Tillamook County

Land of Cheese, Trees and Ocean Breeze

DEPARTMENT OF COMMUNITY DEVELOPMENT
BUILDING, PLANNING & ON-SITE SANITATION SECTIONS

1510 - B Third Street
Tillamook, Oregon 97141
www.tillamook.or.us

Building (503) 842-3407
Planning (503)842-3408
On-Site Sanitation (503)842-3409
Fax (503)842-1819
Toll Free 1 (800)488-8280

Floodway Development Permit #851-21-000194-PLNG: MACY

NOTICE TO MORTGAGEE, LIENHOLDER, VENDOR OR SELLER:
ORS 215 REQUIRES THAT IF YOU RECEIVE THIS NOTICE,
IT MUST BE PROMPTLY FORWARDED TO THE PURCHASER

NOTICE OF ADMINISTRATIVE REVIEW
Date of Notice: November 24, 2021

Notice is hereby given that the Tillamook County Department of Community Development is considering the following:

#851-21-000194-PLNG: A review of a Floodway Development Permit for the placement of a single-family dwelling on a property located north-east of Nehalem on the south side of the Nehalem River where the north and south fork of the river meet. The subject property is accessed via Tohl Ranch Road., a private road, is zoned Rural Residential 2 Acre (RR-2) and is designated as Tax Lot 1002 of Section 23, Township 3 North, Range 10 West, W.M., Tillamook County, Oregon. The applicants and property owner is Kirk Macy.

Written comments received by the Department of Community Development prior to 4:00 p.m. on December 8, 2021, will be considered in rendering a decision. Comments should address the criteria upon which the Department must base its decision. A decision will be rendered no sooner than the next business day, December 9, 2021. Notice of the application, a map of the subject area, and the applicable criteria are being mailed to all property owners within 250 feet of the exterior boundaries of the subject parcel for which an application has been made and other appropriate agencies at least 14 days prior to this Department rendering a decision on the request.

A copy of the application, along with a map of the request area and the applicable criteria for review are available for inspection at the Department of Community Development office located at 1510-B Third Street, Tillamook, Oregon 97141. They are also available on the Tillamook County Department of Community Development website: http://www.co.tillamook.or.us/gov/ComDev/landuseapps

If you have any questions about this application, please contact the Department of Community Development at (503) 842-3408 ext. 3301 or mjenck@co.tillamook.or.us.

Sincerely,

Melissa Jenck, CFM, Land Use Planner II

Sarah Absher, CFM, Director

Enc. Maps and applicable ordinance criteria

REVIEW CRITERIA

ARTICLE III – ZONE REGULATIONS

TCLUO SECTION 3.510: FLOOD HAZARD OVERLAY ZONE

(14) DEVELOPMENT PERMIT PROCEDURES

(b) Development Permit Review Criteria

(1) The fill is not within a Coastal High Hazard Area.

(2) Fill placed within the Regulatory Floodway shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(3) The fill is necessary for an approved use on the property.

(4) The fill is the minimum amount necessary to achieve the approved use.

(5) No feasible alternative upland locations exist on the property.

(6) The fill does not impede or alter drainage or the flow of floodwaters.

(7) If the proposal is for a new critical facility, no feasible alternative site is available.

(8) For creation of new, and modification of, Flood Refuge Platforms, the following apply, in addition to (14)(a)(1-4) and (b)(1-5):

i. The fill is not within a floodway, wetland, riparian area or other sensitive area regulated by the Tillamook County Land Use Ordinance.

ii. The property is actively used for livestock and/or farm purposes,

iii. Maximum platform size = 10 sq ft of platform surface per acre of pasture in use, or 30 sq ft per animal, with a 10-ft wide buffer around the outside of the platform,

iv. Platform surface shall be at least 1 ft above base flood elevation,

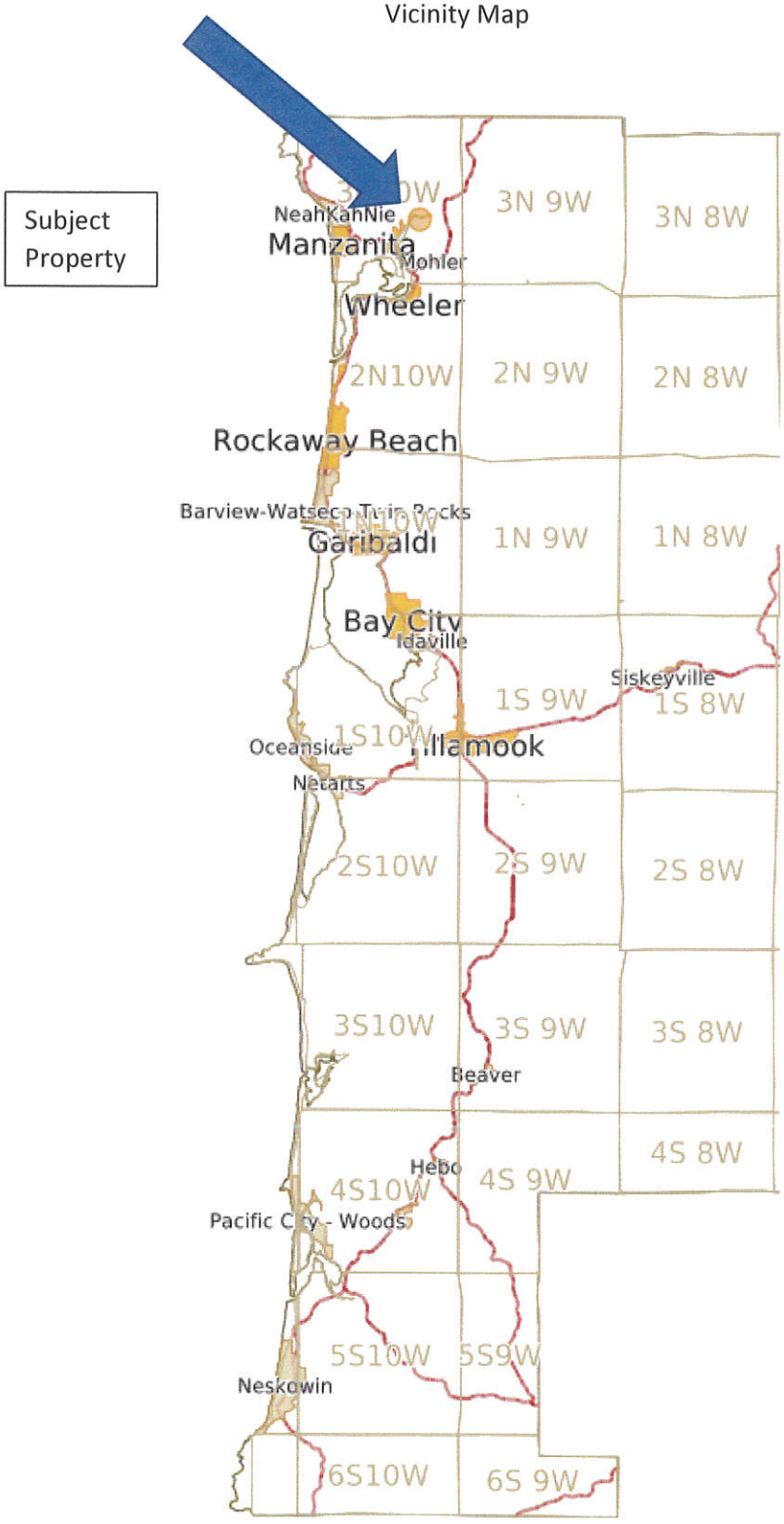
v. Slope of fill shall be no steeper than 1.5 horizontal to 1 vertical,

vi. Slope shall be constructed and/or fenced in a manner so as to prevent and avoid erosion.

Conditions of approval may require that if fill is found to not meet criterion (5), the fill shall be removed or, where reasonable and practical, appropriate mitigation measures shall be required of the property owner. Such measures shall be verified by a certified engineer or hydrologist that the mitigation measures will not result in a net rise in floodwaters and be in coordination with applicable state, federal and local agencies, including the Oregon Department of Fish and Wildlife.

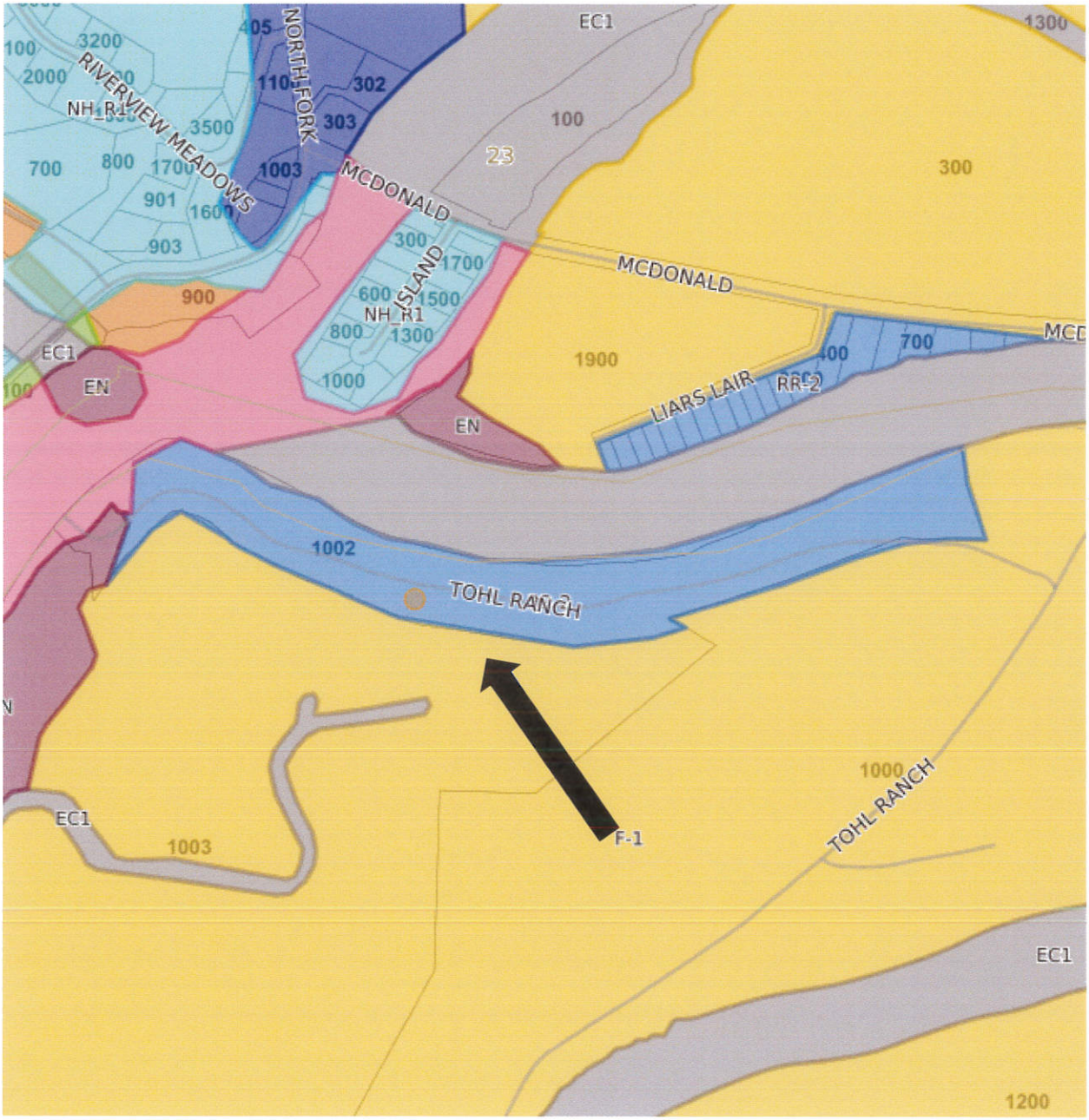
EXHIBIT A

Vicinity Map



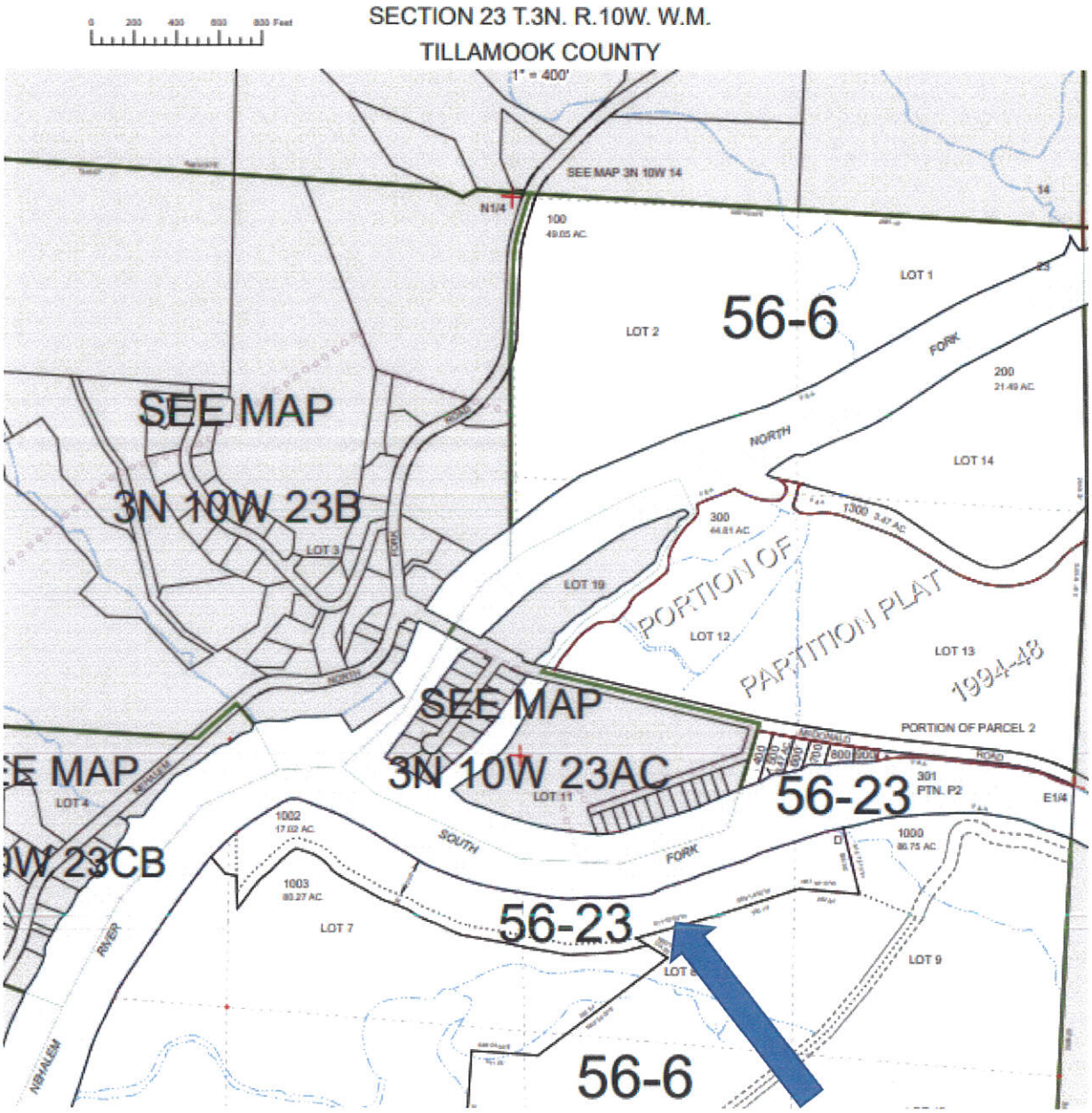
851-21-000194-PLNG MACY

Zone Map



851-21-000194-PLNG MACY

Tax Map



851-21-000194-PLNG MACY

EXHIBIT B

Tillamook County Department of Community Development
1510-B Third Street. Tillamook, OR 97141 | Tel: 503-842-3408 Fax: 503-842-1819
www.co.tillamook.or.us

PLANNING APPLICATION

OFFICE USE ONLY
Date Stamp
RECEIVED
MAY 2 3 2021
BY: Email

☐Approved ☐Denied
Received by: NJ
Receipt #:
Fees: 983.00
Permit No:
851-21-000194-PLNG

Applicant ☒ *(Check Box if Same as Property Owner)*
Name: Kirk Macy Phone: 503-686-9558
Address: 5200 SW 173rd Ave
City: Beaverton State: OR Zip: 97078
Email: QTRMYL@Live.com

Property Owner
Name: Phone:
Address:
City: State: Zip:
Email:

Request: Floodway Development Permit for 'single family dwelling' for occasional use and storage

Type II	Type III	Type IV
☐ Farm/Forest Review	☐ Appeal of Director's Decision	☐ Appeal of Planning Commission Decision
☐ Conditional Use Review	☐ Extension of Time	☐ Ordinance Amendment
☐ Variance	☐ Detailed Hazard Report	☐ Large-Scale Zoning Map Amendment
☐ Exception to Resource or Riparian Setback	☐ Conditional Use (As deemed by Director)	☐ Plan and/or Code Text Amendment
☐ Nonconforming Review (Major or Minor)	☐ Ordinance Amendment	
☐ Development Permit Review for Estuary Development	☐ Map Amendment	
☐ Non-farm dwelling in Farm Zone	☐ Goal Exception	
☐ Foredune Grading Permit Review		
☐ Neskowin Coastal Hazards Area		

Location:
Site Address: 37000 Tohl Ranch Road #33 Nehalem, OR 97131
Map Number:
Township Range Section Tax Lot(s)

Clerk's Instrument #: _____

Authorization
This permit application does not assure permit approval. The applicant and/or property owner shall be responsible for obtaining any other necessary federal, state, and local permits. The applicant verifies that the information submitted is complete, accurate, and consistent with other information submitted with this application.

Property Owner Signature (Required) 4-15-21 Date

Applicant Signature Date

TLCUO SECTION 3.510(14)(b) Development Permit Review Criteria:

(1) The fill is not within a Coastal High Hazard Area. **The property is not within the High Hazard Area**

(2) Fill placed within the Regulatory Floodway shall not result in any increase in flood levels during the occurrence of the base flood discharge. **Please refer to West Consultants No-Rise Analysis and Certification report**

(3) The fill is necessary for an approved use on the property. **The proposed structure will provide a safe and secure place to enjoy the property and secure our belongings**

(4) The fill is the minimum amount necessary to achieve the approved use. **The proposed structure will be 480 ft^2 and will be raised on columns which will leave the smallest footprint possible**

(5) No feasible alternative upland locations exist on the property. **No alternatives exist**

(6) The fill does not impede or alter drainage or the flow of floodwaters. **Please refer to West Consultants No-Rise Analysis and Certification report**

(7) If the proposal is for a new critical facility, no feasible alternative site is available. **The lot size is 40' x 200' with a road that runs through the middle so no alternative sites are suitable**

(8) For creation of new, and modification of, Flood Refuge Platforms, the following apply, in addition to (14)(a)(1-4) and (b)(1-5):

i. The fill is not within a floodway, wetland, riparian area or other sensitive area regulated by the Tillamook County Land Use Ordinance. **Please refer to West Consultants No-Rise Analysis and Certification report**

ii. The property is actively used for livestock and/or farm purposes, **No farm use**

iii. Maximum platform size = 10 sq ft of platform surface per acre of pasture in use, or 30 sq ft per animal, with a 10-ft wide buffer around the outside of the platform, **No farm use**

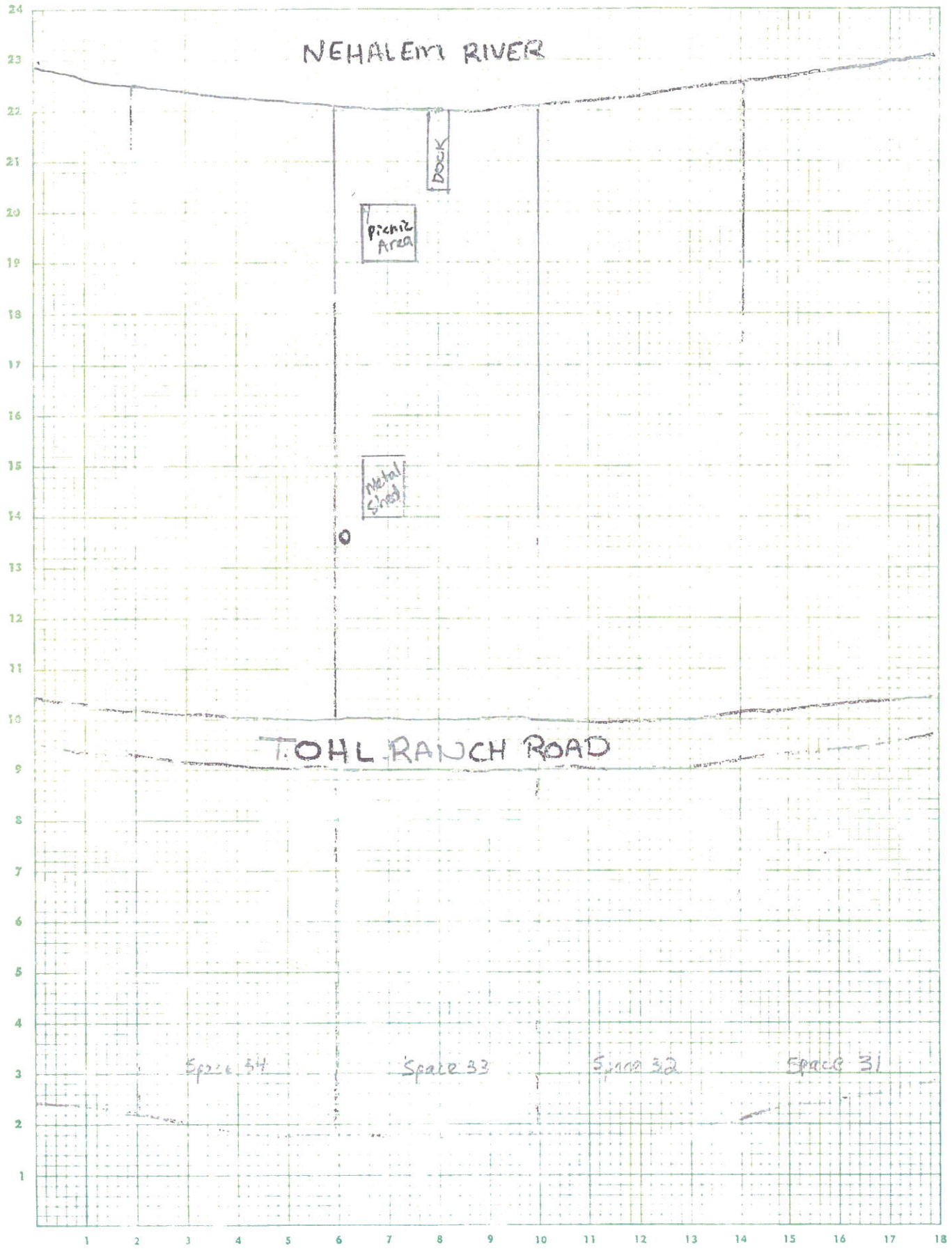
iv. Platform surface shall be at least 1 ft above base flood elevation,

v. Slope of fill shall be no steeper than 1.5 horizontal to 1 vertical,

vi. Slope shall be constructed and/or fenced in a manner so as to prevent and avoid erosion.

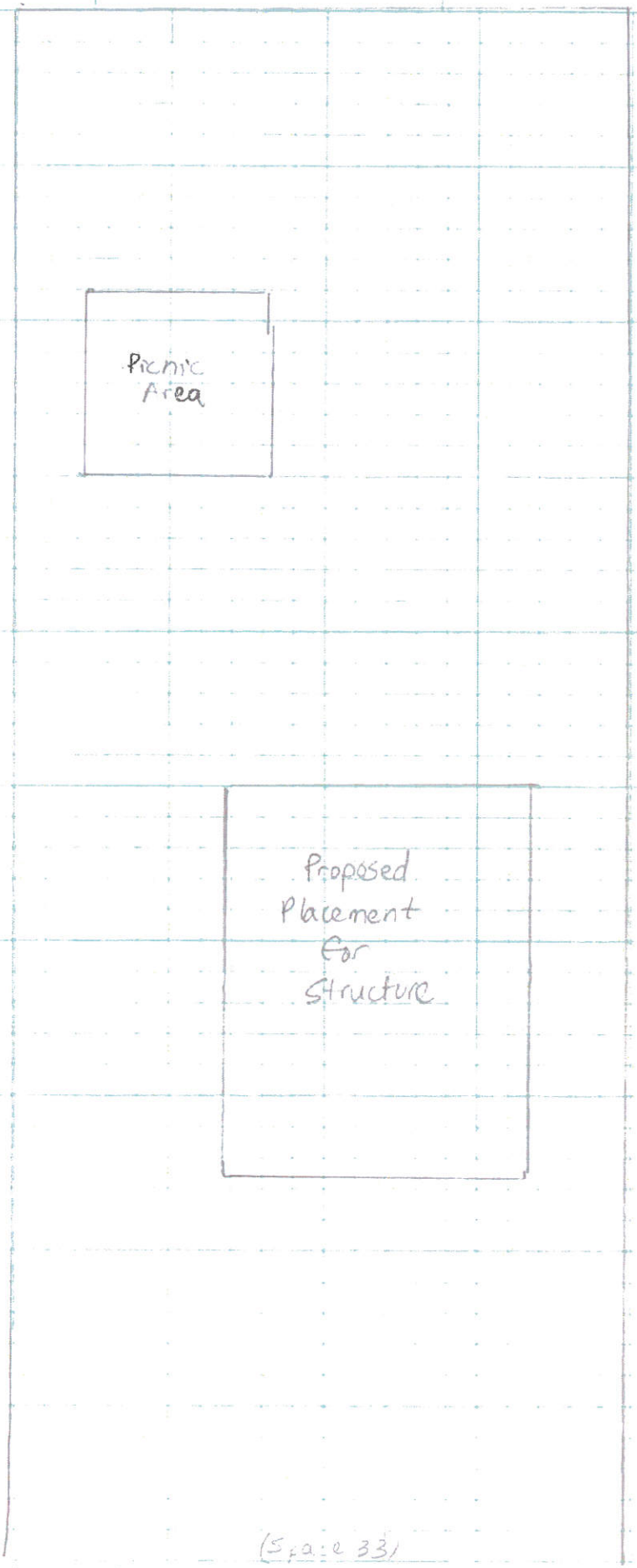
Conditions of approval may require that if the fill is found to not meet criterion (5), the fill shall be removed or, where reasonable and practical, appropriate mitigation measures shall be required of the property owner. Such measures shall be verified by a certified engineer or hydrologist that the mitigation measures will not result in a net rise in floodwaters and be in coordination with applicable state, federal and local agencies, including the Oregon Department of Fish and Wildlife. **Please refer to West Consultants No-Rise Analysis and Certification report**

NORTH ↑


NEHALEM RIVER
DOCK
picnic Area
metal shed
TOHL RANCH ROAD
Space 34
Space 33
Space 32
Space 31

1 sq = 2'

NEHALEM RIVER



(Space 33)

1 Sq = 2'

FEMA

NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

AND

INSTRUCTIONS

2019 EDITION

OMB No. 1660-0008
Expiration Date: November 30, 2022

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

ELEVATION CERTIFICATE AND INSTRUCTIONS

Paperwork Reduction Act Notice

Public reporting burden for this data collection is estimated to average 3.75 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting this form. You are not required to respond to this collection of information unless a valid OMB control number is displayed on this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20742, Paperwork Reduction Project (1660-0008). **NOTE: Do not send your completed form to this address.**

Privacy Act Statement

Authority: Title 44 CFR § 61.7 and 61.8.

Principal Purpose(s): This information is being collected for the primary purpose of estimating the risk premium rates necessary to provide flood insurance for new or substantially improved structures in designated Special Flood Hazard Areas.

Routine Use(s): The information on this form may be disclosed as generally permitted under 5 U.S.C. § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/FEMA-003 – National Flood Insurance Program Files System or Records Notice 73 Fed. Reg. 77747 (December 19, 2008); DHS/FEMA/NFIP/LOMA-1 – National Flood Insurance Program (NFIP) Letter of Map Amendment (LOMA) System of Records Notice 71 Fed. Reg. 7990 (February 15, 2006); and upon written request, written consent, by agreement, or as required by law.

Disclosure: The disclosure of information on this form is voluntary; however, failure to provide the information requested may result in the inability to obtain flood insurance through the National Flood Insurance Program or the applicant may be subject to higher premium rates for flood insurance. Information will only be released as permitted by law.

Purpose of the Elevation Certificate

The Elevation Certificate is an important administrative tool of the National Flood Insurance Program (NFIP). It is to be used to provide elevation information necessary to ensure compliance with community floodplain management ordinances, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).

The Elevation Certificate is required in order to properly rate Post-FIRM buildings, which are buildings constructed after publication of the Flood Insurance Rate Map (FIRM), located in flood insurance Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, and AR/AO. The Elevation Certificate is not required for Pre-FIRM buildings unless the building is being rated under the optional Post-FIRM flood insurance rules.

As part of the agreement for making flood insurance available in a community, the NFIP requires the community to adopt floodplain management regulations that specify minimum requirements for reducing flood losses. One such requirement is for the community to obtain the elevation of the lowest floor (including basement) of all new and substantially improved buildings, and maintain a record of such information. The Elevation Certificate provides a way for a community to document compliance with the community's floodplain management ordinance.

Use of this certificate does not provide a waiver of the flood insurance purchase requirement. Only a LOMA or LOMR-F from the Federal Emergency Management Agency (FEMA) can amend the FIRM and remove the Federal mandate for a lending institution to require the purchase of flood insurance. However, the lending institution has the option of requiring flood insurance even if a LOMA/LOMR-F has been issued by FEMA. The Elevation Certificate may be used to support a LOMA or LOMR-F request. Lowest floor and lowest adjacent grade elevations certified by a surveyor or engineer will be required if the certificate is used to support a LOMA or LOMR-F request. A LOMA or LOMR-F request must be submitted with either a completed FEMA MT-EZ or MT-1 package, whichever is appropriate.

This certificate is used only to certify building elevations. A separate certificate is required for floodproofing. Under the NFIP, non-residential buildings can be floodproofed up to or above the Base Flood Elevation (BFE). A floodproofed building is a building that has been designed and constructed to be watertight (substantially impermeable to floodwaters) below the BFE. Floodproofing of residential buildings is not permitted under the NFIP unless FEMA has granted the community an exception for residential floodproofed basements. The community must adopt standards for design and construction of floodproofed basements before FEMA will grant a basement exception. For both floodproofed non-residential buildings and residential floodproofed basements in communities that have been granted an exception by FEMA, a floodproofing certificate is required.

Additional guidance can be found in FEMA Publication 467-1, Floodplain Management Bulletin: Elevation Certificate, available on FEMA's website at https://www.fema.gov/media-library/assets/documents/3539?id=1727.

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

OMB No. 1660-0008
Expiration Date: November 30, 2022

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1–9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name John Macy		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Tohl Ranch Road No. 33		Company NAIC Number:
City Nehalem	State Oregon	ZIP Code 97131

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
Portion of Tax Lot 3N10230001002

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential

A5. Latitude/Longitude: Lat. N 123°52'25.89" Long. W 45°43'47.47" Horizontal Datum: ☐ NAD 1927 ☒ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number 5

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) N/A sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade N/A

c) Total net area of flood openings in A8.b N/A sq in

d) Engineered flood openings? ☐ Yes ☐ No

A9. For a building with an attached garage:

a) Square footage of attached garage N/A sq ft

b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade N/A

c) Total net area of flood openings in A9.b N/A sq in

d) Engineered flood openings? ☐ Yes ☐ No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
Tillamook County, Oregon 410196	Tillamook County	Oregon

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)
41057C0230	F		09-28-2018	AE	15.6

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other/Source:

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No
Designation Date: ☐ CBRS ☐ OPA

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Tohl Ranch Road No. 33			Policy Number:
City Nehalem	State Oregon	ZIP Code 97131	Company NAIC Number

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☒ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: ORGN GPS Vertical Datum: NAVD 1988

Indicate elevation datum used for the elevations in items a) through h) below.

☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

Datum used for building elevations must be the same as that used for the BFE.

		Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	17.7	☒ feet	☐ meters
b) Top of the next higher floor	26.7	☒ feet	☐ meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A	☐ feet	☐ meters
d) Attached garage (top of slab)	N/A	☐ feet	☐ meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)		☐ feet	☐ meters
f) Lowest adjacent (finished) grade next to building (LAG)	10.7	☒ feet	☐ meters
g) Highest adjacent (finished) grade next to building (HAG)	12.5	☒ feet	☐ meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	N/A	☒ feet	☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

Were latitude and longitude in Section A provided by a licensed land surveyor? ☒ Yes ☐ No ☐ Check here if attachments.

Certifier's Name Jack L. White II	License Number 91987PLS - Oregon	
Title Professional Land Surveyor		
Company Name S&F Land Services		
Address 1725 N. Roosevelt Dr., Suite B		
City Seaside	State Oregon	ZIP Code 97138

REGISTERED PROFESSIONAL LAND SURVEYOR

Jack L White II

OREGON
SEPTEMBER 10, 2019
JACK L WHITE II
91987PLS

Signature	Date	Telephone	Ext.
Jack L White II	8-07-2021	(503) 738-3425	

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)

C.1 No building plans available at this time. Elevations of floors as listed are per client statement regarding building plans in progress.

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Tohl Ranch Road No. 33			Policy Number:
City Nehalem	State Oregon	ZIP Code 97131	Company NAIC Number

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B,and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).

a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ ☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner or Owner's Authorized Representative's Name			
Address	City	State	ZIP Code
Signature	Date	Telephone	

Comments

☐ Check here if attachments.

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Tohl Ranch Road No. 33			Policy Number:
City Nehalem	State Oregon	ZIP Code 97131	Company NAIC Number

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued

G7. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____ ☐ feet ☐ meters Datum _____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____ ☐ feet ☐ meters Datum _____

G10. Community's design flood elevation: _____ ☐ feet ☐ meters Datum _____

Local Official's Name	Title
Community Name	**Telephone**
Signature	**Date**

Comments (including type of equipment and location, per C2(e), if applicable)

☐ Check here if attachments.

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

OMB No. 1660-0008
Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Tohl Ranch Road No. 33			Policy Number:
City Nehalem	State Oregon	ZIP Code 97131	Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

Photo One

Photo One Caption 7/6/2021 North half of property

Clear Photo One

Photo Two

Photo Two Caption 7/6/2021 South half of property

Clear Photo Two

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

Continuation Page

OMB No. 1660-0008
Expiration Date: November 30, 2022

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. Tohl Ranch Road No. 33			Policy Number:
City Nehalem	State Oregon	ZIP Code 97131	Company NAIC Number

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.

Photo Three

Photo Three

Photo Three Caption

Clear Photo Three

Photo Four

Photo Four

Photo Four Caption

Clear Photo Four

Technical Memorandum

WEST Consultants, Inc.

2601 25th St. SE
Suite 450
Salem, OR 97302-1286
(503) 485 5490
(503) 485-5491 Fax
www.westconsultants.com

Name: Kirk Macy

Date: 9 April 2021

From: Chris Bahner, P.E., D. WRE

Subject: Mr. and Mrs. Macy Property, No-Rise Analysis and Certification

---

Introduction

Per your request, a FEMA "No-Rise" hydraulic analysis was conducted for your property and proposed construction of building on piles along the south bank of the Nehalem River at Sports Camp Lot #33 along Tohl Ranch Road in Nehalem, Oregon. The property is located within a Special Flood Hazard Area (SFHA) of the Nehelam River floodplain in the left overbank between FEMA lettered cross sections "E" and "F". Further, the proposed structure lies within the regulatory floodway. The effective base flood elevation at the proposed structure site is 15.6 ft and the floodway elevation is 16.0 ft. Both these elevations are referenced to the North American Vertical Datum of 1988 (NAVD88), and all elevations referenced in this memorandum will be based on this vertical datum. Figure 1 presents the study area and effective FEMA flood hazard mapping. All figures referenced in the text are found at the end of this memorandum.

As specified by Article 3, Section 2.03.510(9a) of the Tillamook County Code, new construction is prohibited within a regulatory floodway "unless certification is provided by a professional registered civil engineer demonstrating through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge."

A hydraulic study was conducted in accordance with standard engineering practice for a FEMA No-Rise analysis which indicates that the proposed structure does not result in an increase in water surface elevations during the base flood. This memorandum summarizes the analysis methodology and results.

Analysis Approach

The hydraulic study utilized the U.S. Army Corps of Engineers' (USACE) software HEC-RAS (Hydraulic Engineering Center – River Analysis System) version 5.0.7 (USACE 2019). The effective hydraulic modeling of this reach of the Nehalem River was conducted by WEST in November 2014.

Procedures set forth by FEMA Region 10 call for a multi-step analysis approach for evaluating a proposed project for No-Rise certification (FEMA 2013). The steps are as follows:

1. Current Effective Model: Obtain the effective model upon which the current effective base flood elevations and floodway extents is based. Effective models are archived by FEMA.
2. Duplicate Effective Model (DEM): Use the Current Effective Model input data to create a Duplicate Effective Model to ensure that the results recorded in the effective FIS can be reproduced within an acceptable tolerance.
3. Corrected Effective Model (CEM): The Duplicate Effective Model is then modified to correct any errors and incorporate the most recent topographic information.
4. Existing Conditions Model (ECM): The Corrected Effective Model is revised to reflect any modifications that have occurred within the floodplain since the date of the original analysis but prior to the proposed project. This model should be the best depiction of existing conditions.
5. Proposed Conditions Model (PCM): The Proposed Conditions Model is to reflect conditions following the completion of the project and will be compared with the Existing Conditions Model to determine the projects effects (if any). The direct comparison of water surface elevations between the results of these two models is the basis of a No-Rise analysis.

The effective model was developed by WEST Consultants, Inc. (WEST) for a Letter of Map Revision (LOMR), effective September 24, 2015. The model produced for the LOMR was used to perform the hydraulic analysis for this No-Rise.

Effective Model

Documentation accompanying the effective model indicates that it was produced using Geographic Information System (GIS) data available in the digital flood insurance map (DFIRM) for Tillamook County (FEMA) and topographic data available from the Oregon Department of Geologic and Mineral Industries (DOGAMI 2009). The model includes FEMA lettered cross sections A through J and 21 unlettered cross sections. Bathymetry at all cross sections was manually created to match thalweg elevations indicated in the FIS profiles. Discharges and downstream boundary conditions were set to published values in the effective Flood Insurance Study. The limits of floodway encroachments were extracted from the S_FLD_HAZ_LN layer in the DFIRM. All remaining hydraulic parameters in the effective model (Manning's roughness, flow-paths, etc.) were estimated based on data listed in the FIS, publicly available aerial imagery, engineering judgement, and from observations made during the field reconnaissance.

Duplicate Effective Model (DEM)

A Duplicate Effective Model (DEM) was created from a copy of the effective. Results from the DEM were compared with water surface elevations published in the floodway data table and on flood profiles in the FIS. The DEM results are within the minimum agreement tolerance of 0.1 feet, so it is considered sufficient for conducting a No-Rise analysis. Table 1 presents the comparison of DEM and FIS water surface elevations.

Corrected Effective Model (CEM)

The DEM was modified to create the Corrected Effective Model (CEM). The modifications consisted of adding an additional cross section at the Macy's property. Figure 2 shows the added cross section. Results from the CEM were compared with the water surface elevations computed by the DEM. That comparison is presented in Table 2.

As seen in Table 2, the CEM water surface elevations for the reach represented by the additional cross sections are about 0.01 to 0.02 ft lower than the DEM water surface elevations, and the CEM water surface elevations for the river reach upstream of the additional cross section are about 0.02 to 0.06 ft higher than the DEM water surface elevations. The floodway surcharge (which is not shown in the table) is still less than that maximum 1 foot increase allowed by FEMA.

Table 1 - Duplicate Effective Model vs. Effective FIS

River Station (RM) and FEMA XS Letter		Regulatory Water Surface Elevation (ft)			With Floodway Water Surface Elevation (ft)		
		FIS Effective Model	DEM	Difference (DEM - FIS)	FIS Effective Model	DEM	Difference (FIS - DEM)
0.45	A	13.11	13.11	0.00	13.45	13.45	0.00
0.60	--	13.32	13.32	0.00	13.61	13.61	0.00
0.73	--	13.36	13.36	0.00	13.65	13.65	0.00
0.78	--	13.40	13.4	0.00	13.70	13.70	0.00
0.80	--	13.50	13.50	0.00	13.80	13.80	0.00
0.86	--	13.55	13.55	0.00	13.86	13.86	0.00
0.95	--	13.63	13.63	0.00	13.94	13.94	0.00
0.994	B	13.68	13.68	0.00	14.00	14.00	0.00
1.05	C	13.70	13.7	0.00	14.01	14.01	0.00
1.33	--	13.88	13.88	0.00	14.20	14.20	0.00
1.50	--	14.04	14.04	0.00	14.36	14.36	0.00
1.74	--	14.31	14.31	0.00	14.64	14.64	0.00
1.92	--	14.74	14.74	0.00	15.13	15.13	0.00
2.01	D	14.84	14.84	0.00	15.26	15.26	0.00
2.28	--	14.95	14.95	0.00	15.35	15.35	0.00
2.49	--	15.15	15.15	0.00	15.53	15.53	0.00
2.92	E	15.53	15.53	0.00	15.89	15.89	0.00
3.12	--	15.68	15.68	0.00	16.12	16.12	0.00
3.24	--	15.75	15.75	0.00	16.25	16.25	0.00
3.28	--	15.79	15.79	0.00	16.33	16.33	0.00
3.66	F	16.22	16.22	0.00	16.96	16.96	0.00
3.8	--	15.98	15.98	0.00	16.77	16.77	0.00
4.78	G	17.53	17.53	0.00	18.34	18.34	0.00
5.17	--	17.60	17.6	0.00	18.41	18.41	0.00
5.26	--	17.63	17.63	0.00	18.45	18.45	0.00
5.34	--	17.66	17.66	0.00	18.48	18.48	0.00
5.55	H	17.54	17.54	0.00	18.39	18.39	0.00
5.65	--	17.50	17.5	0.00	18.34	18.34	0.00
5.79	--	17.86	17.86	0.00	18.70	18.70	0.00
5.88	I	18.09	18.09	0.00	18.87	18.87	0.00
5.951	--	17.98	17.98	0.00	18.74	18.74	0.00
5.98	J	18.04	18.04	0.00	18.80	18.80	0.00

Notes: --- Indicates unlettered FEMA cross section; estimated from FIS flood profile

Table 2 - Corrected Effective Model vs. Duplicate Effective Model

River Station (RM) and FEMA XS Letter		Regulatory Water Surface Elevation (ft)			With Floodway Water Surface Elevation (ft)		
		DEM	CEM	Difference (CEM - DEM)	DEM	CEM	Difference (CEM - DEM)
0.45	A	13.11	13.11	0.00	13.45	13.45	0.00
0.60	--	13.32	13.32	0.00	13.61	13.61	0.00
0.73	--	13.36	13.36	0.00	13.65	13.65	0.00
0.78	--	13.40	13.40	0.00	13.70	13.70	0.00
0.80	--	13.50	13.50	0.00	13.80	13.80	0.00
0.86	--	13.55	13.55	0.00	13.86	13.86	0.00
0.95	--	13.63	13.63	0.00	13.94	13.94	0.00
0.994	B	13.68	13.68	0.00	14.00	14.00	0.00
1.05	C	13.70	13.70	0.00	14.01	14.01	0.00
1.33	--	13.88	13.88	0.00	14.20	14.20	0.00
1.50	--	14.04	14.04	0.00	14.36	14.36	0.00
1.74	--	14.31	14.31	0.00	14.64	14.64	0.00
1.92	--	14.74	14.74	0.00	15.13	15.13	0.00
2.01	D	14.84	14.84	0.00	15.26	15.26	0.00
2.28	--	14.95	14.95	0.00	15.35	15.35	0.00
2.49	--	15.15	15.15	0.00	15.53	15.53	0.00
2.92	E	15.53	15.53	0.00	15.89	15.89	0.00
2.96*		15.56	15.54	-0.02	15.94	15.90	-0.04
2.964*		15.56	15.55	-0.01	15.94	15.92	-0.02
2.968*		15.57	15.56	-0.01	15.95	15.95	0.00
2.972*		15.57	15.57	0.00	15.95	15.95	0.00
3.02*		15.61	15.56	-0.05	16.01	16.02	0.01
3.12	--	15.68	15.74	0.06	16.12	16.15	0.03
3.24	--	15.75	15.80	0.05	16.25	16.28	0.03
3.28	--	15.79	15.84	0.05	16.33	16.36	0.03
3.66	F	16.22	16.27	0.05	16.96	16.98	0.02
3.8	--	15.98	16.03	0.05	16.77	16.80	0.03
4.78	G	17.53	17.56	0.03	18.34	18.36	0.02
5.17	--	17.60	17.64	0.04	18.41	18.43	0.02
5.26	--	17.63	17.66	0.03	18.45	18.47	0.02
5.34	--	17.66	17.69	0.03	18.48	18.50	0.02
5.55	H	17.54	17.58	0.04	18.39	18.40	0.01
5.65	--	17.50	17.53	0.03	18.34	18.36	0.02
5.79	--	17.86	17.88	0.02	18.70	18.71	0.01
5.88	I	18.09	18.11	0.02	18.87	18.88	0.01
5.951	--	17.98	18.00	0.02	18.74	18.76	0.02
5.98	J	18.04	18.06	0.02	18.80	18.81	0.01

Notes: --- Indicates unlettered FEMA cross section; estimated from FIS flood profile
* indicates cross section added at Macy's property

Existing Conditions Model (ECM)

The ECM is the same as the CEM.

Proposed Conditions Model (PCM)

The proposed conditions incorporate the proposed structure into the model. The proposed structure will consist of 20 ft by 24 ft building supported by six 16-inch diameter columns and a 10 ft by 20 ft deck supported by three 4-inch square post. The proposed location of the structure is shown in Figure 3, and sketches of the structures are shown in Figure 4. The PCM was created from the ECM by modifying the cross sections to include the proposed columns and posts to support the structure.

Analysis Results

Water surface elevations predicted by the ECM and PCM models were compared to determine if the proposed structure resulted in a rise in water surface elevations for either the base flood or the floodway. Table 3 presents the computed water surface elevations for the ECM and PCM, and the calculated difference. As the table indicates, the proposed construction will not result in a rise in water surface elevations along the Nehalem River for either the base flood or the floodway. A FEMA No-Rise Certificate is provided in Figure 5. Supporting data, including the effective FEMA flood hazard mapping and modeling cross sections, are included in Appendix A.

If you have any questions, please feel free to contact me by phone at (503) 485-5490, or by email at cbahner@westconsultants.com.

Table 3 - Proposed Conditions vs. Existing Conditions

River Station (RM) and FEMA XS Letter		Regulatory Water Surface Elevation (ft)			With Floodway Water Surface Elevation (ft)		
		ECM	PCM	Difference (PCM - ECM)	ECM	PCM	Difference (PCM - ECM)
0.45	A	13.11	13.11	0.00	13.45	13.45	0.00
0.60	--	13.32	13.32	0.00	13.61	13.61	0.00
0.73	--	13.36	13.36	0.00	13.65	13.65	0.00
0.78	--	13.40	13.40	0.00	13.70	13.70	0.00
0.80	--	13.50	13.50	0.00	13.80	13.80	0.00
0.86	--	13.55	13.55	0.00	13.86	13.86	0.00
0.95	--	13.63	13.63	0.00	13.94	13.94	0.00
0.994	B	13.68	13.68	0.00	14.00	14.00	0.00
1.05	C	13.70	13.70	0.00	14.01	14.01	0.00
1.33	--	13.88	13.88	0.00	14.20	14.20	0.00
1.50	--	14.04	14.04	0.00	14.36	14.36	0.00
1.74	--	14.31	14.31	0.00	14.64	14.64	0.00
1.92	--	14.74	14.74	0.00	15.13	15.13	0.00
2.01	D	14.84	14.84	0.00	15.26	15.26	0.00
2.28	--	14.95	14.95	0.00	15.35	15.35	0.00
2.49	--	15.15	15.15	0.00	15.53	15.53	0.00
2.92	E	15.53	15.53	0.00	15.89	15.89	0.00
2.96*		15.54	15.54	0.00	15.90	15.90	0.00
2.964*		15.55	15.55	0.00	15.92	15.92	0.00
2.968*		15.56	15.56	0.00	15.95	15.95	0.00
2.972*		15.57	15.57	0.00	15.95	15.95	0.00
3.02*		15.56	15.56	0.00	16.02	16.02	0.00
3.12	--	15.74	15.74	0.00	16.15	16.15	0.00
3.24	--	15.80	15.80	0.00	16.28	16.28	0.00
3.28	--	15.84	15.84	0.00	16.36	16.36	0.00
3.66	F	16.27	16.27	0.00	16.98	16.98	0.00
3.8	--	16.03	16.03	0.00	16.80	16.80	0.00
4.78	G	17.56	17.56	0.00	18.36	18.36	0.00
5.17	--	17.64	17.64	0.00	18.43	18.43	0.00
5.26	--	17.66	17.66	0.00	18.47	18.47	0.00
5.34	--	17.69	17.69	0.00	18.50	18.50	0.00
5.55	H	17.58	17.58	0.00	18.40	18.40	0.00
5.65	--	17.53	17.53	0.00	18.36	18.36	0.00
5.79	--	17.88	17.88	0.00	18.71	18.71	0.00
5.88	I	18.11	18.11	0.00	18.88	18.88	0.00
5.951	--	18.00	18.00	0.00	18.76	18.76	0.00
5.98	J	18.06	18.06	0.00	18.81	18.81	0.00

Notes: --- Indicates unlettered FEMA cross section; estimated from FIS flood profile
* indicates cross section added at Macy's property

References

U.S. Army Corps of Engineers, Hydrologic Engineering Center; HEC-RAS, River Analysis System, Software Version 5.0.7; March 2019

U.S. Department of Homeland Security, Federal Emergency Management Agency; Flood Insurance Study for Tillamook County, OR and Incorporated Areas, 41057C002A, Vol. 1 and 2; Effective September 28, 2018

U.S. Department of Homeland Security, Federal Emergency Management Agency; Letter of Map Revision, Case No. 14-10-1695P; Effective September 24, 2015

U.S. Department of Homeland Security, Federal Emergency Management Agency, Region X; Procedures for "No-Rise" Certification for Proposed Developments in the Regulatory Floodway; October 2013

Oregon Department of Geology and Mineral Industries; Light Detection and Ranging (LiDAR) data; OLC North Coast 2020; Published August 2009

Figures

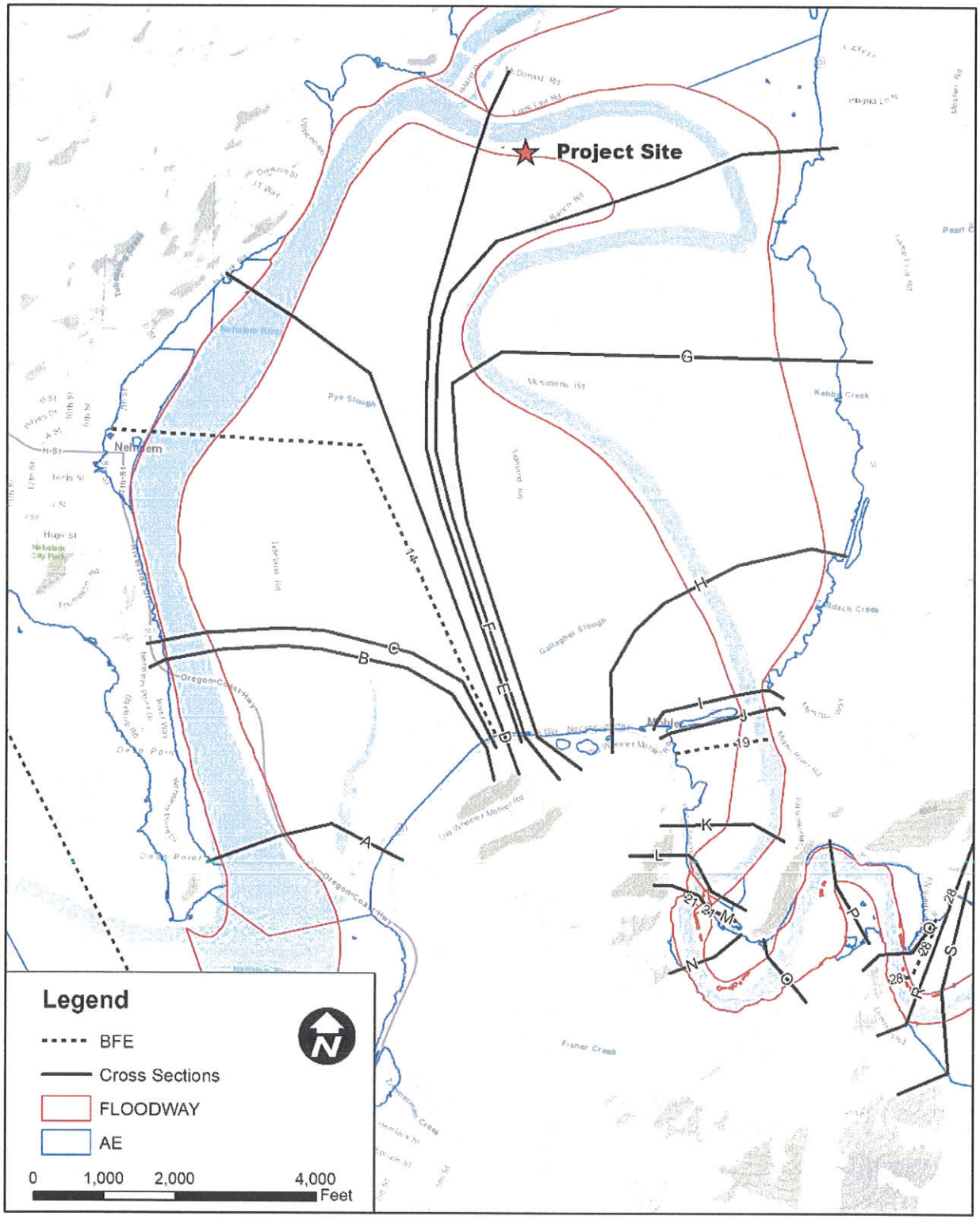


Figure 1 - Study Area with Effective FEMA Flood Hazard Mapping

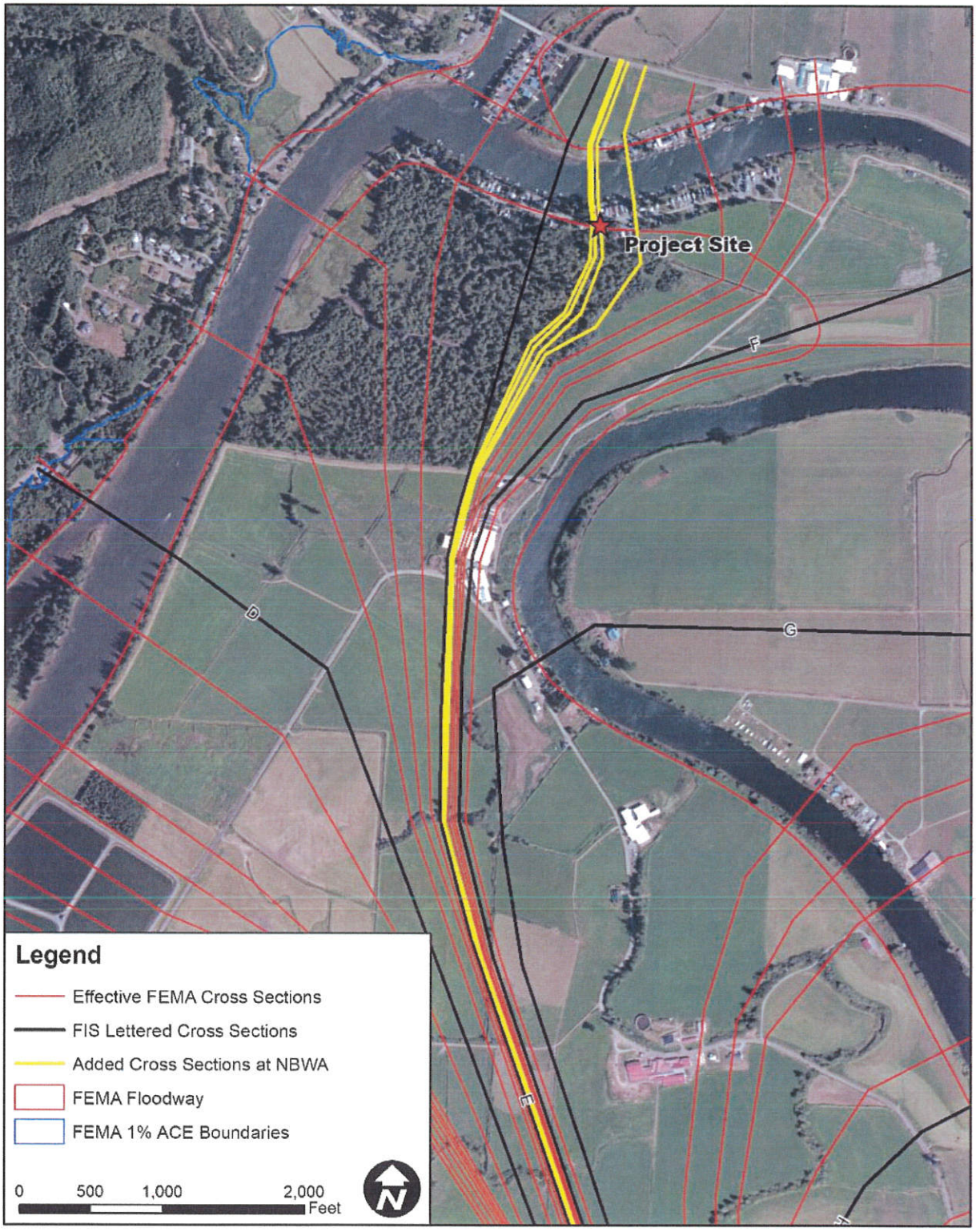


Figure 2 - Cross Sections Added for CEM

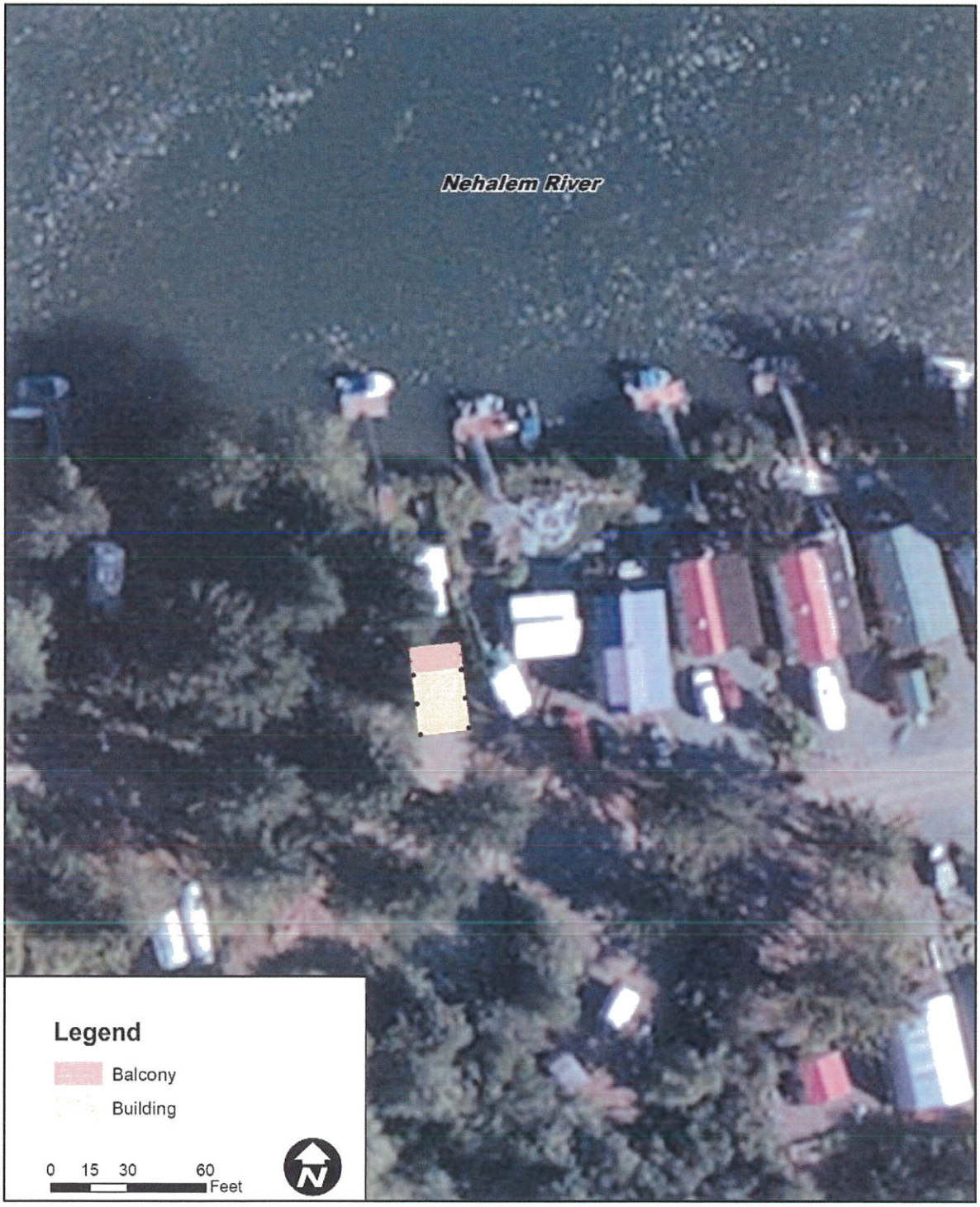
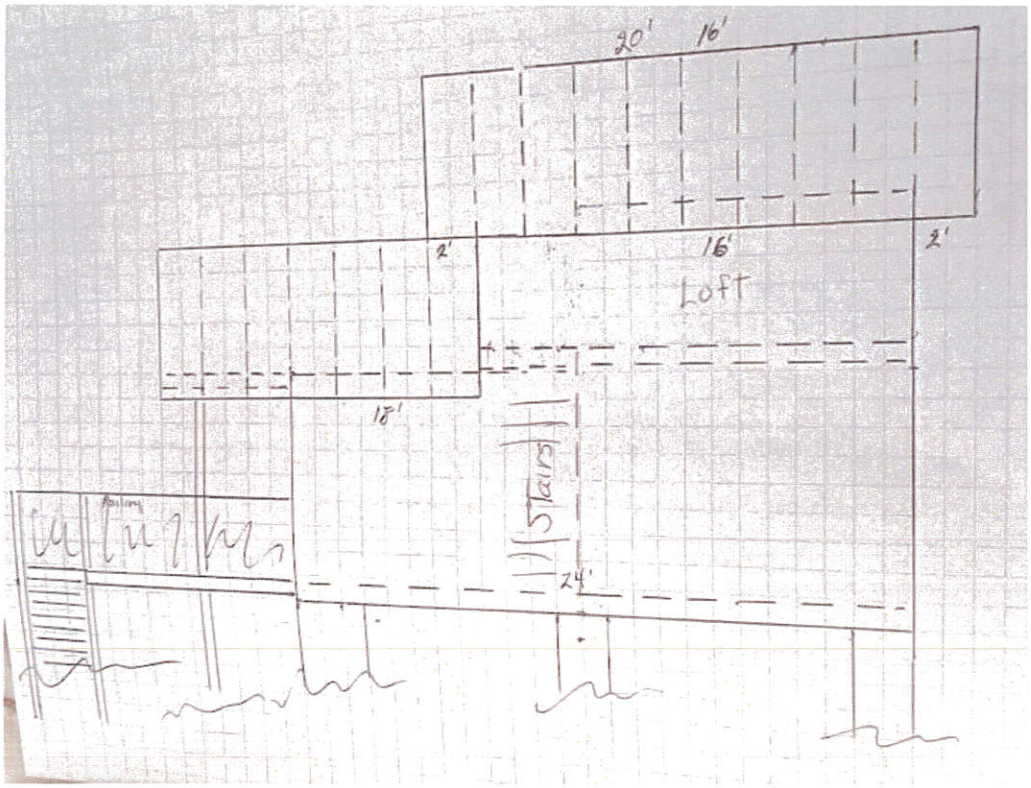


Figure 3 – Proposed Structure Location



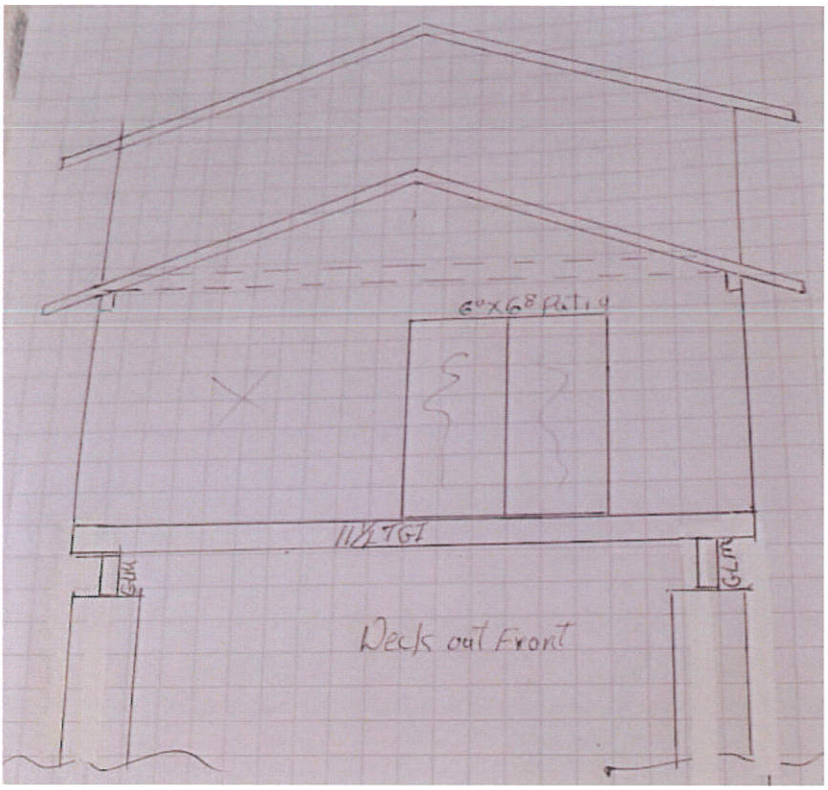


Figure 4 – Proposed Structure

ENGINEERING "NO-RISE" CERTIFICATION

This is to certify that I am a duly qualified engineer licensed to practice in the State of Oregon.

It is to further certify that the attached technical data supports the fact that the proposed construction at Tillamook County (Sports Camp Site #33) will
(Name of Development)

not impact the 100-year flood elevations, floodway elevations and floodway widths on the Nehalem River at published sections
(Name of Stream)

in the Flood Insurance Study for Tillamook County & Incorporated Areas (41057CV001A),
(Name of Community)

dated September 28, 2018 and will not impact the 100-year flood elevations, floodway elevations, and floodway widths at unpublished cross-sections in the vicinity of the proposed development.

Attached are the following documents that support my findings:

Technical Memorandum by WEST Consultants, Inc. dated April 9, 2021.

(Date) April 9, 2021

(Signature) Chris Bahner (Title) Project Manager

WEST Consultants, Inc.
2601 25th Street
Suite 450
Salem, OR 97302
(Address)

REGISTERED PROFESSIONAL ENGINEER
67050PE
OREGON
JULY 9, 2001
CHRIS D. BAHNER
EXPIRATION DATE: 12/31/21

Figure 5 – FEMA No-Rise Certificate

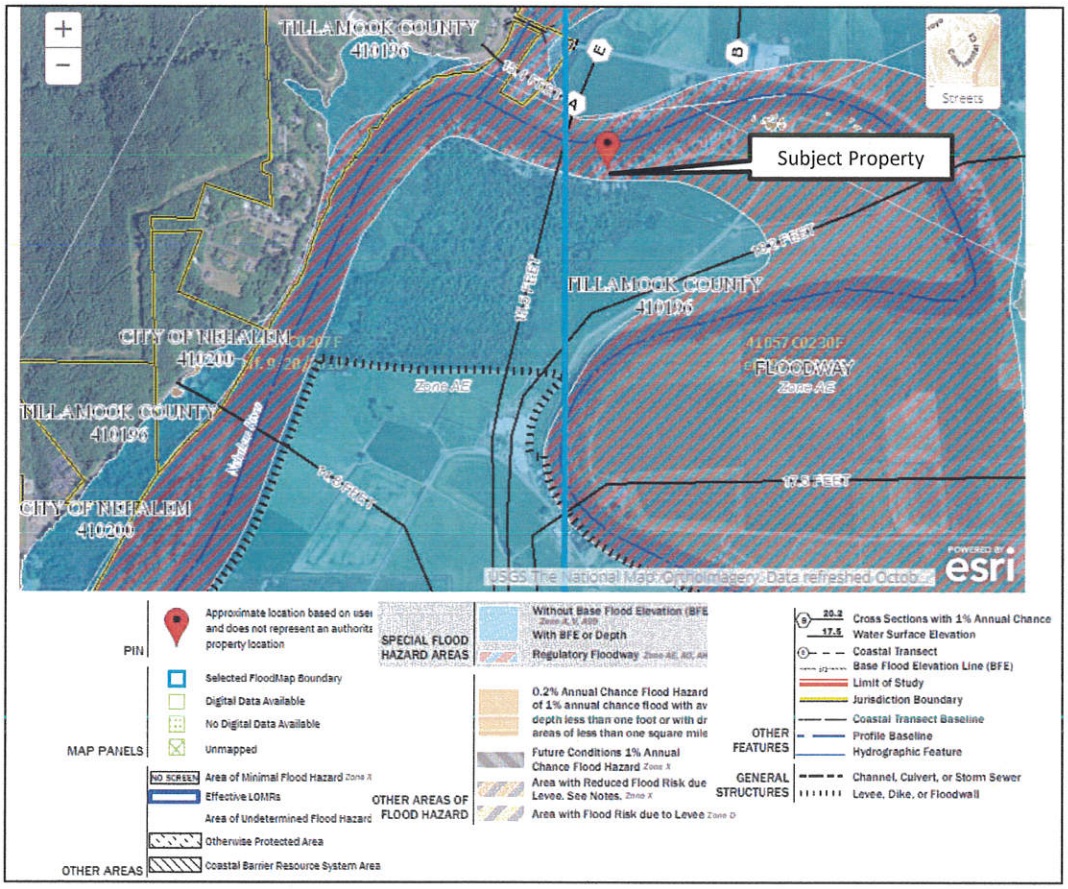
Appendix A

Effective FIRM Panel

Effective Floodway Data Table

HEC-RAS Cross Section Plots, Existing and Proposed Conditions

Effective FEMA FIRM Panel



Effective FEMA Floodway Data Table

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,360	1,045	15,503	4.8	13.1	13.1	13.5	0.4
B	5,178	675	13,824	5.2	13.6	13.6	14.0	0.4
C	5,455	617	13,139	5.5	13.7	13.7	14.0	0.3
D	10,617	740	14,543	4.9	14.8	14.8	15.3	0.5
E	15,349	570	9,568	6.5	15.5	15.5	15.9	0.4
F	19,086	2,480	20,374	6.0	16.2	16.2	17.0	0.8
G	25,158	4,388	41,742	3.8	17.5	17.5	18.4	0.9
H	29,642	1,813	12,272	8.1	17.5	17.5	18.4	0.9
I	31,318	349	6,529	9.0	18.0	18.0	18.8	0.8
J	31,608	270	6,183	9.6	18.0	18.0	18.8	0.8
K	33,368	734	9,487	8.7	20.3	20.3	20.7	0.4
L	34,492	670	9,877	7.1	20.8	20.8	21.7	0.9
M	34,620	346	7,700	7.7	20.8	20.8	21.7	0.9
N	35,660	326	7,069	8.3	23.8	23.8	24.3	0.5
O	37,350	491	11,908	4.9	25.9	25.9	26.4	0.5
P	39,090	532	10,916	5.4	26.6	26.6	27.1	0.5
Q	40,680	236	6,670	8.8	27.4	27.4	27.9	0.5
R	41,490	455	10,047	5.8	28.8	28.8	29.4	0.6
S	41,890	435	9,623	5.9	29.0	29.0	29.6	0.6
T	42,830	285	6,434	8.8	29.5	29.5	30.3	0.8
U	43,210	378	8,062	7.1	30.7	30.7	31.2	0.5
V	45,790	370	7,391	7.7	32.4	32.4	32.9	0.5
W	47,330	593	8,370	6.7	32.9	32.9	33.7	0.8
X	48,885	631	12,388	4.5	33.7	33.7	34.7	1.0

[1]Feet above confluence with Nehalem Bay

TABLE 24

FEDERAL EMERGENCY MANAGEMENT AGENCY

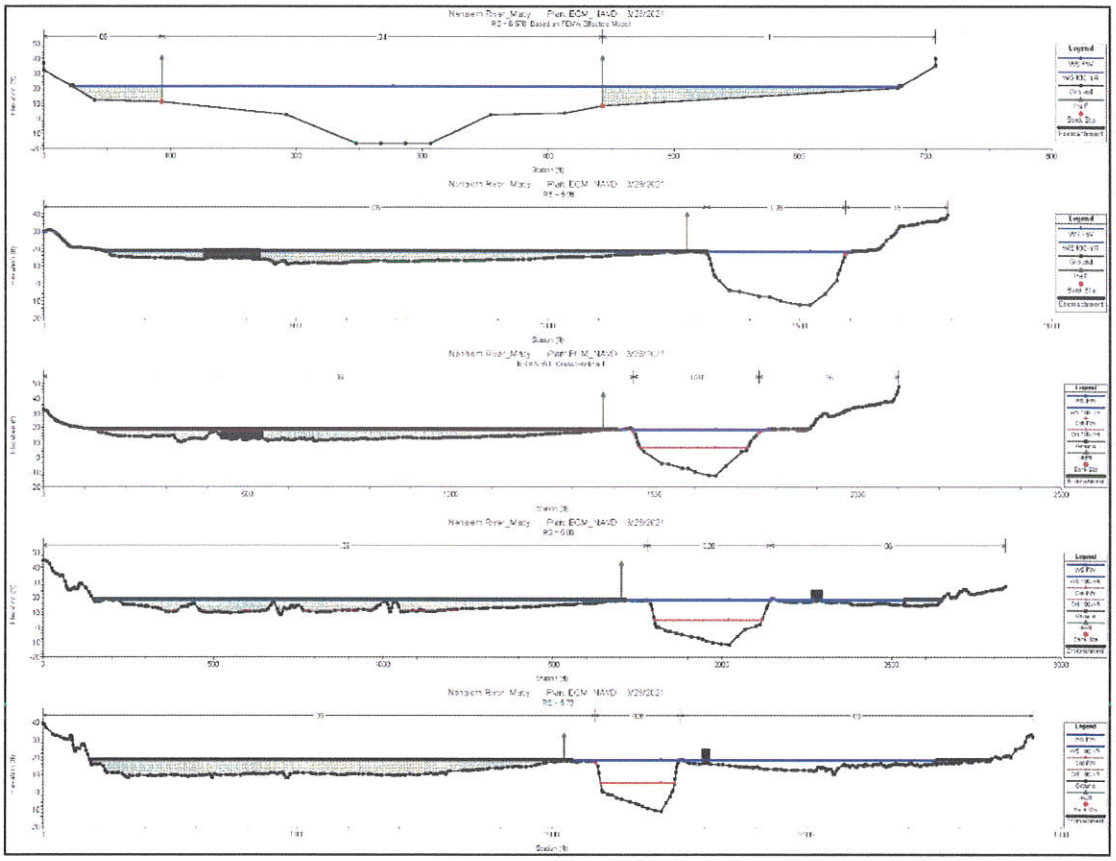
TILLAMOOK COUNTY, OREGON

AND INCORPORATED AREAS

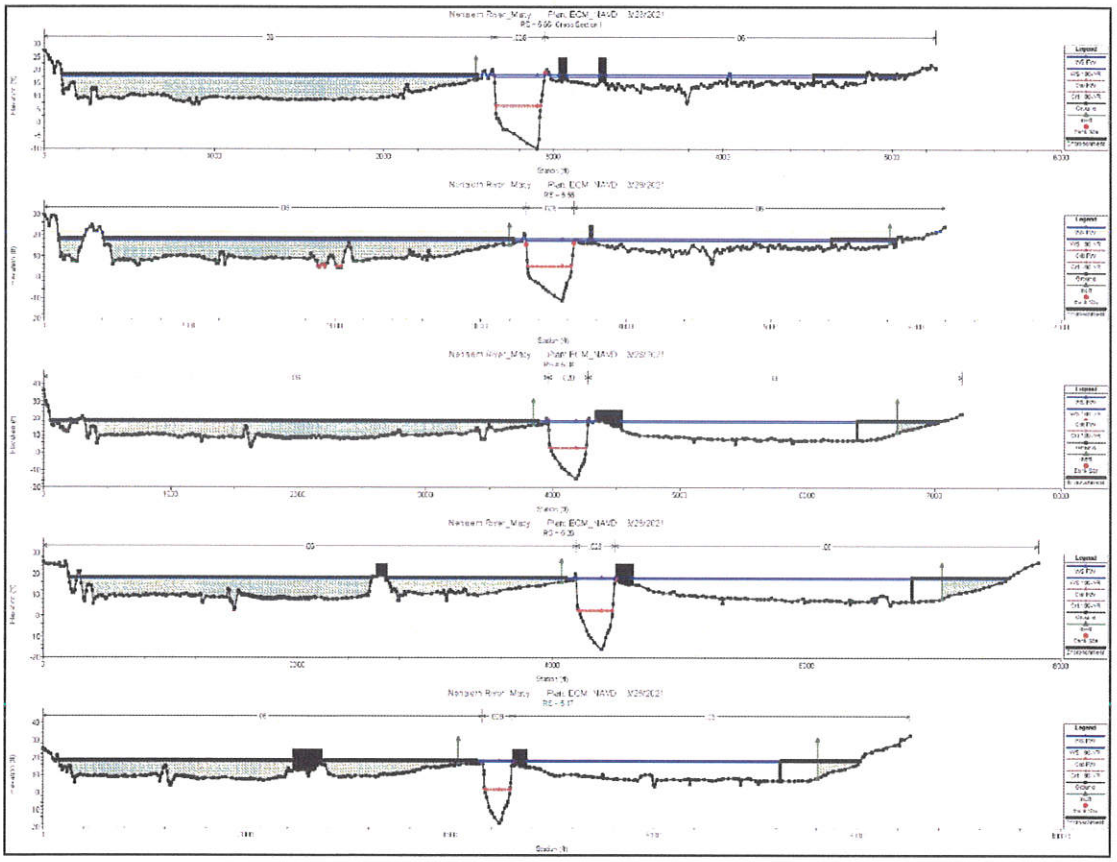
FLOODWAY DATA

FLOODING SOURCE: NEHALEM RIVER

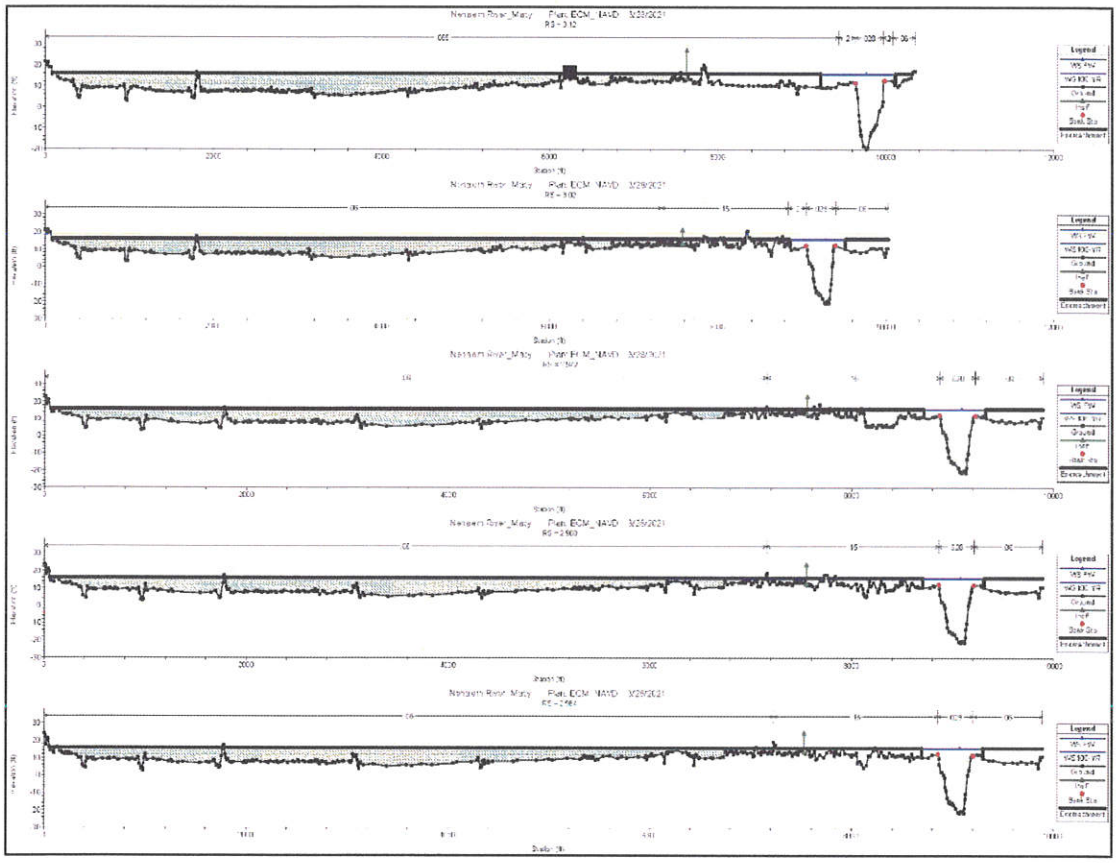
HEC-RAS Cross Section Plots – Existing Conditions



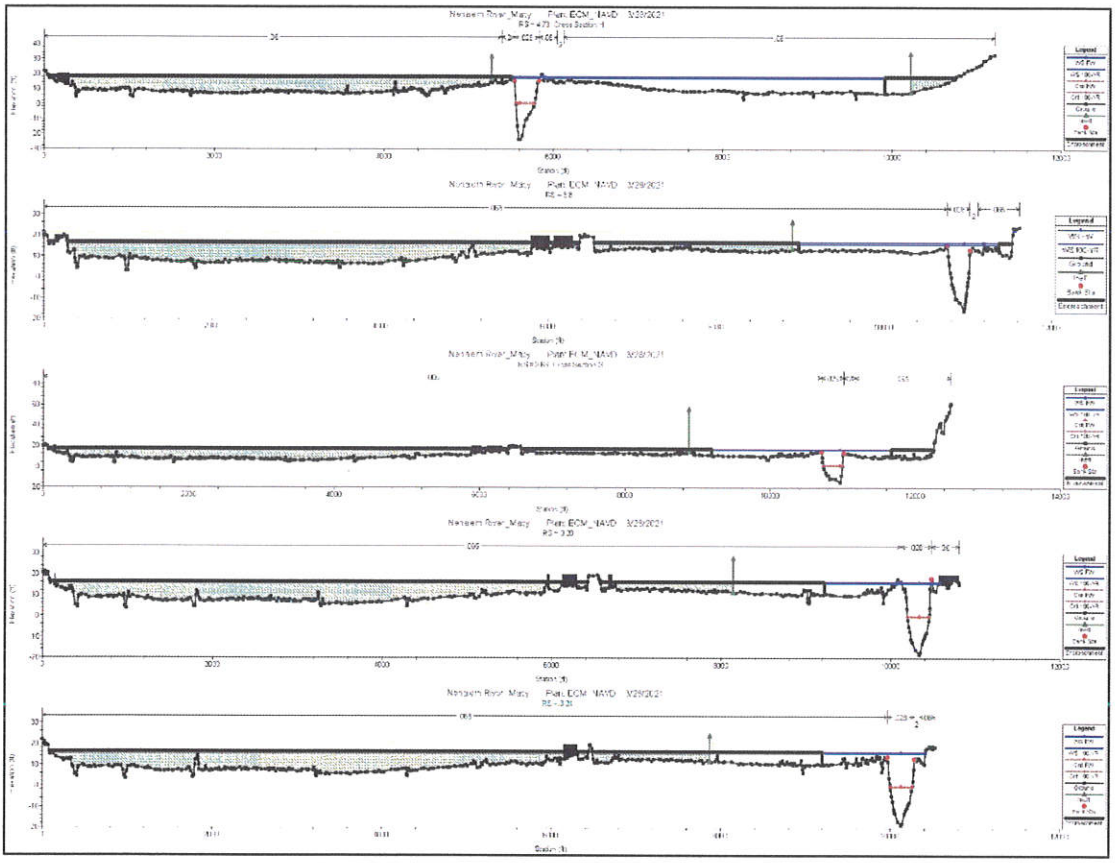
HEC-RAS Cross Section Plots – Existing Conditions



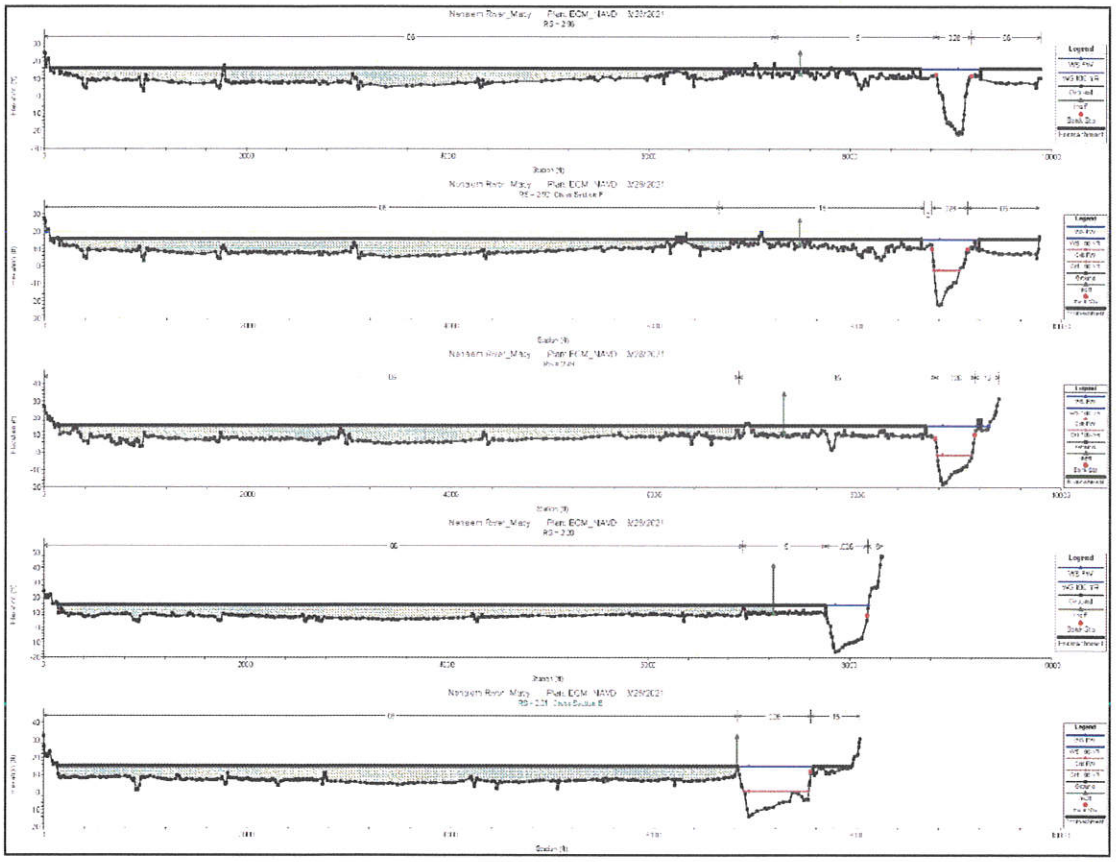
HEC-RAS Cross Section Plots – Existing Conditions



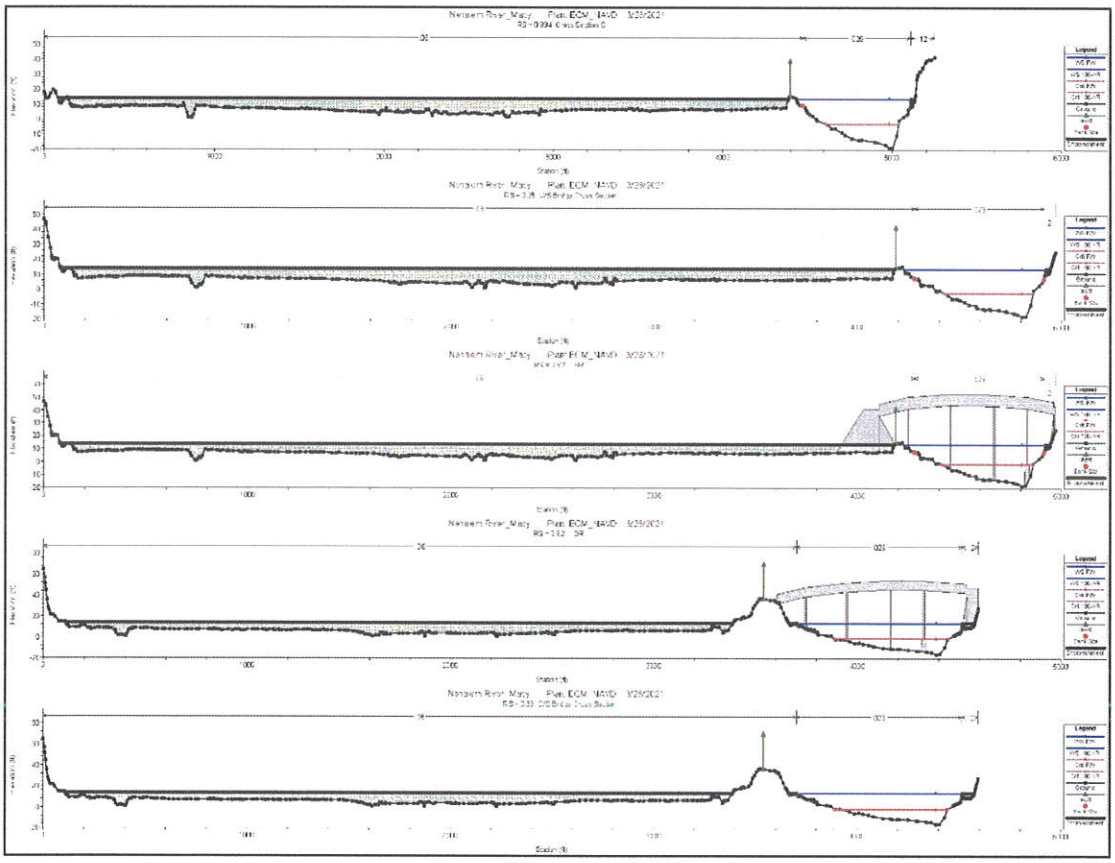
HEC-RAS Cross Section Plots – Existing Conditions



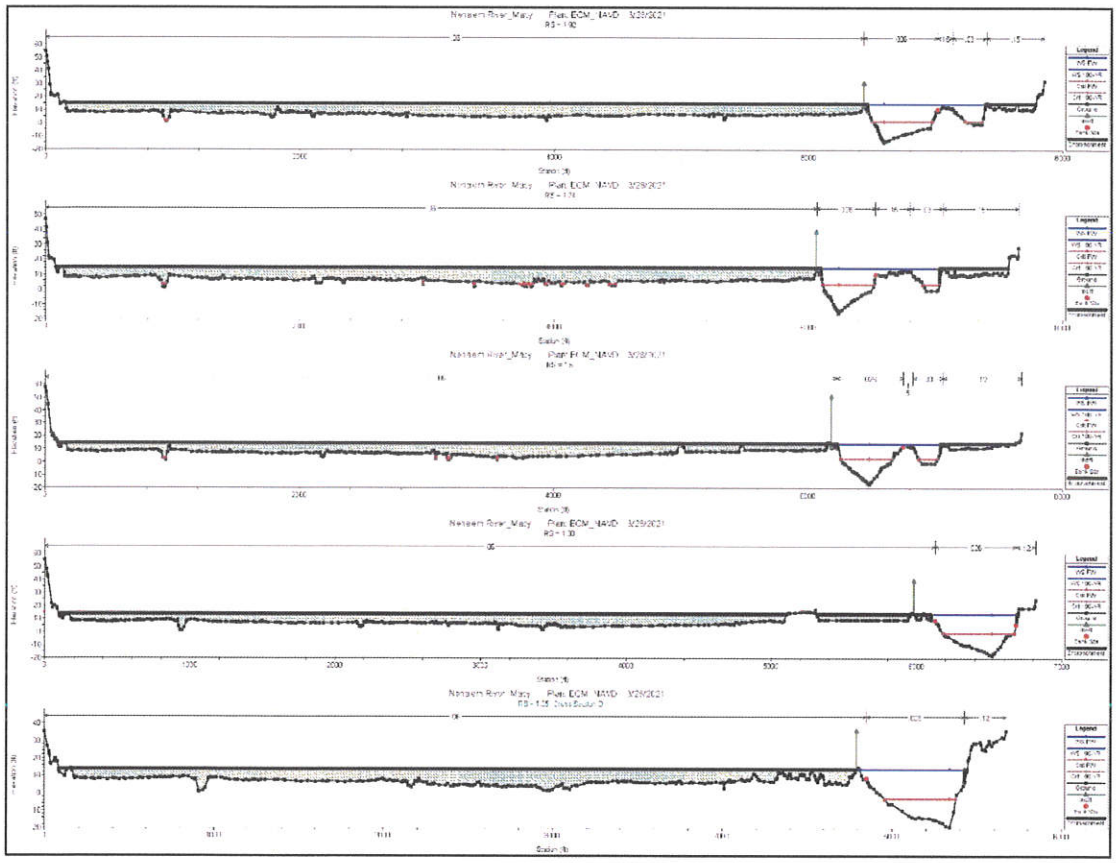
HEC-RAS Cross Section Plots – Existing Conditions



HEC-RAS Cross Section Plots – Existing Conditions



HEC-RAS Cross Section Plots – Existing Conditions



HEC-RAS Cross Section Plots – Existing Conditions