grassland habitat plan and greenbelt management plan which will increase the overall capacity of wildlife habitat within the riverfront area.
- d. *Proposed work shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.*
The proposed project has been designed to include appropriate erosion control measures during construction to protect wetland resource areas and all said interest including groundwater and surface water quality.

PART II. BORDERING LAND SUBJECT TO FLOODING

In accordance with 310 CMR 10.57(4)(a), the project located at LOT 5 on Leonard Street, Norton (the

site) is subject to the performance standards for work within Bordering Land Subject to Flooding (BLSF) to ensure the protection of interests for which BLSF is significant. The intention of this commentary is to detail how the proposed project meets the applicable performance standards as identified in 310 CMR 10.57(4)(a).

10.57(4) General Performance Standards (a) Bordering Land Subject to Flooding

1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the issuing authority said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows.

Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.

Compensatory storage has been provided as shown on the site plans in an area and at the required elevation to meet the performance standards. Table B provided in Section 3.2 above is a summary of flood storage lost and compensatory storage added.

2. Work within Bordering Land Subject to Flooding, including that work required to provide the above specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.

The Project does not restrict flows or increase flood stage or velocity. The required compensatory storage is provided and pre- and post- runoff calculations with outlet controls have been provided for the project. Subsurface drainage systems have been added to the project in the areas of Buildings one (1) through four (4) in order to reduce the amount of runoff that is routed to Basin #5 that is within the BLSF. Subsurface systems at building five (5) have not been proposed due to high groundwater, existing topography and the building/lot configuration.

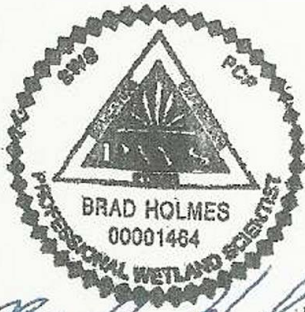
3. Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. Except for work which would adversely affect vernal pool habitat, a project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold, or altering vernal pool habitat, may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

Per section 10.57(1)(a) 3, a majority of the locus parcel is considered an area "so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated (such altered lands include paved and graveled areas, golf courses, lawns, etc).

The remaining area where work is being performed, also in the BLSF, has been investigated by Environmental Consulting and Restoration, LLC (ECR) and documented in a report that is included as Attachment C of the Project Narrative. Per the report there are no important habitat features within this area such as the features listed in DEP's wildlife habitat protection guidance such as trees with large cavities, existing nest trees for birds, land containing freshwater mussel beds, etc. Based on ECR's past and additional wildlife habitat evaluations, ECR has confirmed that the proposed work within the area described above will not have adverse impacts to wildlife habitat.

If you have any questions or concerns please contact me at 617-828-6768 or brad@bradhomes.com

Sincerely,



A handwritten signature in cursive script that reads "Brad Holmes".

Brad Holmes, PWS, MCA
Environmental Consulting & Restoration, LLC
Manager