CRMC DECISION WORKSHEET 2021-08-018

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Hearing Date:		
Approved as 1	Recommended	
Approved w/addition	al Stipulations	
Approved	d but Modified	
Denied	Vote	

		AP	PLIC	ATIO	N INFORMATION			
File Number	Town	Project Location		Category	Special Exception	Variance		
2021-08-018	Providence	Woonasquatucket Greenway/River		B		X		
		Plat		Lot				
		Ov	vner I	Name	and Address			
Date Accepted	8/17/21	City of Providence		Work at or Below MHW		X		
Date Completed	4/5/22	444 Westminster Street		Lease Required				
			Provi	idence	, RI 02903			

PROJECT DESCRIPTION

The project proposes a multi-use trail connecting Eagle Square to downtown Providence. The design includes two kayak launches, green infrastructure, and two pocket parks.

KEY PROGRAMMATIC ISSUES

Coastal Feature: Coastal wetland, coastal bluff, manmade shoreline; Riverbank Wetland (FWWVC)

Water Type: Type 4, Multi-Purpose Waters, Woonasquatucket River

CRMP: 1.1.6(F),1.1.7, 1.1.9, 1.1.10, 1.2.1(D),1.2.2(C), 1.2.2(D), 1.2.2(F), 1.2.3, 1.3.1(A), 1.3.1(B),

1.3.1(C),1.3.1(F), 1.3.1(G),1.3.1(J), 1.3.1(M),1.3.2, 1.3.5

SAMP: N/A

Variances and/or Special Exception Details: 50' construction setback to Redbook 1.1.7

Additional Comments and/or Council Requirements:

Specific Staff Stipulations (beyond Standard stipulations): 5-year permit timeframe, WQC approval before Assent

	STA	FF RECOMMENDA	TION(S)
Engineer	RML	Recommendation:	Approval
Biologist	TAS	Recommendation:	Approval
ther Staff		Recommendation:	

Pulled M. Justi 4/6/22
Engineering Supervisor Sign-Off date

7 APRZE622

Supervising Biologist Sign-off

date

Staff Sign off on Hearing Packet (Eng/Bio)

date

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STATE OF RHODE ISLAND

COASTAL RESOURCES MANAGEMENT COUNCIL

STAFF REPORT TO THE COUNCIL

DATE: April 5, 2022

TO: Jeffrey M. Willis, Executive Director

FROM: Richard Lucia, P.E., Tracy Silvia, Permitting Staff

Applicant's Name: City of Providence

CRMC File Number: | 2021-08-018

The project proposes a multi-use trail connecting Eagle Square to downtown

Providence. The design includes two kayak launches, green infrastructure, and

Project: | two pocket parks.

Location: | Woonasquatucket Greenway; Providence

Water Type/Name: 4, Woonasquatucket River, Multi-Purpose Waters

Coastal Feature: | Coastal wetland, Coastal Bluff, River/Riverbank Wetland, Manmade Shoreline

"Woonasquatucket River Greenway, Kinsley Avenue, Providence Place and Promenade Street (Eagle Street to Park Street), City of Providence...," last revised

January 2022, Sheets 1-123, by Horsley Witten Group, Inc., stamped by Jonathan

Plans Reviewed: A. Ford, P.E. (for sheets 35-52).

Recommendation: | Approval, with standard stipulations

A--INTRODUCTION/HISTORY:

- 1. The project is located northwest of Route I-95/downtown Providence in the Kinsley Avenue, Providence Place and Promenade Street sections, along both sides of the Woonasquatucket River, a Type 4 shoreline in this area. The project site is predominantly heavily urbanized, with limited opportunity for public access to the River. Manmade shorelines characterize the riverbanks, with some sections of vegetated and unvegetated coastal bluff. Freshwater wetlands in the vicinity of the coast (FWWVC) are also applicable to the site (riverbank wetland/floodplain).
- 2. The applicant held pre-application meetings with prior CRMC Supervising Staff D. Reis and R. Lucia as well as more recent discussions including T. Silvia. The application was accepted by the CRMC on 8/17/21, however review was delayed due to prior pending large projects in the queue. A 30day public notice was issued on 11/10/2021, including in the local newspaper and the USACOE

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emailed a General Permit-Self Verification concurrence on 11/23/21. No comments were received during notice.

3. Staff requested additional information/revisions from the applicant on 12/3/21, with clarifying comment provided 12/17/21; Revisions were received 2/8/22. A final updated planset (agenda copy) was received 3/17/22. RIDEM's Water Quality Certification (WQC) approval is imminent and RIDEM RIPDES review is covered through CRMC's stormwater review (see below). The applicant is seeking a five-year permit timeframe for project completion.

B—REVIEW OF APPLICABLE REGULATORY REQUIREMENTS:

As described in the consultant's narrative "The proposed project consists of mobility improvements to provide protected pedestrian/bicycle urban trail between Providence Place Mall and Eagle Square, including new planted areas, two pocket parks, two kayak launches, and associated utility and landscape improvements." More specifically, the following are proposed:

- A separated multi-use urban trail, converting an existing vehicular travel lane to a trail with associated pedestrian/bicycle, signage, and striping improvements and a vegetated buffer wherever possible;
 - A new pocket park adjacent to Hemlock Street;
 - A new pocket park at the Eagle Street/Kinsley Avenue intersection;
 - A kayak launch adjacent to Kinsley Avenue near Sims Avenue;
 - A kayak launch near Leland Street and Promenade Street;
 - Street tree planting and associated improvements; and
 - Green stormwater infrastructure bioretention systems

Kayak Launches:

- 1. The two proposed kayak launches are located off Kinsley Avenue (Launch 1) and near the Leland Street and Promenade Street intersection (Launch 2). The existing coastal features at the site are similar and consists of a vegetated coastal bluff.
- 2. Both sites have steep slopes ranging from 2:1 to 5:1. Due to the steep slopes, shoreline protection is proposed for both launches. Shoreline protection are similar for both Launch 1 and 2. Both consist of utilizing a flexible geotextile-soil bag system (FlexMSE) resulting in reducing the amount of cutting/disturbance of the bank. The walls will also allow for seating spaces along the edge of the ramp.
- 3. Based on site observation, it is evident that the site is subject to erosional forces. Consequently, shoreline protection is essential to protect against erosion from flow in the river especially during storm events. The construction of the shoreline protection is in conformance with RICRMP (650-RICR-20-00-1) § 1.3.1.G. (Shoreline Protection). Shoreline protection at the Launch ramps will consist of a flexible geotextile-soil bag system vegetated wall (FlexMSE) upslope of the ramp. Utilizing the soil bag system along with brush cuttings and stabilizing seed mix will assist in withstanding flooding events. It is the staff engineer's opinion that the proposed shoreline protection

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is a hybrid design as defined per Red Book §1.1.2.A.74 (Definitions) Hybrid Shoreline Protection "means practices that combine vegetation, biodegradable materials and stone, the purpose or effect of which is to reduce the erosion of coastal features...". There are no objections to the hybrid design especially since the RICRMP policy is to encourage such design into shoreline protection facilities due to their effectiveness in preserving natural shoreline habitat and vegetation.

4. Please note in order to construct the kayak launch ramps, temporary diversion structures will be installed to divert river flow away from the proposed ramp. The structures are identified on the plans as a "muscle wall" that essentially resembles jersey barriers. The walls will be installed during low tide with individual pieces locked together, filled with water and covered with a waterproof liner. Water will be pumped out behind the wall during construction and the wall will be removed when soil is stabilized, and plants are established. It is expected that the wall will be installed for approximately 30 days. In the event of a large flood storm event the walls will be removed. Since the walls are temporary there are no objections to these structures being installed to divert water to construct the kayak launch ramps.

Stormwater Treatment:

- 1. The proposed improvements are predominantly located in the City right-of-way. More specifically, the site area consists of streets, paved travel ways, concrete sidewalks, and small amounts of green areas. The total project drainage area is 13.83 acres (12.77 acres of impervious). Because the impervious exceeds 40% of the project area the project is classified as "Redevelopment" per the Rhode Island Stormwater Design and Installation Standards Manual (RISDISM). Existing storm water runoff is mostly conveyed to the Woonasquatucket River directly via catch basins and closed drainage systems.
- 2. The design constraints at the site include the presence of urban fill, already developed areas and existing relatively flat grade. These constraints limit the spaces for Best Management Practices (BMPs) to treat the stormwater per the RISDISM and type of treatment options. After reviewing available options, the consulting engineer chose to utilize bioretention systems. Additionally, BMPs consist of stormwater tree trenches and extensive tree plantings.
- 3. There are no engineering objections to the proposed stormwater management since the applicant has met the requirements of RICMRP Section 1.3.1(F) (Treatment of Sewage and Stormwater) and the RISDISM. The requirements are being accomplished through Low Impact Development Techniques using BMPs as described above. The RICRMP 1.3.1(F) (and in accordance with RISDISM Section 3.3.3) requires that the water quality volume (WQv) be treated, the WQv is considered to be the runoff associated with the first 1.2 inch of rainfall over the impervious area (i.e. 1 inch of runoff). Through the implementation of Low Impact Techniques, the required WQv will be treated.

Climate Change and Sea Level Rise:

1. CRMC Staff and the design consultant reviewed the potential sea level rise scenario utilizing Stormtools online mapping tools in accordance with Redbook § 1.1.10 Climate Change and Sea Level Rise. The project is located in a highly developed area and there are little alternatives for placing the project in a different location and still achieve its goals. The applicant has chosen a 50-year design life for a 5.35' sea level rise (year 2070) for analysis. Based on Stormtools the streets

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within the limit of work will not be inundated. Additionally, the two proposed launch ramps should be functional throughout this design life.

2. Please note, of importance, that the stormtools is modelled with the Fox Point hurricane barrier closed. Currently, staff is unaware of there being a plan for closing the barrier for each tidal cycle in the future. This is likely problematic for most of the area north of the barrier, considering the design of the barrier was not for a twice daily opening and closing but was designed for strictly storm events at the time of its construction. This will likely be an issue that will need to be addressed in the future for the entire area of Providence north of the barrier. However, considering that the launch ramps for this project are designed to withstand above high tides events and will continue to do so as high tide rises over time, there are no engineering objections.

Freshwater Wetlands in the Vicinity of the Coast (FWWVC):

- 1. As part of the project work, the applicant is proposing to alter areas of coastal bluff. While the CRMC's FWWVC Redbook Section 1.1.4(D) has jurisdiction along this portion of the River (vs. DEM) and the FWWVC Riverbank Wetland is technically valid, the Redbook Coastal Feature (coastal bluff) is the overriding more conservative regulation which the project was reviewed against. The applicant has submitted FWWVC avoidance and minimization criteria documenting the attempts to limit disturbance to the area and although 145sf of permanent riverbank is to be lost, no existing wetland vegetation (coastal or freshwater) is proposed to be altered and in fact the final project will include restorative/enhanced planting of the area.
- 2. Please note a portion of the project is located within an AE Flood Zone, including the proposed raised multi-use trail, kayak launches, and truck aprons. In accordance with the FWWVC, to offset the fill within the food zone other portions of the project site, such as the pocket parks at the intersections of Kinsley Avenue and Eagle Street, have been regraded to compensate for the proposed fill. Additionally, the slope along the river has been cut into two locations where the kayak launches are proposed. The calculated fill is 591 cubic yards and the compensated cut is 593 cubic yards.

Metro Bay Special Area Management Plan (SAMP):

The project does not fit the applicability requirements under the Metro Bay SAMP 650-RICR-20-00-05 Section 5.5(C)(1) & appears exempt under (C)(4)(a)(5) as the primary components are increased stormwater treatment and public access opportunities on municipal properties. The project also does not trigger new Redbook buffer requirements.

C—VARIANCE/SPECIAL EXCEPTION:

- 1. The project requires a variance to the 50' minimum construction setback for various portions of the proposed work, however, staff recommends approval of this setback as it appears the minimum necessary to provide environmental benefits in this heavily constrained location.
- 2. Part of the discussion of this project centered around the need for filling tidal waters and altering a coastal bluff for the proposed kayak launches. As the project is located in Type 4 waters and not along a coastal wetland designated for protection, the alteration/fill prohibitions contained within the Redbook do not apply to this work, therefore a Special Exception is not required for the project.

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D—SUMMARY:

- 1. The proposed project will significantly create and improve public greenway space, public passive transit, public recreational opportunities and public access to the shore in a traditionally underserved area of the City. Additionally, stormwater treatment and management is also proposed to enhance existing conditions.
- 2. The temporary construction impacts and permanent alteration of the coastal feature/waterway are considered minor relative to the project benefits and have been minimized and/or mitigated in accordance with staff's comments. No public comment was received during the public notice period and staff recommends approval of this project and associated variance.
- 3. Standard stipulations, including requirement of a final DEM WQC approval, are withheld pending Council's decision and staff supports a five-year Assent timeframe if approved.

Staff Biologist:	Tracelly	Tracy Silvia, Sr. Env. Scientist
Staff Engineer:	Tull Holen	Richard Lucia, PE