

**Rhode Island Department of Environmental Management**  
**REQUEST FOR A PRELIMINARY DETERMINATION**  
**Supplemental Documentation**

**ROSEBROOK COMMONS**  
**CVDD II, LLC & CENZ CORP**

1747 West Main Road  
Middletown, Rhode Island

**Applicant:**

CVDD II, LLC & CENZ CORP  
4 Fox Place  
Providence, RI 02903

**APRIL 2022**



April 8, 2022

RI Department of Environmental Management  
Permit Application Center  
235 Promenade Street  
Providence, RI 02908-5767

**Re: Request for a Preliminary Determination  
Rosebrook Commons  
1747 West Main Road  
Middletown, RI  
(Pare Project No. 13018.01)**

Dear Reviewer:

On behalf of CVDD II, LLC & CENZ CORP, Pare Corporation (Pare) is pleased to submit this Request for a Preliminary Determination (PD) seeking an Insignificant Alteration Permit for a proposed affordable housing development in Middletown. The submitted materials consist of the following:

- One original completed RIDEM Office of Water Resources Freshwater Wetlands General Application Form and Site Work Affidavit;
- One original Application for Stormwater Construction Permit;
- Three (3) copies of Supplemental Documentation containing a Narrative Project Description, Figures, Site Photographs, Wetland Delineation Documentation, Pre-application Meeting Minutes, and Site Photographs;
- Three (3) copies of the Stormwater Management Report, as a separate volume;
- Three (3) copies of the Stormwater Operation and Maintenance Plan, as a separate volume;
- Three (3) copies of the Soil Erosion and Sediment Control Plan, as a separate volume;
- Three (3) copies of Full-sized Permit Submission Plans dated April 8, 2022, as a separate volume; and
- One filing fee check in the amount of \$3,000.00 made out to the Rhode Island General Treasurer in accordance with Rule 1.7(A)(11)(d)(5)(c).

CVDD II, LLC & CENZ CORP is proposing development of an affordable housing complex located at 1747 West Main Road in Middletown. The project site is identified as Lots 8 and 9 on Middletown Assessors Map 111. The proposed project includes construction of eight buildings that will provide 144 residential units and approximately 23,000 square feet of commercial space. Parking areas, pedestrian walkways, stormwater management system, landscaping, and other ancillary site improvements are proposed as part of the development.

The site is currently developed with a storage warehouse and paved two-way driveway that provides access to the site from West Main Road. A marsh- shrub complex surrounds the southern and eastern edge of the site and extends into the site along western edge of the existing warehouse. This wetland complex is part of the headwaters of Bailey’s Brook and has an associated 50-foot perimeter wetland. A shrub wetland is located





RIDEM Permit Application Center

(2)

April 8, 2022

along the northern property boundary and has no associated perimeter wetland. The proposed layout minimizes work within jurisdictional wetland areas to the extent practicable and maintains development to previously disturbed or altered portions of the site. The limited, unavoidable impacts are confined to previously disturbed areas of perimeter wetland that are currently dominated by invasive vegetation and will be improved with native shrub plantings in areas that will be disturbed.

Approval was received from RIDEM Freshwater Wetlands in 2014 for development of storage units on the subject properties (RIDEM File No. 14-0028). A pre-application for this project was held on July 29, 2021 with RIDEM and it was determined that a new application would be required for the proposed housing development, meeting minutes are included as Section 6 of this PD.

Soil erosion and sediment control measures will be implemented in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook to minimize construction phase impacts, and the updated stormwater management system is designed in accordance with the Rhode Island Stormwater Design and Installation Standards Manual (RISDISM) to provide treatment of stormwater that eventually enters Bailey's Brook. A detailed project description and avoidance, minimization, and mitigation statement in accordance with Section 1.9(B) of the Regulations are included in the attached Supplemental Documentation.

Thank you for your consideration in this matter. We trust that the attached documentation is sufficient for the Department to determine that the proposed activity represents only an Insignificant Alteration to wetlands so that this important project can proceed to construction. Should you have any questions or require additional information in processing the application, please feel free to contact our office at (401) 334-4100.

Sincerely,

Seaver Anderson  
Environmental Scientist

VH/SA

Enclosures

cc: CVDD II, LLC & CENZ CORP  
File

---

## TABLE OF CONTENTS

### REQUEST FOR PRELIMINARY DETERMINATION Supplemental Documentation

#### Rosebrook Commons Middletown, RI

Section 1	Filing Fee Calculation
Section 2	Figures Figure 1 - Site Location Map Figure 2 - Annotated Aerial Photograph Figure 3 - Environmental Constraints Map Figure 4 - Excerpt from FEMA Flood Insurance Rate Map
Section 3	Narrative Project Description
Section 4	Wetland Delineation Documentation
Section 5	Existing Conditions Photographs
Section 6	Pre-application Meeting Minutes
Section 7	Stormwater Management Report (Bound Separately)
Section 8	Stormwater Operation & Maintenance Plan (Bound Separately)
Section 9	Soil Erosion and Sediment Control Plan (Bound Separately)
Section 10	Project Plans, entitled "Rosebrook Commons" prepared by Pare Corporation (Bound Separately)



---

**SECTION 1**

Filing Fee Calculation



## **RIDEM FRESHWATER WETLANDS FEE DETERMINATION (RULE 1.7(A)(11))**

Fee determination according to 1.7(A)(11)(d)(5)(c):

5) Construction of new apartments, condominiums, offices, schools, churches, commercial/ industrial lots including all associated site amenities, utilities and infrastructure, on undeveloped property or where work is not confined to existing developed areas and where the 'total project area' is:

c) greater than 4 acres to 20 acres;

**Preliminary Determination Fee = \$3,000.00**

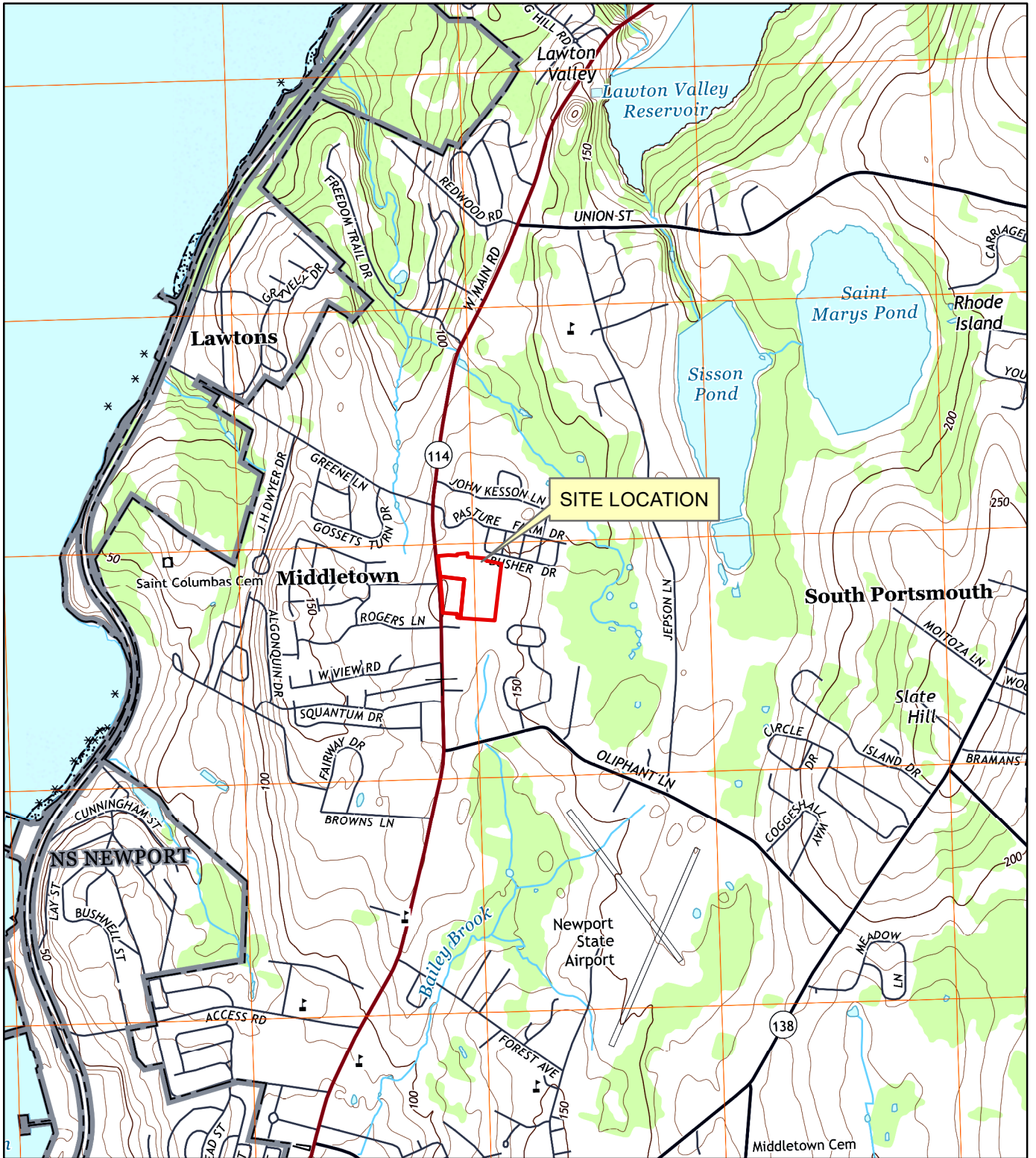


---

## SECTION 2

Figures





**RIGIS**

**SITE LOCATION MAP**

SCALE: 1"=2,000'



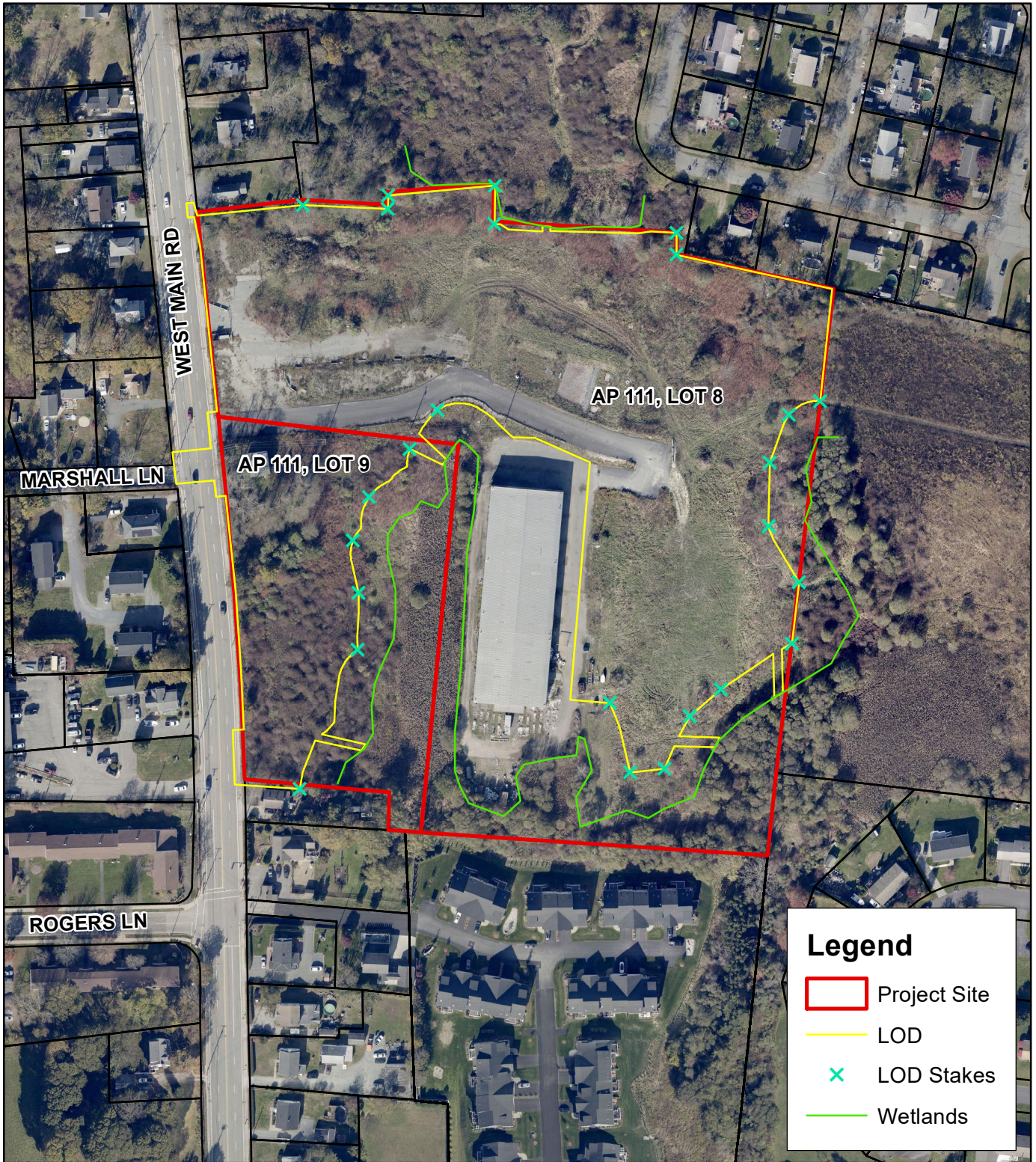
8 BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02865  
(401) 334-4100

10 LINCOLN ROAD, SUITE 210  
FOXBORO, MA 02035  
(508) 543-1755

PARE PROJECT No. 13018.01

NOVEMBER 2021

**FIGURE 1**  
**ROSEBROOK COMMONS**  
**MIDDLETOWN, RI**



**RIGIS**

**ANNOTATED AERIAL PHOTOGRAPH**

SCALE: 1' = 200"



8 BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02865  
(401) 334-4100

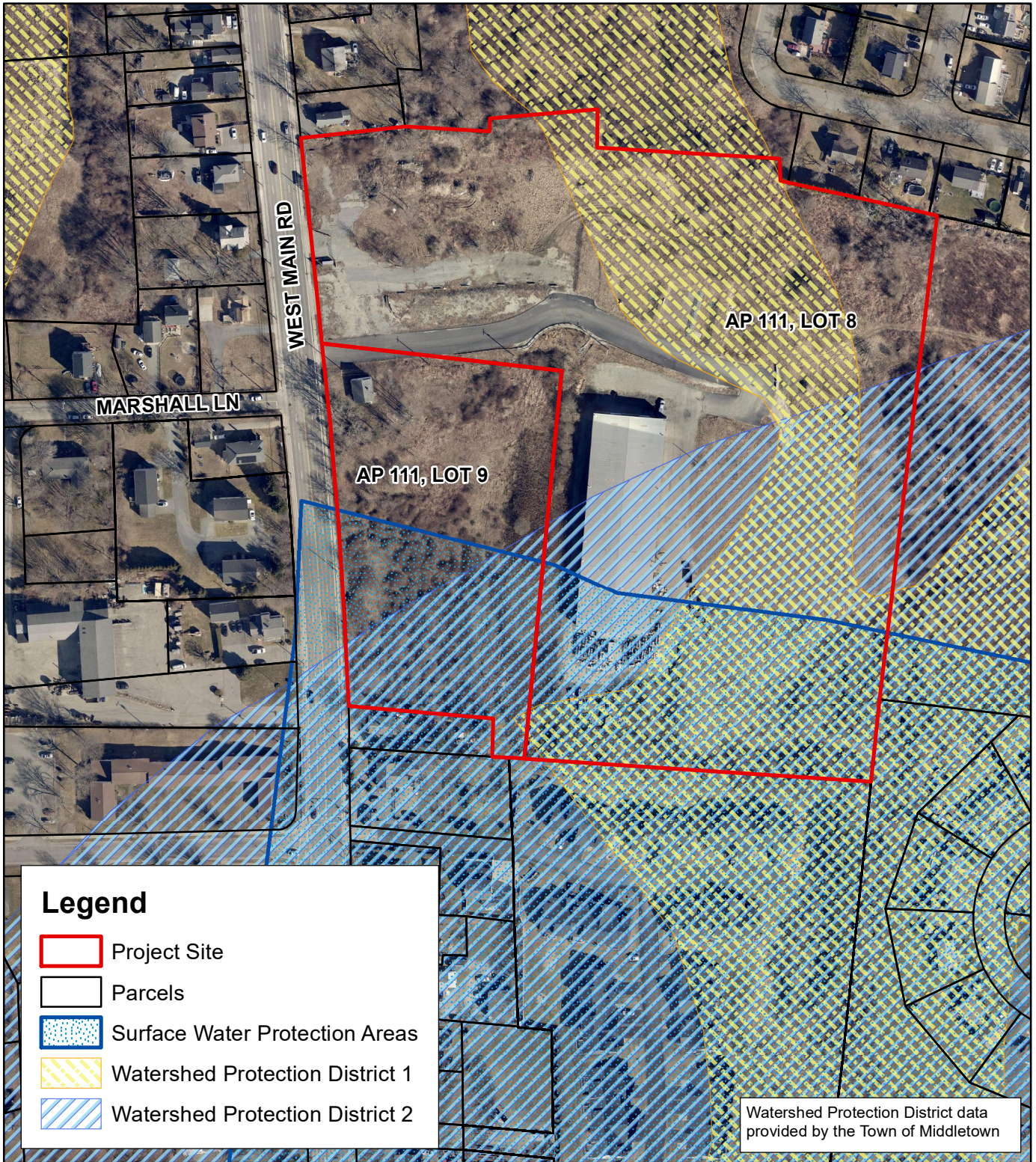
10 LINCOLN ROAD, SUITE 210  
FOXBORO, MA 02035  
(508) 543-1755

PARE PROJECT No. 13018.01






MARCH 2022

**FIGURE 2**

ROSEBROOK COMMONS  
MIDDLETOWN, RI



**Legend**

-  Project Site
-  Parcels
-  Surface Water Protection Areas
-  Watershed Protection District 1
-  Watershed Protection District 2

Watershed Protection District data provided by the Town of Middletown



**ANNOTATED AERIAL PHOTOGRAPH**

SCALE: 1' = 200"



8 BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02865  
(401) 334-4100

10 LINCOLN ROAD, SUITE 210  
FOXBORO, MA 02035  
(508) 543-1755

PARE PROJECT No. 13018.01

DECEMBER 2021

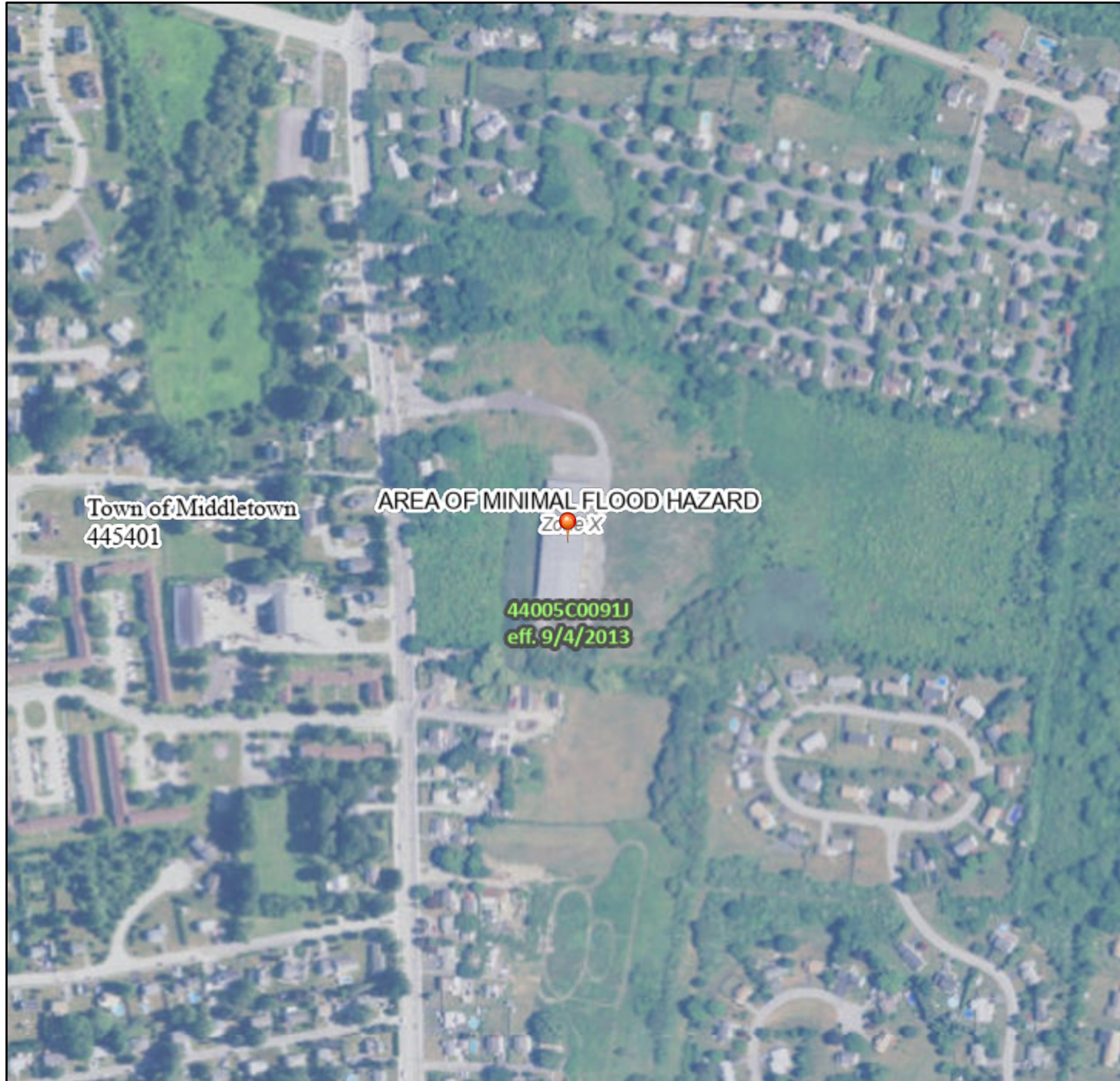
**FIGURE 3**

ROSEBROOK COMMONS  
MIDDLETOWN, RI

# National Flood Hazard Layer FIRMMette



71°17'43"W 41°32'55"N



Town of Middletown  
445401

AREA OF MINIMAL FLOOD HAZARD  
Zone X

44005C0091J  
eff. 9/4/2013



71°17'6"W 41°32'28"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

<b>SPECIAL FLOOD HAZARD AREAS</b>		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
<b>OTHER AREAS</b>		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
<b>GENERAL STRUCTURES</b>		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
<b>OTHER FEATURES</b>		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
<b>MAP PANELS</b>		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/16/2021 at 2:25 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

---

**SECTION 3**

Narrative Project Description



---

## I. INTRODUCTION

This supplemental documentation has been prepared on behalf of CVDD II LLC & CENZ CORP to support a Request for a Preliminary Determination (PD) seeking an Insignificant Alteration Permit for the Rosebrook Commons development project in Middletown. The PD is submitted pursuant to the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (the “Regulations”).

The project site consists of two lots located at 1747 West Main Road in Middletown and is identified on the Town of Middletown Assessor’s Plat 111 as Lots 8 and 9. The properties are owned by CVDD II LLC & CENZ CORP. The parcel identified as Plat 111, Lot 8 was the subject of an application submitted to RIDEM in 2014 (RIDEM File No. 14-0028) which proposed development of storage units. The development plan has since been revised to include Plat 111, Lot 9 and proposes a mixed-use development that includes affordable housing units and commercial space. Eight multi-story buildings are proposed on the site and with two designated as mixed-use and six residential. The development includes approximately 23,000 square feet of commercial space in the two mixed-use buildings and 144 residential units.

A pre-application meeting was held on July 29, 2021 between RIDEM, the Applicant, and Pare Corporation (Pare) to discuss the proposed project and permitting requirements. Meeting minutes for the pre-application meeting are included in Section 6 of this PD application.

The following narrative describes the existing site conditions, demonstrates the need for the proposed project, discusses the proposed work sequence of the construction phase, and demonstrates compliance with the Avoidance, Minimization and Mitigation criteria of the Regulations. Existing site conditions and the proposed project are shown on the attached project plans entitled “*Rosebrook Commons*”, prepared by Pare and dated April 8, 2022 (the Plans).



---

## II. EXISTING SITE CONDITIONS

The existing project site occupies approximately 15.56 acres identified as Lots 8 and 9 on Middletown Assessors Map 111 (herein referred to as, “the site”). The site is located on the eastern side of West Main Road opposite the intersection with Marshall Lane and had several historical uses including farmland and as a bus maintenance garage. Based upon review of historic aerial imagery and soil evaluation, the site has experienced significant alteration dating back to at least the early 1900’s. 1939 aerial imagery shows that the eastern portion of the site along West Main Road was developed with several structures and linear drainage channels punctuated the central portion of the site when much of the surrounding area consisted of agricultural land. By the 1980’s, the central and western portion of the site had been filled in and a single drainage channel appears to have been dug in the central portion of the site. The existing warehouse was also constructed in the 1980’s. Between 1997 and 2008 the structures located along West Main Road were removed with the exception of one residential house that remains today. A 2014 development proposal permitted under RIDEM File No. 14-0028 included the addition of four storage buildings, access drives, and utility connections, which was partially built out.

### *a. General*

Site access is provided by a two-lane driveway off West Main Road. The driveway is paved and extends to the existing storage warehouse located in the central portion of the site. The warehouse is approximately 30,400 square feet and currently functions as boat storage. Paved drive aisles, parking, and loading areas surround the warehouse on all sides. The northwestern portion of the site consists of deteriorated pavement that is overgrown with early successional vegetation. This portion of the site was previously developed and functioned at one time as a bus maintenance garage. The north-central portion of the site consists of a partially constructed and non-functioning stormwater basin associated with work that was previously permitted in under Application No. 14-0028 and previously disturbed land that is now vegetated with early successional shrub vegetation. The southwestern and eastern portions of the property are also undeveloped but show clear indications of historic disturbance. The eastern portion of the property primarily consists of an open field that lacks topsoil. Aerial imagery from 1997 and 2008 show that the field has developed over top human transported material (HTM). The southwestern portion of the site is thickly vegetated with invasive



---

shrubs and vines that extend from the edge of West Main Road to the wetland complex located next to the warehouse storage building. An abandoned residential house is located just south of the site entrance along West Main Road. The site is bordered primarily by residential neighborhoods to the south, west, and north and an undeveloped field to the east. The Existing Conditions Plan included on Sheet 2 of the Project Plans along with the Existing Conditions Photographs (Section 5) depict the current site conditions.

*b. Environmental Land Use Restriction*

An approximately 6-acre portion of the parcel identified as Plat 111, Lot 8 was previously contaminated as a result of its historic use as a bus maintenance garage. An environmental land usage restriction (ELUR) recorded with the property deed limits the use of the property to industrial and commercial use. A 2013 remedial action work plan (RAWP) was approved by the RIDEM. Engineered controls installed as a part of this RAWP remain intact at the parcel and Pare is in the process of submitting a revised RAWP to the RIDEM that ensures proper soil management for the currently proposed project and that the final development will be compliant with the proposed residential uses. Upon completion of redevelopment activities and concurrent remedial measures, a revised ELUR will be filed, and the project can be closed out in accordance with the Remediation Regulations.

*c. Wetlands*

Site wetlands were delineated and classified by Pare in accordance with Appendix 2 of the Rhode Island Fresh Water Wetlands Act and Regulations. The delineation was completed on October 8, 2021. Wetlands identified on or in close vicinity to the site include a marsh-shrub complex with associated 50-foot perimeter wetland and a shrub wetland. These areas are described briefly below and in greater detail in the Wetland Field Report attached as Section 4 of this PD.

Flags A-1 to A-61 define the edges of a marsh-shrub wetland complex that extends along the southern and western portions of the property. The wetland extends into the central portion of the site as a peninsular projection along the western side of the storage warehouse. The western portion of the wetland is dominated by emergent vegetation, primarily Common Reed (*Phragmites australis*) with some Broadleaf Cattail (*Typha latifolia*) in the southern end of the site. The portion



---

of wetland dominated by emergent vegetation is greater than one acre in area and therefore, classifies as a marsh with an associated 50-foot perimeter wetland. The eastern portion of the wetland complex is composed primarily of shrub and sapling vegetation with pockets of emergent vegetation within the wetland interior. It is apparent that the wetland has undergone significant disturbance due to the amount of invasive vegetation, disturbed soils, presence of utility poles, and a sewer easement that crosses underneath portions of the wetland. The wetland interior appears to be indicative of a semi-permanently to permanently flooded hydrologic regime as surface water was observed at a depth of ±15 inches in October. This wetland drains to Bailey's Brook (WBID: RI0007035R-01) which originates immediately south of the project site and eventually discharges to Green End Pond, one of Newport's drinking water supply reservoirs.

Flag series B-1 to B-10 define southern edge of a shrub wetland located immediately north of the property on Plat 111, Lot 4. The southern edge of the shrub wetland extends to the property boundary of the project site. The wetland is dominated by shrub vegetation and is less than 3 acres in area, therefore, the wetland is classified as a Shrub Wetland and does not have an associated 50-foot perimeter wetland. The wetland edge corresponds to an abrupt break along a steep embankment fill slope. Hydrology within the wetland interior appears to be indicative of a seasonally to semi-permanently flooded regime indicated by the presence of standing water in October. Similar to the A-series marsh, the shrub wetland has indications of previous disturbance as evidenced by the presence of invasive vegetation along its boundary.

According to FEMA Flood Insurance Rate Map for the area (Map Number 44005C0091J, effective date September 4, 2013), the entire site is mapped as Zone X (Area of Minimal Flood Hazard).

*d. Drainage*

The existing topography of the site generally slopes to wetlands located within and immediately surrounding the project site. Four sub-watersheds that were analyzed on the site as detailed in the Stormwater Management Report. Runoff is conveyed primarily via overland flow throughout the site.



---

Stormwater conveyed to the A-series wetland eventually drains to Bailey's Brook while the northern portion of the site drains to the B-series wetland and Mother of Hope Brook. Bailey's Brook (Waterbody ID: RI0007035R-01) is documented in the 2020 RIDEM Final 303(d) list of Impaired Waters as being impaired for Lead, Enterococcus, and Phosphorus. Mother of Hope Brook is not included as an impaired waterbody in the 2020 303(d) list. The existing site contains approximately 3.07 acres of impervious area which consists of the existing storage facility, access drive, and an impervious lot. Pervious upland surfaces are comprised of previously disturbed areas that have colonized with early successional vegetation. Additional detail on existing drainage and runoff characteristics is provided in the Stormwater Management Report (Section 7).

*e. Utilities*

Existing underground water, gas, and sewer mains run through a portion of the site, some of which currently service the existing warehouse. A 20-foot wide sewer easement associated with the sewer main is routed through the site from the residential properties to the north and West Main Road to southeastern corner of the site as shown on the plans. Overhead electric lines extend from West Main Road along the access drive and connect to the existing warehouse. Utility poles support the overhead wires and convey the wires overhead the A-series wetland.

*f. Soils*

The USDA Natural Resources Conservation Service (NRCS) Soil Survey of Rhode Island reports that the majority of the project area is classified as Udorthents-Urban land complex (UD) and Stissing silt loam (Se). Portions of the site are also mapped as Pittstown silt loam, 3 to 8 percent slopes (PmB) and Newport-Urban land complex (NP). Soil test pits were evaluated by Environmental Solutions, Inc. (ESI) in 2013 and 2018 and indicate that HTM (aka, 'fill') dominate the soil properties on the site. Test pit logs and the associated reports prepared by ESI are included as Appendix A of the attached Stormwater Management Report.

*g. Other Environmental Considerations*

According to the most recent RIGIS Natural Heritage Areas data layer (updated 2021) there are no mapped Natural Heritage Areas on or near the project site.



---

According to the most recent RIGIS Local Conservation Land data layer (updated 2021) and Town of Middletown web GIS application, two local conservation areas abut the site property. Thelma Lane Conservation Area is located immediately north of the project site on Plat 111, Lot 4 and Huntington Farm Conservation Area is located southwest of the project site on Plat 111, Lot 39.

According to the most recent RIGIS data layers for Surface Water Protection Areas and Water Supply Districts, the entire project site is located within the Newport Water Supply District. The southern portion of the project site is also located within the Surface Water Protection Area for Bailey's Brook. According to the Middletown Web GIS application, portions of the project site are located within the Watershed Protection Districts 1 and 2. Figure 3 shows the Watershed Protection District and Surface Water Protection Area overlays on the site.

### III. PROPOSED PROJECT

The proposed project consists of redevelopment of 1747 West Main Road into a mixed-use development consisting of residential and commercial building space. The proposed development will improve existing conditions of the site that are currently marred by human transported material, deteriorating pavement, invasive vegetation, and remnants of previous development on the site. All proposed work will occur on previously disturbed portions of the property that have been significantly altered in the past 100 years. Work avoids direct impacts to palustrine wetlands, minimizes indirect impacts through the installation of a stormwater management system in accordance with the *State of Rhode Island Stormwater Design and Installation Standards Manual* (RISDISM), and proposes improvement to perimeter wetland by removing invasive vegetation and providing native plantings in areas where unavoidable work is proposed.

#### *a. Erosion and Sedimentation Control*

Standard erosion and sediment controls will be implemented prior to demolition and construction activities in accordance with the "Rhode Island Soil Erosion and Sediment Control Handbook." Controls will include numerous measures aimed at preventing the release of sediment laden runoff. Compost filter socks will be installed along edges of the LOD to establish the LOD perimeter and



---

intercept runoff generated by the project site. A crushed stone construction access drive will be installed at the existing site access point from West Main Road and temporary inlet protection will be installed at existing catch basins in West Main Road. Designated below grade concrete washout areas, fueling areas, and stockpile areas will be established throughout the property at a minimum of 50 feet from jurisdictional wetlands. Temporary sediment diversion swales will direct stormwater to sediment traps to contain sediment laden runoff and allow sediment to settle out. Sheets C2.1 and C2.2 of the Project Plans and the Soil Erosion and Sediment Control Plan (Section 9) depict the proposed controls and provide further detail on implementation and maintenance.

*b. Demolition*

Project demolition primarily consists of select utility removal and removal of flexible pavement in previously developed portions of the site. Utility removal includes limited portions of overhead wires, select utility poles, sections of sewer line north of the existing access drive, and drainage pipes and structures associated with the partially complete prior development. Flexible pavement will be removed throughout the site and the residential building located along West Main Road will be demolished. Upland portions of the site colonized by early successional vegetation will be cleared and grubbed within the LOD. Demolition debris and removed vegetation will be legally disposed of offsite. Disturbed soils will be managed in accordance with the revised and approved RAWP discussed in Section II(b) above. Sheets C3.1 and C3.2 of the Project Plans illustrate the proposed demolition plan.

*c. Grading*

The grading plan is intended to provide level areas at the proposed buildings with landscape and adjacent parking areas graded to drain away from the buildings. Existing drainage patterns are maintained to the extent practicable. The majority of the site, including building footprints and parking areas, will be graded to elevation 150±. Perimeter grading will be required to support the proposed elevations of the parking areas, roadways, buildings, and stormwater treatment areas. Graded slopes will generally be less than 3V:1H and will be stabilized with loam and seed. Slopes at 3V:1H slope or greater will be stabilized with turf reinforcement mats.



---

Parking areas and drive aisles will be graded to shed runoff toward proposed Best Management Practice (BMP) areas. Proposed BMP's will be graded to the appropriate depth and area so that the required storage capacity is achieved. Sheest C5.1 and C5.2 of the Project Plans depict the proposed grading plan.

*d. Site Improvements*

The proposed redevelopment includes the construction of eight buildings to include 23,000 square feet of commercial space and 144 residential units. The two buildings closest to West Main Road will include the commercial space on the ground floor and two stories of residential units above. The remaining six three-story buildings will consist of residential units. Overall, proposed building footprints total approximately 63,100 square feet. The existing warehouse located centrally in the site will remain and be protected during construction.

Exterior improvements will include the construction of parking areas, access roads, walkways, patio areas, and accesses to the proposed residential buildings. Access to the site will be provided via two driveways from West Main Road, one located near the existing driveway and a secondary enter-only access at the southern end of the site. Drive aisles will provide vehicular circulation to and through the site and parking lots distributed throughout the site provide 333 parking spaces. Cement walkways will provide pedestrian circulation throughout the site from parking areas to buildings, and patio areas will be constructed at building access points. Loading areas and dumpster enclosures will be included surrounding parking areas and access roads. The proposed buildings, parking areas, and drive aisles will result in an overall increase of 4.16 acres of impervious surfaces. Sheets C4.1 and C4.2 show the proposed site elements described above.

Landscape plantings will be added surrounding and throughout the proposed development as shown on Sheets L1.0 and L2.0 of the plans. Dense stands of plantings are proposed to improve aesthetics of the site and provided a vegetated buffer between the development and surrounding wetlands. Plantings include various species including Red Maple (*Acer rubrum*), Black Tupelo (*Nyssa sylvatica*), White Pine (*Pinus strobus*), Black Huckleberry (*Gaylussacia baccata*), and Arrowwood (*Viburnum dentatum*) among others. A plant list is provided on Sheet 32 of the plans.



---

*e. Drainage and Utilities*

Collection, storage, and treatment of stormwater is designed in accordance with the *State of Rhode Island Stormwater Design and Installation Standards Manual* (RISDISM) and detailed in the Stormwater Management Report included as Section 7 of this PD.

The proposed stormwater system is designed to mitigate stormwater runoff and pollutant loading to Bailey's Brook and minimize any further impairment to the City of Newport's drinking water supply. The proposed drainage system and stormwater management system design utilizes a combination of low-impact development (LID) practices and localized stormwater best management practices (BMP's) for conveyance and treatment of stormwater. The conveyance system consists of capturing overland flow with area drains and conveying with HDPE pipe or RCP through a series of manholes before discharging into a stormwater BMP or outfall. The stormwater management system consists of sediment forebays, bioretention areas, a tree box filter, infiltration basins, detention basins, underground detention systems, and qualifying pervious area (QPA). The existing site includes 1.49 acres of impervious surface within the LOD. The proposed project includes 5.65 acres of impervious surface within the LOD, resulting in a net increase of 4.16 acres of impervious. Of the proposed 5.65 acres of impervious surface, 5.47 acres (97%) will be treated. The 0.18 acres (3%) of untreated impervious surface reflect areas where matching into existing grades limited the ability for stormwater management. The 11 Minimum Standards of the RISDISM are addressed in the Stormwater Management Report. Seventeen bioretention areas, sediment forebays, two infiltration basins, and a tree box filter are designed to provide water quality treatment and groundwater recharge. The bioretention areas, sediment forebays, and infiltration basins will be seeded with New England Conservation/Wildlife seed mix, New England Wetland seed mix, or New England Erosion Control/ Restoration seed mix which will provide aesthetic value and wildlife habitat.

Utility connections will be made to the proposed buildings including underground gas, water, electric, and sewer from services within the property. A grease trap will be installed for building A-2 in the event that a restaurant would like to occupy a portion of the commercial space. Electrical transformers mounted on concrete pads and encircled by bollards will be installed on the site and coordinated with National Grid. A pump house with generator will also be installed on the site.



---

Hydrants will connect to the underground water line throughout the site for fire suppression. Sheets C7.1 and C7.2 of the plans show the proposed utilities and connections.

## IV. WETLAND IMPACTS

The Rosebrook Commons development has been designed to minimize wetland impacts to the extent practicable while achieving the project goals. Direct impacts to biological wetlands will be avoided however impacts to perimeter wetland are unavoidable to convey stormwater from BMPs to receiving wetlands. Approximately 3,346 square feet of 50-foot perimeter wetland will be impacted from the proposed work. Indirect impacts associated with the increase in impervious surfaces and stormwater runoff will be mitigated by the proposed stormwater BMP's and LID practices.

### *a. 50-foot Perimeter Wetland*

A total of approximately 3,346 square feet of work is proposed within 50-foot Perimeter Wetland associated with the A-series marsh-shrub complex. This is primarily associated with the installation of four stormwater outfalls and drainage pipes within perimeter wetland immediately upgradient of wetland flags A-3, A-18, A-48, and A-50. These outfalls are required to discharge stormwater from BMPs to the wetland without creating significant erosion through the perimeter wetland. Perimeter wetland in all four of these areas has been previously disturbed. Perimeter wetland in the vicinity of flag A-3 is dominated by Multiflora Rose (*Rosa multiflora*) with two young Ash (*Fraxinus sp.*) trees growing out of the understory thicket. Vegetation upgradient of flag A-18 consists of a monolithic stand of Japanese Knotweed (*Polygonum cuspidatum*) and has minimal wildlife habitat value. Perimeter wetland conditions upgradient of flags A-48 and A-50 include previously disturbed and compacted soils vegetated with Multiflora Rose and various upland grasses and forbs. Once drainage pipes are installed the disturbed soils will be planted with Black Huckleberry (*Gaylussacia baccata*), Highbush Blueberry (*Vaccinium corymbosum*), and Arrowwood (*Viburnum dentatum*) shrubs. Additional impacts to perimeter wetland are limited to two areas along the outermost edge of perimeter wetland where off-grading is required for Bioretention Area-01 and Building A-2. An approximately 9 linear foot section of retaining wall is also proposed within perimeter wetland adjacent to building A-2. Approximately 18 square feet of the wall will be within perimeter wetland



---

and the surrounding graded slope will be seeded. This area currently consists of dense Multiflora Rose and provides minimal value as vegetative buffer.

Disturbance within perimeter wetland and shrub wetland have been minimized given the restraints of the site; however, the site design can not entirely avoid work within perimeter wetland while also achieving the project goals. Due to the poor existing surface conditions of the perimeter wetland, stormwater treatment measures, and proposed plantings, the proposed condition will not represent a significant adverse impact on the site wetlands.

*b. Indirect Impacts*

Indirect impacts to the A and B series wetlands associated with the addition of stormwater outfalls and increase in impervious surfaces will be mitigated by the proposed BMP's designed in accordance with the RISDISM. These measures will help attenuate stormwater, provide water quality treatment, and promote groundwater recharge. Several alternative stormwater designs were considered before a design that provides adequate collection, storage, and pollutant removal was achieved. As previously noted, 97% of impervious surfaces within the LOD will be treated by the proposed stormwater management system which will improve water quality discharged to receiving wetlands. The proposed stormwater design responsibly manages stormwater in this sensitive area and minimizes indirect impacts to the adjacent wetlands to the extent practicable.

## **V. IMPACT AVOIDANCE (§ 1.9(B)(1)(d)(1))**

### **1. Description of the primary purpose of the proposed project;**

The purpose of the proposed project is to provide commercial and residential space, a portion of which being affordable housing units to Middletown residents, which there is currently a lack of. The project also intends to improve a currently vacant lot that has historically undergone significant alteration and disturbance.

### **2. Whether the primary proposed activity is water-dependent, or if it requires access to freshwater wetlands as a central element of its primary purpose (e.g., a pier);**



---

The project is not water dependent, however due to the location of the site and existing drainage conditions, work within perimeter wetland is unavoidable to properly manage stormwater for the site.

**3. Whether there are any areas within the same property or other property owned or controlled by the applicant that could be used to achieve the same project purpose without altering the natural character of any freshwater wetlands;**

Due to current ownership, disturbed condition of the site, and site-specific purpose of the project to provide residential housing in the town of Middletown no other site available to the applicant could achieve the project goals. The proposed buildings will be located primarily on previously disturbed areas that have become colonized by invasive vegetation and consist of imported fill soils. A portion of the site was previously approved for the construction of storage units which provide less community value than the currently proposed project.

**4. Whether there are any other properties not currently owned or controlled by the applicant, but which are reasonably available to the applicant that would not involve wetland alterations and could be used to achieve the same project purpose;**

No other properties that would achieve the project purpose are currently owned or available to the applicant. The proposed site represents the most practicable for the proposed development. Disturbance is confined to areas previously altered by either agricultural use or historic development of buildings that have since been removed.

**5. Whether there are alternative designs, layouts, or technologies that could be used to avoid freshwater wetlands or impacts on wetland functions and values on the subject property or reasonably available properties which would achieve the same project purpose, and whether these design alternatives are feasible;**

Alternative designs and layouts have been considered and the preferred alternative has minimized wetland impacts to the extent practicable. No alternative was able to entirely avoid perimeter wetland impact all together. Areas proposed for disturbance in perimeter wetland have been sited in areas primarily vegetated with invasive plants that provide minimal habitat value and will be improved with native shrub plantings once drainage installation is complete.



---

**6. Description of all attempts applicant has made to overcome or remove such constraints as zoning, infrastructure, parcel size, or other similar constraints in order to avoid wetland alterations; and**

Site constraints in the form of parcel size, existing developed portions of the site, and challenging soil properties have been overcome throughout the project design. These efforts are evident in the stormwater design and site layout which utilizes previously disturbed upland areas and previously disturbed perimeter wetland which consists primarily of invasive vegetation.

**7. Whether the available alternatives, which would not alter the natural character of any freshwater wetlands on the subject property or reasonably available properties, if incorporated in the proposed project, would result in significant adverse consequences to the public health and safety, and/or the environment.**

Due to the existing site conditions and restraints, no alternatives have been identified that would achieve the project purpose while entirely avoiding work within 50-foot perimeter wetland. All measures have been taken to avoid adverse consequences to public health and safety and/or the environment.

## **VI. IMPACT MINIMIZATION (§ 1.9(B)(1)(d)(2))**

**1. Whether the proposed project is necessary at the proposed scale and whether the scale of the alteration could be reduced and still achieve the same primary project purpose;**

The project is necessary at the proposed scale to fulfill the project goals at a scale that will provide sufficient commercial and residential space for the project to be feasible. A reduction in scale would not support the project goals.

**2. Whether the proposed project is necessary at the proposed location or whether another location within the site could achieve the same primary project purpose while resulting in less impact to the wetland;**

As described above, the work is necessary at the proposed location due to the site-specific nature of the work. No practicable alternative site owned or available to the applicant is available to fulfill the project goals.



- 
- 3. Whether there are alternative designs, layouts, densities, or technologies that are feasible, and which would result in less impact to the wetland while still achieving the same project purpose;**

As discussed in item V.5 above, no alternative designs, layouts, densities, or technologies that would result in less impact have been identified. Alternative designs explored had a similar degree of wetland impact as the proposed design. The impacts of the currently proposed design within wetlands are limited to previously disturbed areas that lack established communities of wetland vegetation and have been minimized to the extent practicable.

- 4. Whether reduction in the scale of the proposed project or relocation to minimize impact to the wetland would result in significant adverse consequences to public health and safety and/or the environment.**

The proposed scale is required to meet the project goals and a reduction in scale would not minimize the potential for adverse consequences to public health and safety and/or the environment. Stormwater BMPs have been designed to mitigate indirect wetland impacts to Bailey's Brook and Mother of Hope Brook and improve the quality of water discharging to the impaired Bailey's Brook.

## **VII. MITIGATION (§ 1.9(B)(1)(d)(3))**

- a. Preserving natural areas in and around wetlands**

The entire project site consists of previously altered and manipulated areas that no longer resemble the natural condition of the area. Invasive vegetation is prevalent and human transported fill material dominates the underlying soil. Areas of perimeter wetland that will be disturbed by construction will be improved with native shrub plantings that provide more value than the existing vegetation. More natural areas present within wetlands will be preserved.

- b. Minimizing the extent of disturbed areas and encouraging the preservation of land in its natural state;**



---

Work on the site has been minimized to previously altered and disturbed areas. As mentioned above, the development is proposed in an area that was previously approved as a storage facility and conditions are not indicative of land in its natural state. Native shrub and tree plantings are proposed within perimeter wetland to help improve plant communities on the site that are currently dominated by invasive species.

- c. Designing dense plantings of shrubs and trees between the developed areas and the remaining natural areas (i) to “buffer” impacts from loss of wildlife habitat and loss of natural areas and (ii) to reduce the impacts of noise, lighting and other disturbances upon wildlife and the remaining areas;**

Landscape plantings are proposed throughout the site and native shrub plantings are proposed in perimeter wetland to improve the aesthetics of the development while also providing wildlife habitat. Additionally, stormwater BMPs will be planted with New England Conservation/Wildlife Mix, New England Erosion Control/ Restoration mix, and New England Wet Mix. Once this vegetation establishes it will provide pollinator friendly habitat and increase aesthetic value while also functioning as stormwater management features. The proposed plantings represent an improvement on many of the areas that are currently colonized by monolithic stands of Japanese Knotweed and Multiflora Rose.

- d. Maintaining unrestricted fish and wildlife passage;**

Due to the existing development of the site, wildlife passage between the A and B series wetlands is currently restricted by the access road and storage warehouse. The open field in the eastern portion of the site will be eliminated, however, passage between the A-series wetland and the wetland complex to the east will be preserved. Fish passage will not be impacted by the proposed project.

- e. Designing structures and alterations so that they are located outside of floodplain, floodway, areas subject to flooding, flowing bodies of water or other freshwater wetlands;**

No structures or alterations are proposed within floodplain, regulatory floodways, areas subject to flooding, or flowing bodies of water. Impacts to freshwater wetlands are limited



---

to portions of previously disturbed perimeter wetland that will be improved with native shrub plantings.

- f. Using best management practices for the stabilization of disturbed areas and the selection, use and maintenance of temporary or permanent soil erosion and sediment controls in accordance with or equivalent to the latest version of the Rhode Island Soil Erosion and Sediment Control Handbook;**

Standard erosion and sediment controls will be implemented prior to demolition and construction activities in accordance with the “Rhode Island Soil Erosion and Sediment Control Handbook” as described in Section III a., above as well as in the Soil Erosion and Sediment Control Plan attached as Section 9 of this PD.



---

**SECTION 4**

Wetland Delineation Documentation





## WETLAND FIELD REPORT

**PROJECT TITLE:** Rosebrook Commons

**REPORT DATE:** 10/18/2021

**LOCATION:** Middletown, Rhode Island

**WEATHER:** Sunny; 75 degrees

**PARE JOB NO.:** 13018.01

**PERFORMED BY:** Seaver Anderson

### DISCUSSIONS AND COMMENTS

Wetlands in the vicinity of 1747 West Main Road (Route 114) in Middletown were defined and delineated in accordance with Appendix 2 of the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations Governing the Administration and Enforcement of the Rhode Island Freshwater Wetlands Act (referred to herein as the RIDEM Regulations). Inspection and delineation of the site wetlands were completed on October 8, 2021.

Two wetland complexes are located on or within the vicinity of the site. The delineation was completed to establish the limit of wetlands in the vicinity of proposed redevelopment of the subject property. The site is located at 1747 West Main Road (Middletown Assessors Plat 111, Lots 8 and 9). The site is currently developed with a large warehouse utilized for boat and marina storage. A paved driveway provides access to the site from West Main Road. Review of historic aerial imagery of the site dating back to 1939 reveals that the site has been previously developed and undergone significant land disturbance. Wetlands that exist within and surrounding the site have historically been filled in and altered by previous development and agricultural use of the site.

According to the most recent RIGIS data, the site is not located within a mapped Natural Heritage Area. According to FEMA Flood Insurance Rate Map for the area (Map Number 44005C0091J, effective date September 4, 2013), the entire site is mapped as Zone X (Area of Minimal Flood Hazard).

Pink field flags were placed at appropriate intervals along the edges of the wetlands in the vicinity of the proposed work area. Primary parameters evaluated in wetland delineation included vegetation, hydric soil features, and other visual indicators of hydrology. Observed wetland vegetation, hydrologic indicators and soils are described in the following sections and within the attached Wetland Edge Delineation Data Forms. Wetland resource areas on the property include the following, as defined under Rule 1.4 of the RIDEM Regulations: A wetland complex consisting of a **Marsh** and shrub wetland, **50-foot Perimeter Wetland** associated with the marsh-shrub complex, and a **Shrub Wetland**.

### WETLAND DESCRIPTIONS

Two vegetated wetlands were identified within and in the vicinity of the project site. Flag series A defines the edge of a marsh-shrub wetland complex located in the southern portion of the site. Flag series B defines the southern edge of a shrub wetland located on the parcel immediately north of the site.

According to field survey data, review of 2021 aerial imagery from RIGIS, and topographic contours, the A-series wetland is in part comprised of a **Marsh** (>1 acre) complex and has an associated **50-foot Perimeter Wetland**. The B-series wetland is indicative of a **Shrub Wetland** (<3 acres) with no 50-foot Perimeter Wetland. Each of the delineated wetlands are described below.

## WETLAND FIELD REPORT

### *Wetland A*

Flag series A-1 to A-61 defines the edges of a marsh-shrub wetland complex that occupies southern and central portions of the site. The series begins at the southern property limit of Assessors Plat 111, Lot 9 and extends north in a finger like projection along the western edge of the existing warehouse. Flags A-1 to A-20 define the western edge of this peninsula of wetland which corresponds to a gradual increase in slope and transition to invasive upland vegetation dominated by Multiflora Rose (*Rosa multiflora*) and Japanese Knotweed (*Polygonum cuspidatum*). The eastern peninsula edge corresponds to the toe of a paved drive aisle that runs along the western edge of the warehouse from flags A-22 to A-30. The wetland between flags A-1 and A-32 consists of emergent vegetation dominated by Common Reed (*Phragmites australis*) and interspersed throughout with Bebb Willow (*Salix bebbiana*), Broadleaf Cattail (*Typha latifolia*), and various species of sedge. The portion of wetland dominated by emergent vegetation is greater than one acre in area and, therefore, classifies as a Marsh.

The wetland edge continues to follow the toe of developed areas in the rear of the warehouse up to flag A-39 where it turns south to follow the toe of the open field east of the warehouse. Flags A-40 to A-61 define the northern and western edges of the wetland complex in the eastern portion of the site. The wetland edge along this section corresponds to the toe of an upland field and thick sections of invasive shrubs and vines. The field lies on previously placed fill material and invasive species are growing along a significant portion of the wetland edge between flags A-49 and A-61. Shrub vegetation, notably Bebb Willow (*Salix bebbiana*), dominates the eastern portion of the wetland complex. The flag series ends at flag A-61 where the wetland edge turns offsite to the east. Hydrology within the wetland appears to range from permanently to semipermanently flooded as surface water was observed in the wetland interior to a depth of 15± inches in a portion of the marsh. The wetland complex extends offsite to the south eventually draining to Bailey's Brook. Vegetation within the wetland complex included, but was not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Bebb Willow	<i>Salix bebbiana</i>	FACW
Arrowwood	<i>Viburnum dentatum</i>	FAC
Black Elderberry	<i>Sambucus nigra</i>	FACW
Silky Dogwood	<i>Cornus amomum</i>	FACW
Multiflora Rose	<i>Rosa multiflora</i>	FACU
Beggarticks	<i>Bidens frondosa</i>	FACW
Broadleaf Cattail	<i>Typha latifolia</i>	OBL
Common Reed	<i>Phragmites australis</i>	FACW
Common Rush	<i>Juncus effusus</i>	FACW
Goldenrod	<i>Solidago spp.</i>	Assume FACU
Jewel Weed	<i>Impatiens capensis</i>	FACW
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW
Shallow Sedge	<i>Carex lurida</i>	OBL
Swamp Milkweed	<i>Asclepias incarnata</i>	OBL

## WETLAND FIELD REPORT

### *Wetland B*

Flag series B-1 to B-10 defines the southern edge of a Shrub Wetland located along the northern property boundary. Based upon field survey data, analysis of topographic contour data, and aerial imagery the wetland is less than 3 acres in area, and as a shrub wetland, does not have an associated 50-foot Perimeter Wetland. The wetland is dominated by shrub vegetation consisting of variable species notably Arrowwood (*Viburnum dentatum*) and Bebb Willow (*Salix bebbiana*). Portions of the wetland interior are composed of emergent vegetation however they are confined to pockets that are well under an acre in size. The series begins approximately 50 feet south of the corner of Busher Drive. The series continues south to flag B-1A before turning west and continuing along an abrupt edge established by a steep embankment fill slope. The wetland extends to the toe of the fill slope embankment which is vegetated by monolithic stands of Japanese Knotweed. The series turns to the north after flag B-8 and terminates at flag B-10 approximately 60 feet north of the site property line. Hydrology within the wetland appears to be indicative of seasonally to semipermanently flooded conditions and portions of the wetland were holding surface water up to the embankment toe. Vegetation within the wetland included, but was not limited to, the following species:

Common Name	Scientific Name	Indicator Status
Swamp White Oak	<i>Quercus bicolor</i>	FACW
Bebb Willow	<i>Salix bebbiana</i>	FACW
Arrowwood	<i>Viburnum dentatum</i>	FAC
Black Elderberry	<i>Sambucus nigra</i>	FACW
Multiflora Rose	<i>Rosa multiflora</i>	FACU
Winterberry	<i>Ilex verticillata</i>	FACW
Broadleaf Cattail	<i>Typha latifolia</i>	OBL
Common Rush	<i>Juncus effusus</i>	FACW
Jewel Weed	<i>Impatiens capensis</i>	FACW
Purple Loosestrife	<i>Lythrum salicaria</i>	OBL
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW

### SWA

Z:\JOBS\13 Jobs\13018.01 Rosebrook Commons - RI\REPORTS\Wetlands\Rosebrook Wetland\_Field\_Report.doc



**Photo 1: General view of the A-series wetland edge facing south from near flag A-6.**



**Photo 2: View of the A-series wetland edge facing south from near flag A-13.**





**Photo 3: View of the A-series wetland edge along the edge of the existing warehouse development facing north from near flag A-29.**



**Photo 4: View of A-series wetland edge facing east of flag A-43.**





**Photo 5: View of the B-series wetland facing east from flag B-3.**



**Wetland Edge Delineation Data Form (Upland)**

**Applicant:** MesoIella Development Corp      **Wetland No.** A  
**Project:** Rosebrook Commons      **Flag No. Sequence:** A1 through A61  
**City/Town:** Middletown      **Date:** 10/8/2021

**Vegetation:** List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1.		1. Solidago canadensis	FACU
2.		2. Taraxacum officinale	FACU
3.		3. Impatiens capensis	FACW
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Rosa multiflora	FACU	1. Parthenocissus quinquefolia	FACU
2. Fraxinus spp.	FAC	2. Convolvulus arvensis	Assume FACU
3.		3.	

List other vegetative species noted which may have affected determination of the wetland edge:

**Soil:** SCS Soil Survey Mapping Unit: PmB: Pittstown silt loam, 3 to 8 percent slopes  
 On Hydric Soils List? (Y/N) No

**Soil Profile** (Note wetland flag no. nearest soil test pit): A5

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
O	½ - 0"	10YR 3/1			
HTM	0-14+"	2.5Y 3/1			

**Other indicators exhibiting an absence of wetland hydrology (e.g. absence of water marks, lack of redoximorphic features, lack of oxidized rhizospheres, etc.):** Fill soils that lacked development of redoximorphic features, absence of water staining or drainage patterns.

**Landscape position:** Foot-slope

**Altered/atypical situation? (describe):** Yes, fill soils and invasive vegetation dominate the landscape, area has been filled in and previously disturbed.

**Comments:** Multiflora Rose (*Rosa multiflora*) dominates vegetation along the upland edge.

**Wetland Edge Delineation Data Form (Wetland)**

**Applicant:** MesoIella Development Corp      **Wetland No.**      A  
**Project:** Rosebrook Commons      **Flag No. Sequence:**      A1 through A61  
**City/Town:** Middletown      **Date:**      10/8/2021

**Vegetation:** List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1.		1. Juncus effusus	FACW
2.		2. Asclepias incarnata	OBL
3.		3. Carex spp.	FAC*
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Rosa multiflora	FACU	1.	
2.		2.	
3.		3.	

\* Assume FAC or wetter.

**List other vegetative species noted which may have affected determination of the wetland edge:**  
Typha latifolia (OBL), Onoclea sensibilis (FACW), Carex lurida (OBL)

**Soil:** SCS Soil Survey Mapping Unit: Se: Stissing silt loam  
**On Hydric Soils List? (Y/N)** Yes

**Soil Profile** (Note wetland flag no. nearest soil test pit): A5

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
Oe	0-1"	10YR 2/2		0"	
Ap	0-12"	10YR 2/1			
Bg	12-16+"	10YR 4/1	10YR 4/6		

**Other hydrological indicators (e.g. water marks, drainage patterns, root rhizospheres, etc.; see Appendix 4(A)(4) of the Rules):** Surface water observed within depressed areas of plot, prominent redoximorphic features, depleted B horizon.

**Landscape Position:** Toe slope  
**Altered/atypical situation? (describe)**

**Comments:**

**Wetland Edge Delineation Data Form (Upland)**

**Applicant:** MesoIella Development Corp      **Wetland No.** A  
**Project:** Rosebrook Commons      **Flag No. Sequence:** A1 through A61  
**City/Town:** Middletown      **Date:** 10/8/2021

**Vegetation:** List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1.		1. Solidago canadensis	FACU
2.		2. Taraxacum officinale	FACU
3.		3. Grass spp.	FACU*
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Lonicera tatarica	FACU	1.	
2. Polygonum cuspidatum	FACU	2.	
3. Rosa multiflora	FACU	3.	

\*Assume FACU.

**List other vegetative species noted which may have affected determination of the wetland edge:**

**Soil:** SCS Soil Survey Mapping Unit: Se: Stissing silt loam  
**On Hydric Soils List? (Y/N)** Yes

**Soil Profile** (Note wetland flag no. nearest soil test pit): A49

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
Ap	0-8"	10YR 3/2			
Bw	8-16+"	10YR 4/3			

**Other indicators exhibiting an absence of wetland hydrology (e.g. absence of water marks, lack of redoximorphic features, lack of oxidized rhizospheres, etc.):** Previously disturbed soils that lacked development of redoximorphic features, absence of water staining or drainage patterns, vegetation dominated by invasive upland species.

**Landscape position:** Foot-slope

**Altered/atypical situation? (describe):** Yes, area was previously used for agriculture.

**Comments:**

**Wetland Edge Delineation Data Form (Wetland)**

**Applicant:** MesoIella Development Corp      **Wetland No.**      A  
**Project:** Rosebrook Commons      **Flag No. Sequence:**      A1 through A61  
**City/Town:** Middletown      **Date:**      10/8/2021

**Vegetation:** List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1.		1. Bidens frondosa	FACW
2.		2. Grass spp.	FACU*
3.		3. Impatiens capensis	FACW
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Salix bebbiana	FACW	1.	
2. Viburnum dentatum	FAC	2.	
3. Rosa multiflora	FACU	3.	

\*Assume FACU.

**List other vegetative species noted which may have affected determination of the wetland edge:**  
Onoclea sensibilis (FACW)

**Soil:** SCS Soil Survey Mapping Unit: Se: Stissing silt loam  
**On Hydric Soils List? (Y/N)** Yes

**Soil Profile** (Note wetland flag no. nearest soil test pit): A49

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
Oe	0-1"	10YR 3/1		0"	
A	1-4"	10YR 3/1			4"
Bg1	4-8"	10YR 4/2	10YR 5/8		
Bg2	8-12+"	10YR 5/1	10YR 5/8		

**Other hydrological indicators (e.g. water marks, drainage patterns, root rhizospheres, etc.; see Appendix 4(A)(4) of the Rules):** Standing water observed in soil pit, water stained leaves, and buttressed roots.

**Landscape Position:** Toe slope  
**Altered/atypical situation? (describe)**

**Comments:**

**Wetland Edge Delineation Data Form (Upland)**

**Applicant:** MesoIella Development Corp      **Wetland No.** B  
**Project:** Rosebrook Commons      **Flag No. Sequence:** B1 through B10  
**City/Town:** Middletown      **Date:** 10/8/2021

**Vegetation:** List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1.		1.	
2.		2.	
3.		3.	
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Polygonum cuspidatum	FACU	1.	
2. Lonicera tatarica	FACU	2.	
3. Salix spp.	FAC*	3.	

\*Assume FAC or wetter. Located along wetland edge.

**List other vegetative species noted which may have affected determination of the wetland edge:**

**Soil:** SCS Soil Survey Mapping Unit: Se: Stissing silt loam  
**On Hydric Soils List? (Y/N)** Yes

**Soil Profile** (Note wetland flag no. nearest soil test pit): B2A

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
HTM	0-16+”	10YR 3/1			

**Other indicators exhibiting an absence of wetland hydrology (e.g. absence of water marks, lack of redoximorphic features, lack of oxidized rhizospheres, etc.):** Fill soils that lacked development of redoximorphic features, absence of water staining or drainage patterns.

**Landscape position:** Backslope

**Altered/atypical situation? (describe):** Yes, embankment fill soils and invasive vegetation dominate the landscape.

**Comments:** Embankment is vegetated homogenously with Japanese Knotweed (*Polygonum cuspidatum*).

**Wetland Edge Delineation Data Form (Wetland)**

**Applicant:** MesoIella Development Corp      **Wetland No.** B  
**Project:** Rosebrook Commons      **Flag No. Sequence:** B1 through B10  
**City/Town:** Middletown      **Date:** 10/8/2021

**Vegetation:** List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. Quercus bicolor	FACW	1. Grass spp.	FAC*
2.		2. Impatiens capensis	FACW
3.		3. Juncus effusus	FACW
 <u>Saplings/Shrubs</u>		 <u>Woody Vines</u>	
1. Salix spp.	FAC*	1.	
2. Viburnum dentatum	FAC	2.	
3. Lonicera tatarica	FACU	3.	

\* Assume FAC or wetter.

**List other vegetative species noted which may have affected determination of the wetland edge:**  
Lythrum salicaria (OBL)

**Soil:** SCS Soil Survey Mapping Unit: Se: Stissing silt loam  
**On Hydric Soils List? (Y/N)** Yes

**Soil Profile** (Note wetland flag no. nearest soil test pit): B2A

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
A	0-1"	10YR 2/2		0"	0"
Bg	1-12+"	10YR 4/1	5YR 3/4		

**Other hydrological indicators (e.g. water marks, drainage patterns, root rhizospheres, etc.; see Appendix 4(A)(4) of the Rules):** Surface water observed within plot, prominent redoximorphic features, depleted B horizon.

**Landscape Position:** Toe slope  
**Altered/atypical situation? (describe)**

**Comments:** Wetland edge is well defined by a steep embankment fill slope.

---

**SECTION 5**

Existing Conditions Photographs





**Photo 1: View of the site from the access driveway facing east.**



**Photo 2: View of the eastern portion of the site facing south from near the end of the paved access drive.**





**Photo 3: View of the existing warehouse facing southwest from near the end of the access drive.**



**Photo 4: View of the incomplete stormwater feature along the access drive facing north.**





**Photo 5: View of the previously developed northwestern portion of the site facing east.**



**Photo 6: View of the southwestern portion of the property that is overgrown with invasive vegetation, primarily Multiflora Rose, facing south from the access drive.**





**Photo 7: View of the perimeter wetland upgradient of flag A-3, location of a proposed drainage outfall.**



**Photo 8: View of the perimeter wetland upgradient of flag A-17 which consists of a monolithic stand of Japanese Knotweed. This is the location of a proposed drainage outfall.**





**Photo 9: View of the perimeter wetland upgradient of flag A-48, location of a proposed drainage outfall.**



**Photo 10: View of the perimeter wetland upgradient of flag A-50, location of a proposed drainage outfall.**



---

**SECTION 6**

Pre-application Meeting Minutes





## **Meeting Minutes**

## **1747 West Main Road, Middletown**

Meeting held via Teams conference call on July 29, 2021

### **Meeting Participants**

Tim Thies, Pare  
Derrick Mesoilella  
Vincent Mesoilella,

Nancy Freeman, RIDEM – Freshwater  
Wetlands  
Nicholas Pisani RIDEM – Stormwater  
Jeff Crawford, RIDEM – Site Remediation  
Ron Gagnon, RIDEM - OCTA *RG*

### **Purpose of the Meeting**

The purpose of the meeting was to review permitting requirements for the proposed development of property located at 1747 West Main Road in Middletown.

### **Meeting Minutes**

- The current plan for the property is to build self-storage units on a portion of the site, previously approved under Application Number 14-0028. The remainder of the site has no permitted development plan as of yet. The new plan is to develop housing on the site, in lieu of self-storage. The new plan also includes housing on areas of the site not previously included and not reviewed by DEM in the self-storage plan. Therefore, additional wetland edges would need to be delineated and depicted on future site plans.
- The property is currently covered by an Environmental Land Use Restriction (ELUR) that prohibits residential uses. A new Remedial Action Work Plan (RAWP) that includes the removal of contaminated soils to bring the site into Residential Exposure Criteria compliance will be submitted.
- DEM issued a letter of Compliance for Plat Map 111/Lots 8 and 9A on July 29, 2021. The letter and ELUR must be recorded against the deed to clear Lot 9A for development.

- It was noted that the current permit for the storage units will expire in approximately one year. Based on the short timeframe, change in use of the property and potential expansion of the previously approved limits of disturbance (LOD), it was advised that a new freshwater wetlands application be submitted for this proposed new development.
- It was noted that the new development should avoid encroachment into all freshwater wetlands, including perimeter wetlands that are present on-site. DEM indicated that proposing a replicate wetland as a trade-off for disturbance into jurisdictional wetlands is not considered as a mitigating factor.
- Bailey's Brook was noted as the receiving waterbody for stormwater. This waterbody is impaired and will require water quality treatment to mitigate additional loadings to the impairments. Infiltration BMPs should be investigated. If infiltration cannot meet the water quality treatment requirement, a Pollutant Loading Analysis (PLA) or use the offset method as described in the guidance document: Appendix H.3: Water Quality Goals and Pollutant Loading Analysis Guidance for Discharges to Impaired Waters "Stormwater Compensation Method" (<http://www.dem.ri.gov/programs/benviron/water/permits/swcoord/pdf/swgoals.pdf>)
- It was noted the EPA has developed performance curves for water quality treatment efficiency that are now being used by the State of Massachusetts in their General Permit. It was suggested that these curves may be used to design the water quality BMPs to meet the impairment treatment requirements.
- The applicant noted that the project will be going through the Rhode Island Housing process for an expedited permit review. DEM indicated that the legislation related to this process will be further reviewed.

To facilitate review of the permit applications, please include a copy of these notes with your application submittal. This meeting summary does not relieve the property owner from his/her obligation to obtain any local, state, or federal approvals or permits required by ordinance or law.

---

**SECTION 7**

Stormwater Management Plan  
(Bound Separately)



---

**SECTION 8**

Stormwater Operation & Maintenance Plan  
(Bound Separately)



---

**SECTION 9**

Soil Erosion and Sediment Control Plan  
(Bound Separately)



---

**SECTION 10**

Project Plans  
(Bound Separately)

