

Memorandum of Findings

To: Mr. Nicholas Veltri **Date:** June 7, 2024

Project: Wilson Drive, Narragansett:

Proposed Single-Family Dwelling

From: Joseph A. Casali, PE, MBA Re: Memorandum of Findings

William M. Lavery, Jr. CRMC File No. 2022-12-075 Sandro DaSilva, P.E.

Introduction / Purpose

Joe Casali Engineering, Inc., (JCE) has been retained to assist Natural Resource Services, Inc. (NRS) in responding to a March 5, 2024, Staff Report to the Coastal Resources Management Council (CRMC) for a project located on Wilson Drive, Narragansett, Rhode Island (Tax Assessor's Plat N-A, Lot 28-K). The project consists of a proposed 2-bedroom single-family dwelling to be occupied by the applicant, Mr. Nicholas Veltri and his wife.

The following list of documents were reviewed to generate this Memorandum of Findings:

- Narragansett, RI Zoning Ordinance
- Staff Report to the CRMC, prepared by T. Silva, Sr., Environmental Scientist, dated March 5, 2024
- CRMC Application No. 2022-12-075 (subject project)
- CRMC Application No. 2009-04-008 (Town of Narragansett's Narrow River Stormwater Abatement Project)
- FEMA Flood Map No. 44009C0202K, effective April 3, 2020

Existing Site Conditions and Constraints

The site is currently vacant and contains approximately 8,077 square feet of land. The subject property is situated at the southwest corner of Wilson Drive and Pettaquamscutt Avenue. The parcel has direct frontage on the Pettaquamscutt River to the west, and residential lots under common ownership (N-A-28-G & J) to the south. To the north of the parcel, a paved public boat access and a stormwater BMP (filter strip) exists within the Town right-of-way. This boat access and BMP were altered and improved as part of the Town of Narragansett's Narrow River Stormwater Abatement Project as approved under CRMC File No. 2009-04-008. Refer to Figure 1 – General Locus Map below.

The existing topographic elevation of the site ranges from 6 feet along the southeastern property line and slopes down to 1.8-feet along the western property line (mean high water elevation). The average slope is approximately 4%.



<u>Figure 1 – General Locus Map</u> NOT TO SCALE

The subject parcel is located on the Flood Insurance Rate Map (FIRM) for Washington County, Map Number 44009C0202K, effective April 3, 2020. Based on this FEMA FIRM, the site and all adjacent parcels are identified as being within Flood Zone AE (elevation 11) – special flood hazard area with base flood elevation determined. The general location is shown below on Figure 2 – Flood Map.



<u>Figure 2 – Flood Map</u> NOT TO SCALE

JCE has reviewed the Staff Report and offer the following responses to key engineering areas of concern:

Response to Comments from Section C of the Staff Report to Council

Comment 1: -- Section 1.1.7(A)(1) states that the proposed alteration conforms with the applicable goals and policies [of the Redbook]. The application states that the project is consistent with Sections 1.2.1(C), 1.1.6(I) and 4.4.3 of the NR SAMP. While staff concurs with the first Section, comments above indicate that Section 1.1.10 CHA results are significant for this site. Relative to SAMP Section 4.4.3(C), the Council should note that Section 1.1.2 (A) of the Redbook contains a definition of Buffer Zone "land area on or contiguous to a shoreline feature that is retained in its natural undisturbed condition..." Staff agrees that the NR SAMP has no definition of a buffer zone, however, for LDBCC parcels, the SAMP refers to the Redbook for buffer zone applicability and (C)(3) of Section 4.4.11 refers to buffer and buffer zone widths interchangeably, when referencing SAMP/Redbook requirements. Possible confusion stems from the enactment of the recent DEM/CRMC Freshwater Wetland regulatory changes, which add and define Buffer and Buffer Zone as distinct terms within these programs only. This intent of CRMC Rebook and NR SAMP requirements remains the same, and CRMC past practice refers to coastal buffer and coastal buffer zones as one and the same as applied to coastal wetlands (this site is not a freshwater wetland). As such, a proposed 7' buffer zone does not meet the requirements of either the Redbook or NR SAMP.

Additionally, the project is inconsistent with the Policies contained within Section 1.1.10(A) for preparing Rhode Island for evolving conditions and making coastal areas more resilient as well as the legislative mandate to preserve, protect and where possible, restore the coastal resources of the state. The site is an unfortunate example of the accelerated rate of SLR and its associated risks as (A)(3) is concerned with. Should development on this flood-prone lot (demonstrated to likely be affected by further SLR and storm event flooding) be approved, the precedent may lead to less coastal resiliency along the River over time.

As noted herein, the project is also inconsistent with Section 1.1.11(B) regarding the multiple uses and benefits that buffer zones provide. Specifically, the program applies greater buffer widths for Type 2 waters to "protect water quality" (B)(6). The

existing Phragmites marsh and invasive upland vegetation, while lesser wildlife habitat value than preferred native Spartina marsh or upland shrub species, is likely a result of the excessive nutrient and sediment load the site already receives from both tidal inundation and overland stormwater runoff. Both species form a thick root system which helps hold soil and trap nutrients and the vegetation itself can reduce flood velocity while providing wildlife cover. Both the buffer zone on this lot and the wetland it is protecting currently serve to store floodwaters in significant storm events. As shown in the submitted photographs, the site already experiences intense flooding events. Reducing the buffer zone on this lot will reduce the lot's ability to continue to provide the same level of benefits. Future lot restoration could even enhance the current benefits for the surrounding area and adjacent River, improving resiliency.

Section 1.2.2(C)(h)/(i) state the Council's goal "to provide for maximum coastal buffer zone widths for projects abutting coastal wetlands that are adjacent to Type 1 & Type 2 waters..." and the same for those "wetlands that are likely...to migrate landward with sea level rise." The SLAMM maps (j) indicate that by projected SLR 1', 3' & 5' scenarios, coastal wetland vegetation could use the site to migrate landward, one of the only areas available in this densely developed neighborhood.

It is the staff's opinion that the project does not meet all goals and applicable policies of the Redbook/SAMP.

Applicant Response:

The subject property is owned by a private owner looking to utilize their property for a use allowed by right per the Town's Zoning Ordinance. While the project does not meet the requirements of either the Redbook or NR SAMP with the proposed 7-foot buffer zone, every effort has been made to meet these requirements to the maximum extent practicable. The 50-foot setback extends beyond the property boundaries. It is therefore necessary to seek a variance from this standard to utilize the property for its zoned use. If these variance requests are not granted, the applicant would be denied all beneficial use of his land and face what is tantamount to an undue hardship.

The project as recently submitted does not propose any grade changes and therefore flood waters will not be displaced. The proposed project also conforms to the requirements stipulated by FEMA. No improvements are proposed within the coastal wetlands. The existing buffer within this site is not historically natural as evidenced in historical aerials (specifically 2011 – see Exhibit A). Most of the improvements are proposed within the vegetated buffer zone that was previously disturbed by the Town's stormwater improvement project as this area was utilized as a staging area. Since then, this area has been colonized by invasive species Common reed (*Phragmites* australis), Japanese knotweed (*Polygonum cuspidatum*), and Tree of heaven (*Ailanthus altissima*).

Comment 2: -- Section 1.1.7 (A)(2) requires that "the proposed alteration will not result in significant adverse environmental impacts or use conflicts, including but not limited to, cumulative impacts". The applicant indicates that the project meets this criteria as the existing lot vegetation is currently invasive species monocultures, there are no anticipated use conflicts and the setback variances are not significant as stormwater management is provided. As noted above, staff disagrees with the finding regarding existing vegetation and buffer zone reduction. The Redbook seeks to enhance/restore degraded wetland areas (Section 1.2.1(B)/1.2.2(C)) where possible. If left as-is, the current vegetation provides stormwater, sediment and flood control functions, particularly as there are few sites available for such in this area. Marsh migration can also potentially occur on the site if left undeveloped.

The potential use conflicts are with access to and around the site in current and future flooding events, as well with the abutting Town stormwater BMP and public access ROW as sea levels continue to rise and storm events become more frequent. Although the applicant has properly designed for S&E controls and stormwater management per the Redbook minimum requirements, it is staff's option that the site cannot accommodate current flooding and the proposed design is subject to failure in future storm/tidal flooding events. Additional development on the lot (cars, fertilizer, etc) will potentially add to the pollutant burden the lot is currently facing during these events. Although the neighborhood is preplatted and densely developed, the NR SAMP notes that this predates the Council. Additional effects on the area could be cumulative by setting precedent for further development of sub-standard lots along the River.

The subject property is a privately owned lot with development rights. The proposed dwelling has been designed per FEMA guidelines by not filling in a floodway. The proposed by-right use (single-family dwelling) has been reduced to the maximum extent practicable. The project adheres to FEMA and CRMC residential stormwater guidance documents.

In addition, as discussed above, the coastal buffer zone where most improvements are proposed was previously disturbed by the Town's drainage project in 2011, as permitted under CRMC Application 2009-04-008). Since then, this area has been colonized by invasive species Common reed (Phragmites australis), Japanese knotweed (Polygonum cuspidatum), and Tree of heaven (Ailanthus altissima). According to the December 2022 Written Narrative in Support of a CRMC Assent Application and Variance Request for a Proposed Single-Family Development prepared Natural Resource Services, Inc. (NRS), the 72% buffer zone variance request would impact lands where the knotweed is dominant. This species typically creates a monoculture over time which in turn limits the value of the affected area for wildlife and wildlife habitat. From this perspective, the buffer zone variance request if granted would not result in a significant adverse environmental impact.

Comment 3: -- Section 1.1.7(A)(3) states that "due to conditions at the site, the applicable standard(s) cannot be met". Staff concurs with this statement, as the substandard lot zoned R10) predates the Council and is half wetland. It is staff's opinion that the lot has remained undeveloped for decades due to the difficulty in meeting the required standards as well as due to the existing lot conditions (increased flooding).

The parcel is a legal, non-conforming lot of record with development rights. The project complies with the minimum building requirements for FEMA and local building codes. Flooding will occur within this site with or without this project as the flood storage will be the same under pre- and post-conditions. JCE has created a Proposed High-Water Profile to depict how the proposed single-family dwelling will be affected by the mean high-water elevation (El. 1.8 feet) and the FEMA [100-year flood] elevation (El. 11 feet). The first-floor elevation is set at 14.5 feet. This is 10.5 feet above ground level and 3.5 feet above the AE Flood Zone elevation of 11 feet. Under this scenario, the neighboring properties would be inundated with flood water. Please refer to Exhibit B for the Proposed High-Water Profile.

The 14.5-foot elevation also exceeds the STORMTOOLS Design Elevation (SDE) for a predicted 1.47 feet of sea level rise (SDE = 13.9 feet). The SDE for 3 feet of seal level rise would be 17.4 feet. This is 6.4 feet above the current AE Flood Zone and would not be consistent with current building code minimums. The 14.5-foot elevation, while not accommodating the full 3-foot SDE, is consistent with the CRMP's policies pursuant to Section 1.1.10 and application requirements from Section 1.1.6.

It should be noted that CRMC STORMTOOLS maps are a design tool for planners and homeowners to understand the flood risks to their property based on projected sea level rise, not codified rules and regulations.

Comment 4: -- Section 1.1.7(A)(4) requires that "the modification requested by the applicant is the minimum variance to the applicable standard(s) necessary to allow a reasonable alteration of the site". Although staff concurs the applicant has attempted minimization of the project through downsizing of the proposed dwelling and parking areas as well as irregular design of the dwelling, reconfiguration could potentially increase buffer zone along the northern portion of the site by designing a more north-south dwelling. However, it is important to note that staff did not request such as even with that change, impacts on the site from existing and future potential flooding would still remain. A reasonable use or alteration of the upland portion of the site could be for parking or passive recreation (shed, benches, kayak rack, etc), which CRMC often issues permits for, provided local approval is received.

The applicant has reduced the dwelling and deck to the maximum extent practicable as acknowledged by the *Council Staff*. As discussed previously, this site will experience flooding regardless of this project being implemented.

The proposed passive recreation uses recommended are accessory uses that would be complimentary of a primary use, such as a single-family home as proposed.

Comment 5: -- Section 1.1.7(A)(5) refers to the prior action of the applicant or predecessors in title. The applicant indicates the lot is a legal non-conforming lot of record, platted prior to formation of the Council and that no changes to the lot have occurred since that time, with which staff concurs. However, the former owner, R. Wyss (with realtor R. LeClerc) received a CRMC PD report indicating the significant variances and likely hazards with developing this lot. A second PD report was also issued to R. Wyss (with potential buyer N. Veltri), reiterating CRMC concerns with the project. Mr. Veltri then purchased this lot and began the development review process. This lot has remained vacant for almost 100 years as the surrounding community was built; It is staff's option the owner was aware of the difficulties with developing this site.

Mr. Veltri purchased the subject property for the expressed purpose of constructing a small single-family residence intended as primary residence and retirement home for him and his wife. While he understood the difficulties with developing this site, he has development rights and the project should not be denied outright as this would go against the applicant being able to utilize the property for a legally zoned use.

Comment 6: ---Section 1.1.7(A)(6) asks if compliance with the standards will cause an undue hardship for the applicant due to site conditions. Staff concurs that site conditions are a source of difficulty with the project, however the surrounding area also experiences similar conditions (flooding), which have been well documented and have been increasing. Relief from this hardship must be unique to this site and may not be mere economic diminution. The current owner purchased this site following several years of marketing the parcel by the former owner and agency indications that development would not be supported. There exist other opportunities for use of this lot as noted above.

It is staff's opinion that the variance criteria have not been met and the application should be denied.

The parcel is a legal, non-conforming lot of record with development rights that was platted prior to the Council's regulations.

Response to Comments from Section D of the Staff Report to Council

Comment (1)(a): There is no direct impact to the adjacent ROW or abutting properties. However, part of the Town stormwater BMP (drainage outfall) appears to be located on the subject parcel, based on comments received and personal communication (3/2024) with the Town Engineer.

Based on the recent correspondence dated May 20, 2024, with Stephen L. Daignault, Jr., the Narragansett Director of Public Works, this comment is no longer relevant. Based on a recent survey performed by John A. Tzitzouris Land Surveying, the Town drainage pipes are within the Town Right-of-Way on Pettaquamscutt Ave. A site visit by the DPW confirmed that the pipe's outflow is within the Town property and "therefore, DPW no longer has any issues with the drainage as it pertains to your lot." Please refer to Exhibit C for a copy of the correspondence.

Comment (1)(b): The project does not meet all of the applicable standards and has appropriately requested variance relief for buffer zone, construction setback and buffer-derived setback distances. However, as discussed above, the project does not appear to qualify for these variances.

The parcel is a legal, non-conforming lot of record with development rights. In addition, the proposed by-right use (single-family dwelling) has been reduced to the greatest extent practicable. The project complies with the minimum building requirements for FEMA and local building codes. Flooding will occur within the subject site with or without this project. The flood storage onsite will be the same under pre- and post-conditions as the existing topography onsite will remain unchanged.

Comment (1)(c): Several potential impacts are identified within this subsection. Sediment deposition and erosion, scenic values, biological communities, water quality and flood hazards could be adversely impacted by this project. The comments contained by objectors address several of these impacts.

It is the staff's opinion that substantive objections have been presented for this project:

On 2/9/23 the Town Engineer submitted concerns with the location of the existing drainage outfall and potential conflict. While the submitted plans show the outfall to the north, on Town property, the field survey marker detected by the Town indicates the outfall is actually on the subject parcel. Alterations to the site for development could affect the existing drainage system and/or its future access/maintenance needs which could further impact its capacity to manage stormwater runoff.

As discussed above, based on the newest correspondence dated May 20, 2024, with Stephen L. Daignault, Jr., the Narragansett Director of Public Works, this comment is no longer relevant. Based on a recent survey performed by John A. Tzitzouris Land Surveying, the Town drainage pipes are within the Town Right-of-Way on Pettaquamscutt Ave. A site visit by the DPW confirmed that the pipe outflow are within the Town property and "therefore, DPW no longer has any issues with the drainage as it pertains to your lot." Please refer to Exhibit C for a copy of the correspondence.

Conclusion

All surrounding structures are existing, non-conforming and are susceptible to damage during a flood event. Although located on an existing, non-conforming lot, the proposed structure will be new construction and will conform to both FEMA and current building codes.

As shown in the attached Proposed High-Water Profile, the proposed single-family dwelling's first-floor elevation is set at 14.5 feet; 10.5 feet above ground level and 3.5 feet above the FEMA AE Flood Zone elevation of 11 feet which is in compliance with current FEMA minimum construction requirements and State Building Code. The 14.5-foot elevation also exceeds the STORMTOOLS Design Elevation (SDE) for a predicted 1.47 feet of sea level rise (SDE = 13.9 feet).

The project will not alter the existing grades of the site. Stormwater runoff associated with the proposed improvements will be conveyed to a rain garden in conformance with CRMC's *State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development*. Sediment control during construction will be managed via silt socks in conformance with typical construction practices.

The applicant has development rights of the subject parcel as evidenced by this memorandum and other submitted documents. The development limits impact to the CRMC buffer zones to the maximum extent practicable. The proposed development is consistent with similar adjacent residential developments and will result in no negative impacts to water quality, no increase or impact to flooding, and no adverse effects on vegetative or wildlife habitats.

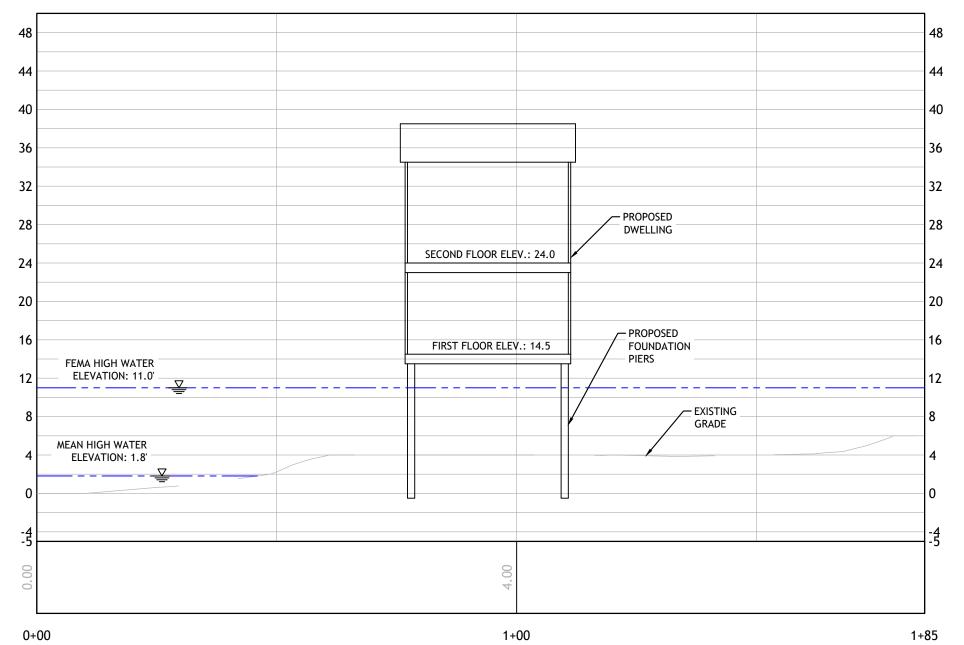
$\underline{EXHIBIT\;A}$

2011 RIGIS AERIAL



EXHIBIT B

PROPOSED HIGH-WATER PROFILE



PROPOSED HIGH WATER PROFILE

HORIZONTAL: 1" = 20' VERTICAL: 1" = 10'

EXHIBIT C

EMAIL CORRESPONDENCE FROM NARRAGANSETT DIRECTOR OF PUBLIC WORKS, DATED MAY 20, 2024

Fw: Application #2022-12-075

Nicholas Veltri <veltrisurvey@verizon.net>

Mon 5/20/2024 3:12 PM

To:Sara Paquin <sara@joecasali.com>

Hi Sara,

Attached please find Email from the Town of Narragansett Highway Director. Also can you give an update on your work on Wilson Drive for the upcoming hearing with CRMC.

Thanks Nick

---- Forwarded Message -----

From: Stephen Daignault <sdaignault@narragansettri.gov>
To: veltrisurvey@verizon.net <veltrisurvey@verizon.net>

Cc: John Lawless <jlawless@narragansettri.gov>; Daren McConnell <dmcconnell@narragansettri.gov>; Michael

Deluca <mdeluca@narragansettri.gov>

Sent: Monday, May 20, 2024 at 02:49:29 PM EDT

Subject: Application #2022-12-075

Mr. Veltri

In regards to my email to CRMC on February 9, 2023, which stated that the proposed structure is planned over or near Town drainage outfall pipes, it turns out that my statement was incorrect. The Town has received the updated survey of the property on Wilson Dr at Pettaquamscutt Ave. which was done by John A. Tzitzouris Land Surveying. This survey shows that the Town Drainage Pipes are within the Town Right of Way on Pettaquamscutt Ave. I visited the site today with our Engineering Staff and have verified that the pipe outflows are on our property. Therefore, DPW no longer has any issues with the drainage as it pertains to your lot.

Sincerely,

Stephen L. Daignault Jr.

Stephen L. Daignault Jr.

Town of Narragansett

Director of Public Works

Tree Warden

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