



*Land of Cheese, Trees and Ocean Breeze*

**FLOODWAY DEVELOPMENT PERMIT #851-23-000136-PLNG: DAVIS**

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

February 16, 2024

Dear Property Owner:

This is to confirm that the Tillamook County Department of Community Development **APPROVED WITH CONDITIONS** the above-cited requests on February 16, 2024. A copy of the application, along with a map of the request area and the applicable criteria for review are available for inspection on the Tillamook County Department of Community Development website: <https://www.tillamookcounty.gov/commdev/landuseapps> and is also available for inspection at the Department of Community Development office located at 1510-B Third Street, Tillamook, Oregon 97141.

**Appeal of this decision.** This decision may be appealed to the Tillamook County Planning Commission, who will hold a public hearing. Forms and fees must be filed in the office of this Department before **4:00pm on February 28, 2024**. This decision will become final on February 28, 2024 after 4:00pm unless an appeal is filed in accordance with Tillamook County Land Use Ordinance Article X.

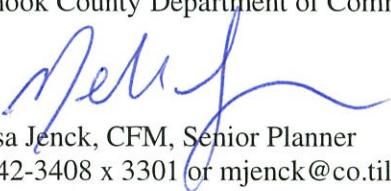
- Request:** A review of a Floodway Development Permit for the placement of deck addition to an existing single-family dwelling near the Nehalem River.
- Location:** The subject property is accessed from McDonald Road, a County road, and is designated as Tax Lot 1400, of Section 24CB of Township 3 North, Range 10 West of the Willamette Meridian, Tillamook County, Oregon.
- Zone:** Rural Residential 2-Acre (RR-2) Zone
- Applicant/  
Property Owner:** Trent & Kellie Davis, 13975 SW High Tor Drive, Tigard, OR 97224

## CONDITIONS OF APPROVAL

1. The applicant/property owner shall obtain all required Federal, State, and Local permits and/or licenses and will comply with applicable rules and regulations.
2. All applicable permits, including a consolidated Zoning and Building Permit from the Tillamook County Department of Community Development shall be obtained prior to construction the proposed dwelling.
3. A minimum 10-foot riparian setback from the Nehalem River, determined by the Oregon Department of Fish and Wildlife (ODFW) and measured in accordance with TCLUO Section 4.140, shall be maintained on the subject property for the proposed deck improvement. Future development on the subject property shall also maintain the required riparian setback and comply with the requirements of TCLUO 4.140: Development Requirements for Water Quality and Streambank Stabilization.
4. The applicant/property owner shall maintain the riparian vegetation enhancement (planting) plan with the Oregon Department of Fish and Wildlife (ODFW) and a copy of the plan shall be submitted to the Department at the time of consolidated Zoning and Building Permit application submittal. The plan submittal shall include written confirmation from ODFW that the plan is acceptable.
5. The applicant/property owner shall submit a site plan drawn to scale that confirms all required setbacks are met. The site plan shall be submitted to the Department of Community Development at the time of consolidated Zoning and Building Permit application submittal.
6. Development shall comply with the applicable standards of TCLUO Section 3.310 'Rural Residential 2-Acre (RR-2) zone', TCLUO Section 3.106, 'Estuary Conservation 1 (EC1) Zone' and TCLUO Section 3.545 'Shoreland Overlay'.
7. The applicant/property owner shall comply with all 'Zone AE' flood hazard construction standards per FEMA requirements. All construction shall adhere to the standards for residential structure in the 'AE' flood zone per TCLUO Section '3.510'. This shall be reviewed and verified by this Department during the Building Permit process.
8. The dwelling and deck shall comply with all Building Code requirements for Anchoring, Construction Materials and Methods, and Utilities for residential structure located in the 'AE' and Floodway flood zones.
9. Owner/Applicant shall submit a 'Post-Elevation' certificate completed by a registered surveyor and provided on the current FEMA form prior to receiving Certificate of Occupancy for the dwelling.
10. This approval shall be void on February 16, 2026, unless construction of approved plans has begun, or an extension is requested from, and approved by this Department.

Sincerely,

Tillamook County Department of Community Development



Melissa Jenck, CFM, Senior Planner  
503-842-3408 x 3301 or mjenck@co.tillamook.or.us

Sarah Absher, CFM, Director  
Enc.: Vicinity, Assessor's and Zoning maps



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**FLOODWAY DEVELOPMENT PERMIT #851-23-000136-PLNG  
DAVIS**

**ADMINISTRATIVE DECISION & STAFF REPORT  
Decision Date: February 16, 2024**

**Decision: APPROVED WITH CONDITIONS  
(This is not Building or Placement Permit Approval)**

**Report Prepared by: Melissa Jenck, CFM, Senior Planner**

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**I. GENERAL INFORMATION:**

**Request:** A review of a Floodway Development Permit for the placement of deck addition to an existing single-family dwelling near the Nehalem River.

**Location:** The subject property is accessed from McDonald Road, a County road, and is designated as Tax Lot 1400, of Section 24CB of Township 3 North, Range 10 West of the Willamette Meridian, Tillamook County, Oregon.

**Zone:** Rural Residential 2-Acre (RR-2) Zone

**Applicant/  
Property Owner:** Trent & Kellie Davis, 13975 SW High Tor Drive, Tigard, OR 97224

**Proposal Description:** The subject property is bordered by McDonald Road to the east, is vegetated and encompasses 0.30 acres according to County Assessors records (Exhibit A). Access to the subject property is from McDonald Road, a County road (Exhibit B). The surrounding area is zoned RR-2 with the general area consisting of single-family dwellings, with Farm zoned property to the east (Exhibit A).

No wetlands or geologic hazards are mapped on the subject property (Exhibit A). The area is an area of Special Flood Hazard, Flood Zone “AE” and Floodway, according to FEMA FIRM 41057C0230F dated September 28, 2018 (Exhibit A). Staff finds that the proposed addition is subject to the standards and criteria of TCLUO Section 3.510, Flood Hazard Overlay’ which are addressed below.

Currently, the application is a Floodplain Development Permit approval for the ad addition of a deck to an existing single-family dwelling, within the FEMA Floodway on the Nehalem River (Exhibit B). The criteria and standards for each of these reviews are addressed below in this Staff Report.

## II. APPLICABLE ORDINANCE AND COMPREHENSIVE PLAN PROVISIONS:

The desired use is governed through the following Sections of the Tillamook County Land Use Ordinance (TCLUO). The suitability of the proposed use, in light of these criteria, is discussed in Section III of this report:

- A. TCLUO Section 3.010, 'Rural Residential 2-Acre (RR-2) Zone'
- B. TCLUO Section 3.510, 'Flood Hazard Overlay (FH) Zone'
- C. TCLUO Section 4.140, 'Requirements for Protection of Water Quality and Streambank Stabilization'

## III. ANALYSIS

The subject project is located within the regulatory floodway and is subject to a Type II review per TCLUO Article X: Development Approval Procedures. TCLUO Section 10.070 requires notification of Type II applications to be mailed to landowners within 250 feet of the subject properties, to allow at least 14 days for written comment and requires staff to consider comments received in making the decision.

**Findings:** Notice of the request was mailed to property owners and agencies on July 31, 2023. Staff finds that notification requirements have been met. Comments were received from the Oregon Department of Fish and Wildlife (ODFW), Department of State Lands and FEMA Region X and are included as "Exhibit C".

### A. TCLUO Section 3.010, 'Rural Residential 2-Acre (RR-2) Zone'

*PURPOSE: The purpose of the RR zone is to provide for the creation and use of small acreage residential homesites. Land that is suitable for Rural Residential use has limited value for farm or forest use; it is physically capable of having homesites on parcels of five acres or less; and it can be utilized for residential purposes without constraining the use of surrounding resource-zoned properties for resource-production purposes.*

**Section 3.010(2) and 3.010(3)** list uses permitted outright and conditionally in the zone.

**Findings:** Staff finds that the proposed addition to an existing single-family dwelling is an outright permitted use. Staff finds that Applicant will be required to demonstrate compliance with other applicable standards, such as parking, height, and yard setback requirements, at the time of applying for consolidated zoning/building permit approval.

### B. TCLUO Section 3.510 'Flood Hazard (FH) Overlay'

(5) *GENERAL STANDARDS: In all areas of special flood hazards the following standards are required:*

...

#### *ANCHORING*

*(b) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.*

*(c) All manufactured dwellings must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (See FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for techniques). A certificate signed by a registered architect or*

engineer which certifies that the anchoring system is in conformance with FEMA regulations shall be submitted prior to final inspection approval.

#### CONSTRUCTION MATERIALS AND METHODS

(d) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(e) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(f) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be elevated to prevent water from entering or accumulating within the components during conditions of flooding. In Flood Zones A, A1-A30, AE, V, V1-V30 or VE, such facilities shall be elevated three feet above base flood elevation. In Flood Zone AO, such facilities shall be elevated above the highest grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least two feet above the highest adjacent grade if no depth number is specified).

#### UTILITIES

(g) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood water into the system.

(h) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

(i) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding, consistent with Oregon Department of Environmental Quality (DEQ) standards.

**Findings:** Applicant has provided a site plan and building plans which indicate support design improvements to site deck addition to prevent flotation and lateral movement (Exhibit B). An Elevation Certificate prepared by Erick White of Onion Peak Design dated February 21, 2023, details the location of the improvement of the deck (Exhibit B). Floor plans and structural plans provided confirm improvements and location of existing lowest floor and machinery (Exhibit B). Staff finds that these standards can be met through compliance with Conditions of Approval.

...

(6) *SPECIFIC STANDARDS FOR A ZONES (A, AE or A1-A30): In all areas of special flood hazards where base flood data has been provided as set forth in Section 3.510(2) or other base flood data are utilized, the following provisions are required:*

#### RESIDENTIAL CONSTRUCTION

(a) New construction and substantial improvement of any residential structure, including manufactured dwellings, shall have the lowest floor, including basement, at a minimum of three feet above base flood elevation.

(b) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or must meet or exceed the following minimum criteria:

(1) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(2) The bottom of all openings shall be no higher than one foot above grade.

(3) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

**Findings:** The proposed area of development is located in an AE Area of Special Flood Hazard as indicated on FEMA FIRM 41057C08230F dated September 28, 2018 (Exhibit A). Applicant is proposing to add a deck to an existing single-family dwelling (Exhibit B).

Applicant provided a pre-construction elevation certificate prepared by Erick White of Onion Peak Design, a licensed professional surveyor, for the proposed residential development. The proposed design includes a main floor level at 23.7-feet (Exhibit B). Erick White stated Base Flood Elevation (BFE) for the subject property is 17.2-feet (Exhibit A). The bottom floor of the existing dwelling is to be maintained as crawlspace and storage and is proposed to be located at 12.2-feet NAVD 88 (Exhibit B). The next higher floor, which is indicated to maintain the proposed living space of the dwelling and includes the proposed deck addition, is located at 23.7-feet NAVD 88, which exceeds 3-feet above BFE (Exhibit B). Applicant has the existing house plans which indicate the location of multiple vents, with the Elevation Certificate confirming adequate net area of openings provided by the vents for the enclosed bottom floor (Exhibit B). Staff finds that the proposed development complies with the standards of TCLUO 3.510(6).

*(9) SPECIFIC STANDARDS FOR FLOODWAYS: Located within areas of special flood hazard established in Section 3.510(2) are areas designated as regulatory floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:*

*(a) Encroachments in the regulatory floodway including fill, new construction, substantial improvements and other development are prohibited 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.*

*(b) If Subsection 8(a) is satisfied, all new construction and substantial improvement shall comply with all applicable flood hazard reduction provisions of Section 3.510(5) and (6).*

*(c) If hydrologic and hydraulic analysis indicates an increase in flood levels, the Applicant shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA before any encroachment, including fill, new construction, substantial improvement, or other development, in the regulatory floodway is permitted. Upon completion of the project, but no later than six months after project completion, a Letter of Map Revision (LOMR) shall be submitted to FEMA to reflect the changes on the FIRM and/or Flood Insurance Study. A LOMR is required only when the CLOMR documents an increase in flood levels during the occurrence of the base flood or where post-development conditions do not reflect what was proposed on the CLOMR.*

**Findings:** The Applicant retained Cascade Water Resources. to complete the no-rise analysis required for development within the regulatory floodway (Exhibit B). The analysis was performed for the proposed addition of the deck (Exhibit B). The analysis confirms that the proposed encroachments into the regulatory floodway will not result in any increase in flood levels (Exhibit B). Comments were received from Josha Crowley, FEMA Region X Service Center, to conclude that the proposed development as demonstrated in Cascade Water Resources report result in a zero rise in BFE (Exhibit C).

Staff finds that these standards have been met.

*(14) DEVELOPMENT PERMIT PROCEDURES: A development permit shall be obtained before construction or development begins within any area of special flood hazard zone. The permit shall be for all structures including manufactured dwellings, and for all development including fill and*

other development activities, as set forth in the Definitions contained in this Section of the Land Use Ordinance.

(a) Application for a development permit shall be made on forms furnished by the Community Development Director and shall include but not necessarily be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information in 3.510(14)(a)(1)–(4) is required and Development Permits required under this Section are subject to the Review Criteria put forth in Section 3.510(14)(b):

- (1) Elevation in relation to a specific datum of the lowest floor, including basement, of all structures as documented on an Elevation Certificate;
- (2) Elevation in relation to a specific datum to which any proposed structure will be floodproofed as documented on an Elevation Certificate;
- (3) If applicable, certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Subsection (6)(c)(3) of this Section; and
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(b) Development Permit Review Criteria

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

**Findings:** Staff finds the proposed location is within a FEMA ‘AE’ Flood zone and is therefore not located within a Coastal High Hazard Area (Exhibit B). Staff find this criterion is met.

- (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.

**Findings:** The Applicant retained Cascade Water Resources to complete the no-rise analysis required for development within the regulatory floodway (Exhibit B). The analysis confirms that the proposed encroachments into the regulatory floodway will not result in any increase in flood levels (Exhibit B). The proposed activity is for the placement of a deck addition to the existing dwelling on the subject property (Exhibit B). No additional fill outside the proposed structure has been designated on the application submittal (Exhibit B). Staff find these criteria are met.

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

**Findings:** The subject property is entirely located within the FEMA ‘AE’ Flood zone boundary and entirely within the Floodway (Exhibit A). No upland location exists on the subject property which would remove future development from the regulatory floodplain (Exhibit B). Staff find this criterion is met.

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

**Findings:** The Applicant retained Cascade Water Resources. to complete the no-rise analysis required for development within the regulatory floodway (Exhibit B). The analysis confirms that the proposed encroachments into the regulatory floodway will not result in any increase in flood levels or surface elevations anywhere in the model (Exhibit B). Staff find this criterion is met.

(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.

**Findings:** The Applicant has proposed the siting of a deck addition to an existing single-family residential structure on the subject property (Exhibit B). Staff find the proposed improvement is neither a critical facility as defined in TCLUO Section 3.510(4) or a Flood Refuge Platform. Staff find these criteria are met.

*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.*

**Findings:** Applicant submitted the required information on forms provided by the Community Development Department and as attachments thereto (Exhibit B). The entire property is located in an AE Area of Special Flood Hazard and in the Floodway of the Nehalem River and no alternative upland location exists (Exhibits A and B). Cascade Water Resources. provided a no-rise analysis certifying that the proposed addition will not create a rise in flood levels (Exhibit B). Staff finds that these criteria are met.

**C. TCLUO Section 4.140, 'Requirements for Protection of Water Quality and Streambank Stabilization'**

(1) *The following areas of riparian vegetation are defined:*

- (a) *Fifty (50) feet from lakes and reservoirs of one acre or more, estuaries, and the main stems of the following rivers where the river channel is more than 15 feet in width; Nestucca, Little Nestucca, Three Rivers, Tillamook, Trask, Wilson, Kilchis, Miami, Nehalem and North and South Fork Nehalem River.*

...

*For estuaries, all measurements are horizontal and perpendicular from the mean high water line or the line of non-aquatic vegetation, whichever is most landward. Setbacks for rivers, streams, and coastal lakes shall be measured horizontal and perpendicular from the ordinary high water line.*

**Findings:** Staff finds the subject property is adjacent to Nehalem River (Exhibit B). A 50-foot riparian setback is required.

(2) *All development shall be located outside of areas listed in (1) above, unless:*



- (a) For a bridge crossing; or
- (b) Direct water access is required in conjunction with a water dependent use; or
- (c) Because of natural features such as topography, a narrower riparian area protects equivalent habitat values; or
- (d) A minimal amount of riparian vegetation is present and dense development in the general vicinity significantly degrades riparian habitat values.

*Setbacks may be reduced under the provisions of (c) and (d) above only if the threat of erosion will not increase and a minimum 20-foot setback is maintained. Determinations of habitat values will be made by the Oregon Department of Fish and Wildlife.*

**Findings:** The subject property abuts the Nehalem River, which defines the riparian area as 50-feet. Applicant received a Riparian Exception, #851-20-000223-PLNG which reduced the riparian setback from 50-ft to 10-feet along the Nehalem River (Exhibit B). Robert Bradley, ODFW, provided comments contained in ‘Exhibit C’ recommending the continuance of those conditions as set forth by ODFW in the Riparian Exception (Exhibit C). Staff find the proposed deck expansion will continue to comply with the riparian setback allowance of 10-ft, as allowed through the Riparian Exception #851-20-000223-PLNG.

Staff finds that these requirements can be met through compliance with Conditions of Approval.

**V. DECISION: APPROVED WITH CONDITIONS**

Based on the findings shown above, Staff concludes that the Applicant has satisfied the review criteria, and can meet all applicable ordinance requirements at the time of application. Therefore, the Department approves Floodplain Development Permit 851-23-000136-PLNG subject to the Conditions of Approval in section VI of this report.

**Appeal of this decision.** This decision may be appealed to the Tillamook County Planning Commission, who will hold a public hearing. The forms and fees must be filed in the office of this Department before **4:00 PM on February 28, 2024.**

**VI. CONDITIONS OF APPROVAL:**

1. The applicant/property owner shall obtain all required Federal, State, and Local permits and/or licenses and will comply with applicable rules and regulations.
2. All applicable permits, including a consolidated Zoning and Building Permit from the Tillamook County Department of Community Development shall be obtained prior to construction the proposed dwelling.
3. A minimum 10-foot riparian setback from the Nehalem River, determined by the Oregon Department of Fish and Wildlife (ODFW) and measured in accordance with TCLUO Section 4.140, shall be maintained on the subject property for the proposed deck improvement. Future development on the subject property shall also maintain the required riparian setback and comply with the requirements of TCLUO 4.140: Development Requirements for Water Quality and Streambank Stabilization.
4. The applicant/property owner shall maintain the riparian vegetation enhancement (planting) plan with the Oregon Department of Fish and Wildlife (ODFW) and a copy of the plan shall be submitted to the Department at the time of consolidated Zoning and Building Permit application submittal. The plan submittal shall include written confirmation from ODFW that the plan is acceptable.

5. The applicant/property owner shall submit a site plan drawn to scale that confirms all required setbacks are met. The site plan shall be submitted to the Department of Community Development at the time of consolidated Zoning and Building Permit application submittal.
6. Development shall comply with the applicable standards of TCLUO Section 3.310 'Rural Residential 2-Acre (RR-2) zone', TCLUO Section 3.106, 'Estuary Conservation 1 (EC1) Zone' and TCLUO Section 3.545 'Shoreland Overlay'.
7. The applicant/property owner shall comply with all 'Zone AE' flood hazard construction standards per FEMA requirements. All construction shall adhere to the standards for residential structure in the 'AE' flood zone per TCLUO Section '3.510'. This shall be reviewed and verified by this Department during the Building Permit process.
8. The dwelling and deck shall comply with all Building Code requirements for Anchoring, Construction Materials and Methods, and Utilities for residential structure located in the 'AE' and Floodway flood zones.
9. Owner/Applicant shall submit a 'Post-Elevation' certificate completed by a registered surveyor and provided on the current FEMA form prior to receiving Certificate of Occupancy for the dwelling.
10. This approval shall be void on February 16, 2026, unless construction of approved plans has begun, or an extension is requested from, and approved by this Department.

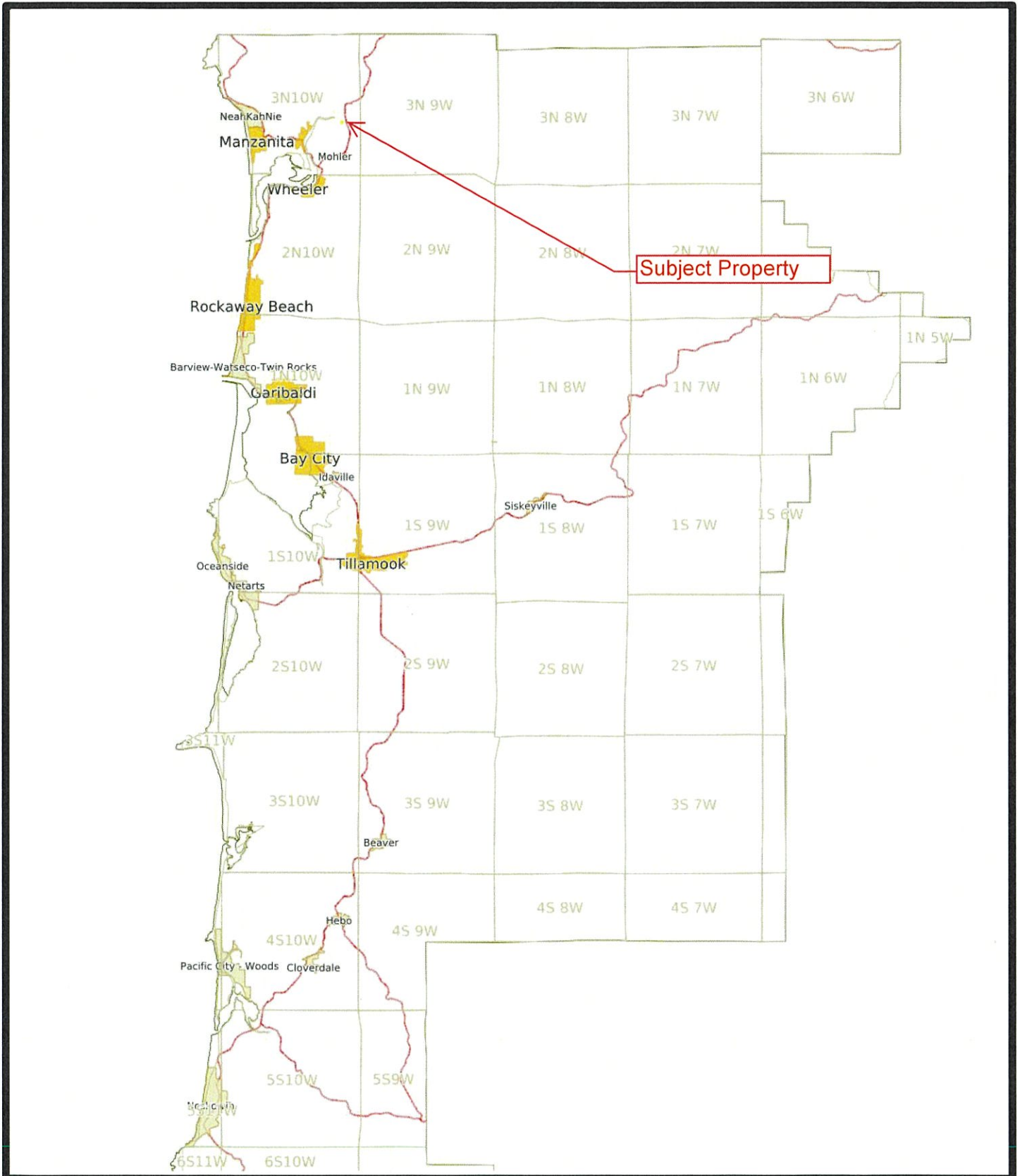
**VII. EXHIBITS**

All Exhibits referred to herein are, by this reference, made a part hereof:

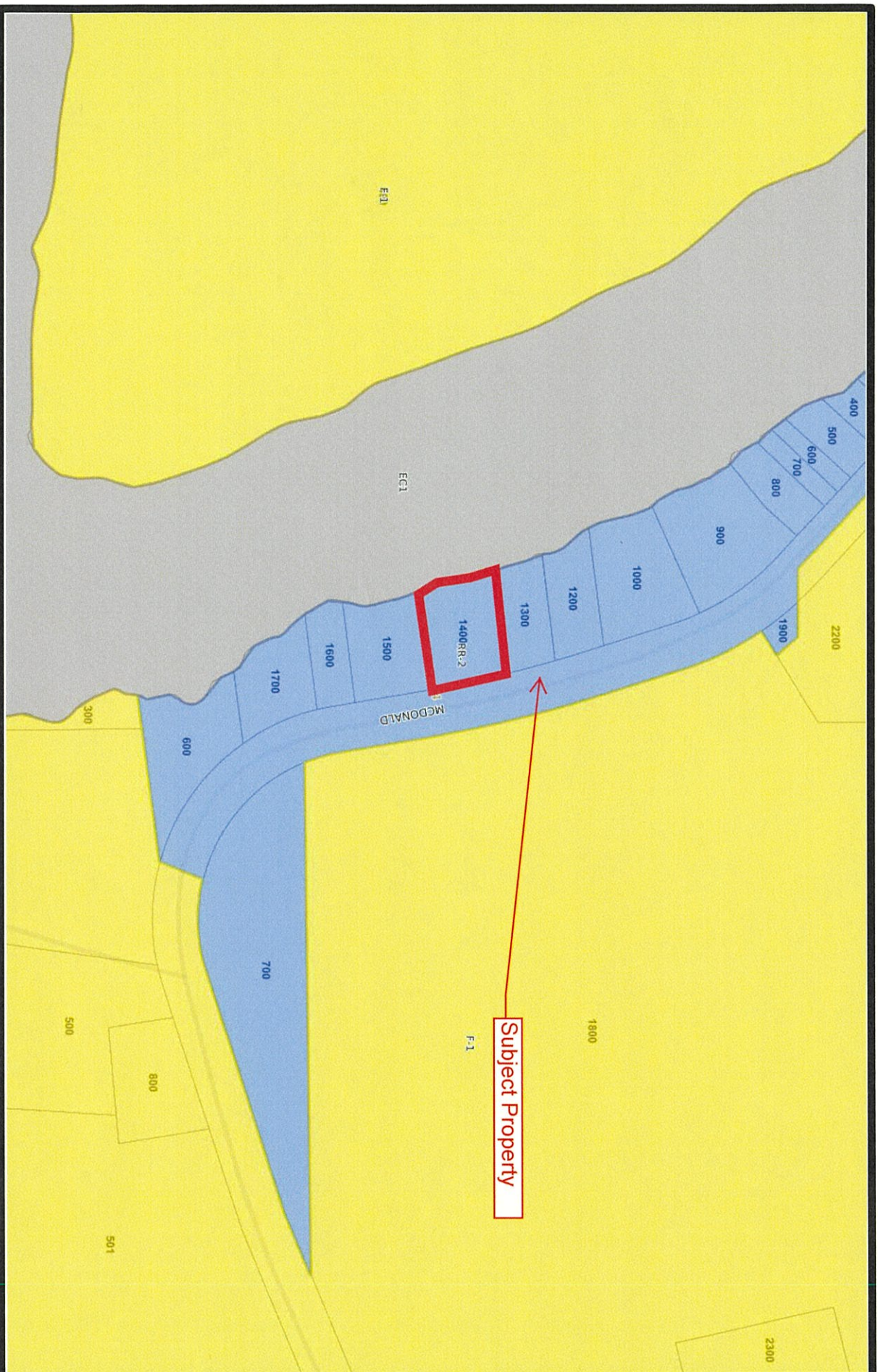
- A. Location map, Assessor map, Zoning map, FEMA FIRM, NWI Wetlands map
- B. Applicant's submittal
- C. Public Comments

# **EXHIBIT A**

# Vicinity Map



# Zoning Map



# National Flood Hazard Layer FIRMette



## Legend

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

	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway

	0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X)
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes, Zone X
	Area with Flood Risk due to Levee Zone D

	Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone

	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall

	20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
	17.5 Coastal Transect
	Base Flood Elevation Line (BFE)
	Limit of Study
	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.
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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 7/29/2023 at 8:29 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.

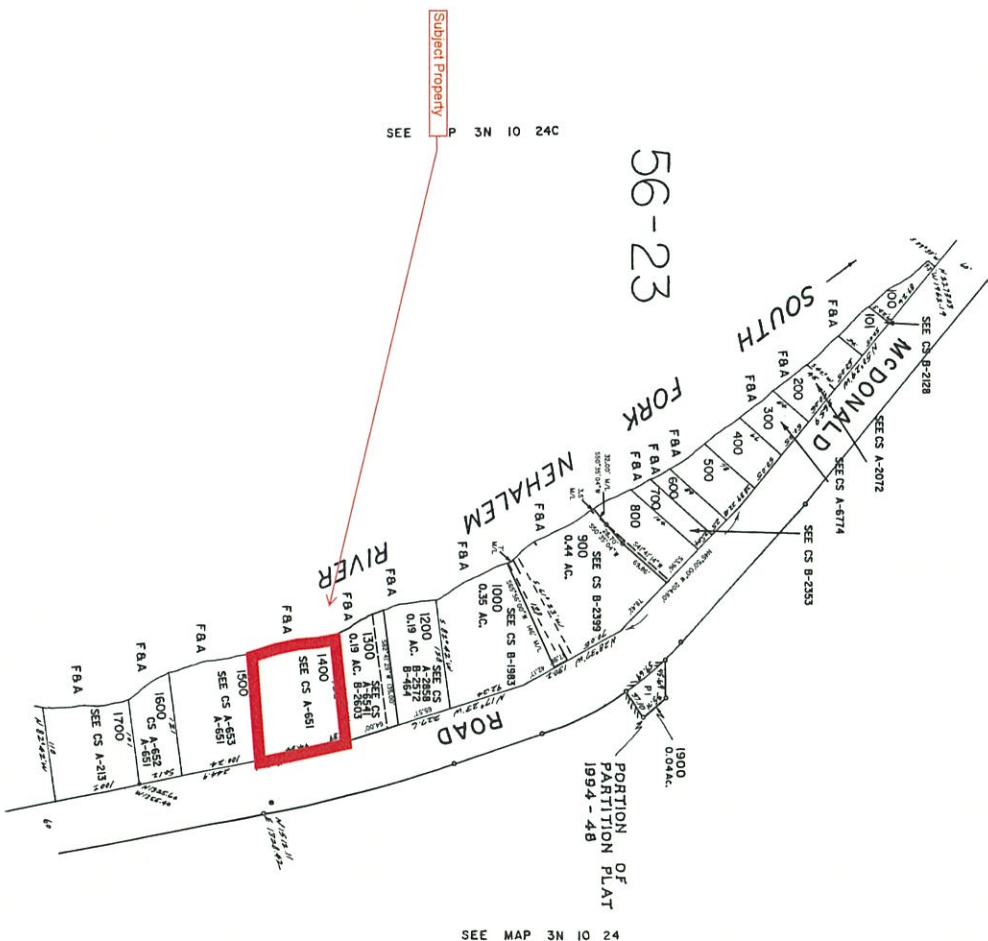
THIS MAP WAS PREPARED FOR  
ASSESSMENT PURPOSE ONLY

NW1/4 SW1/4 SEC.24 T.3N. R.10W. W.M.  
TILLAMOOK COUNTY  
1" = 100'

3N 10 24CB

CANCELLED NO.  
102  
1100  
1800

SEE MAP 3N 10 24



SEE MAP 3N 10 24

SEE MAP 3N 10 24

3N 10 24CB  
REVISED 04/10/03, SA

**Tillamook County**  
**2022 Real Property Assessment Report**  
 Account 89175

Map 3N1024CB01400  
 Code - Tax ID 5623 - 89175

Tax Status Assessable  
 Account Status Active  
 Subtype NORMAL

Legal Descr See Record

Mailing DAVIS, TRENT D & KELLIE M  
 13975 SW HIGH TOR DR  
 TIGARD OR 97224-1598

Deed Reference # 2020-2592  
 Sales Date/Price 04-27-2020 / \$0  
 Appraiser WHITNEY HOPKES

Property Class 101 MA SA NH  
 RMV Class 101 02 WF 263

Site	Situs Address	City
1	16395 MC DONALD RD	COUNTY

Value Summary						
Code Area		RMV	MAV	AV	RMV Exception	CPR %
5623	Land	71,880		Land	0	
	Impr	385,530		Impr	0	
<b>Code Area Total</b>		457,410	216,670	216,670	0	
<b>Grand Total</b>		457,410	216,670	216,670	0	

Land Breakdown									
Code Area	ID #	RFPD	Ex	Plan Zone	Value Source	Trend %	Size	Land Class	Trended RMV
5623					LANDSCAPE - FAIR	100			500
	1	<input checked="" type="checkbox"/>		RR-2	Market	110	0.29 AC		58,880
					OSD - AVERAGE	100			12,500
<b>Code Area Total</b>							0.29 AC		71,880

Improvement Breakdown									
Code Area	ID #	Year Built	Stat Class	Description	Trend %	Total Sqft	Ex%	MS Acct	Trended RMV
5623	1	1967	139	Basement First Floor	169	1,286			385,530
<b>Code Area Total</b>						1,286			385,530

Exemptions / Special Assessments / Notations			
Code Area	Special Assessments	Amount	Year Used
5623	■ SOLID WASTE	12.00	2022

Comments 02/02/09 Updated inventory after phase one mapping.ef 1/23/15 Reappraised land and tabled values. WH



# Statewide Wetlands Inventory



**Townships**

- LWI Study Area

**NHD Springs/Seeps**

- NHD Springs/Seeps

**NHD Streams and Rivers**

- Perennial
- Intermittent
- Ephemeral
- Unknown
- Canal/Ditch
- NHD Area
- NHD Waterbody

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

**SWI Agate-Winlo Soils**

- SWI Predominantly Hydric Soil Map Units
- SWI Agate-Winlo Soils

R. Sountham, Department of State Lands; Est. P. ERN, Gamin, (c) OpenStreetMap contributors, and the GIS user community; Source: Est. Maxar, Earthstar Geographics, and the GIS User Community, R. Sountham 2013

The Statewide Wetlands Inventory (SWI) represents the best data available at the time the map was published and is updated as new data become available. In all cases, actual field conditions determine the presence, absence and boundaries of wetlands and waters (such as creeks and ponds). An on-site investigation by a wetland professional can verify actual field conditions.



# **EXHIBIT B**



## DEVELOPMENT PERMIT

OFFICE USE ONLY	
Date Stamp	
<b>RECEIVED</b>	
MAY 04 2023	
BY: <u>Counter</u>	
<input type="checkbox"/> Approved	<input type="checkbox"/> Denied
Received by: <u>MT</u>	
Receipt #:	
Fees: <u>1,600.00</u>	
Permit No: 851- <u>23</u> - <u>00036</u> -PLNG	

**Applicant**  (Check Box if Same as Property Owner)

Name: Trent Davis Phone: 123 720 9756  
 Address: 13975 SW Highton Dr  
 City: Seaside State: OR Zip: 97224  
 Email: trent@TD-advisors.com

### Property Owner

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Email: \_\_\_\_\_

**Description of Work:** New deck addition

### Location:

Site Address: 16395 McDonald  
 Map Number: \_\_\_\_\_

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ Tax Lot(s) \_\_\_\_\_

### Complete all applicable fields:

Regulatory Floodway: <input checked="" type="checkbox"/>	Estuary: <input type="checkbox"/>	Floodplain: <input type="checkbox"/>
New: <input checked="" type="checkbox"/>	Addition: <input type="checkbox"/>	Replacement: <input type="checkbox"/>
Remodel: <input type="checkbox"/>	Demolish: <input type="checkbox"/>	
Dwelling: _____	Accessory Structure: <u>742 sq-ft</u>	
Culvert Diameter: _____	Bridge Length: _____	
Length: _____	Width: _____	
Fence Height: _____	Retaining Wall Height: _____	
Streambank Stabilization: _____	Other: _____	
Fill/Removal/Grading: <u>NO</u> CY	Vegetation Removal: <u>NO</u> CY	

Structure/Damage \$: <u>20K</u>	5 Year Construction \$: _____
<i>Substantial improvement/damage threshold 50% cost vs. value</i>	

### Flood Insurance Rate Map (FIRM) Panel Info

Tillamook County	Panel Number: 41057C _____
Effective Date: <u>9/28/18</u>	Property Flood Zone(s): <u>AE</u>
Floodway: <u>Y</u> N	Project Flood Zone(s): <u>AE</u>
Stream/Waterbody Name: <u>Nehalem River</u>	

### Elevation Data (NAVD 88)

Base Flood Elevation: <u>17.2'</u>	First Habitable Floor: _____
Lowest Floor/Horizontal Member: _____	
Enclosed Area: _____	Flood Vent Area: _____

### Other Required Permits


### 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) \_\_\_\_\_ 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. *No*
- (2) Fill placed within the Regulatory Floodway shall not result in any increase in flood levels during the occurrence of the base flood discharge. *No per No Rise prepared by Cascade March 6, 2023*
- (3) The fill is necessary for an approved use on the property. *✓ CS needed extra storage due to Flood plane*
- (4) The fill is the minimum amount necessary to achieve the approved use. *Yes, only Fill is new post*
- (5) No feasible alternative upland locations exist on the property. *entire property on Flood plane*
- (6) The fill does not impede or alter drainage or the flow of floodwaters. *Due to size of post does not change flow*
- (7) If the proposal is for a new critical facility, no feasible alternative site is available. *No*
- (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): *No*
- 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 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.

49' 10" x 15' 10"



**FEMA**

*NATIONAL FLOOD INSURANCE PROGRAM*

**ELEVATION CERTIFICATE**

**AND**

**INSTRUCTIONS**

**2019 EDITION**

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>.

# 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 Trent D. & Kellie M. Davis				Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 16395 McDonald Road				Company NAIC Number:	
City Nehalem		State Oregon		ZIP Code 97131	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) 3N 10 24 CB Tax Lot 1400					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Accessory</u>					
A5. Latitude/Longitude: Lat. <u>N45.72881</u> Long. <u>W123.86006</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> 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 <u>7</u>					
A8. For a building with a crawlspace or enclosure(s):					
a) Square footage of crawlspace or enclosure(s) <u>717.00</u> sq ft					
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>12</u>					
c) Total net area of flood openings in A8.b <u>720.00</u> sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
A9. For a building with an attached garage:					
a) Square footage of attached garage _____ sq ft					
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____					
c) Total net area of flood openings in A9.b _____ sq in					
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No					
SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number Tillamook County, Oregon 410196A			B2. County Name Tillamook		B3. State Oregon
B4. Map/Panel Number 41057C0230F	B5. Suffix	B6. FIRM Index Date 09-28-2018	B7. FIRM Panel Effective/ Revised Date 09-28-2018	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 17.2'
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input checked="" type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

**ELEVATION CERTIFICATE**

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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 16395 McDonald Road			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: P 711 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) _____	12.2	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
b) Top of the next higher floor _____	23.7	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only) _____		<input type="checkbox"/> feet <input type="checkbox"/> meters
d) Attached garage (top of slab) _____		<input type="checkbox"/> feet <input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) _____	23.7	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG) _____	12.0	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG) _____	12.1	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support _____	12.1	<input checked="" type="checkbox"/> feet <input type="checkbox"/> 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 Erick M. White	License Number PLS 78572	Place Seal Here	
Title Survey Manager			
Company Name Onion Peak Design			
Address 11460 Evergreen Way			
City Nehalem	State Oregon		ZIP Code 97131
Signature	Date 02-21-2023	Telephone (503) 440-4403	Ext.

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)  
 The top of bottom floor is the concrete slab on the first floor. This area is garage/storage. The next higher floor will be the first finished floor. The lowest machinery servicing the building will be the heating located on the first finished floor.



**ELEVATION CERTIFICATE**

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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 16395 McDonald Road			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

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>			<b>FOR INSURANCE COMPANY USE</b>
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 16395 McDonald Road			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.

# BUILDING PHOTOGRAPHS

See Instructions for Item A6.

OMB No. 1660-0008

Expiration Date: November 30, 2022

## ELEVATION CERTIFICATE

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>	<b>FOR INSURANCE COMPANY USE</b>		
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 16395 McDonald Road	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

Clear Photo One

Photo Two

Photo Two Caption

Clear Photo Two

# BUILDING PHOTOGRAPHS

## ELEVATION CERTIFICATE

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.  
16395 McDonald Road

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 Caption

Clear Photo Three

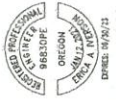
Photo Four

Photo Four

Photo Four Caption

Clear Photo Four





NO.	DATE	REVISION
1		PROPOSED
2		REVISED
3		REVISED
4		REVISED

105 East Cypress  
 Canby, OR 97118  
 503-323-2442  
 john@strickerengineering.com



**STRICKER**  
 ENGINEERS  
 ARCHITECTS  
 PLANNERS

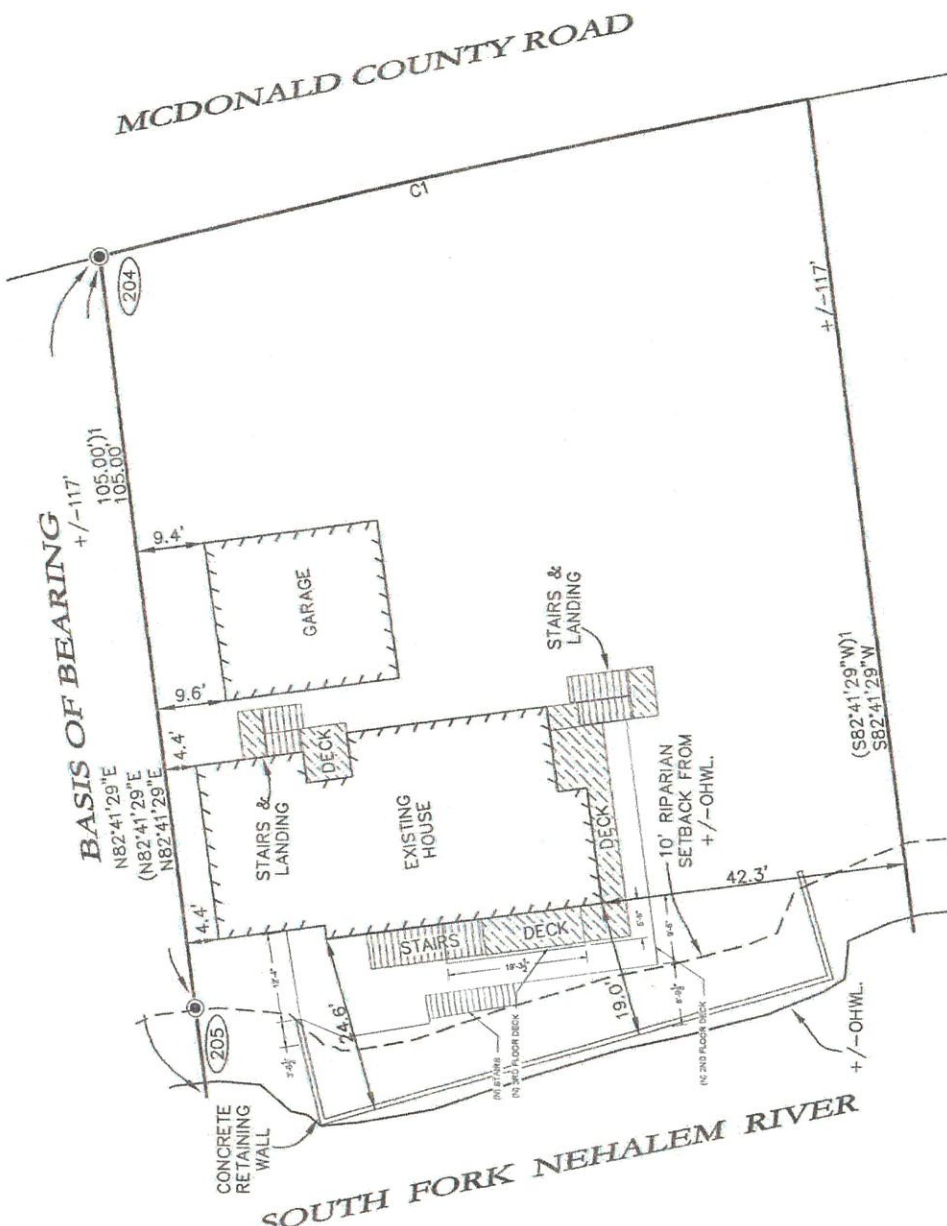
**TRENT AND KELLIE DAVIS**  
 HOUSE RENOVATION  
 1895 McDONALD RD  
 NEHALEM, OR 97131

DRAWN: [blank]  
 CHECKED: [blank]  
 SCALE: AS SHOWN  
 JOB NO.: 19722

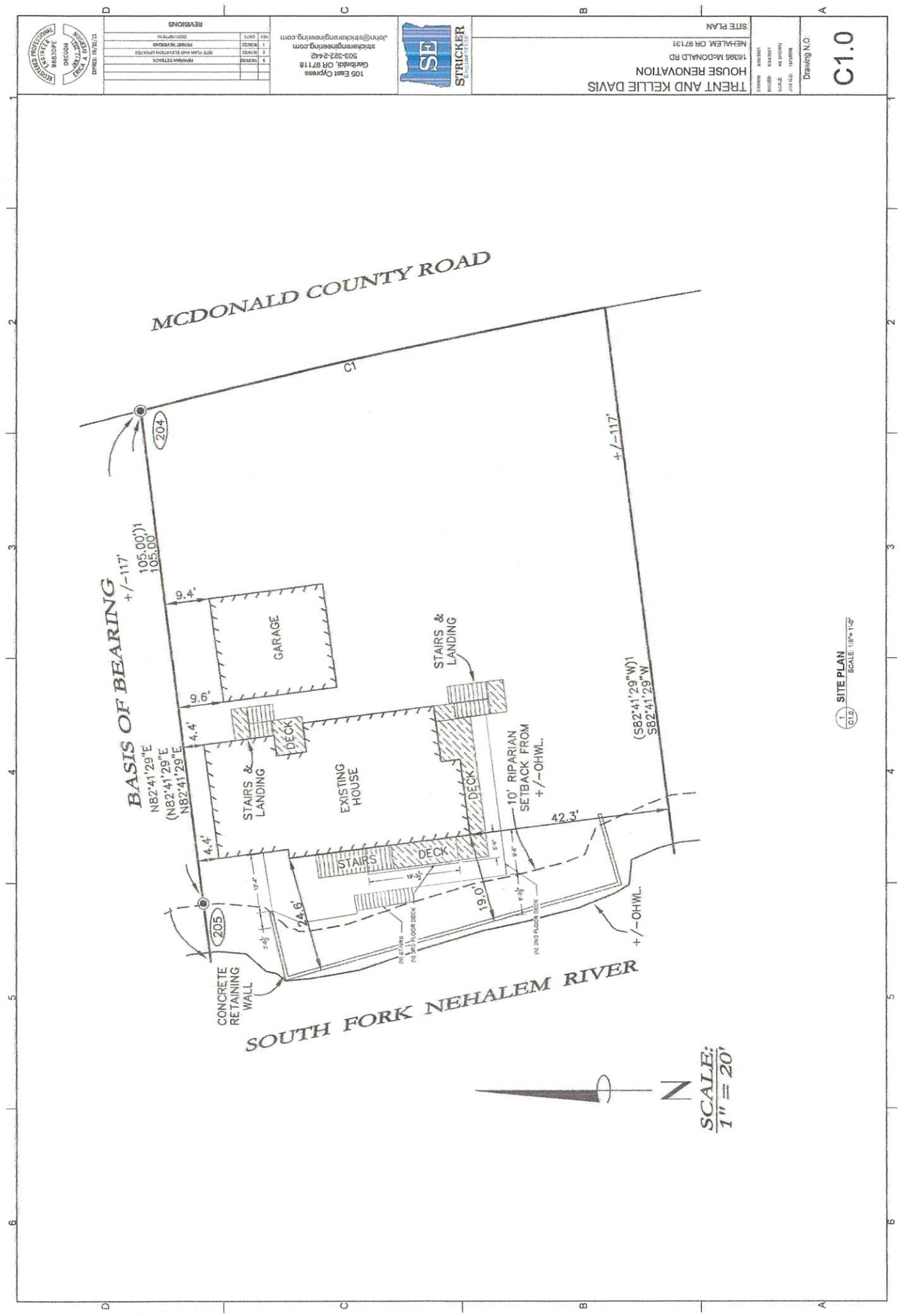
Drawing N.O.

**C1.0**

1. SITE PLAN  
 SCALE: 1/8" = 1'-0"



SCALE:  
 1" = 20'





S1.0

Drawing N.C.

TRENT AND KELLIE DAVIS  
HOUSE RENOVATION  
16395 McDONALD RD  
NEHALEM, OR 97131  
DECK FOUNDATION PLAN



105 East Cypress  
Gresham, OR 97116  
503-222-2442  
strickerengineering.com  
John@strickerengineering.com

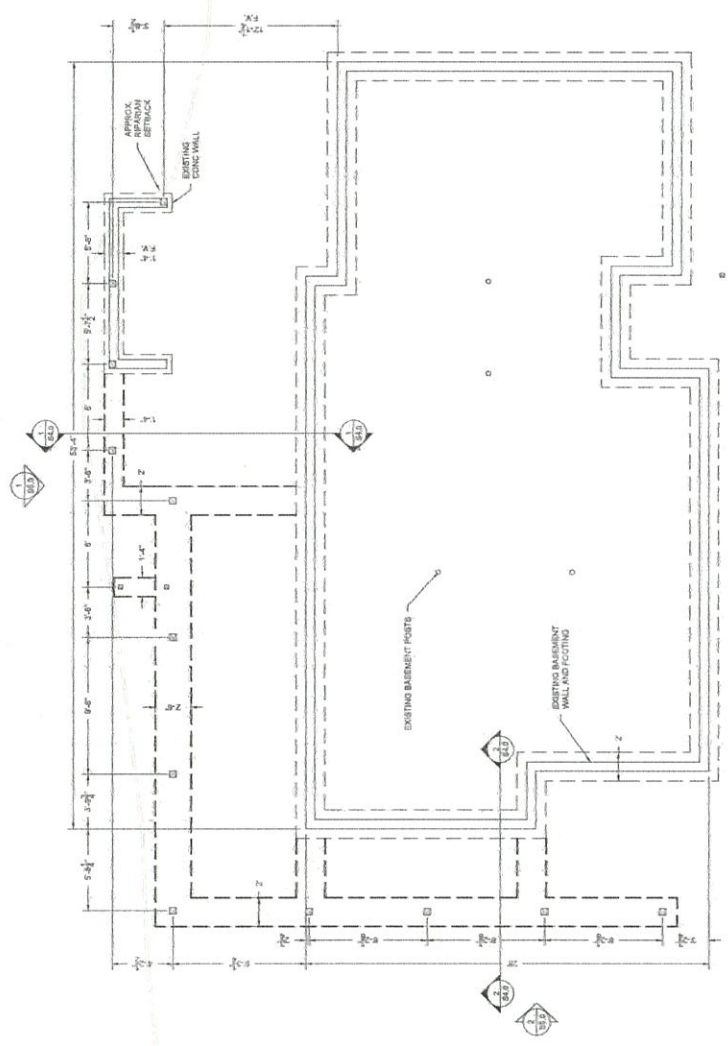
REVISIONS	
REV	DATE
1	1/2/20
2	2/10/20
3	2/10/20
4	2/10/20
5	2/10/20
6	2/10/20

REVISIONS  
1/2/20  
2/10/20  
2/10/20  
2/10/20  
2/10/20  
2/10/20

REVISIONS  
1/2/20  
2/10/20  
2/10/20  
2/10/20  
2/10/20  
2/10/20



1 FOUNDATION PLAN  
SCALE: 1/8" = 1'-0"





S2.0

Drawing N.C.

DATE: 08/26/21  
SCALE: AS SHOWN  
JOB NO.: 170000

CHANN: 3000PT  
BEARD: 3000PT  
16095 McDONALD RD  
NEHELEM, OR 97131  
TRENT AND KELLIE DAVIS  
HOUSE RENOVATION  
2ND FLOOR DECK FRAMING PLAN

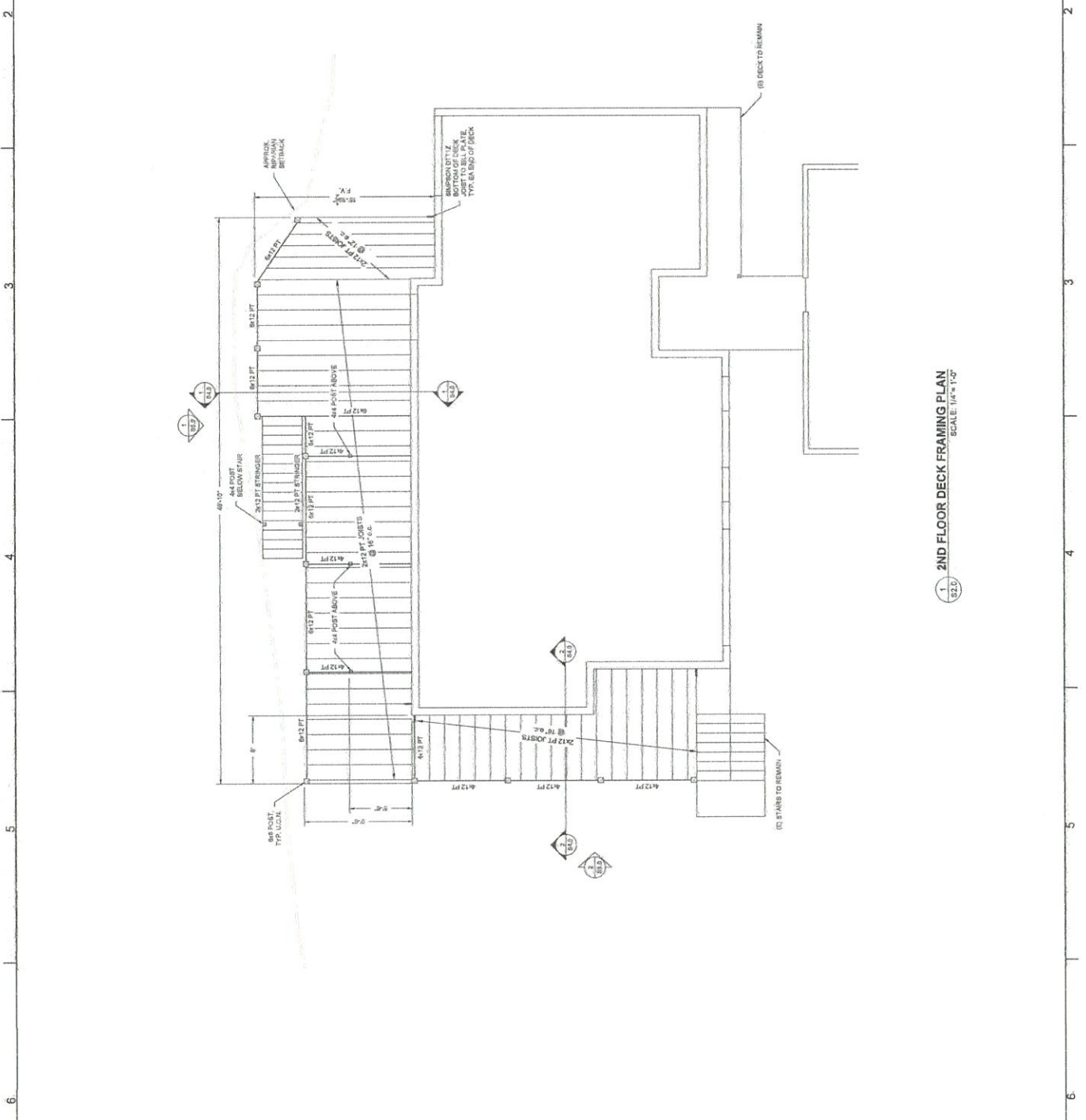
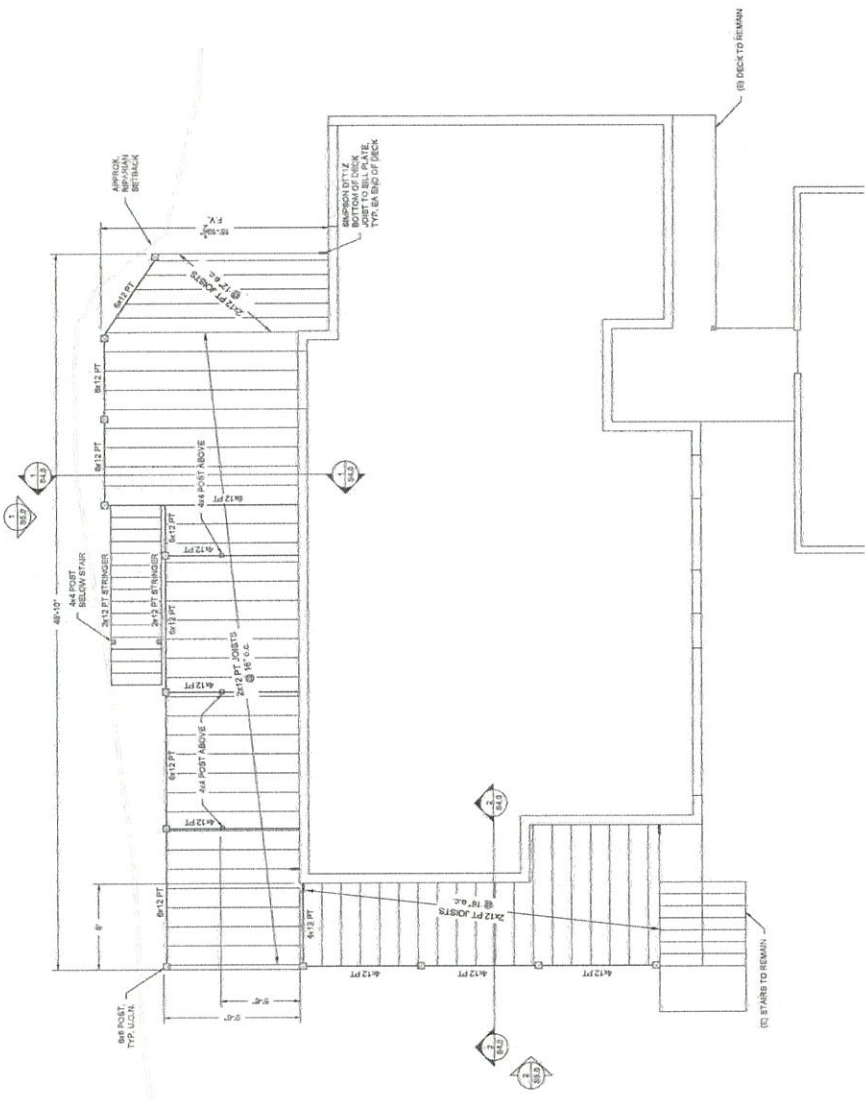


105 East Oxyres  
Garibaldi, OR 97119  
503-922-2442  
strickeringengineering.com

REV	DATE	DESCRIPTION
1	08/26/21	ISSUE FOR PERMIT
2	08/26/21	REVISED PER PERMIT
3	08/26/21	REVISED PER PERMIT



1 2ND FLOOR DECK FRAMING PLAN  
SCALE: 1/4" = 1'-0"







REV.	DATE	DESCRIPTION
1	06/22/21	PREPARE REVISIONS
2	07/13/21	RETE PLAN AND ELEVATION UPDATES
3	09/02/21	REVISION TRACK

105 East Oxyress  
 Garibaldi, OR 97119  
 503-322-2442  
 strickerengineering.com  
 john@strickerengineering.com



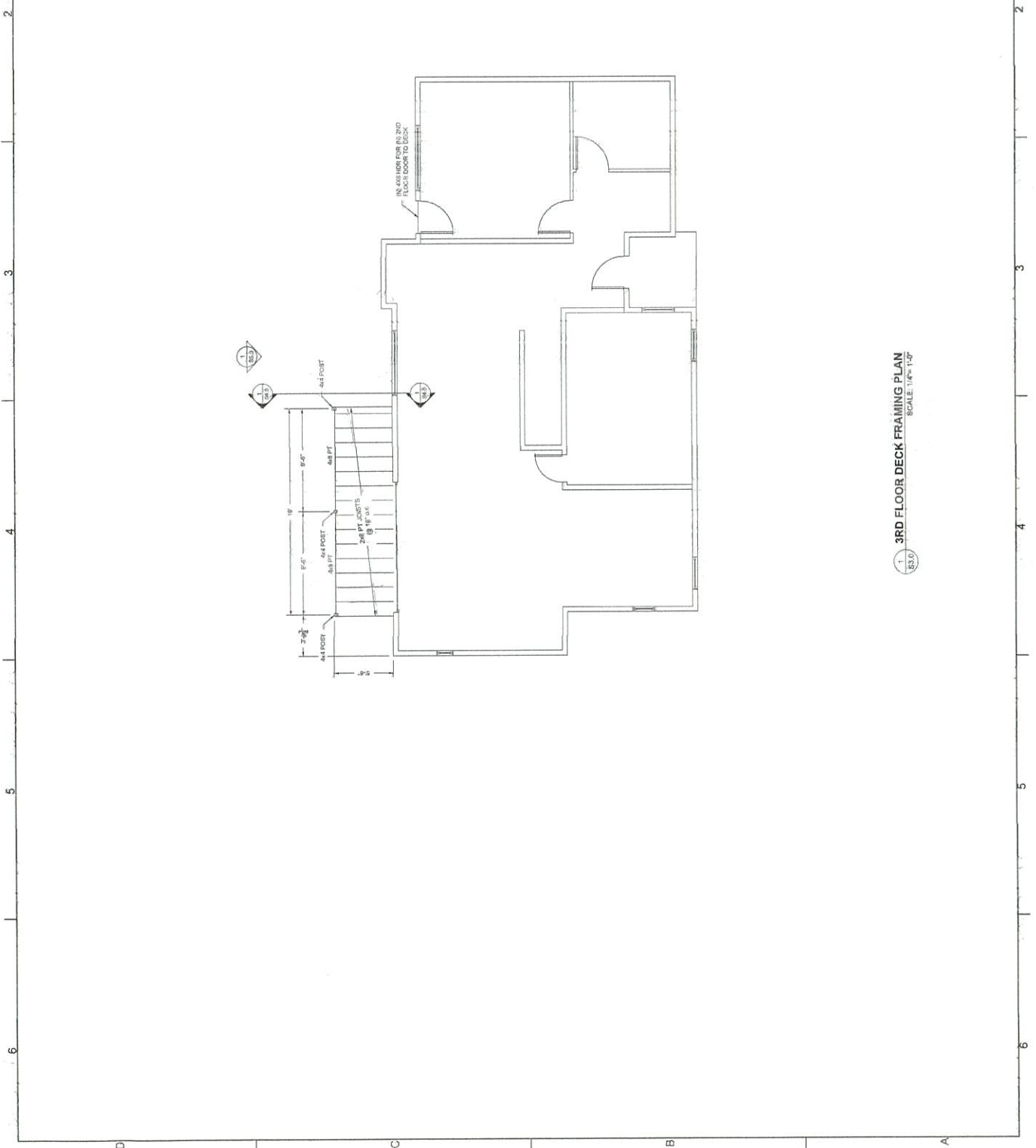
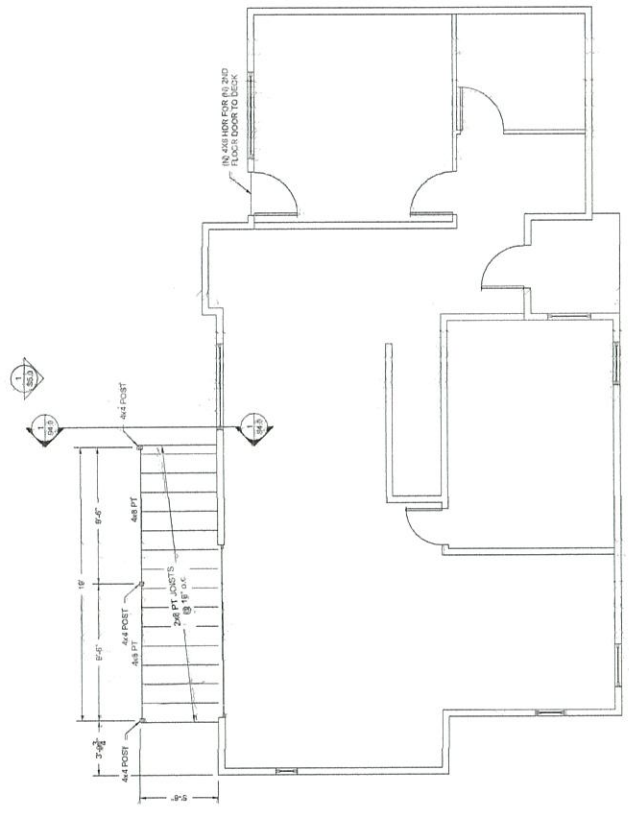
TRENT AND KELLIE DAVIS  
 HOUSE RENOVATION  
 16995 McDONALD RD  
 NEWHELM, OR 97131

3RD FLOOR DECK FRAMING PLAN

Drawing N.C.  
**S3.0**



1 3RD FLOOR DECK FRAMING PLAN  
 SCALE: 1/4"=1'-0"  
 S3.0



# S4.0

Drawing N.O.

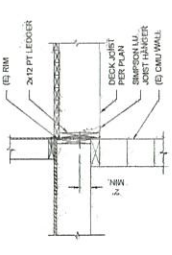
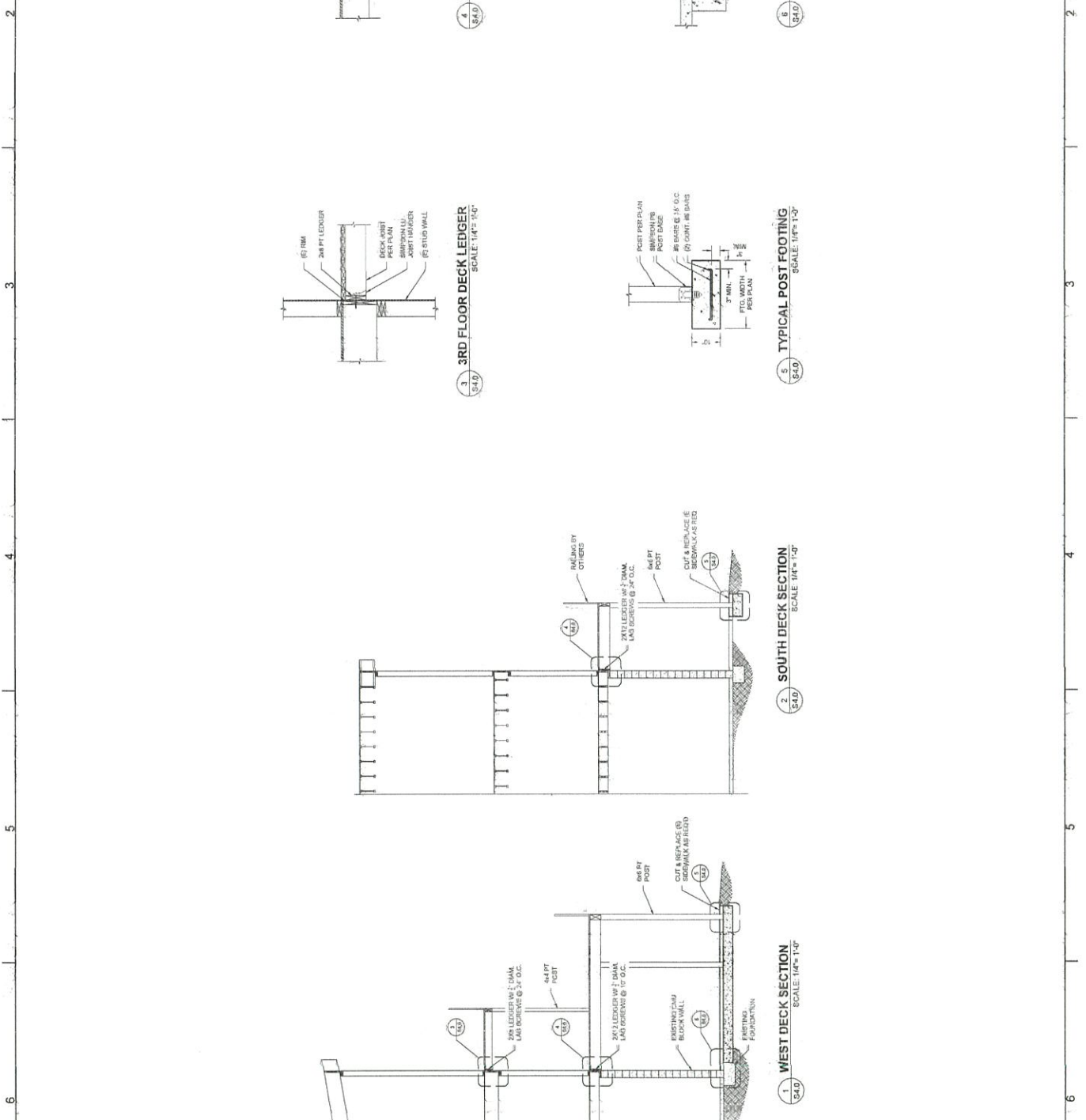
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 PROJECT: HOUSE RENOVATION  
 SCALE: AS SHOWN  
 DATE: 11/20/18

TRENT AND KELLIE DAVIS  
 HOUSE RENOVATION  
 18395 McDONALD RD  
 NEHALEM, OR 97131  
 FOUNDATION AND FRAMING DETAILS

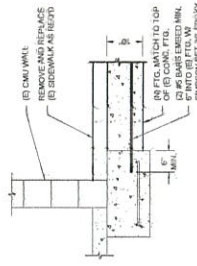


105 East Cypress  
 Gresham, OR 97116  
 503-922-2442  
 john@strickerarchitecture.com

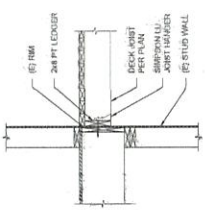
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1	11/20/18	PERMIT REVISION
2		FIELD PLAN AND ELEVATION IMPARTS
3		REVISION



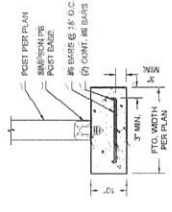
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 SCALE: 1/4" = 1'-0"



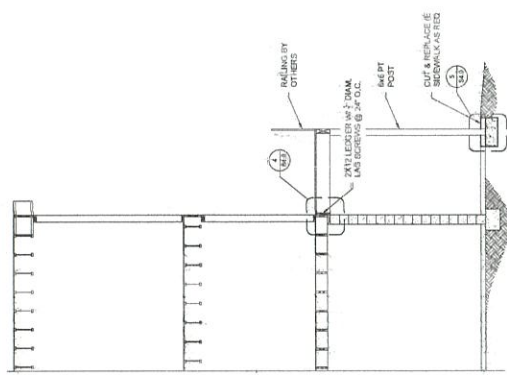
3 (N) FOOTING @ (E) FOOTING  
 SCALE: 1/4" = 1'-0"



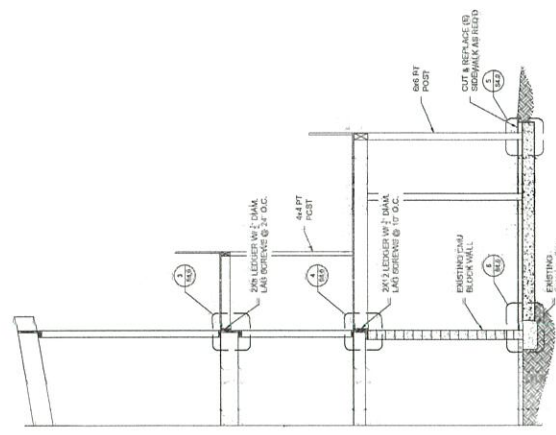
3 3RD FLOOR DECK LEDGER  
 SCALE: 1/4" = 1'-0"



4 TYPICAL POST FOOTING  
 SCALE: 1/4" = 1'-0"



1 SOUTH DECK SECTION  
 SCALE: 1/4" = 1'-0"



2 WEST DECK SECTION  
 SCALE: 1/4" = 1'-0"

S5.0

Drawing NO.:

DATE: 08/20/2018  
SCALE: AS SHOWN  
JOB NO.: 1872004

TRENT AND KELLIE DAVIS  
HOUSE RENOVATION  
18395 MCDONALD RD  
NEHALEM, OR 97131  
SOUTH AND WEST MAIN HOUSE ELEVATIONS

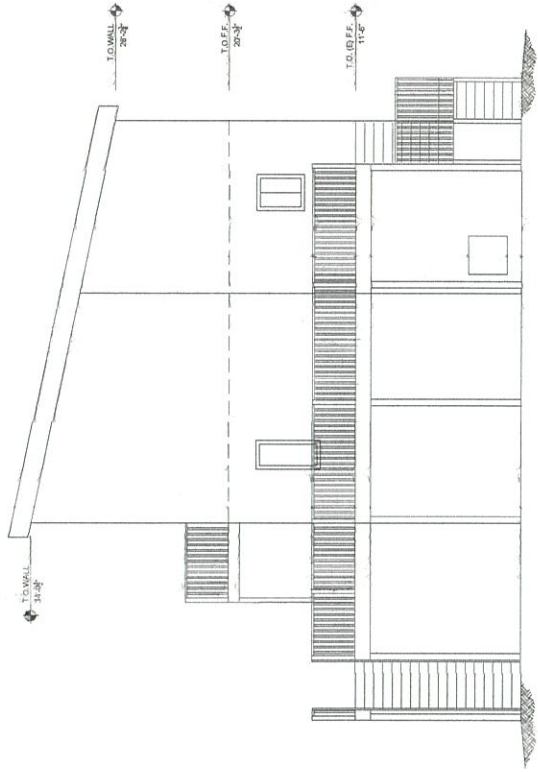


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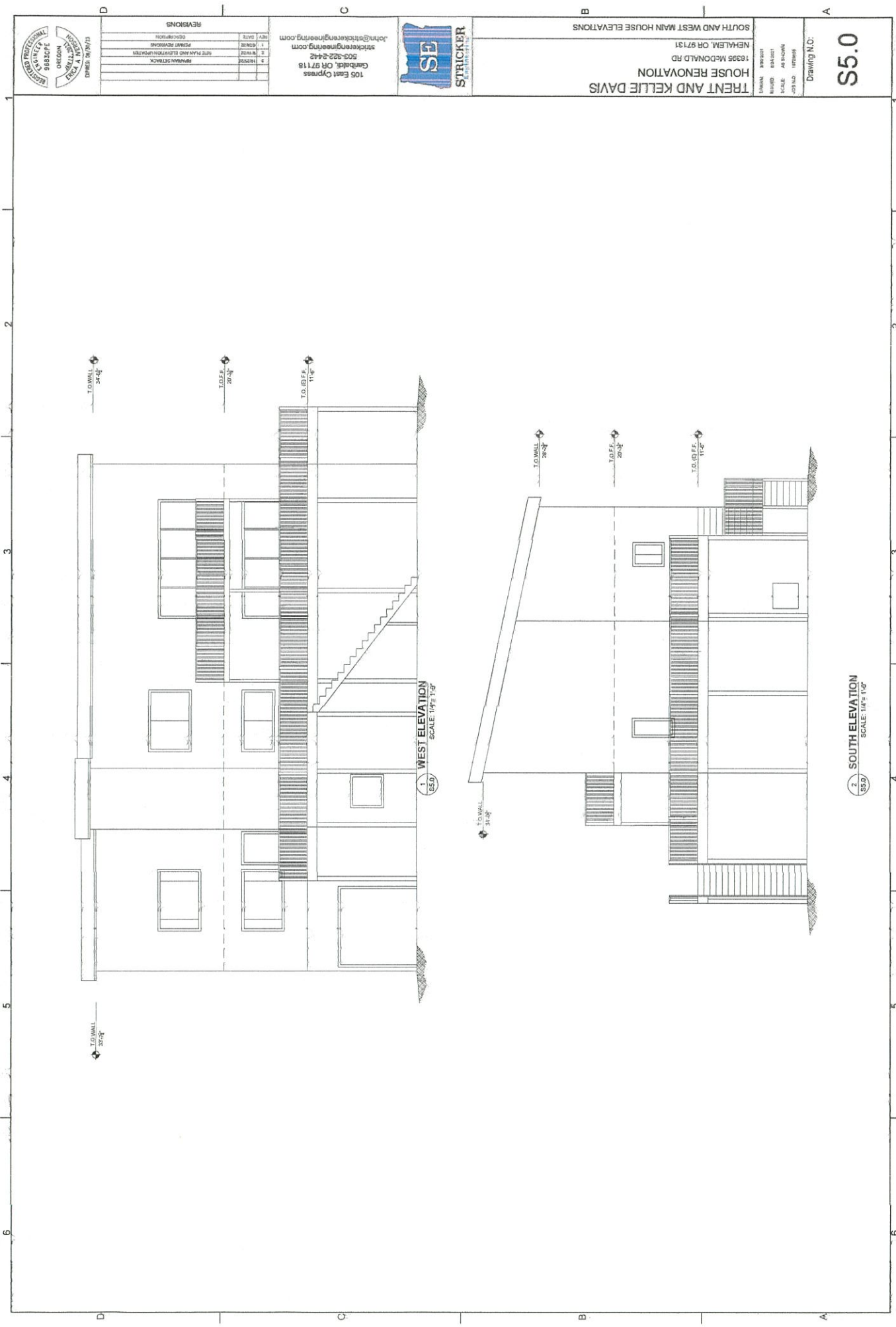
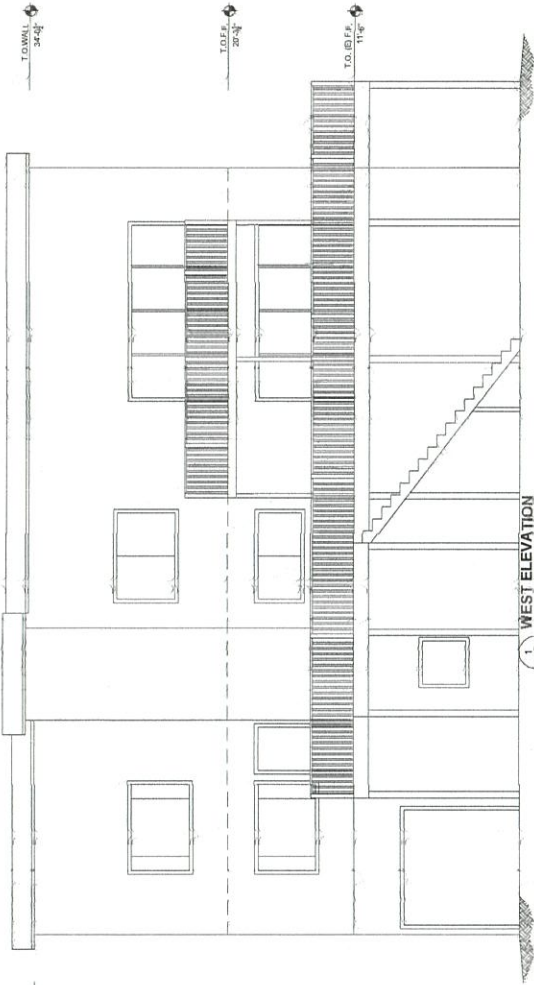


REV	DATE	BY	DESCRIPTION
1	08/20/18	JTD	PERMIT REVISIONS
2	08/20/18	JTD	PERMIT PLAN AND ELEVATION PARTS
3	08/20/18	JTD	PERMIT DETAIL

2 SOUTH ELEVATION  
SCALE: 1/4" = 1'-0"



1 WEST ELEVATION  
SCALE: 1/4" = 1'-0"



**Stricker Engineering, LLC**

---

105 East Cypress

Garibaldi, OR 97118

503-322-2442

erica@strickerengineering.com

**Client:**  
Trent & Kellie Davis

**Job Description:**  
Deck Addition

**Job No:**  
19726855

**Issued:**  
2/1/2022



**Stricker Engineering, LLC**

105 East Cypress  
Garibaldi, OR 97118  
503-322-2442  
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Table of Contents

Project Description..... 3  
Structural Design Notes ..... 3  
Gravity Design ..... 4  
    Deck Framing Design..... 4-13  
    Foundation Design ..... 14  
Lateral Design..... 15

**Stricker Engineering, LLC**

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105 East Cypress

Garibaldi, OR 97118

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**Project Description**

This project includes the structural design of an addition to the existing deck at 16395 McDonald Rd in Nehalem, OR. Wood joists and beams are used for the deck framing.

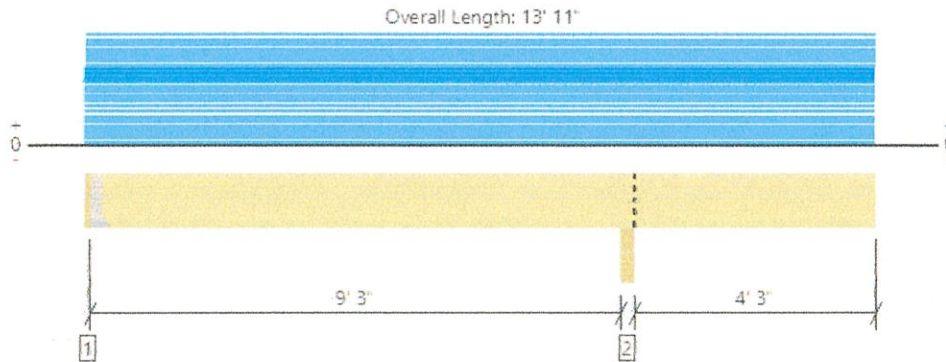
**Structural Design Notes**

Loading Criteria:

DL = 12.0 psf

LL = 60.0 psf

Level, Floor: DJ1  
 1 piece(s) 2 x 12 HF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction (lbs)	435 @ 1 1/2"	911 (1.50")	Passed (48%)	--	1.0 D + 1.0 L (Alt Spans)
Shear (lbs)	446 @ 8' 5 1/4"	1688	Passed (26%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	983 @ 4' 7 13/16"	2577	Passed (38%)	1.00	1.0 D + 1.0 L (Alt Spans)
Live Load Defl. (in)	0.107 @ 13' 11"	0.220	Passed (2L/982)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.111 @ 13' 11"	0.440	Passed (2L/954)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

System : Floor  
 Member Type : Joist  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Overhang deflection criteria: LL (2L/480) and TL (2L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Hanger on 11 1/4" HF ledger on Masonry	1.50"	Hanger <sup>1</sup>	1.50"	61	386/-72	447/-72	See note <sup>1</sup>
2 - Beam - HF	3.50"	3.50"	1.60"	162	810	972	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- <sup>1</sup> See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	13' 3" o/c	
Bottom Edge (Lu)	13' 10" o/c	

• Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
1 - Face Mount Hanger	LUS28	1.75"	N/A	6-10dx1.5	3-10d		

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 13' 11"	16"	12.0	60.0	Default Load

**Weyerhaeuser Notes**

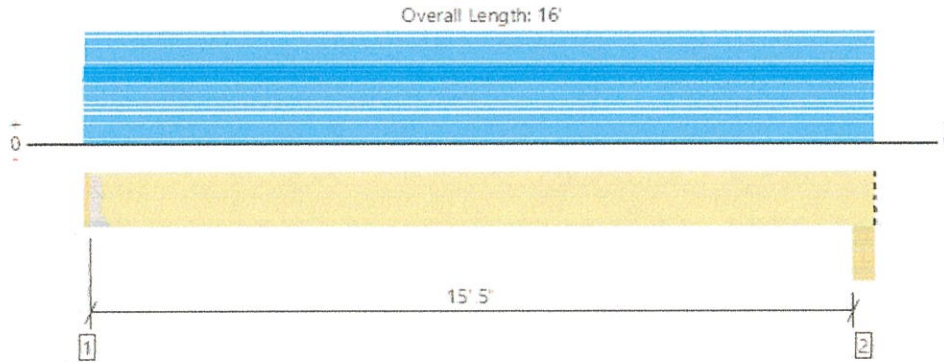
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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Erica Iverwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DJ2  
**1 piece(s) 2 x 12 HF No.2 @ 12" OC**



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction. (lbs)	558 @ 1' 1/2"	911 (1.50")	Passed (61%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	491 @ 1' 3/4"	1688	Passed (29%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	2162 @ 7' 10 1/2"	2577	Passed (84%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.337 @ 7' 10 1/2"	0.387	Passed (L/552)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.404 @ 7' 10 1/2"	0.775	Passed (L/460)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

System : Floor  
 Member Type : Joist  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Hanger on 11 1/4" HF ledger on Masonry	1.50"	Hanger <sup>†</sup>	1.50"	95	473	568	See note <sup>†</sup>
2 - Beam - HF	5.50"	5.50"	1.50"	98	488	586	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- <sup>†</sup> See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 5" o/c	
Bottom Edge (Lu)	15' 11" o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
1 - Face Mount Hanger	LUS28	1.75"	N/A	6-10dx1.5	3-10d		

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 16'	12"	12.0	60.0	Default Load

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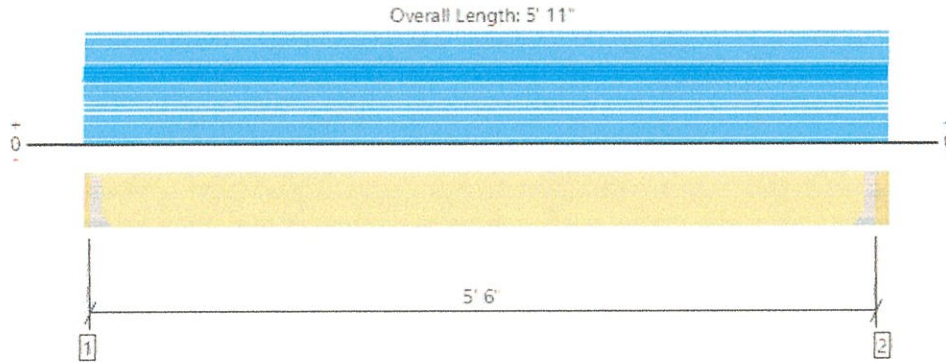
The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Erica Iverwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	





Level, Floor: DJ3  
 1 piece(s) 2 x 8 HF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction (lbs)	264 @ 1 1/2"	911 (1.50")	Passed (29%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	206 @ 8 3/4"	1088	Passed (19%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	363 @ 2' 10 1/2"	1284	Passed (28%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.027 @ 2' 10 1/2"	0.138	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.032 @ 2' 10 1/2"	0.275	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

System : Floor  
 Member Type : Joist  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Hanger on 7 1/4" HF ledger On Masonry	1.50"	Hanger <sup>1</sup>	1.50"	46	230	276	See note <sup>1</sup>
2 - Hanger on 7 1/4" HF beam	3.50"	Hanger <sup>1</sup>	1.50"	49	243	292	See note <sup>1</sup>

- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- <sup>1</sup> See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	5' 6" o/c	
Bottom Edge (Lu)	5' 6" o/c	

• Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
1 - Face Mount Hanger	LU26	1.50"	N/A	6-10dx1.5	4-10dx1.5		
2 - Face Mount Hanger	LU26	1.50"	N/A	6-10dx1.5	4-10dx1.5		

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

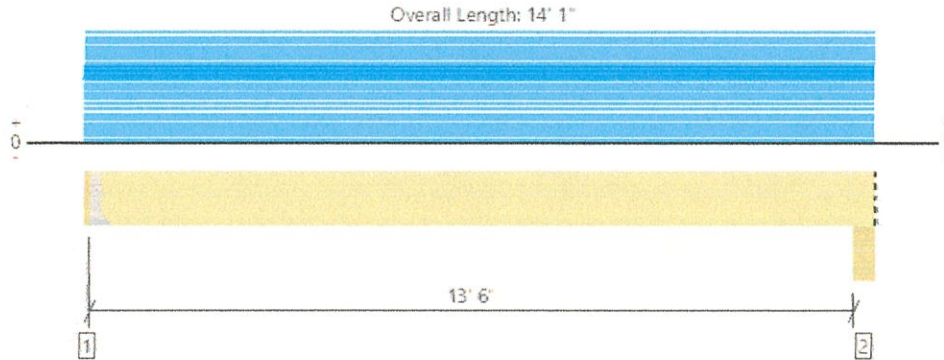
Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 5' 11"	16"	12.0	60.0	Default Load

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FortewEB Software Operator	Job Notes
Erica Ivenwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DJ4  
 1 piece(s) 2 x 12 HF No.2 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction (lbs)	652 @ 1 1/2"	911 (1.50")	Passed (72%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	562 @ 1' 3/4"	1688	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	2214 @ 6' 11"	2577	Passed (86%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.265 @ 6' 11"	0.340	Passed (L/615)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.318 @ 6' 11"	0.679	Passed (L/513)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	N/A	N/A	N/A	--	N/A

System : Floor  
 Member Type : Joist  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A 15% increase in the moment capacity has been added to account for repetitive member usage.
- Applicable calculations are based on NDS.
- No composite action between deck and joist was considered in analysis.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Hanger on 11 1/4" HF beam	1.50"	Hanger <sup>1</sup>	1.50"	111	553	664	See note <sup>1</sup>
2 - Beam - HF	5.50"	5.50"	1.50"	115	573	688	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- <sup>1</sup> See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 2" o/c	
Bottom Edge (Lu)	14' o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
1 - Face Mount Hanger	LUS28	1.75"	N/A	6-10dx1.5	3-10d		

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 14' 1"	16"	12.0	60.0	Default Load

**Weyerhaeuser Notes**

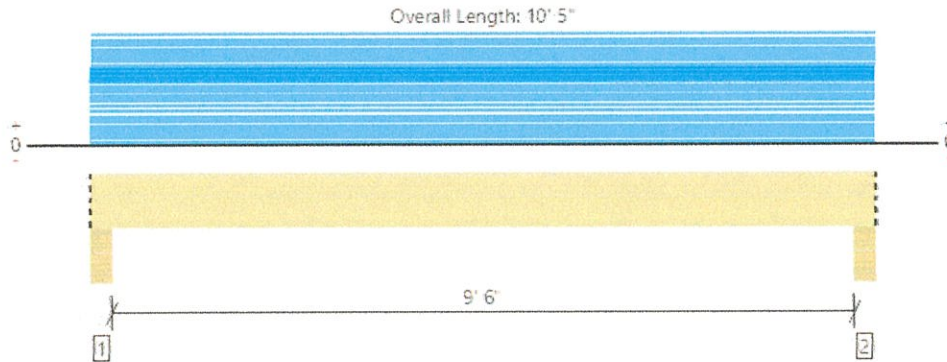
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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

FortewEB Software Operator	Job Notes
Erica Ivenwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DB1  
 1 piece(s) 6 x 12 HF No.2



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction, (lbs)	2490 @ 4"	12251 (5,50")	Passed (20%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1812 @ 1' 5"	5903	Passed (31%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	5680 @ 5' 2 1/2"	6819	Passed (83%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.102 @ 5' 2 1/2"	0.325	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.127 @ 5' 2 1/2"	0.488	Passed (L/923)	--	1.0 D + 1.0 L (All Spans)

System : Floor  
 Member Type : Drop Beam  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Column - HF	5.50"	5.50"	1.50"	484	2005	2489	Blocking
2 - Column - HF	5.50"	5.50"	1.50"	484	2005	2489	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' 5" o/c	
Bottom Edge (Lu)	10' 5" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 10' 5"	N/A	16.0	--	
1 - Uniform (PSF)	0 to 10' 5" (Front)	6' 5"	12.0	60.0	

**Weyerhaeuser Notes**

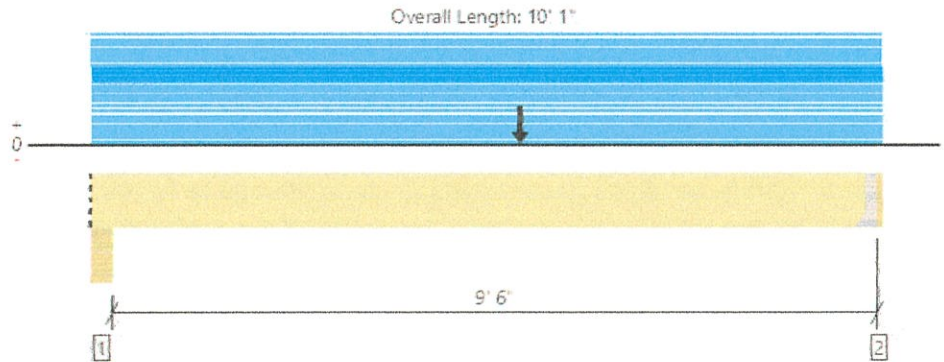
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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Erica Ivenwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DB2  
 1 piece(s) 4 x 12 HF No.2



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction (lbs)	1366 @ 9' 11 1/2"	2126 (1.50")	Passed (64%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1266 @ 9' 1/4"	3938	Passed (32%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	5035 @ 5' 6"	5752	Passed (88%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.105 @ 5' 2 1/2"	0.321	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.132 @ 5' 2 1/2"	0.481	Passed (L/875)	--	1.0 D + 1.0 L (All Spans)

System : Floor  
 Member Type : Drop Beam  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Column - HF	5.50"	5.50"	1.50"	274	1010	1284	Blocking
2 - Hanger on 11 1/4" HF ledger on Masonry	1.50"	Hanger <sup>1</sup>	1.50"	289	1088	1377	See note <sup>1</sup>

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- <sup>1</sup> See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	10' o/c	
Bottom Edge (Lu)	10' o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
2 - Face Mount Hanger	HUS410	2.00"	N/A	8-10dx1.5	8-10d		

• Refer to manufacturer notes and instructions for proper installation and use of all connectors.

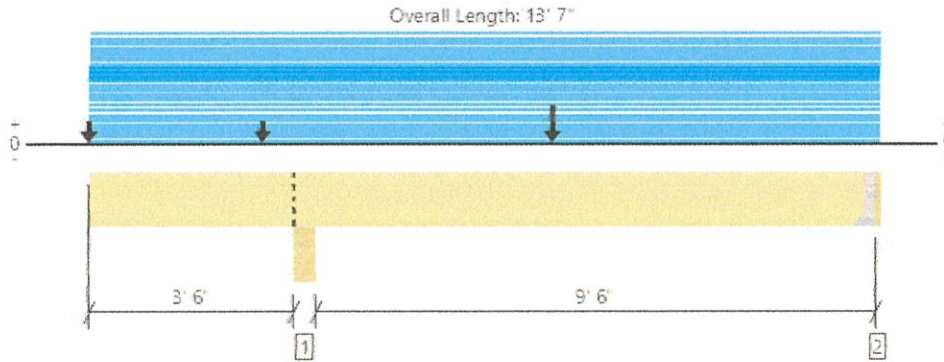
Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 9' 11 1/2"	N/A	10.0	--	
1 - Uniform (PSF)	0 to 10' 1" (Top)	1' 4"	12.0	60.0	
2 - Point (lb)	5' 6" (Top)	N/A	302	1292	Linked from: Floor: DB5, Support 1

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 The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Erica Iverwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DB3  
**1 piece(s) 4 x 12 HF No.2**



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction.(lbs)	1162 @ 13' 5 1/2"	2126 (1.50")	Passed (55%)	--	1.0 D + 1.0 L (Alt Spans)
Shear (lbs)	1568 @ 4' 10 3/4"	3938	Passed (40%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	4765 @ 8'	5752	Passed (83%)	1.00	1.0 D + 1.0 L (Alt Spans)
Live Load Defl. (in)	0.114 @ 0	0.249	Passed (2L/784)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.107 @ 0	0.373	Passed (2L/838)	--	1.0 D + 1.0 L (Alt Spans)

System : Floor  
 Member Type : Drop Beam  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Overhang deflection criteria: LL (2L/360) and TL (2L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Column - HF	5.50"	5.50"	2.11"	596	2391	2987	Blocking
2 - Hanger on 11 1/4" HF ledgerOnMasonry	1.50"	Hanger <sup>1</sup>	1.50"	208	966/-219	1174/-219	See note <sup>1</sup>

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.
- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- <sup>1</sup> See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	13' 6" o/c	
Bottom Edge (Lu)	13' 6" o/c	

•Maximum allowable bracing intervals based on applied load.

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
2 - Face Mount Hanger	LUS414	2.00"	N/A	10-10dx1.5	6-10d		

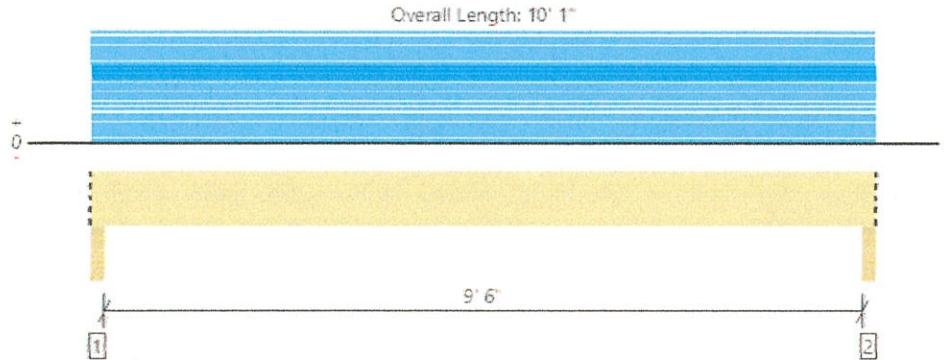
• Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 13' 5 1/2"	N/A	10.0	--	
1 - Uniform (PSF)	0 to 13' 7" (Top)	1' 4"	12.0	60.0	
2 - Point (lb)	0 (Front)	N/A	75	375	
3 - Point (lb)	3' (Front)	N/A	75	375	
4 - Point (lb)	8' (Top)	N/A	302	1292	Linked from: Floor: DB5, Support 1

FortewEB Software Operator	Job Notes
Erica Iverwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DB4  
 1 piece(s) 6 x 12 HF No.2



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2561 @ 2"	7796 (3.50")	Passed (33%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1926 @ 1' 3"	5903	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	6036 @ 5' 1/2"	6819	Passed (89%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.109 @ 5' 1/2"	0.325	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.135 @ 5' 1/2"	0.488	Passed (L/869)	--	1.0 D + 1.0 L (All Spans)

System : Floor  
 Member Type : Drop Beam  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Lumber grading provisions must be extended over the length of the member per NDS 4.2.5.5.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Column - DF	3.50"	3.50"	1.50"	494	2067	2561	Blocking
2 - Column - DF	3.50"	3.50"	1.50"	494	2067	2561	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	Continuous	
Bottom Edge (Lu)	All Bearing Points	

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 10' 1"	N/A	16.0	--	
1 - Uniform (PSF)	0 to 10' 1" (Front)	6' 10"	12.0	60.0	

**Weyerhaeuser Notes**

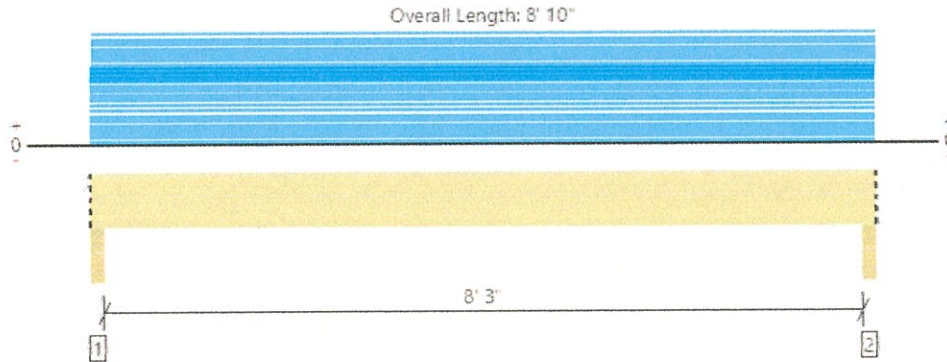
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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Erica Iverwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DB5  
**1 piece(s) 4 x 12 HF No.2**



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction (lbs)	1594 @ 2"	4961 (3.50")	Passed (32%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1151 @ 1' 2 3/4"	3938	Passed (29%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	3260 @ 4' 5"	5752	Passed (57%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.064 @ 4' 5"	0.283	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.079 @ 4' 5"	0.425	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)

System : Floor  
 Member Type : Drop Beam  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Column - DF	3.50"	3.50"	1.50"	302	1292	1594	Blocking
2 - Column - DF	3.50"	3.50"	1.50"	302	1292	1594	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	Continuous	
Bottom Edge (Lu)	All Bearing Points	

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 8' 10"	N/A	10.0	--	
1 - Uniform (PSF)	0 to 8' 10" (Front)	4' 10 1/2"	12.0	60.0	

**Weyerhaeuser Notes**

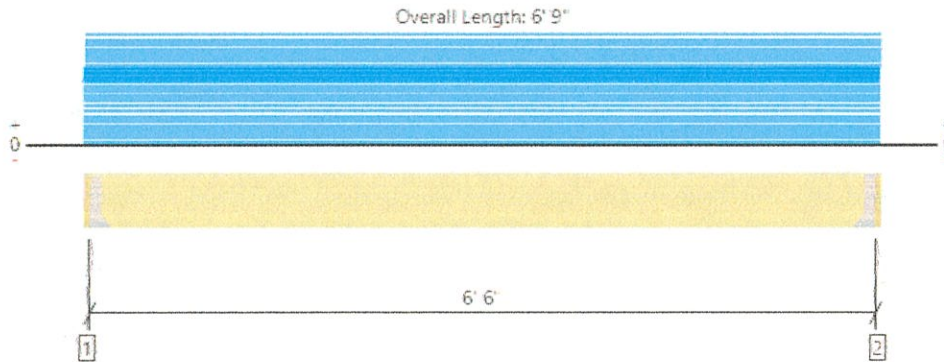
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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
Erica Iverwon Stricker Engineering (208) 404-4404 erica@strickerengineering.com	



Level, Floor: DB6  
**1 piece(s) 4 x 8 HF No.2**



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDf	Load: Combination (Pattern)
Member Reaction (lbs)	781 @ 1 1/2"	2126 (1.50")	Passed (37%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	636 @ 8 3/4"	2538	Passed (25%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	1270 @ 3' 4 1/2"	2823	Passed (45%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.054 @ 3' 4 1/2"	0.217	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.067 @ 3' 4 1/2"	0.325	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)

System : Floor  
 Member Type : Drop Beam  
 Building Use : Residential  
 Building Code : IBC 2018  
 Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Hanger on 7 1/4" HF ledgerOnMasonry	1.50"	Hanger <sup>1</sup>	1.50"	153	658	811	See note <sup>1</sup>
2 - Hanger on 7 1/4" HF ledgerOnMasonry	1.50"	Hanger <sup>1</sup>	1.50"	153	658	811	See note <sup>1</sup>

- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- <sup>1</sup> See Connector grid below for additional information and/or requirements.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	Continuous	
Bottom Edge (Lu)	All Bearing Points	

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
1 - Face Mount Hanger	LUS48	2.00"	N/A	6-10dx1.5	4-10d		
2 - Face Mount Hanger	LUS48	2.00"	N/A	6-10dx1.5	4-10d		

- Refer to manufacturer notes and instructions for proper installation and use of all connectors.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	1 1/2" to 6' 7 1/2"	N/A	6.4	--	
1 - Uniform (PSF)	0 to 6' 9" (Front)	3' 3"	12.0	60.0	

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ForteWEB Software Operator	Job Notes
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**Stricker Engineering, LLC**

105 East Cypress

Garibaldi, OR 97118

503-322-2442

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**Foundation Design**

WF1:

$$W_{DL} = 15 \text{ psf} * (28'/2) * 3 + 12 \text{ psf} * (9.5'/2 + 5'/2) + 57 \text{ psf} * 11.5' = 1379 \text{ plf}$$

$$W_{SL} = 25 \text{ psf} * (28'/2 + 1') = 375 \text{ plf}$$

$$W_{RLL} = 20 \text{ psf} * (28'/2 + 1') = 300 \text{ plf}$$

$$W_{LL} = 40 \text{ psf} * (28'/2) * 2 + 60 \text{ psf} * (9.5'/2 + 6'/2) = 1585 \text{ plf}$$

$$W_{TL} = 1379 \text{ plf} + 300 \text{ plf} + 1585 \text{ plf} = 3282 \text{ plf}$$

$$w_{req'd} = 3282 \text{ plf} / 1500 \text{ psf} = 2.18 \text{ ft}$$

**Use minimum 2'-0" wide wall footing**

F1:

$$W_{DL} = 484 \text{ lbs} * 2 \text{ (DB1 Reaction)} + 538 \text{ lbs (DB3 Reaction)} = 1506 \text{ plf}$$

$$W_{LL} = 2005 \text{ lbs} * 2 \text{ (DB1 Reaction)} + 2133 \text{ lbs} = 6143 \text{ plf}$$

$$W_{TL} = 1506 \text{ plf} + 6143 \text{ plf} = 7649 \text{ plf}$$

$$w_{req'd} = 7649 \text{ plf} / 1500 \text{ psf} = 5.10 \text{ ft}$$

**Use minimum 2'-6" square footing**

F2:

$$W_{DL} = 484 \text{ lbs (DB1 Reaction)} + 575 \text{ lbs (DB4 Reaction)} = 1059 \text{ plf}$$

$$W_{LL} = 2005 \text{ lbs (DB1 Reaction)} + 2402 \text{ lbs} = 4407 \text{ plf}$$

$$W_{TL} = 1059 \text{ plf} + 4407 \text{ plf} = 5466 \text{ plf}$$

$$w_{req'd} = 5466 \text{ plf} / 1500 \text{ psf} = 3.64 \text{ ft}$$

**Use minimum 2'-0" square footing**

# Stricker Engineering, LLC

105 East Cypress  
 Garibaldi, OR 97118  
 503-322-2442  
 erica@strickerengineering.com

## Lateral Design

Job#: 19726855

### Deck Calculator: Lateral Loads

Wind Analysis Method	Design Wind Loads - Other Structures	ASCE 7-10 Sec. 29.5
Basic Wind Speed (ultimate)	135.00 MPH	
Topography Factor	$K_{zt} = 1.00$	ASCE 7-16 Fig. 26.8-1
Directionality Factor	$K_d = 0.85$	ASCE 7-16 Fig. 26.6-1
Gust Effect Factor	$G = 0.85$	ASCE 7-16 Sec. 26.9.1
Deck Height	$h = 11.50$ ft	
Terrain Exp. Category	C	$\alpha = 9.5$
Velocity Pressure Exp. Coefficient	$K_z = 0.849$	$z_g = 900$
Velocity Pressure	$q_z = 33.66$ psf	$q_z = .00256K_z K_{zt} K_d V^2$
Deck Gross Area (normal to wind)	$A_{gross} = 50.00$ ft <sup>2</sup>	
Deck Solid Area (normal to wind)	$A_f = 200.00$ ft <sup>2</sup>	
Ratio of Solid Area to Gross Area	$\epsilon = 4.00$	
Force Coefficient for Deck	$C_{f,deck} = 1.85$	ASCE 7-16 Fig. 29.4-2
Wind Load on Deck	$F_{deck} = 10,588$ lbs	$F = q_z G C_f A_f$
ASD Wind Load on Deck	$F_{ASD,deck} = 6,353$ lbs	
Post Height	$h_{post} = 10.50$ ft	Post Section: SQUARE
Post Width or Dia.	$D = 5.50$ in	
Deck Post Area	$A_f = 4.81$ ft <sup>2</sup>	
Post Aspect Ratio	$h/D = 22.91$	
Force Coefficient for Post	$C_{f,post} = 1.85$	ASCE 7-16 Fig. 29.5-1
Wind Load on Post	$F_{post} = 255$ lbs	$F = q_z G C_f A_f$
ASD Wind Load on Post	$F_{ASD,post} = 153$ lbs	
Total ASD Wind Load	$F_{ASD,WIND} = 6,429$ lbs	
Deck Width (perpendicular to ledger)	$B = 15.83$ ft	Deck Ratio: 0.32
Deck Length (parallel to ledger)	$L = 50.00$ ft	Deck Area: 791.65 ft <sup>2</sup>
Deck Moments (wind)	51,500 ft-lbs	
Deck Holdown Force (wind)	$F_{h,WIND} = 1,030$ lbs	
Unit Shear @ Ledger (wind)	$v_w = 129$ plf	
Deck Live Load	$LL = 60.00$ psf	$\rho = 1.3$ (SDC D)
Deck Dead Load	$DL = 12.00$ psf	
Other Loads	0 lbs	(Conservatively include live loads in Effective Seismic Weight)
Effective Seismic Weight	$W = 56,999$ lbs	
Seismic Response Coefficient	$C_s = 0.151$	(from Seismic Worksheet)
Total ASD Seismic Load	$F_{ASD,SEISMIC} = 7,832$ lbs	$E_n = 0.7 \rho C_s W$ (governs)
Deck Moments (seismic)	62,004 ft-lbs	
Deck Holdown Force (seismic)	$F_{h,SEISMIC} = 1,240$ lbs	(governs)
Unit Shear @ Ledger (seismic)	$v_s = 157$ plf	(governs)
Deck Area	$A_{deck} = 792$ ft <sup>2</sup>	
Occupant Lateral Load per Plan Area	$OL = 5.00$ psf	(Deck and Porch Lateral Loading by Occupants, Donald A. Bender, 2018)
Total ASD Occupant Load	$F_{ASD,OCC} = 3,958$ lbs	
Deck Moments (occupants)	31,335 ft-lbs	
Deck Holdown Force (occupants)	$F_{h,OCC} = 627$ lbs	
Unit Shear @ Ledger (occupants)	$v_o = 79$ plf	

Location: Deck Extension  
 Specification: Use (2) DTT1Z between house and deck.



---

**NO-RISE CERTIFICATION AND REPORT**

Nehalem River at McDonald Dike Road  
Nehalem, Oregon

Prepared for:

**Trent and Kellie Davis**  
16395 McDonald Dike Road  
Nehalem, Oregon 97131

Prepared by:

**Cascade Water Resources, LLC**

March 6, 2023

Project No. 1026

---



March 6, 2023  
Project No. 1026

Trent and Kellie Davis  
16395 McDonald Dike Road  
Nehalem, Oregon 97131  
Via email: [Trent-davis@outlook.com](mailto:Trent-davis@outlook.com)

Attention: Trent and Kellie Davis

Subject: No-Rise Report and Certification for Nehalem River at McDonald Dike Road  
Nehalem, Oregon 97131

Dear Trent and Kellie:

The following report documents Cascade Water Resources, LLC's (CWR's) finding that the proposed construction of a new deck at the property located at 16395 McDonald Dike Road as described on the Stricker Engineering construction plans dated October 25, 2022 will not increase the 100-year (1%-annual chance) pre-project base flood elevations, floodway elevations, or floodway widths on Nehalem River at published or unpublished cross-sections as shown on the Flood Insurance Study for Tillamook County, Oregon dated September 28, 2018 (FEMA, 2018).

The report includes tables and figures that document our analysis. Model input (cross-sections) and output data are appended to the report along with copies of the drawings provided by Stricker Engineering. Digital copies of the hydraulic model and work map are also provided for your reference.

We appreciate this opportunity to be of service. Please feel free to contact me if you have any questions regarding this report.

Sincerely,

A handwritten signature in blue ink that reads "R.C. Sutherland".

Roger Sutherland, PE  
Cascade Water Resources, LLC

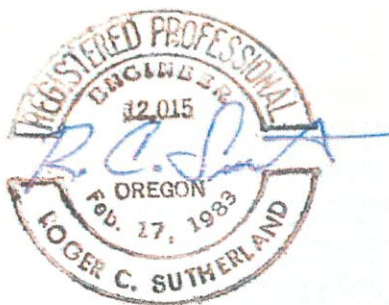
No-Rise Engineering Certification  
Nehalem River at 16395 McDonald Dike Road  
Nehalem, Oregon  
March 6, 2023

This is to certify that I am a duly qualified registered professional engineer licensed to practice in the State of Oregon. This is further to certify that the attached report supports the finding that the proposed construction of a new deck at the property located at 16395 McDonald Dike Road in Nehalem, Oregon, as described on the Stricker Engineering construction plans dated October 25, 2022, will not increase the 100-year (1%-annual chance) pre-project base flood elevations, floodway elevations, or floodway widths on Nehalem River at published or unpublished cross-sections as shown on the Flood Insurance Study for Tillamook County, Oregon dated September 28, 2018 (FEMA, 2018). In addition to this report and its attachments, a hydraulic model and work map are provided to support the finding that this proposed project will meet no-rise criteria.

This certification was prepared exclusively for Trent and Kellie Davis. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in CWR services and based on: 1) a field visit to the site on May 17, 2022; 2) information available at the time of preparation; 3) data supplied by outside sources; and 4) the assumptions, conditions, and qualifications set forth in this report. This No-Rise Certification is intended to be used by Trent and Kellie Davis for the McDonald Dike Road deck project only, subject to the terms and conditions of its contract with CWR. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

While this report was prepared in accordance with standard engineering practice by qualified engineering professionals, this report evaluated a specific storm recurrence interval and assumes free-flowing hydraulic conditions. It is reasonable to assume that a storm event of greater magnitude or changes in water-way conveyance capacity might cause higher stages than estimated for this assignment.

March 6, 2023



*Expires: 6/30/2024*

A handwritten signature in blue ink that reads "R.C. Sutherland".

Roger Sutherland, PE  
Cascade Water Resources, LLC



**TABLE OF CONTENTS**

	<b>Page</b>
1.0 SUMMARY .....	1
2.0 PROJECT DESCRIPTION.....	1
2.1 FEMA Effective Flood Model.....	1
2.2 Proposed Floodway Development.....	2
3.0 NO-RISE HYDRAULIC MODELING .....	2
3.1 Duplicate Effective Model.....	3
3.2 Corrected Effective Model.....	4
3.3 Existing (Pre-Project) Conditions Model.....	5
3.4 Proposed Conditions Model.....	5
3.5 No-Rise Results .....	5
4.0 CONCLUSIONS .....	6
REFERENCES.....	7
LIMITATIONS.....	8

**TABLE**

Table 1: No-Rise Analysis

**FIGURES**

Figure 1: Study Area Vicinity

Figure 2: Flood Insurance Rate Map Panel

Figure 3: Hydraulic Model Work Map

Figure 4: FEMA FIRMette

**APPENDICES**

Appendix A Corrected Effective / Pre-Project Conditions Hydraulic Model Output

Appendix B Proposed Conditions Hydraulic Model Output

Appendix C Proposed Deck Construction Plans by Stricker Engineering

Appendix D Photo Log



# **NO-RISE REPORT**

## **Nehalem River at 16395 McDonald Dike Road**

### **Nehalem, Oregon**

## **1.0 SUMMARY**

Cascade Water Resources, LLC (CWR) found that the proposed construction of a new deck at the property located at 16395 McDonald Dike Road in Nehalem, Oregon meets the no-rise requirement if constructed as described on the Stricker Engineering construction plans dated October 25, 2022. The construction plans are included in Appendix C.

## **2.0 PROJECT DESCRIPTION**

### **2.1 FEMA EFFECTIVE FLOOD MODEL**

WEST Consultants, Inc. (WEST) completed a Letter of Map Revision (LOMR) for the Lower Nehalem River in Tillamook County, Oregon, in 2014. The LOMR update extended from the Federal Emergency Management Agency (FEMA) Cross-Section B at model river station 0.45 to Cross-Section O at model river station 6.80. The river stations represent miles along the Nehalem River centerline. WEST used 2009 lidar data from the Oregon Department of Geology and Mineral Industries (DOGAMI) to update existing cross-section overbank data and to create additional cross-sections that were used in the detailed analysis. The LOMR was used to update a 2002 FEMA Flood Insurance Study (FIS) and represents the best available information and serves as the FEMA effective model for the Lower Nehalem River (WEST, 2014). The LOMR produced by WEST was ultimately incorporated into a September 28, 2018, FIS update for Tillamook County, Oregon. Figure 2 shows the Flood Insurance Rate Map (FIRM) Panel 41057C0230F issued for Tillamook County as part of the 2018 FIS update. Additionally, the FIRMette has been included on Figure 4.

It should be noted that the FIS profiles and mapping (noted above) are published as feet above the North American Vertical Datum of 1988 (NAVD88), as is the effective model produced by WEST for the 2014 Nehalem River LOMR. All elevations referenced in this report and associated modeling files are based on the NAVD88 datum.



## 2.2 PROPOSED FLOODWAY DEVELOPMENT

Trent and Kellie Davis propose to build a new deck at their property located at 16395 McDonald Dike Road in Nehalem, Oregon. The property is shown on Figure 1, the site vicinity map. The proposed deck was designed by Stricker Engineering and will extend along the south and western sides of the Davis's house. The construction plans are included in Appendix C. The entire property is located within the Nehalem River floodway, which means that any fill or development on the property must meet no-rise requirements. It must be shown that the proposed deck will not increase the 100-year base (1%-annual chance) flood elevations, floodway elevations, or floodway widths on the Nehalem River at published or unpublished cross-sections as shown on the 2018 effective FIS for Tillamook County.

The proposed deck will be located above the 100-year base flood elevation (BFE) of 16.1 feet, and therefore will not impact the 100-year flow. However, the support posts do act as obstructions that must be evaluated. As shown on the construction plans (Appendix C), a row of 6" x 6" support posts will be installed roughly 9.25 feet west of the house and a second row will be installed 13.5 feet west of the house. These rows of support posts are in a line parallel with the flow of the river, therefore each row acts as a single obstruction. A portion of the new deck will be constructed on the south side of the house; however, this will not obstruct the floodplain conveyance any further than the obstruction that the house already presents. A "no-rise" certification is required prior to construction of the deck to demonstrate no adverse impact from the proposed improvements and construction of the support posts for the deck.

## 3.0 NO-RISE HYDRAULIC MODELING

The basic process to evaluate the no-rise performance standard uses four modeling steps as follows:

- **Duplicate Effective Model:** The Duplicate Effective model confirms that the effective model was received and reproduces published information from the FIS, or any map amendment studies. The Duplicate Effective model serves to validate the source of the Corrected Effective model (described next) but is not further used in the no-rise analysis.
- **Corrected Effective Model:** Changes are made to the Duplicate Effective model to create the Corrected Effective model. Changes may include correction of errors in the Duplicate Effective model, the addition of new cross-sections, or refinement of existing cross-sections with more detailed topographic information, to improve modeling methods and/or to allow future conditions to be modeled. Man-made physical changes that have occurred since the date of the Effective Model should not be incorporated in the Corrected Effective model.





The Corrected Effective model includes all the cross-sections that will be required to model proposed improvements with the Proposed Conditions model.

- **Existing (Pre-Project) Conditions Model:** Changes are made to the Corrected Effective Model to reflect any modifications that have occurred within the floodplain since the date of the Effective model. The model is identical to the Corrected Effective model if no changes have occurred since the date of the Effective model.
- **Proposed Conditions Model:** Changes to the Existing Conditions model geometry are made only to reflect proposed project changes. The results from this model will indicate the 100-year elevation for the proposed conditions at the project site. These results must indicate no rise in the water surface elevation or floodway when compared to the Existing Conditions model.

For the WEST LOMR, the Nehalem River was studied from FEMA effective Cross-Section B (river station 0.45) to Cross-Section O (River station 6.8), corresponding to a length of approximately 6.35 miles (33,528 ft).

### 3.1 DUPLICATE EFFECTIVE MODEL

The effective hydraulic model used for the LOMR for the Lower Nehalem River was finalized in June 2014 by WEST for the Tillamook County Department of Community Development. PWR obtained the effective model for the Lower Nehalem River from WEST directly. The model includes the geometries, flow files, and floodway encroachment stations necessary for FEMA analysis.

The effective model utilized HEC-RAS Version 4.1 from the US Army Corps of Engineers (USACE). For this no-rise study, the HEC-RAS Version 4.1 model input was executed in the current standard HEC-RAS Version 6.3.1 (USACE; 2022). This HEC-RAS model constitutes the Duplicate Effective model. The Duplicate Effective model does not incorporate any changes, but simply confirms that the base model matches the output in the effective FIS. This Duplicate Effective model was then modified to create the Corrected Effective model, as described below.

The hydrology for the LOMR completed by WEST in 2014 did not modify the flows used in the prior FIS, which were developed by the U.S. Army Corps of Engineers using a hydrologic model that was calibrated to measured data at USGS stream gage 14301000, *Nehalem River near Foss, OR* (WEST, 2014). The flows utilized in this no-rise analysis were unchanged from the effective model. Additionally, no changes were made to the effective floodway. The encroachment stations for the new cross-sections were measured from the FIRM to maintain the effective floodway width.

### 3.2 CORRECTED EFFECTIVE MODEL

Changes made to develop the Corrected Effective model from the Duplicate Effective model are summarized as follows:

- New cross-sections (XS 3.7542 and XS 3.7656) were added at the upstream and downstream faces of the Davis's house to add resolution and accurately model the proposed project area. The locations of the new cross-sections are shown on Figure 3.
- Lidar collected in 2009 by DOGAMI was used for the ground surface of the overbanks for the two new cross sections (NOAA, 2009). No changes to the ground topography near the Davis property is believed to have occurred since 2009, making the lidar a suitable source of topographic information. *(Note: The 2009 lidar from DOGAMI that was used to create the overbank geometry for the two additional cross-sections is the same data that was used by WEST to create the effective cross-sections as part of their 2014 LOMR.)*
- Channel bathymetry is not able to be measured using lidar. Therefore, the channel bathymetry from cross-section 3.8 was used for the two new cross-sections. The elevation of the bathymetry was adjusted based on an interpolation of the channel profile between effective model cross-sections 3.66 and 3.8. Cross-section 3.8 is located just 180 feet upstream of the Davis property. The use of bathymetry from this cross-section for the new cross-sections is reasonable given the short distance upstream and the gradually transitioning nature of the Nehalem River in this area.
- The house was added as an obstruction to cross-section 3.7656. The house existed prior to the date of the effective model; therefore, it is required to be added to the Corrected Effective model. *(Note, the support posts for the existing deck were not added to the Corrected Effective model to be conservative with the analysis.)*
- A Manning's roughness of 0.03 was assigned for the extent of the subject property at cross-section 3.7656 to represent the lawn and paved driveway between the two new cross-sections. This portion of the cross-section in the effective cross-section 3.8 has a Manning's roughness of 0.2, which was likely selected to reflect the houses (not modeled as obstructions in the effective model) and large vegetation present just upgradient of the top of the river bank. Photos of the property are included in Appendix D.
- The encroachment stations for the new cross-sections were measured from the FIRM to maintain the effective floodway width, per FEMA requirements.

Changes made were documented within the HEC-RAS model input as comments to the geometry file for the affected cross-sections. Appendix A includes a plot of the 100-year flood profile for the modeled portion of the Nehalem River, a summary of the model output, and plots of cross-sections utilized in the model (FEMA Sections B through O) for the Corrected Effective model.



### 3.3 EXISTING (PRE-PROJECT) CONDITIONS MODEL

No known modifications have occurred within the study reach since the date of the Effective Model. Therefore, the Existing Conditions model is identical to the Corrected Effective model. For this reason, a separate Existing Conditions model was not created.

### 3.4 PROPOSED CONDITIONS MODEL

Changes made to model the proposed project are summarized as follows:

- The proposed support posts for the deck were modeled as obstructions and added to cross-section 3.7656. Two obstructions were added to this cross-section, as there are two rows of support posts perpendicular to the direction of flow of the river.

As with the Corrected Effective model, changes made were documented within the HEC-RAS model input as comments to the geometry file for the affected cross-sections. Appendix B includes a plot of the 100-year flood profile for the modeled portion of the Nehalem River, a summary of the model output, and plots of cross-sections utilized in the model (FEMA Cross-Sections B through O) for the Proposed Conditions model.

### 3.5 NO-RISE RESULTS

Table 1 compares the base flood elevations for the Proposed Conditions model with those for the Corrected Effective/Pre-Project model. As described previously, no changes were necessary for the Pre-Project model; therefore, the Corrected Effective model represents both scenarios. The 100-year Proposed Conditions model resulted in a 0.01-foot decline at cross-section 5.951. At all other locations, the difference in water surface elevations was 0.00 feet. No rise was observed at any cross-section in the analysis of the Nehalem River as a result of the proposed deck construction.



#### 4.0 CONCLUSIONS

Based on the detailed analysis described above, construction of the proposed deck at the property located at 16395 McDonald Dike Road meets the requirements for a no-rise finding if constructed as described in the construction plan set included in Appendix C.

We appreciate this opportunity to be of service. Please feel free to contact me if you have any questions regarding this report.

Sincerely,

Roger Sutherland, PE  
Cascade Water Resources, LLC



## REFERENCES

FEMA, 2018. Flood Insurance Study and Map Panel 41057C0230F for Tillamook County, Oregon (41057CV001A). Federal Emergency Management Agency, Washington, DC. Effective September 28, 2018.

NOAA, 2009. National Oceanic and Atmospheric Administration (NOAA) Digital Coast Data Access Viewer. Custom processing of "2009 OR DOGAMI Lidar: North Coast". Charleston, South Carolina. Data accessed October 30, 2022, at <https://coast.noaa.gov/dataviewer>.

USACE, 2022. HEC-RAS Program Version 6.3.1. US Army Corps of Engineers Hydraulic Engineering Center. Davis, CA. September 2022.

WEST, 2014. LOMR Submittal: Lower Nehalem River – Tillamook County, Oregon. WEST Consultants, Inc. Portland, OR. June 2014.



## LIMITATIONS

This report was prepared exclusively for Trent and Kellie Davis by Cascade Water Resources, LLC (CWR). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in CWR services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This no-rise report and certification is intended to be used by Trent and Kellie Davis for their property located at 16395 McDonald Dike Road in Nehalem, Oregon only, subject to the terms and conditions of its contract with CWR. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

TABLE

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**Table 1  
No-Rise Modeling Results**

Flow (cfs)	Corrected Effective/Pre-Project		Proposed Condition		Change in BFE (ft) <sup>3</sup>
	Cross Section <sup>1</sup>	BFE (ft NAVD88) <sup>2</sup>	Cross Section <sup>1</sup>	BFE (ft NAVD88) <sup>2</sup>	
59,000	6.8	24.09	6.8	24.09	0
59,000	6.61	21.2	6.61	21.2	0
59,000	6.584	21.3	6.584	21.3	0
59,000	6.583	21.17	6.583	21.17	0
59,000	6.579	21.15	6.579	21.15	0
59,000	6.578	21.16	6.578	21.16	0
59,000	6.559	20.98	6.559	20.98	0
59,000	6.25	20.33	6.25	20.33	0
56,700	6.01	18.23	6.01	18.23	0
Bridge	5.99		5.99		--
54,700	5.98	18.06	5.98	18.06	0
54,700	5.951	18.01	5.951	18	-0.01
54,700	5.88	18.11	5.88	18.11	0
54,700	5.79	17.89	5.79	17.89	0
54,700	5.65	17.53	5.65	17.53	0
54,700	5.55	17.58	5.55	17.58	0
54,700	5.34	17.69	5.34	17.69	0
54,700	5.26	17.66	5.26	17.66	0
54,700	5.17	17.64	5.17	17.64	0
54,700	4.78	17.56	4.78	17.56	0
54,700	3.8	16.03	3.8	16.03	0
54,700	3.7656	16.15	3.7656	16.15	0
54,700	3.7542	16.06	3.7542	16.06	0
52,600	3.66	16.22	3.66	16.22	0
52,600	3.28	15.79	3.28	15.79	0
52,600	3.24	15.75	3.24	15.75	0
52,600	3.12	15.68	3.12	15.68	0
52,900	2.92	15.53	2.92	15.53	0
52,900	2.49	15.15	2.49	15.15	0
52,900	2.28	14.95	2.28	14.95	0
66,400	2.01	14.84	2.01	14.84	0
66,400	1.92	14.74	1.92	14.74	0
66,400	1.74	14.31	1.74	14.31	0
66,400	1.5	14.04	1.5	14.04	0
66,400	1.33	13.88	1.33	13.88	0
66,700	1.05	13.7	1.05	13.7	0
67,000	0.994	13.68	0.994	13.68	0
67,000	0.95	13.63	0.95	13.63	0
Bridge	0.92		0.92		--
67,000	0.86	13.55	0.86	13.55	0
67,000	0.8	13.5	0.8	13.5	0
67,000	0.78	13.4	0.78	13.4	0
67,000	0.73	13.36	0.73	13.36	0
67,000	0.6	13.32	0.6	13.32	0
74,000	0.45	13.11	0.45	13.11	0

Notes:

<sup>1</sup> Cross Section No. is the distance in miles upstream from the end of the effective model.

<sup>2</sup> All model elevations are in North American Vertical Datum of 1988 (NAVD88).

<sup>3</sup> Change in water surface elevation is calculated as the difference between the Corrected Effective / Pre-Project Conditions Model and the Proposed Conditions Model.

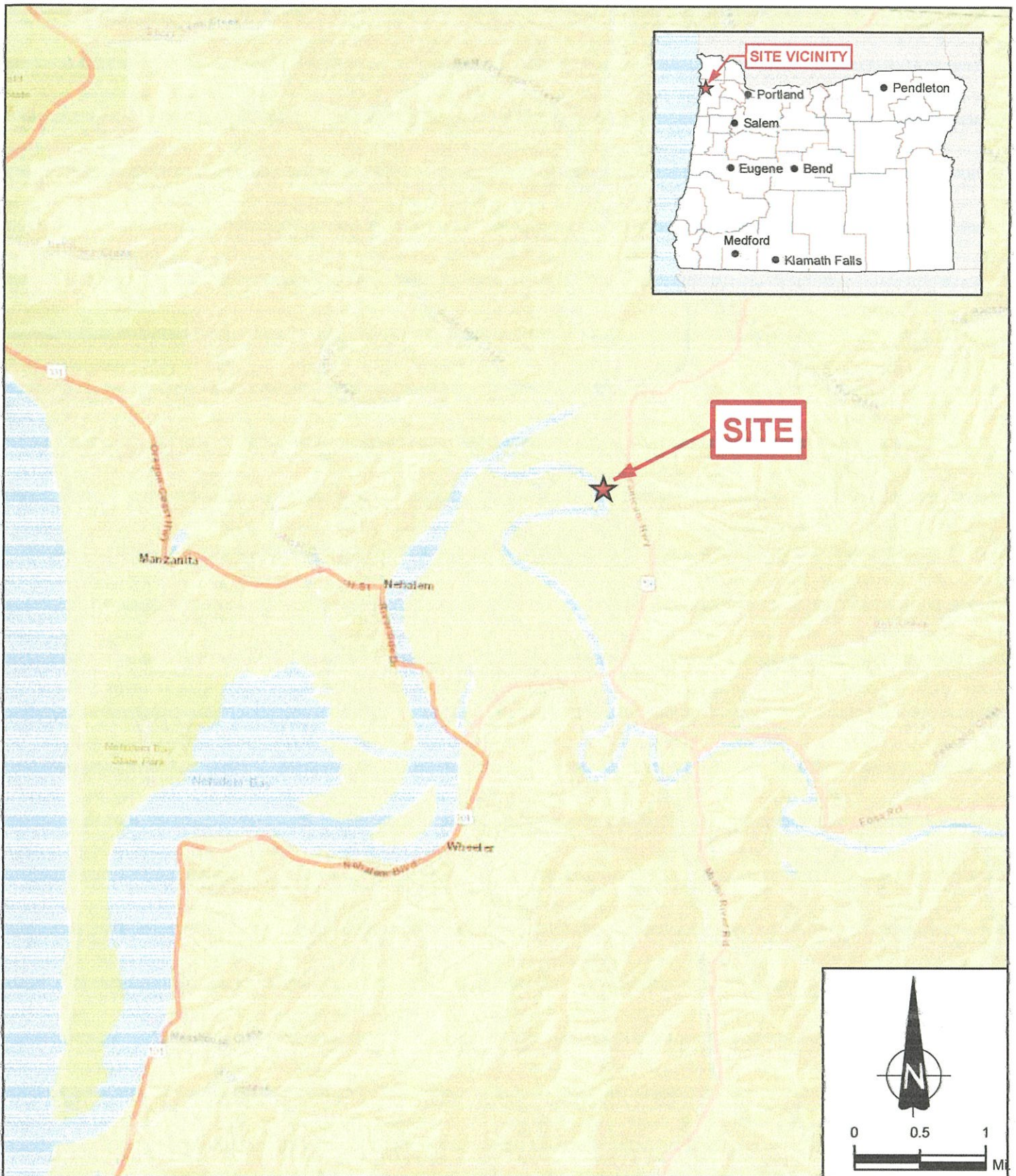
Abbreviations:

BFE - Base Flood Elevation, the regulatory (100-year) flood water surface elevation



**FIGURES**

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TRENT AND KELLIE DAVIS  
PROPERTY

CASCADE WATER  
RESOURCES, LLC

NO-RISE ANALYSIS  
NEHALEM RIVER AT  
MCDONALD DIKE ROAD

FIGURE 1: SITE LOCATION MAP

NO-RISE ANALYSIS  
NEHALEM RIVER AT  
MCDONALD DIKE ROAD

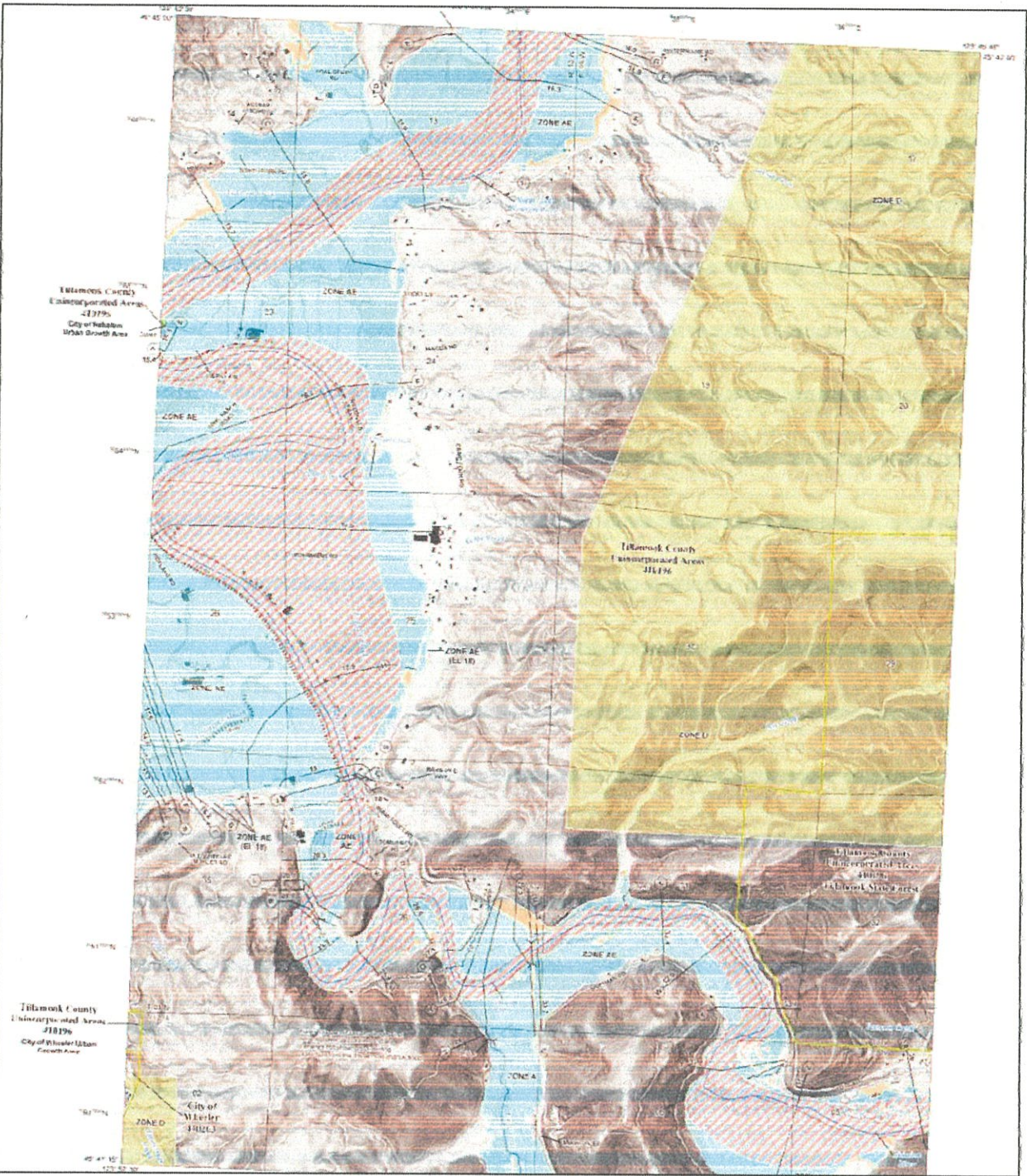
FIGURE 1: SITE LOCATION MAP

DATE  
NOVEMBER 2022

SCALE  
1" = 1 mile

PROJECT NO.  
XX-XX-XXXX

FIGURE  
1



<p><b>FLOOD HAZARD INFORMATION</b></p> <p>FOR FURTHER INFORMATION, VISIT <a href="http://www.fema.gov">www.fema.gov</a> OR CONTACT FEMA AT 1-800-452-5337. FOR MORE INFORMATION, VISIT <a href="http://www.fema.gov">www.fema.gov</a> OR CONTACT FEMA AT 1-800-452-5337.</p> <p><b>SPRINKLER PROTECTION</b></p> <p>SPRINKLER PROTECTED AREAS</p> <p><b>WATER MAINS</b></p> <p>WATER MAINS</p> <p><b>SEWER MAINS</b></p> <p>SEWER MAINS</p> <p><b>POWER LINES</b></p> <p>POWER LINES</p> <p><b>ROADS</b></p> <p>ROADS</p> <p><b>RAILROADS</b></p> <p>RAILROADS</p> <p><b>BOUNDARIES</b></p> <p>BOUNDARIES</p> <p><b>PROPERTY LINES</b></p> <p>PROPERTY LINES</p> <p><b>WATER BODIES</b></p> <p>WATER BODIES</p> <p><b>OTHER FEATURES</b></p> <p>OTHER FEATURES</p>	<p><b>NOTES TO USERS</b></p> <p>1. This map was prepared using the best available data. The user is responsible for verifying the accuracy of the data.</p> <p>2. This map is not to be used for navigation.</p> <p>3. This map is not to be used for legal purposes.</p> <p>4. This map is not to be used for engineering purposes.</p> <p>5. This map is not to be used for insurance purposes.</p> <p>6. This map is not to be used for any other purpose.</p>	<p><b>FEMA</b></p> <p>National Flood Insurance Program</p> <p>COMMUNITY: 33000      FIRM NO: 43273C0230F      DATE: SEPTEMBER 25, 2008</p>	<p><b>BLISSMOR COUNTY, OR 97125</b></p> <p>DATE: NOVEMBER 2022</p> <p>SCALE: 1" = 2,000'</p> <p>PROJECT NO: X-XX-XXXX-XX</p> <p>FIGURE: 2</p>
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TRENT AND KELLIE DAVIS PROPERTY

CASCADE WATER RESOURCES, LLC

NO-RISE ANALYSIS  
 NEHALEM RIVER AT  
 MCDONALD DIKE ROAD

FIGURE 2: EXISTING FLOOD INSURANCE RATE MAP (FIRM) FOR PROJECT SITE  
 PANEL 41057C0230F

DATE: NOVEMBER 2022

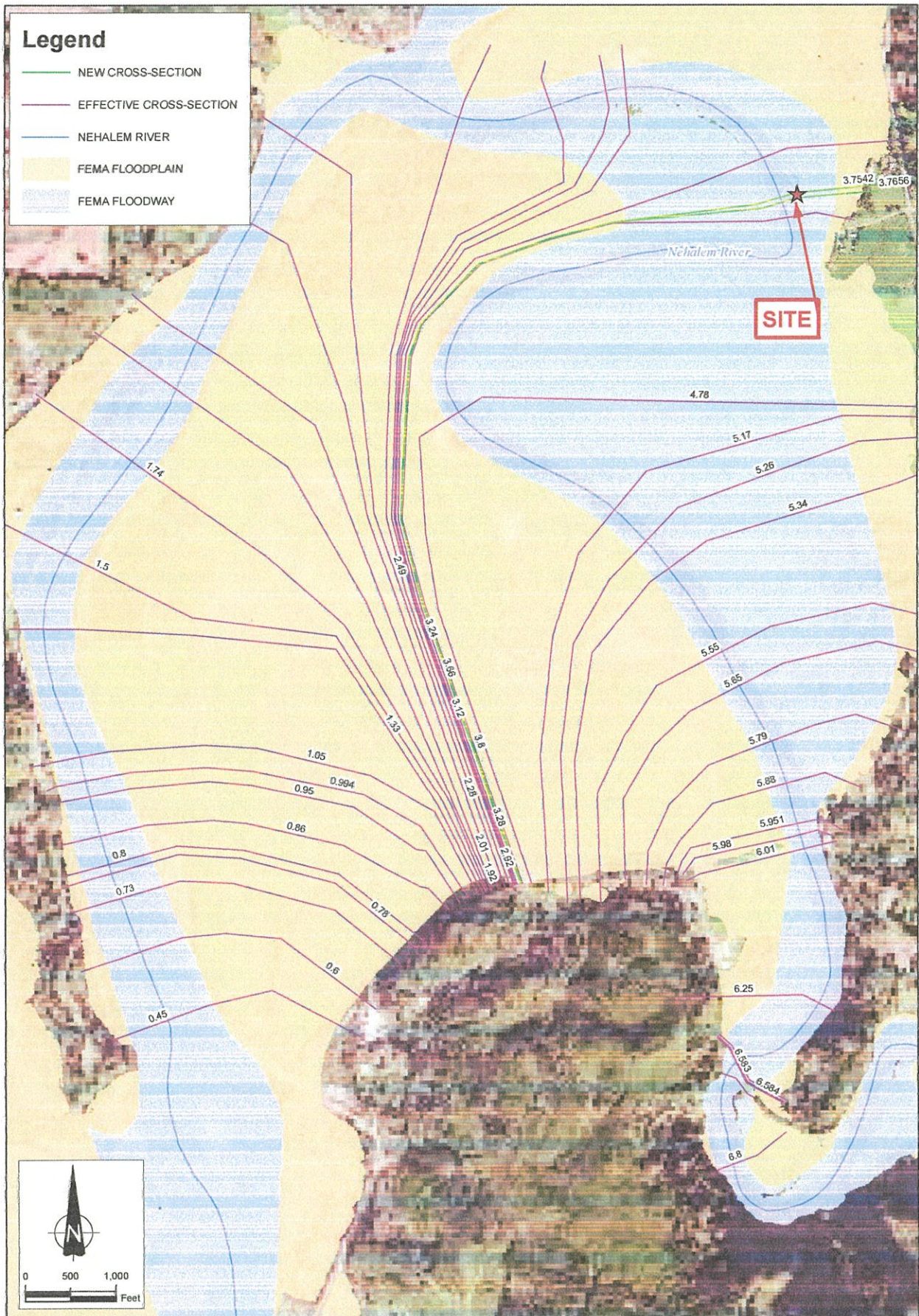
SCALE: 1" = 2,000'

PROJECT NO: X-XX-XXXX-XX

FIGURE: 2

**Legend**

- NEW CROSS-SECTION
- EFFECTIVE CROSS-SECTION
- NEHALEM RIVER
- FEMA FLOODPLAIN
- FEMA FLOODWAY



TRENT AND KELLIE DAVIS PROPERTY		NO-RISE ANALYSIS NEHALEM RIVER AT MCDONALD DIKE ROAD	DATE NOVEMBER 2022
CASCADE WATER RESOURCES, LLC		FIGURE 3 - HYDRAULIC MODEL WORK MAP	SCALE 1" = 1,000' PROJECT NO. X-XX-XXXX-XX FIGURE 3



# Figure 4 - FEMA FIRMedette

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

## Legend

**SPECIAL FLOOD HAZARD AREAS**



Without Base Flood Elevation (BFE)  
Zone A, V, A99

With BFE or Depth Zone AE, AD, AH, VE, AR

Regulatory Floodway

**OTHER AREAS OF FLOOD HAZARD**



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 Zone X

Future Conditions 1% Annual Chance Flood Hazard Zone X

Area with Reduced Flood Risk due to Levee. See Notes. Zone X

Area with Flood Risk due to Levee Zone D

**OTHER AREAS**



NO SCREEN

Area of Minimal Flood Hazard Zone X

Effective LOMRs

Area of Undetermined Flood Hazard Zone D

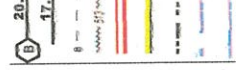
**GENERAL STRUCTURES**



Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

**OTHER FEATURES**



Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

**MAP PANELS**



Digital Data Available

No Digital Data Available

Unmapped

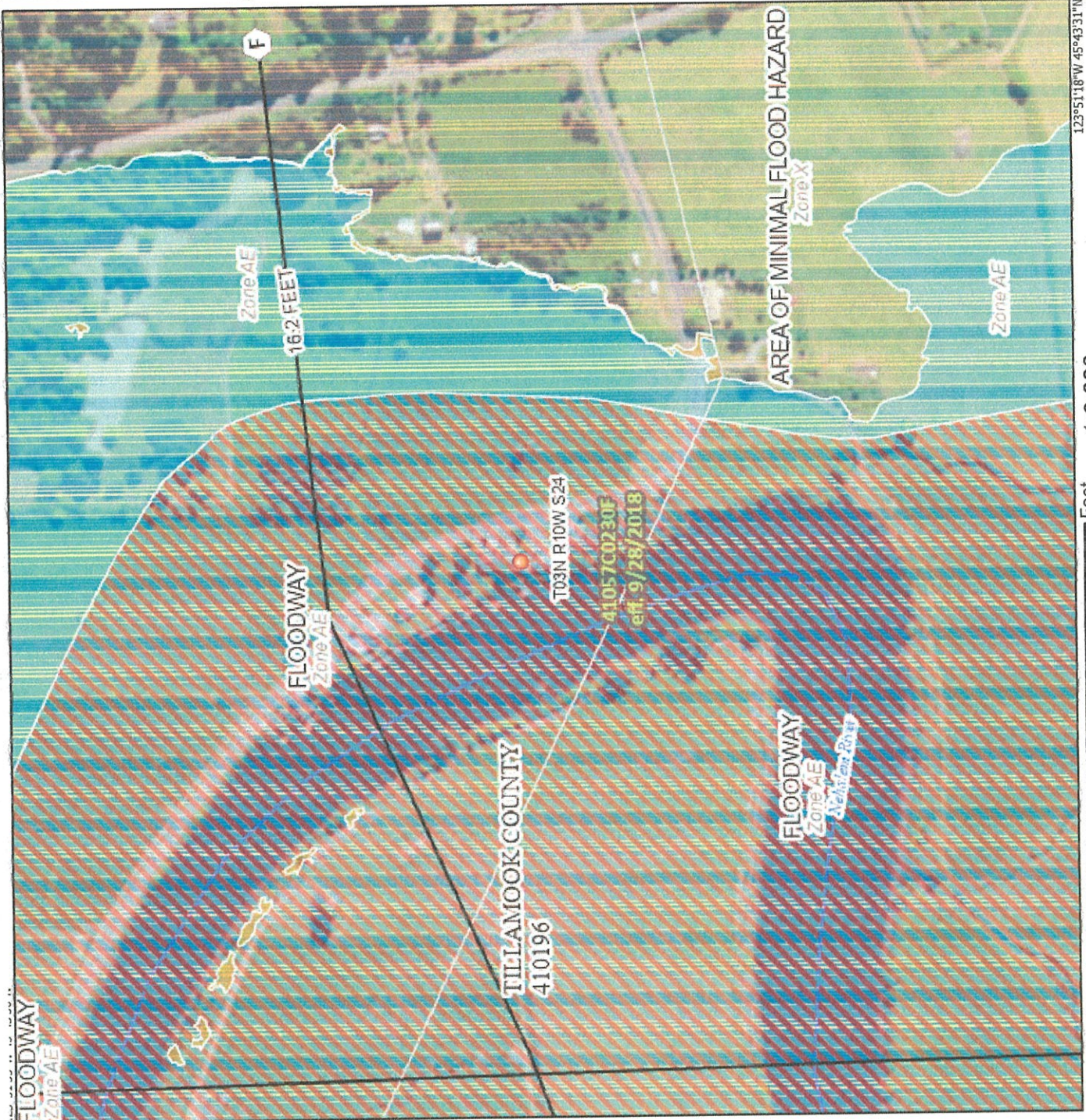


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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 9/27/2021 at 4:11 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.



123°51'18"W 45°43'31"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

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

## APPENDIX A

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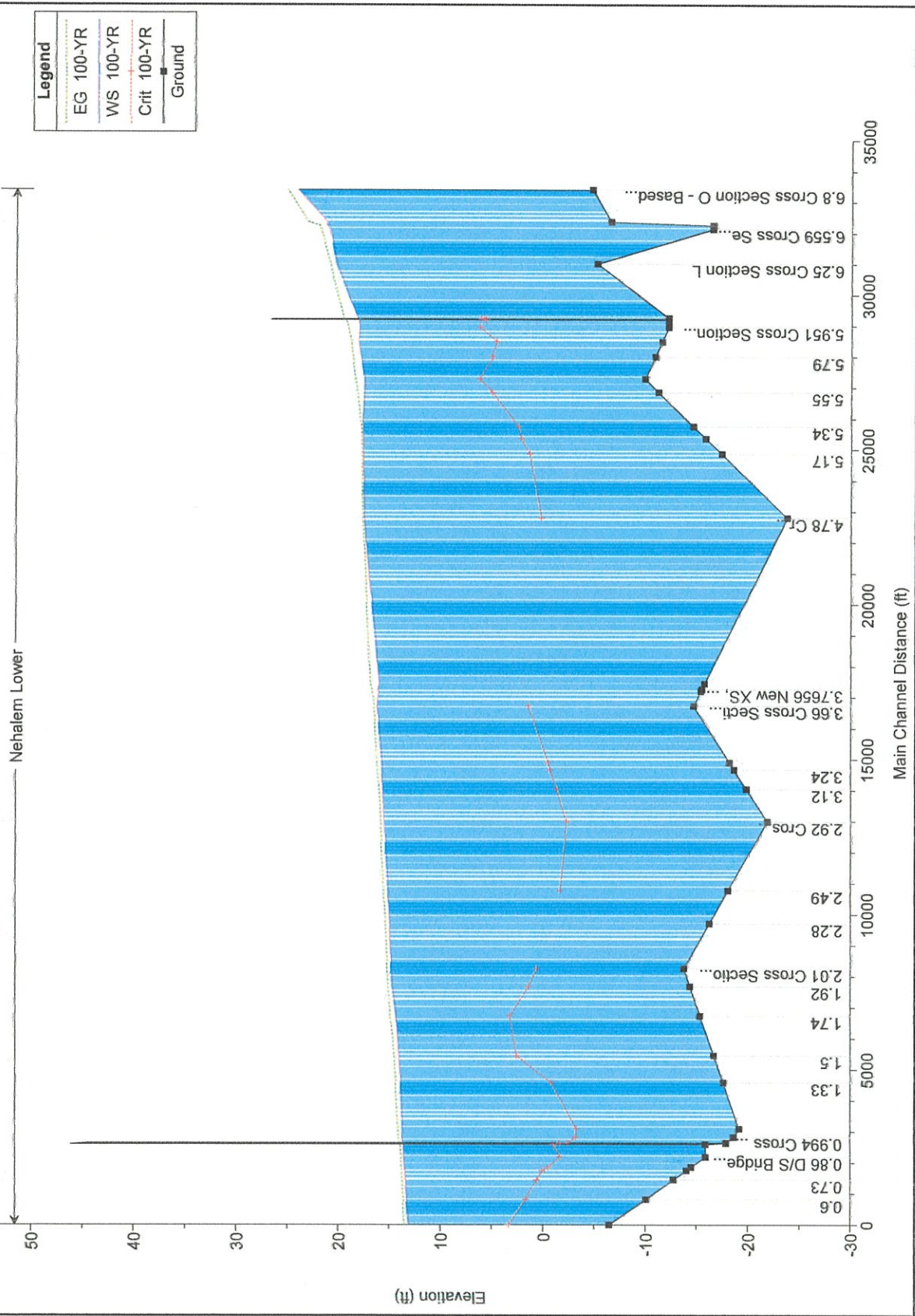
Corrected Effective / Pre-Project Conditions Hydraulic Model Output

*Profile*

*Output Summary*

*Cross-Sections*

Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022



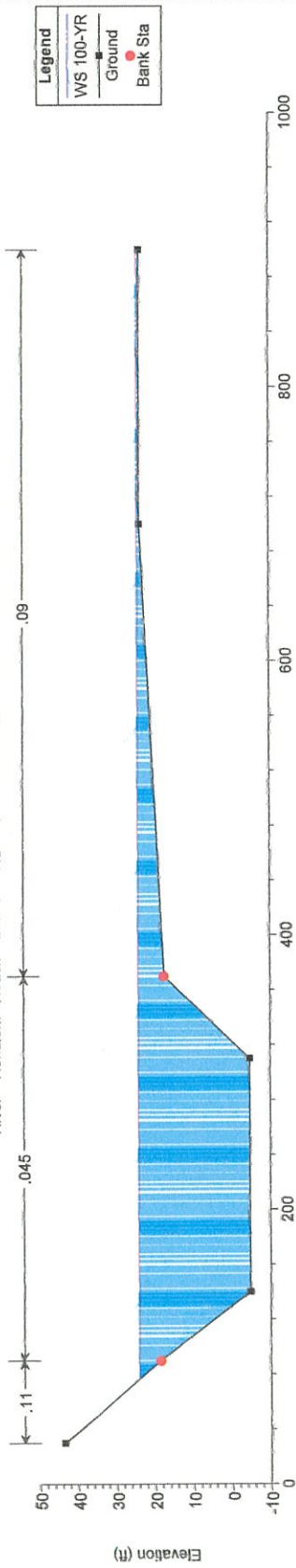
HEC-RAS Plan: Corr\_Eff River: Nehalem Reach: Lower Profile: 100-YR

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Lower	6.8	100-YR	59000.00	-4.66	24.09		25.19	0.000981	8.49	8120.93	823.32	0.30
Lower	6.61	100-YR	59000.00	-6.46	21.20		23.17	0.002661	11.25	5335.85	374.63	0.47
Lower	6.584	100-YR	59000.00	-16.46	21.30		22.12	0.000745	7.24	8146.01	657.94	0.26
Lower	6.583	100-YR	59000.00	-18.46	21.17		22.07	0.001092	7.61	7751.26	633.43	0.28
Lower	6.579	100-YR	59000.00	-16.46	21.15		22.05	0.001095	7.62	7743.80	633.34	0.28
Lower	6.578	100-YR	59000.00	-16.46	21.16		21.99	0.000600	7.29	8098.21	657.40	0.27
Lower	6.559	100-YR	59000.00	-16.46	20.98		21.88	0.000642	7.65	7713.58	1161.53	0.28
Lower	6.25	100-YR	59000.00	-5.16	20.33		20.91	0.000643	7.22	13893.07	1184.08	0.29
Lower	6.01	100-YR	56700.00	-12.16	18.23	5.84	19.63	0.000538	9.49	5999.65	1340.73	0.35
Lower	5.99		Bridge									
Lower	5.98	100-YR	54700.00	-12.16	18.06		19.25	0.000456	8.77	6245.01	1318.92	0.33
Lower	5.951	100-YR	54700.00	-12.16	18.01	6.21	19.19	0.000507	8.72	6275.78	1429.68	0.34
Lower	5.88	100-YR	54700.00	-11.52	18.11	4.60	18.88	0.000319	7.06	8623.08	2389.05	0.27
Lower	5.79	100-YR	54700.00	-10.84	17.89	5.05	18.70	0.000361	7.46	10112.08	3409.98	0.29
Lower	5.65	100-YR	54700.00	-9.86	17.53	6.25	18.41	0.000437	7.99	11569.08	4657.89	0.31
Lower	5.55	100-YR	54700.00	-11.18	17.58	5.07	18.18	0.000284	6.70	14758.91	5541.33	0.26
Lower	5.34	100-YR	54700.00	-14.61	17.69	2.53	17.87	0.000102	4.31	27737.78	6611.34	0.16
Lower	5.26	100-YR	54700.00	-15.84	17.66	2.23	17.83	0.000098	4.22	29537.28	7050.75	0.15
Lower	5.17	100-YR	54700.00	-17.37	17.64	1.38	17.77	0.000085	4.00	33451.00	7419.27	0.14
Lower	4.78	100-YR	54700.00	-23.76	17.56	0.30	17.66	0.000071	3.63	41857.13	10506.49	0.13
Lower	3.8	100-YR	54700.00	-15.74	16.03		16.94	0.000417	8.22	13127.95	10640.01	0.31
Lower	3.7656	100-YR	54700.00	-15.48	16.15		16.80	0.000332	7.32	16289.90	10807.45	0.28
Lower	3.7542	100-YR	54700.00	-15.39	16.08		16.78	0.000367	7.55	15683.24	10909.10	0.29
Lower	3.66	100-YR	52600.00	-14.66	16.22	1.47	16.56	0.000169	5.42	23223.57	11590.21	0.20
Lower	3.28	100-YR	52600.00	-18.19	15.79	-0.38	16.23	0.000214	5.87	17036.40	9955.88	0.22
Lower	3.24	100-YR	52600.00	-18.62	15.75	-0.56	16.19	0.000178	5.78	17935.52	10082.66	0.21
Lower	3.12	100-YR	52600.00	-19.83	15.68	-1.27	16.08	0.000162	5.45	18725.99	9947.19	0.20
Lower	2.92	100-YR	52900.00	-21.86	15.53	-2.28	15.91	0.000149	5.30	20021.14	9515.87	0.19
Lower	2.49	100-YR	52900.00	-18.06	15.15	-1.60	15.58	0.000133	5.39	17039.17	9030.33	0.19
Lower	2.28	100-YR	52900.00	-16.24	14.95		15.42	0.000153	5.57	11800.45	8050.01	0.21
Lower	2.01	100-YR	66400.00	-13.76	14.84	0.65	15.18	0.000129	4.68	14932.24	7786.01	0.19
Lower	1.92	100-YR	66400.00	-14.37	14.74	1.50	15.10	0.000151	5.15	15560.50	7606.61	0.20
Lower	1.74	100-YR	66400.00	-15.36	14.31	3.28	14.89	0.000256	6.64	13656.08	7451.94	0.26
Lower	1.5	100-YR	66400.00	-16.69	14.04	2.57	14.54	0.000250	6.10	13180.32	7425.06	0.26
Lower	1.33	100-YR	66400.00	-17.61	13.88	-0.79	14.35	0.000162	5.55	12351.71	6337.32	0.21
Lower	1.05	100-YR	66700.00	-19.16	13.70	-3.17	14.12	0.000135	5.20	12996.39	5319.91	0.19
Lower	0.994	100-YR	67000.00	-18.66	13.68	-3.15	14.06	0.000131	4.96	13691.29	4996.52	0.19
Lower	0.95	100-YR	67000.00	-17.89	13.63	-2.40	14.03	0.000142	5.09	13390.30	4808.98	0.20
Lower	0.92		Bridge									
Lower	0.86	100-YR	67000.00	-15.91	13.55	-1.63	13.87	0.000132	4.52	15040.76	4184.05	0.19
Lower	0.8	100-YR	67000.00	-14.49	13.50	-0.51	13.82	0.000139	4.59	15109.85	3994.19	0.19
Lower	0.78	100-YR	67000.00	-14.02	13.40	0.06	13.80	0.000157	5.07	14066.78	3874.91	0.21
Lower	0.73	100-YR	67000.00	-12.75	13.36	0.59	13.75	0.000160	5.06	14091.68	3594.73	0.21
Lower	0.6	100-YR	67000.00	-10.00	13.32	1.72	13.63	0.000147	4.49	15373.60	2975.78	0.19
Lower	0.45	100-YR	74000.00	-6.46	13.11	3.38	13.48	0.000207	4.89	15150.11	2656.06	0.23



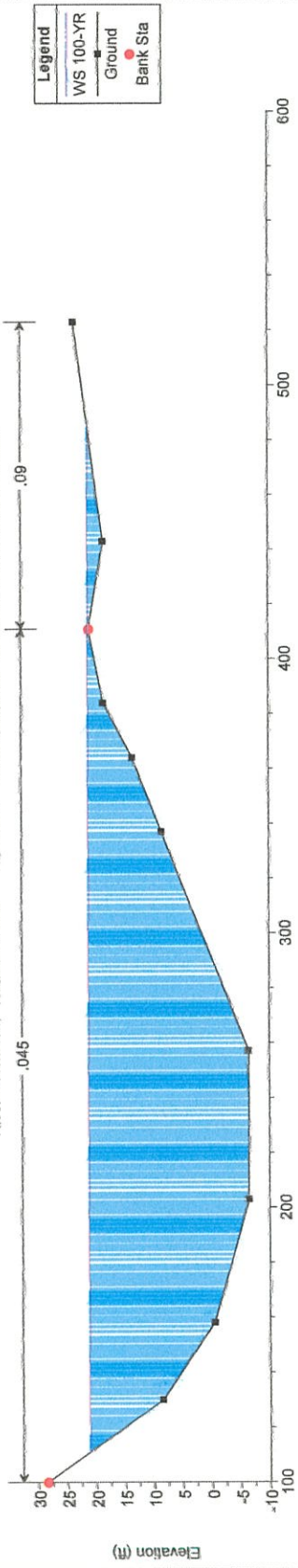
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 6.8 Cross Section O - Based on FEMA Effective Model



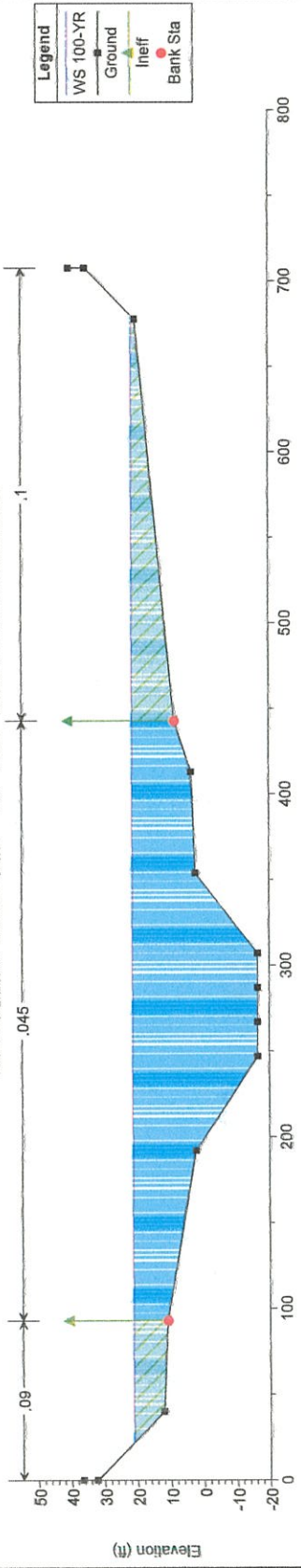
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

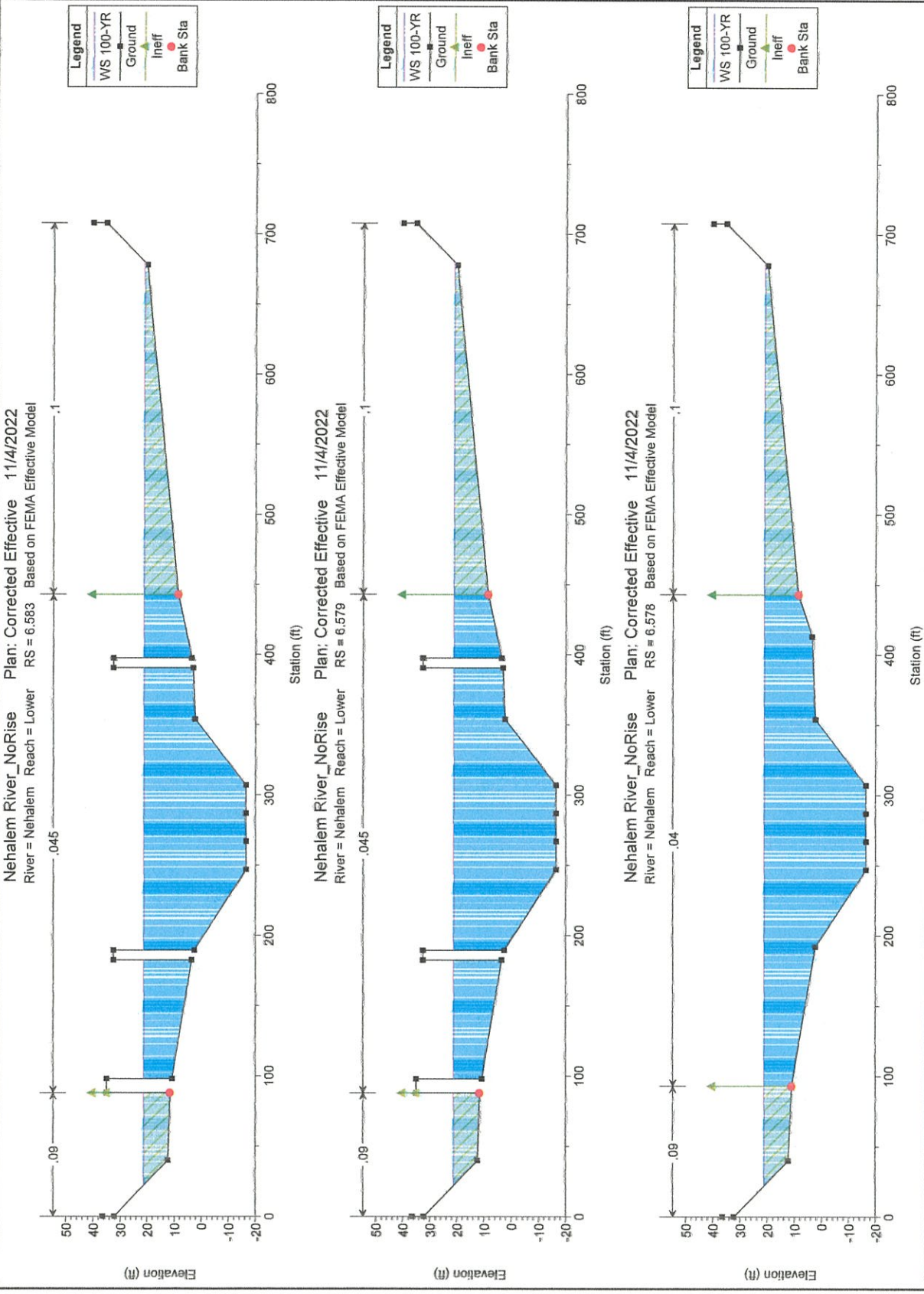
River = Nehalem Reach = Lower RS = 6.61 Cross Section N - Based on FEMA Effective Model

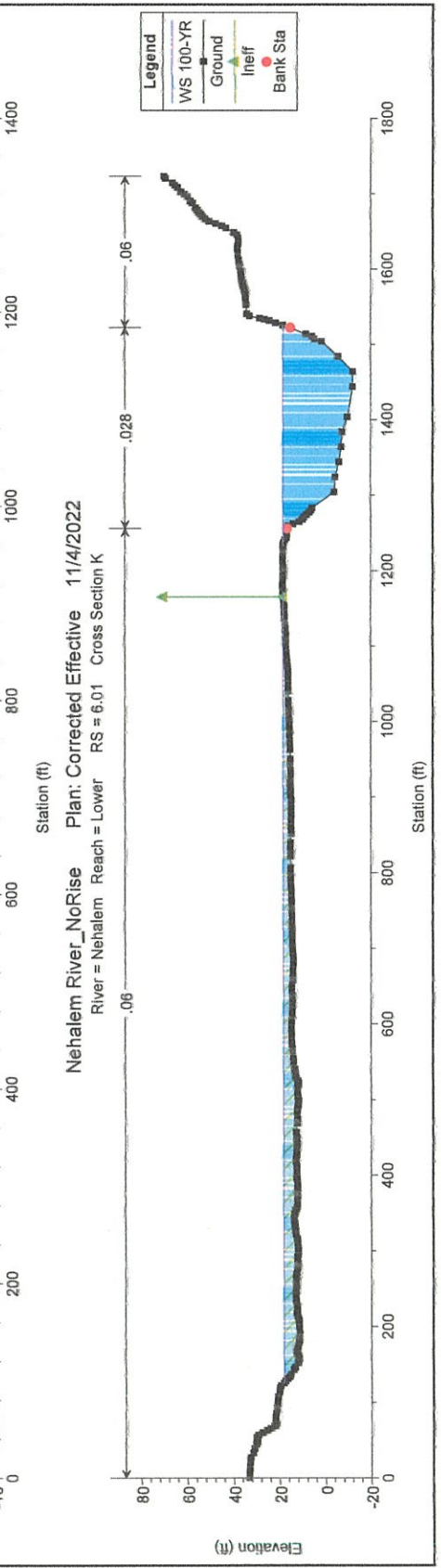
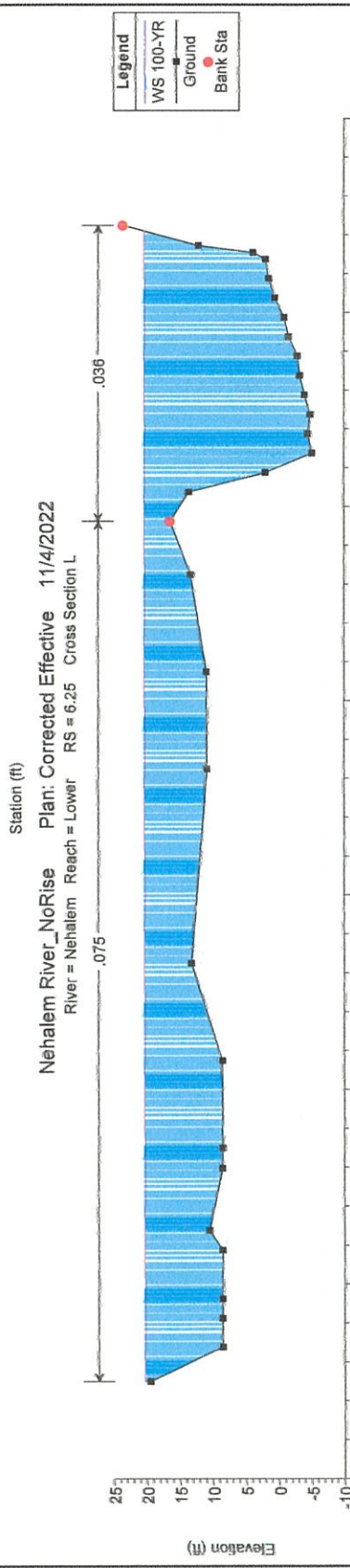
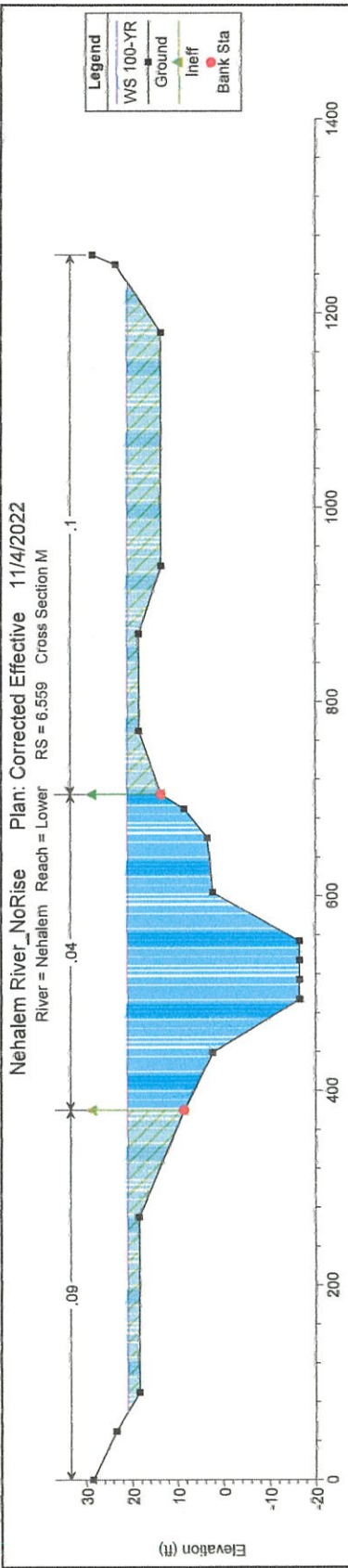


Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 6.584 Based on FEMA Effective Model

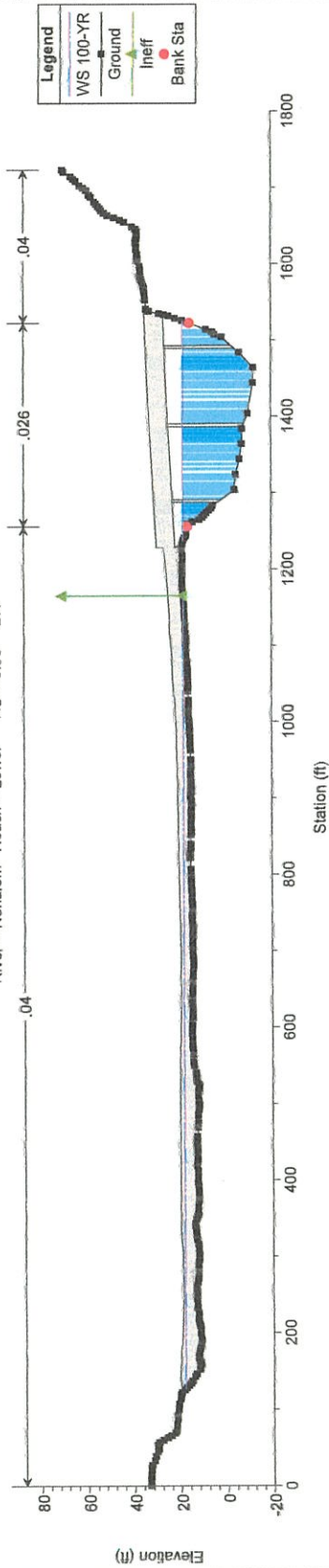






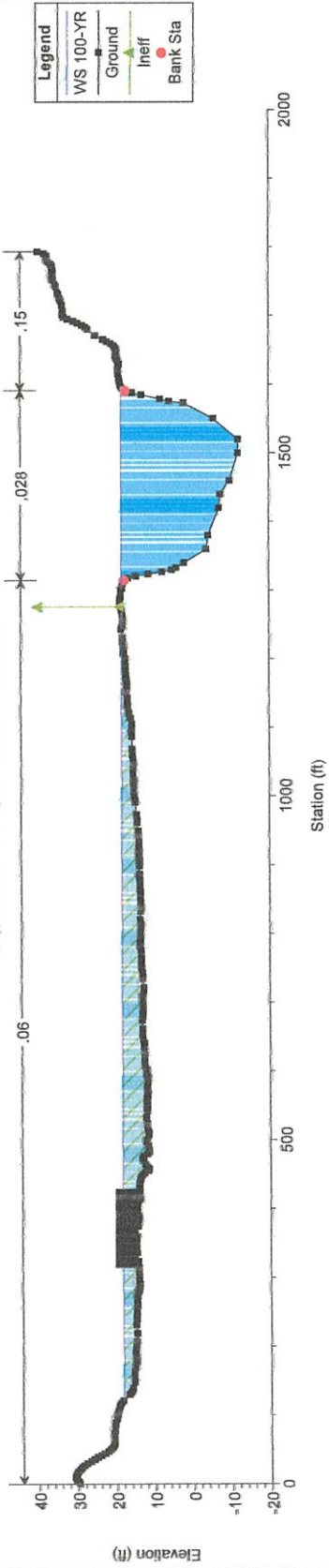
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 5.99 BR



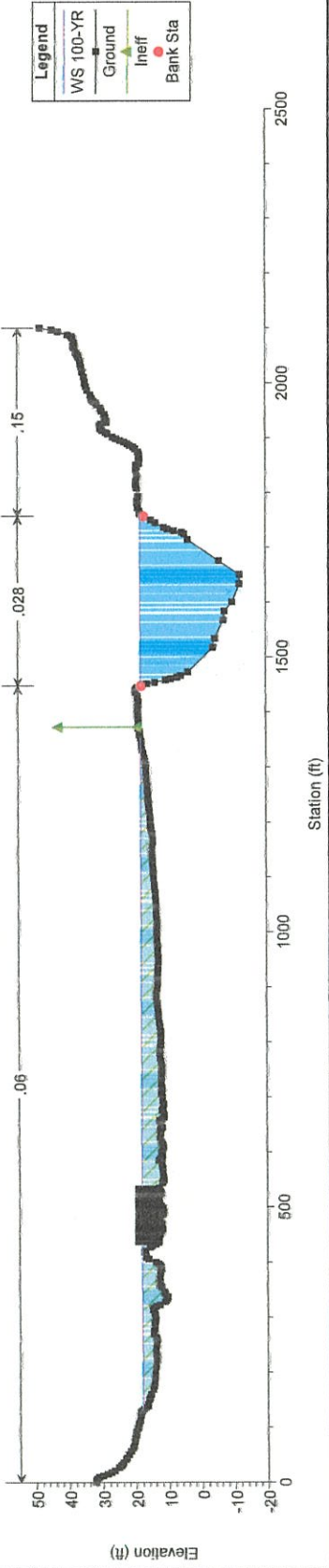
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

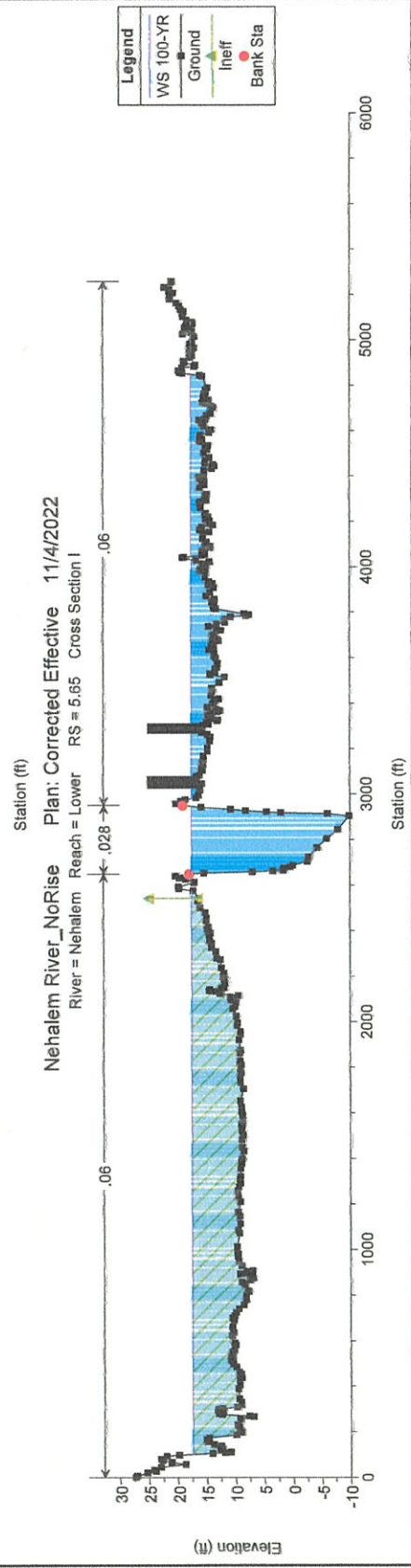
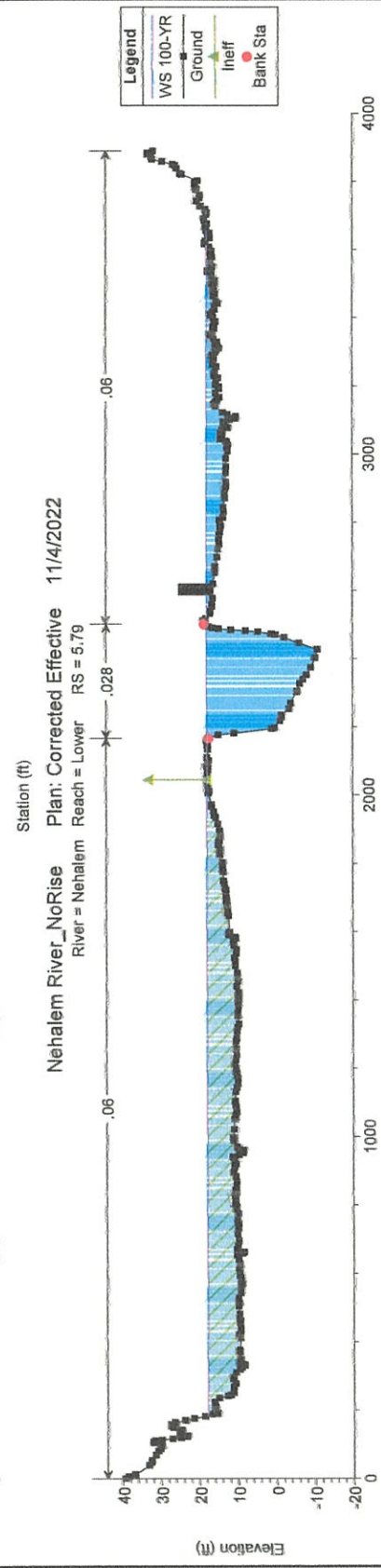
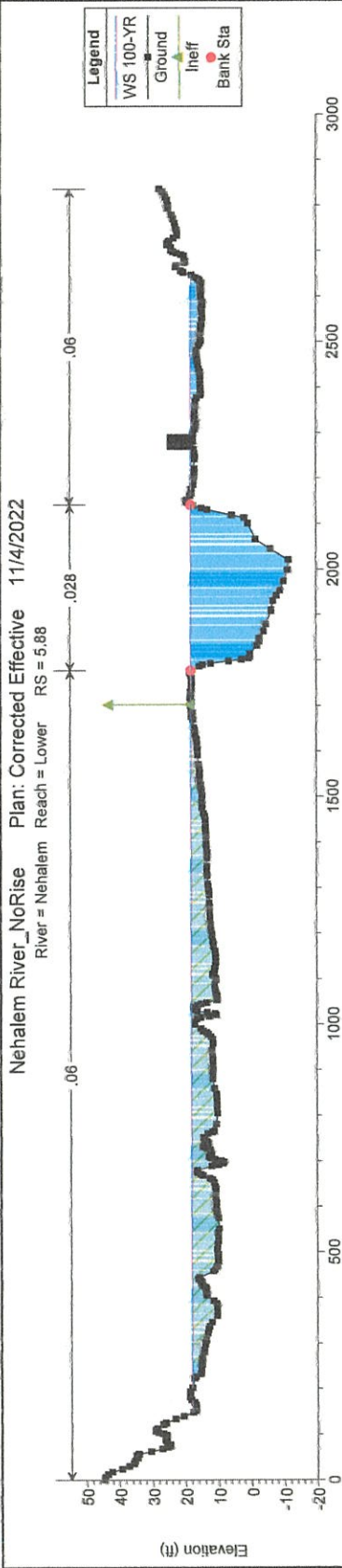
River = Nehalem Reach = Lower RS = 5.98

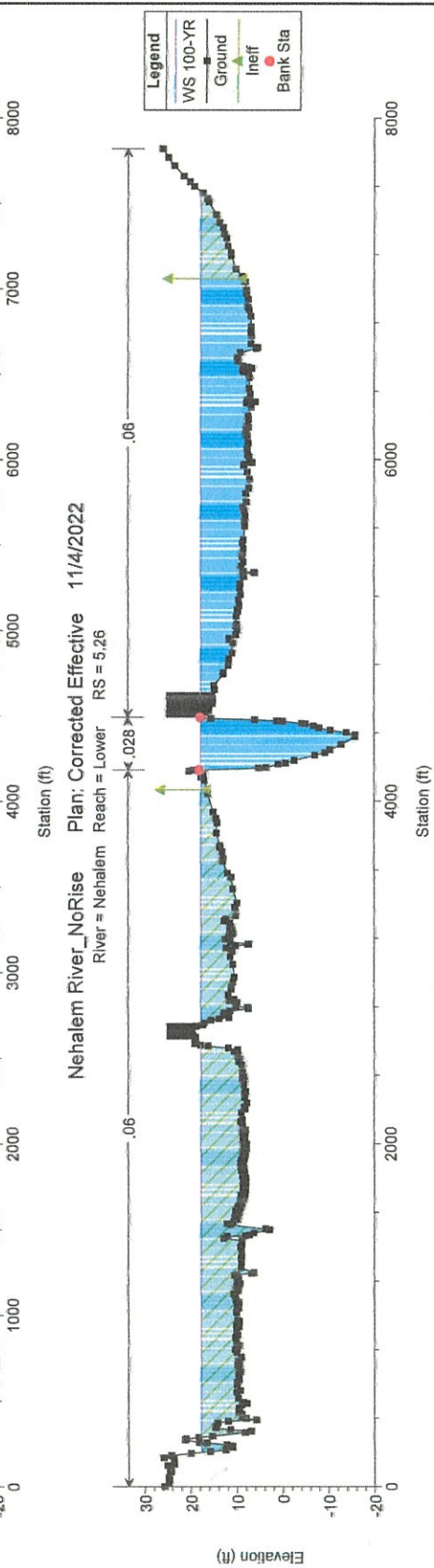
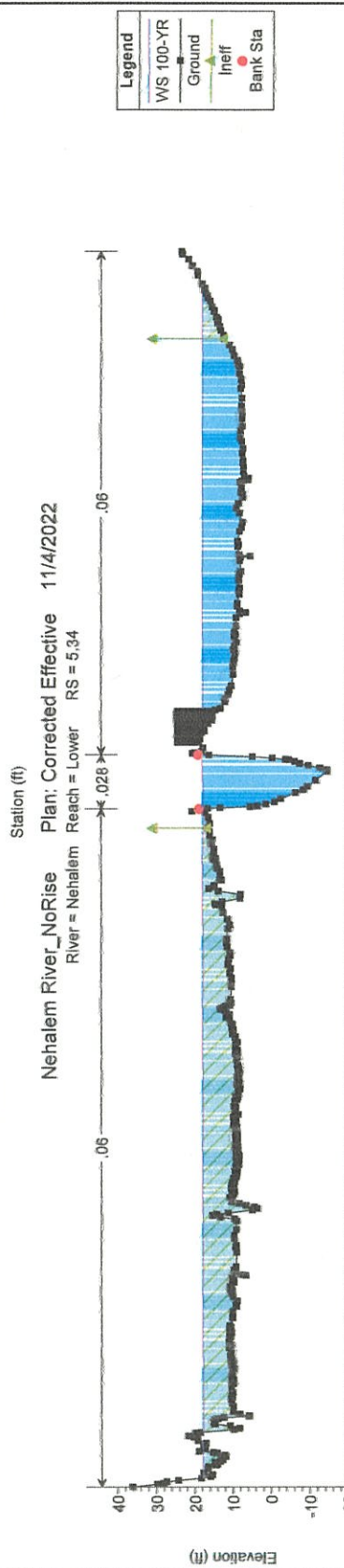
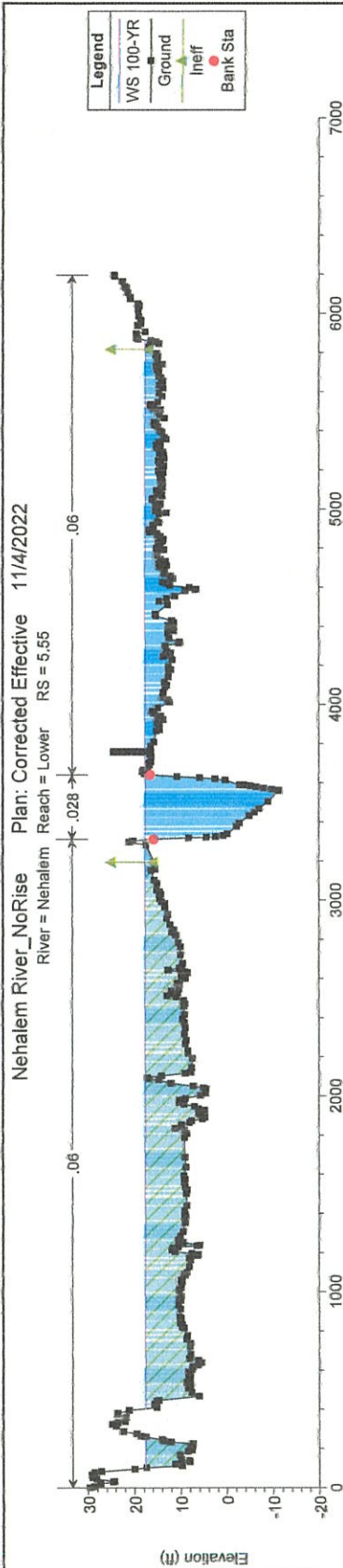


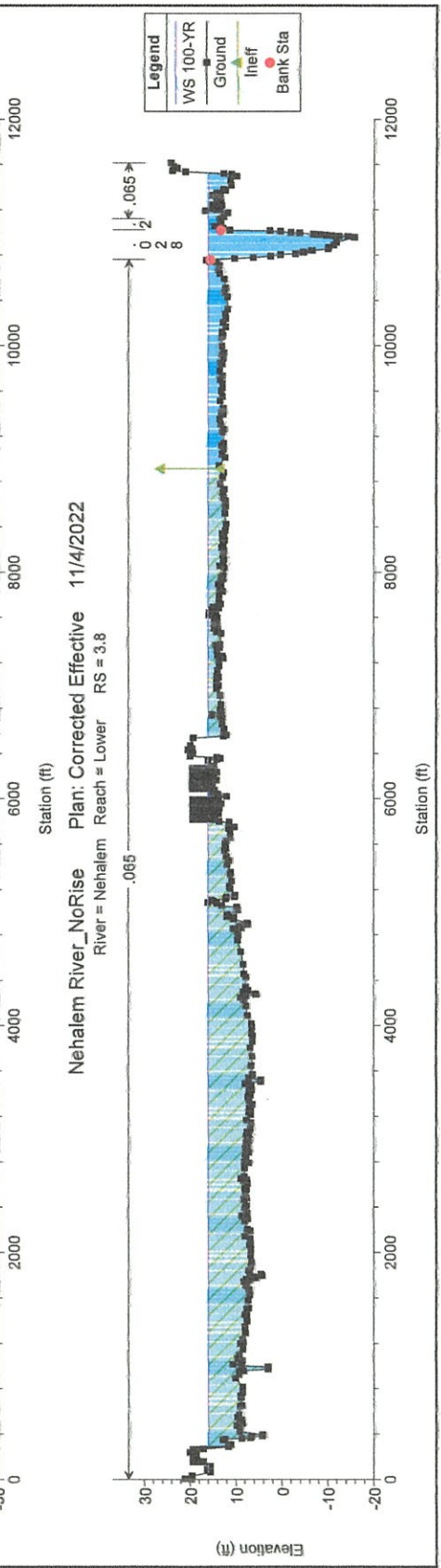
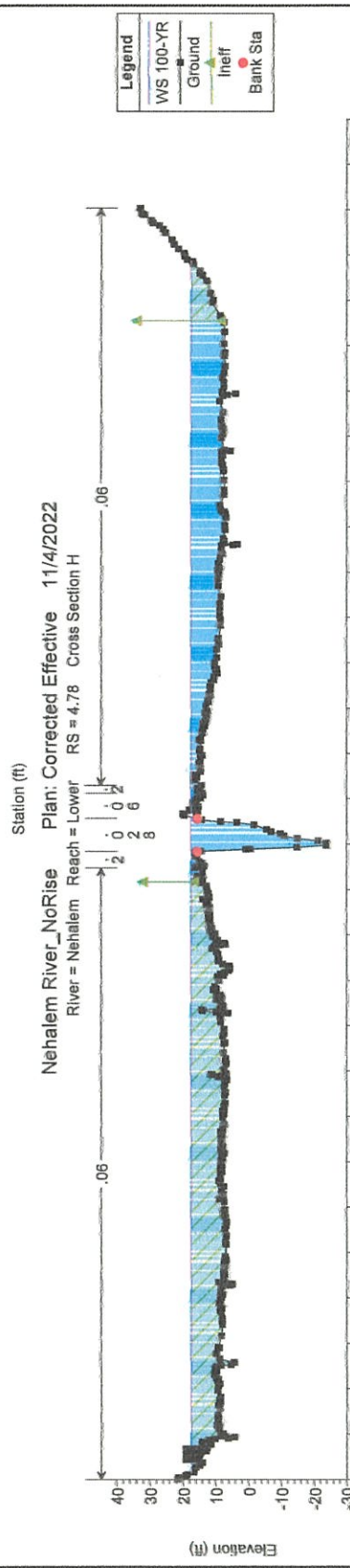
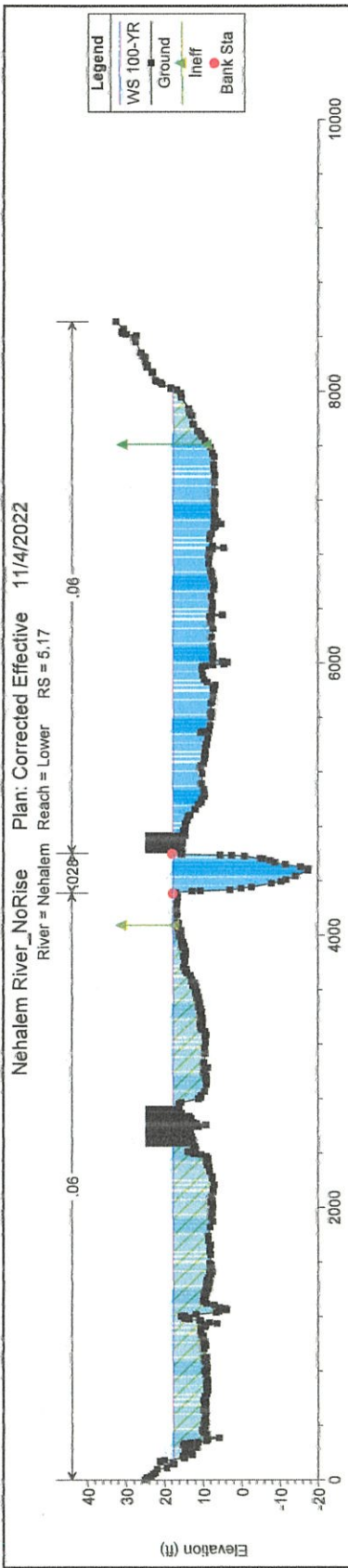
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

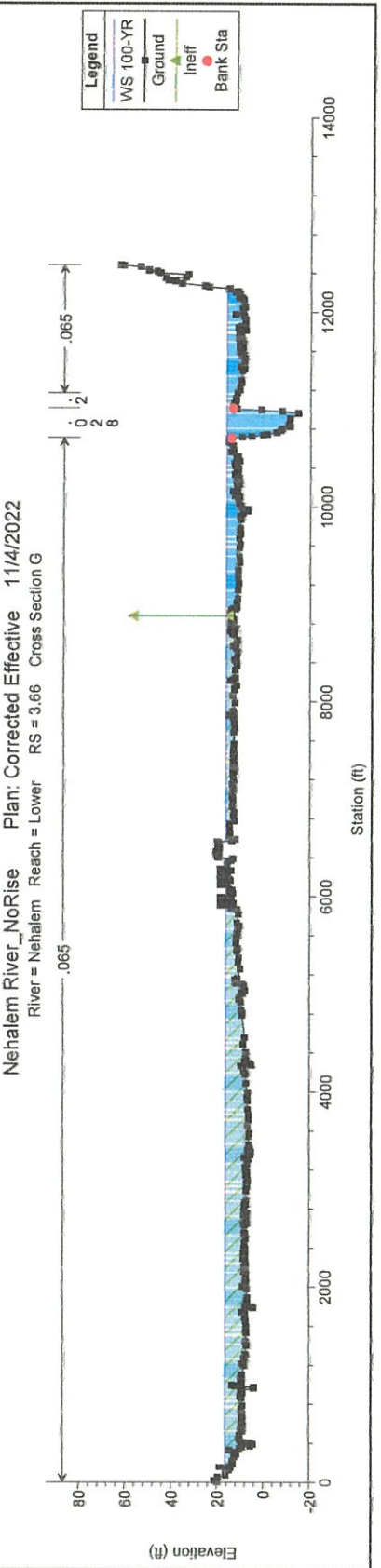
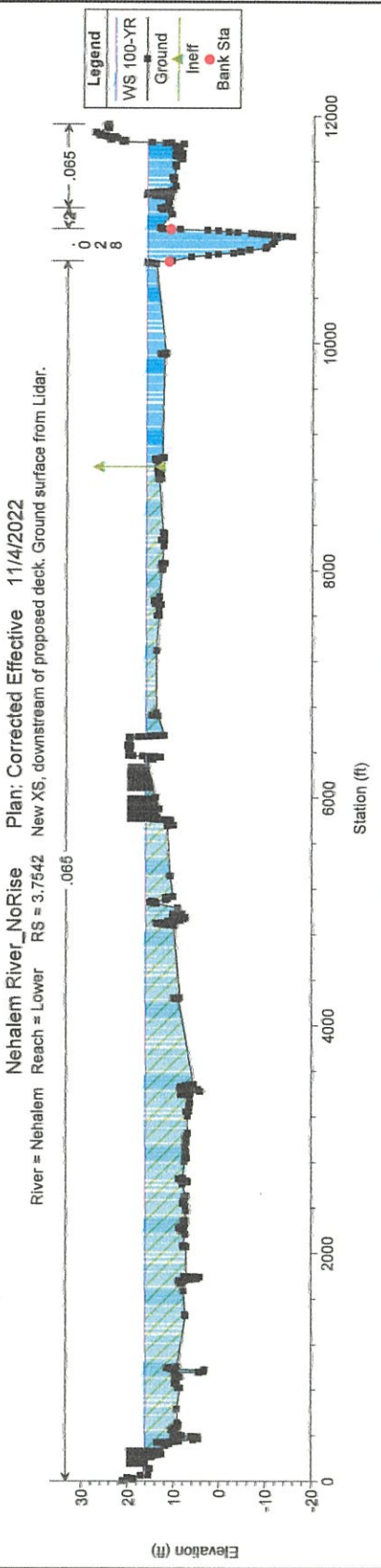
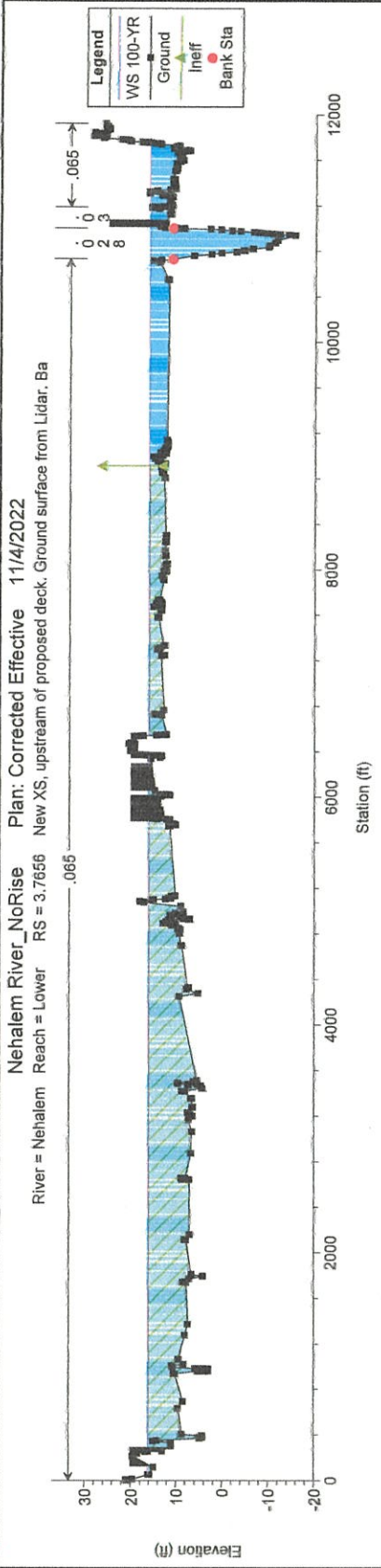
River = Nehalem Reach = Lower RS = 5.951 Cross Section J







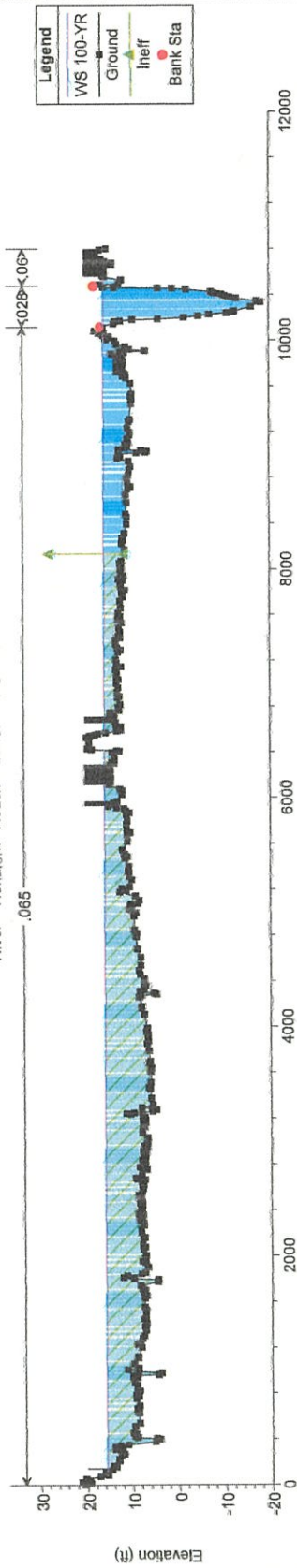






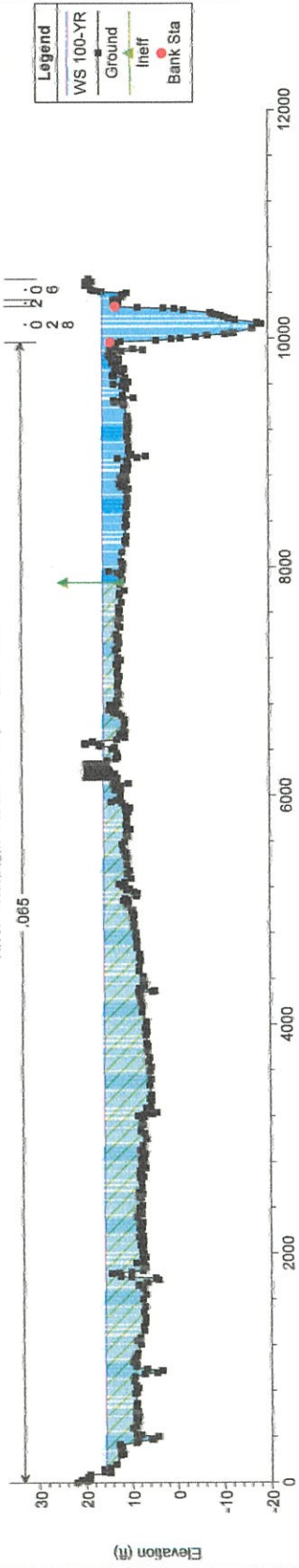
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 3.28



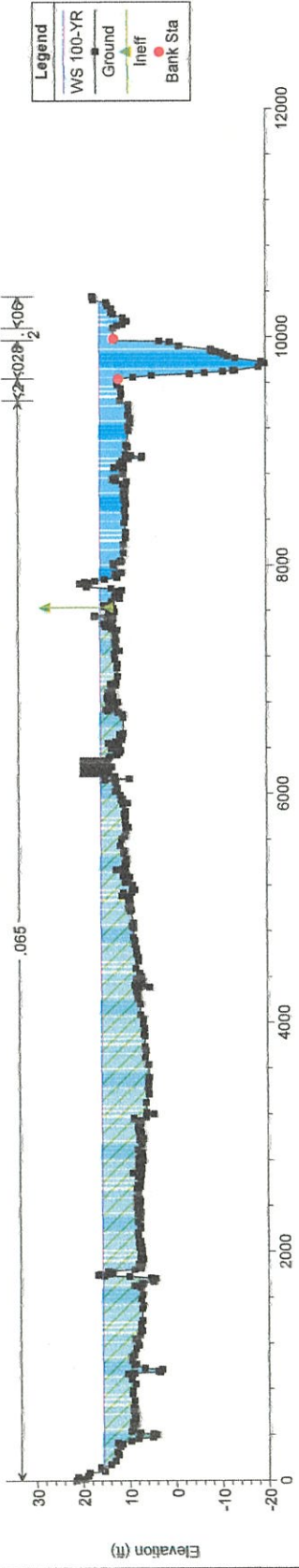
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 3.24



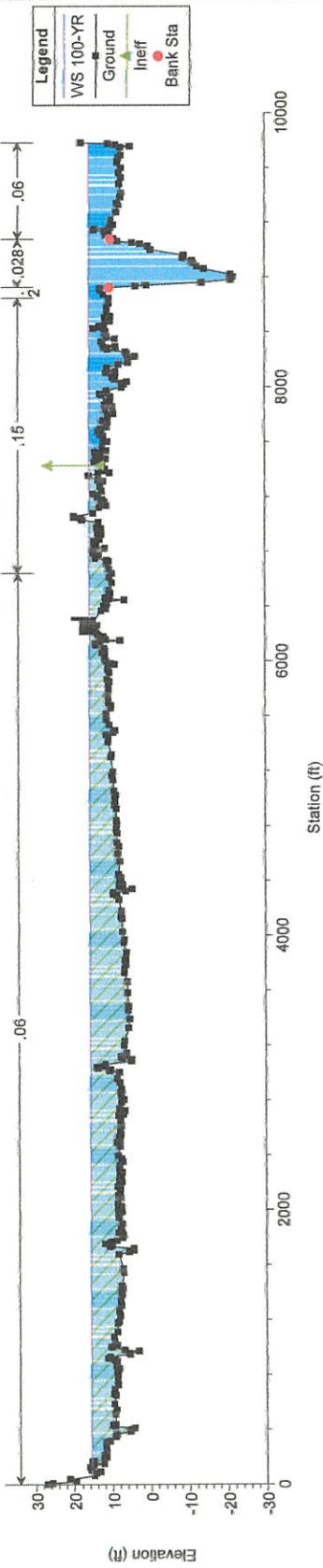
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 3.12



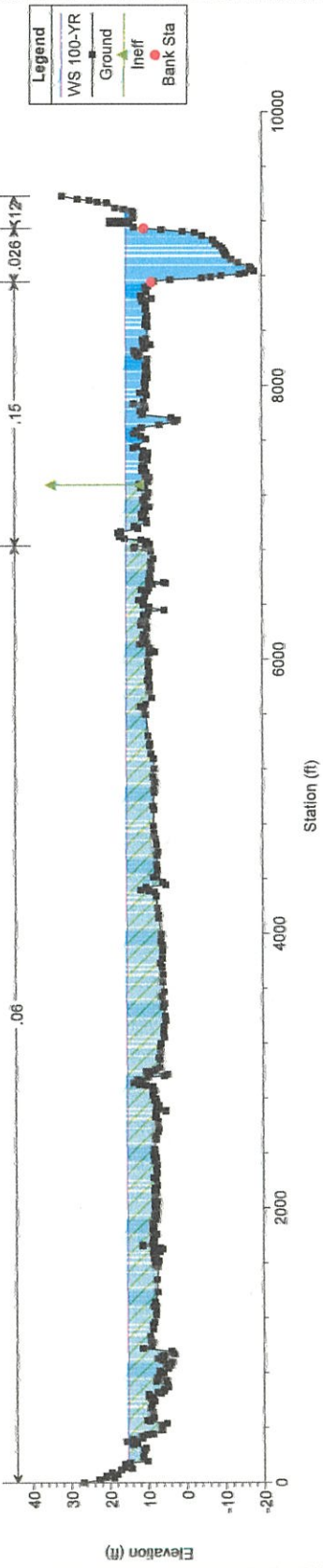
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 2,92 Cross Section F



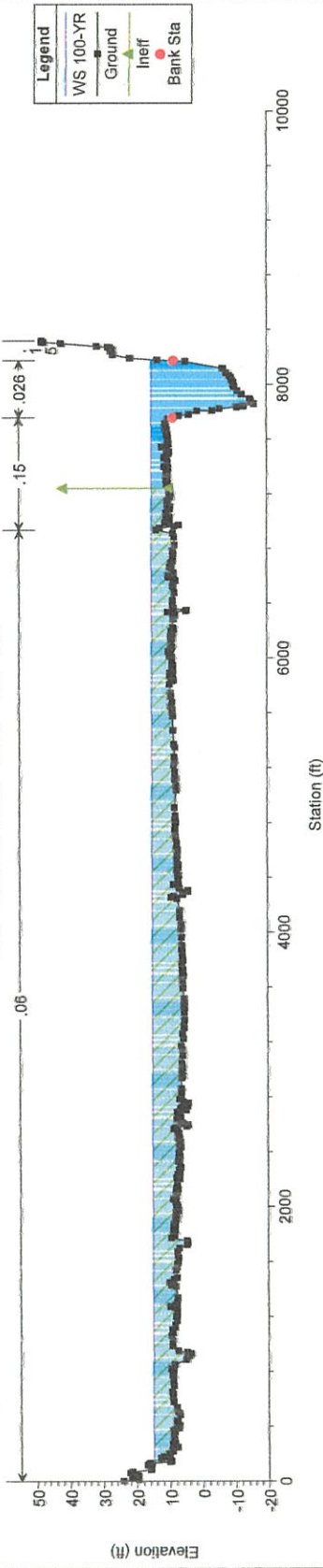
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 2,49



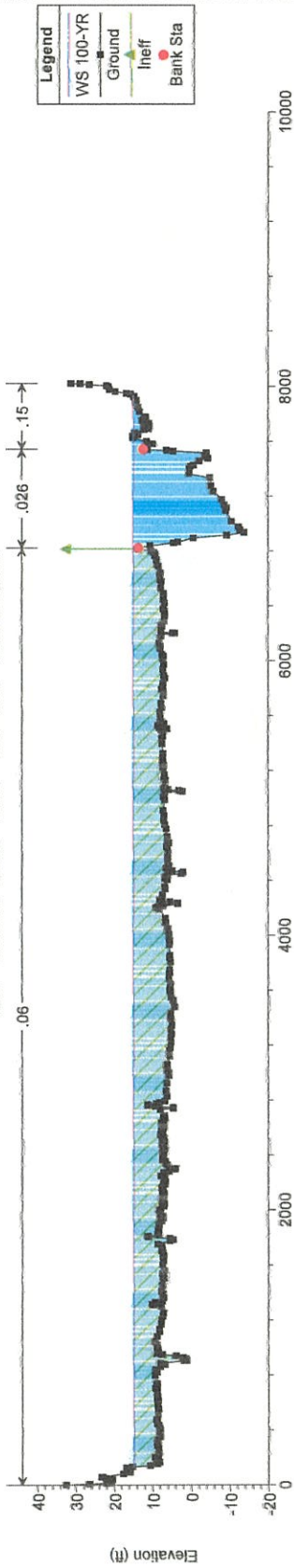
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 2,28



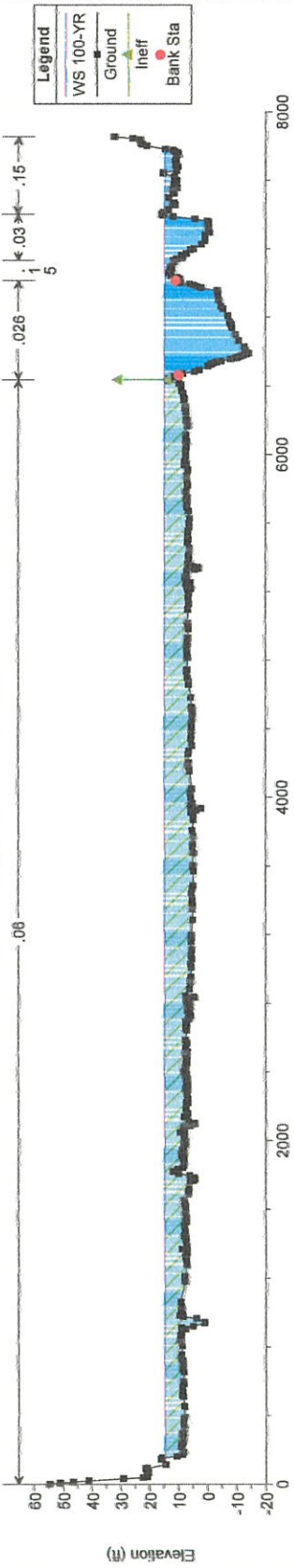
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 2.01 Cross Section E



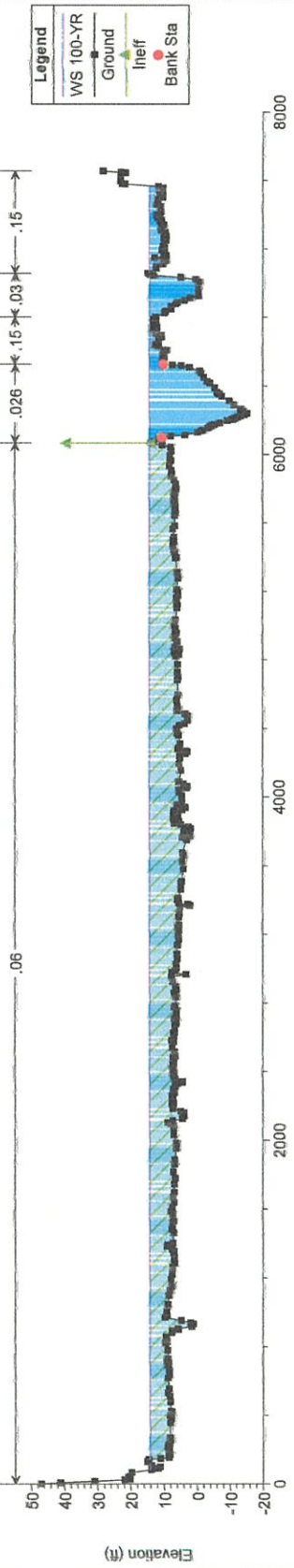
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 1.92



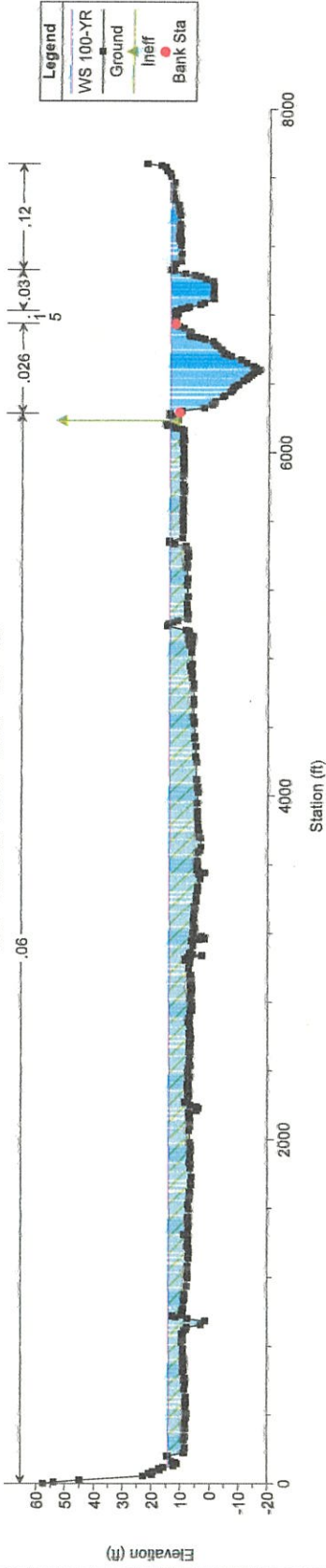
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 1.74



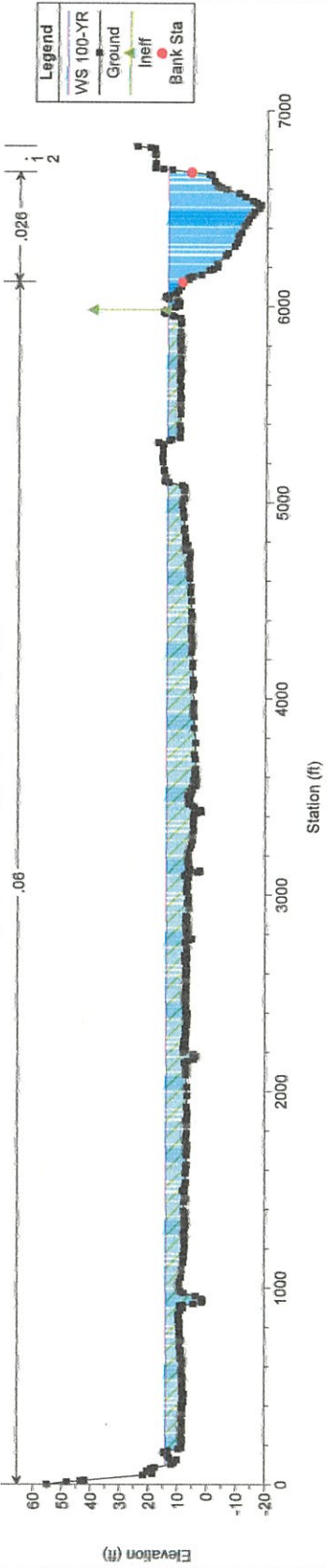
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 1.5



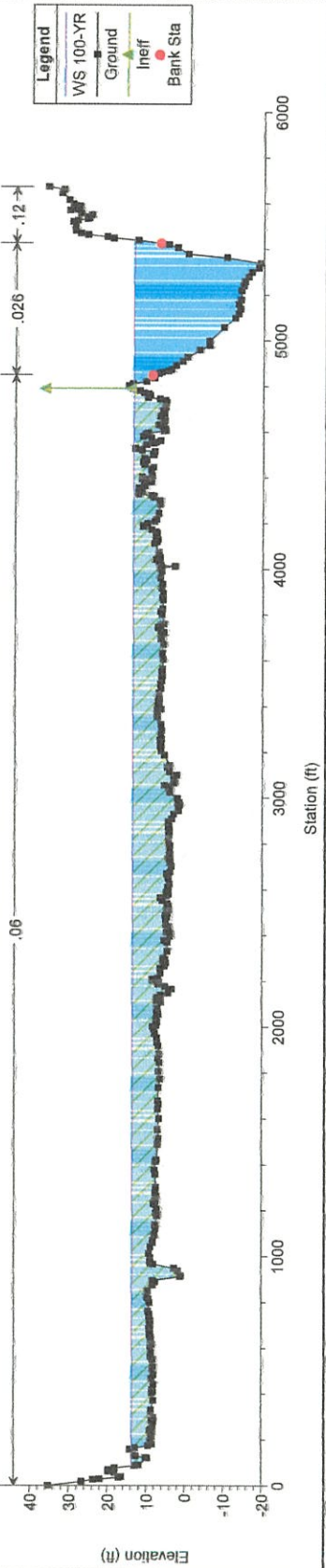
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 1.33



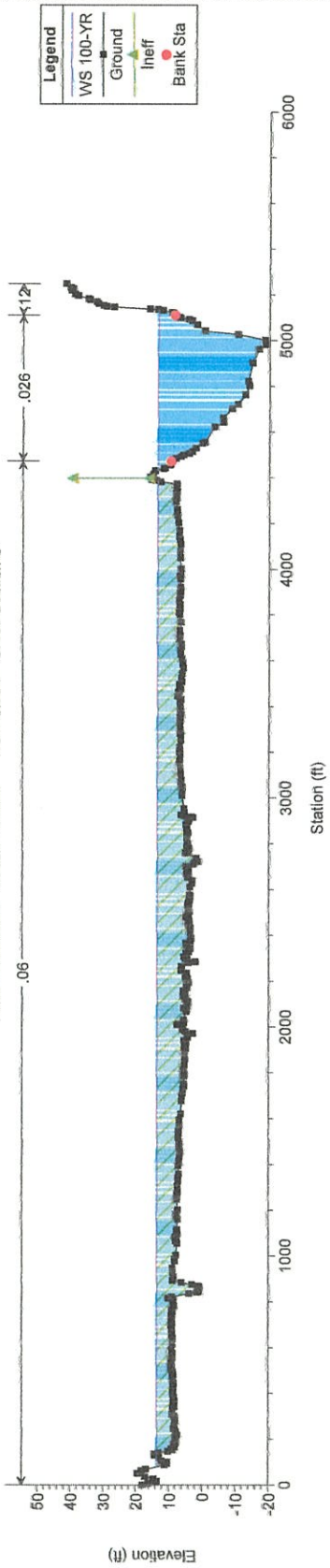
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 1.05 Cross Section D



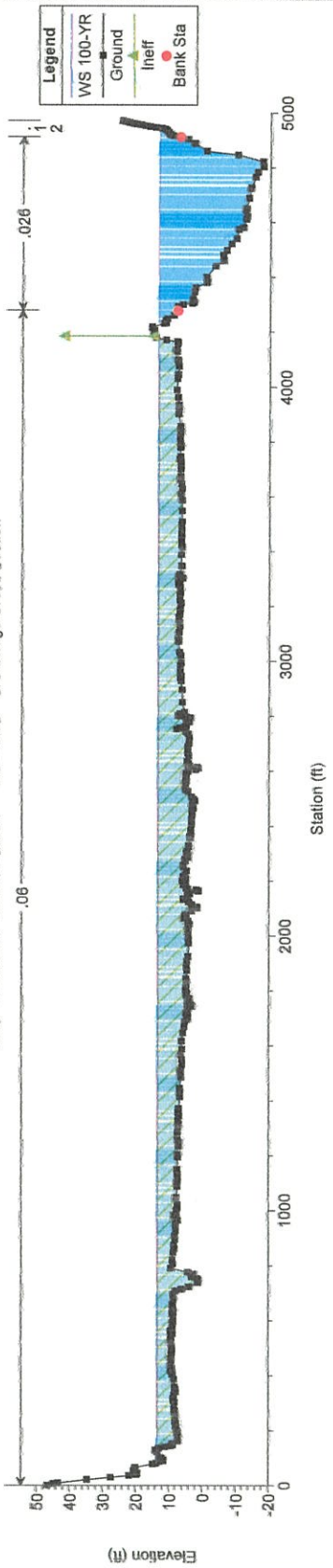
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 0.994 Cross Section C



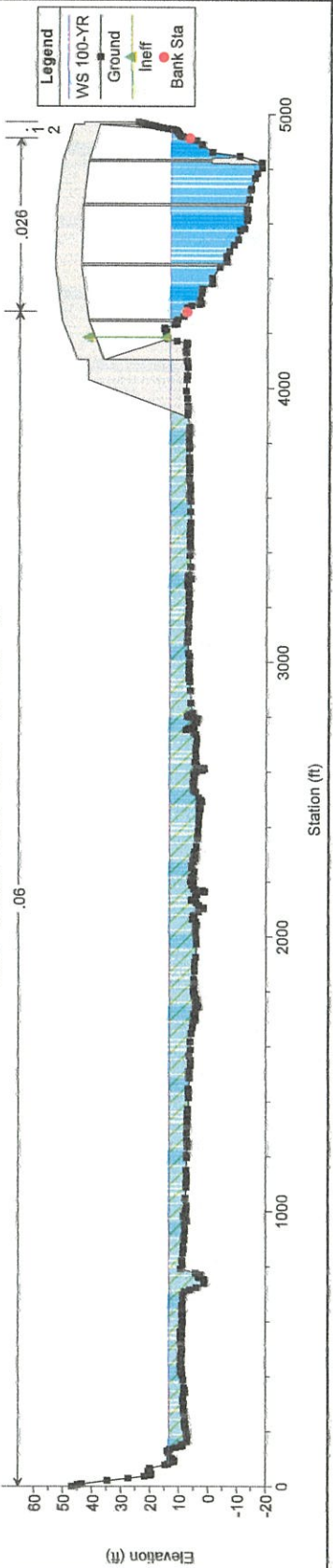
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

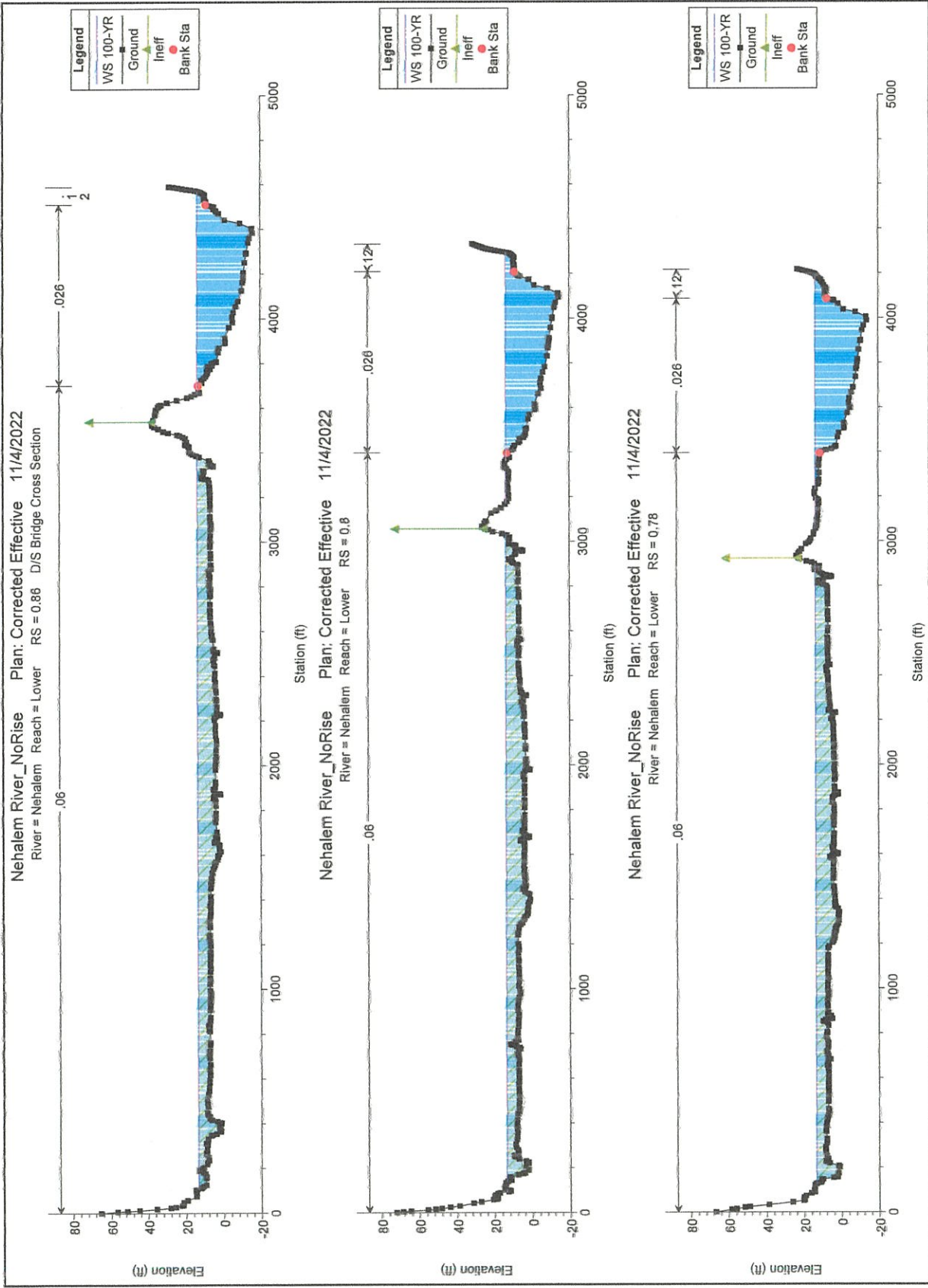
River = Nehalem Reach = Lower RS = 0.95 U/S Bridge Cross Section



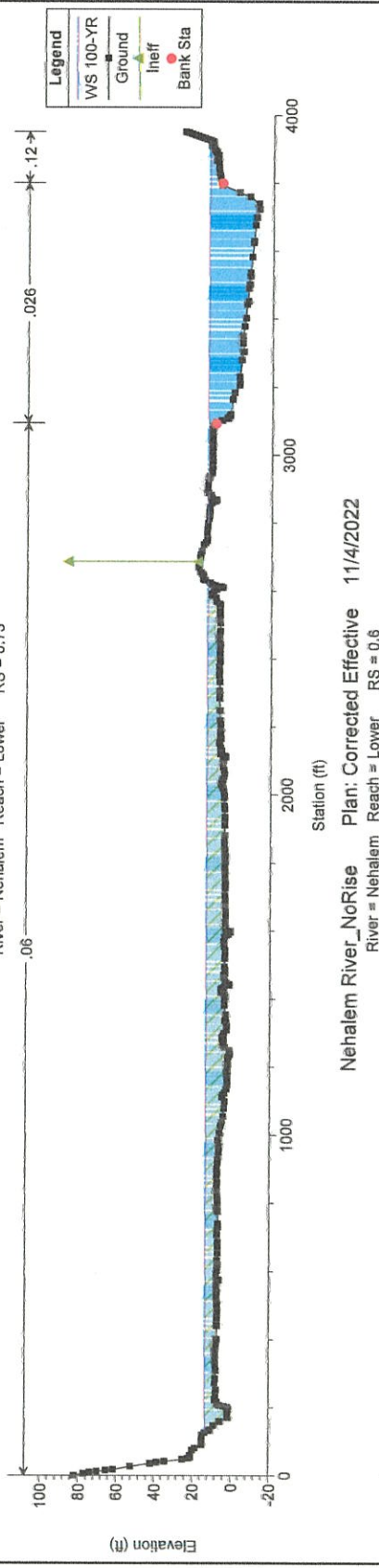
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022

River = Nehalem Reach = Lower RS = 0.92 BR

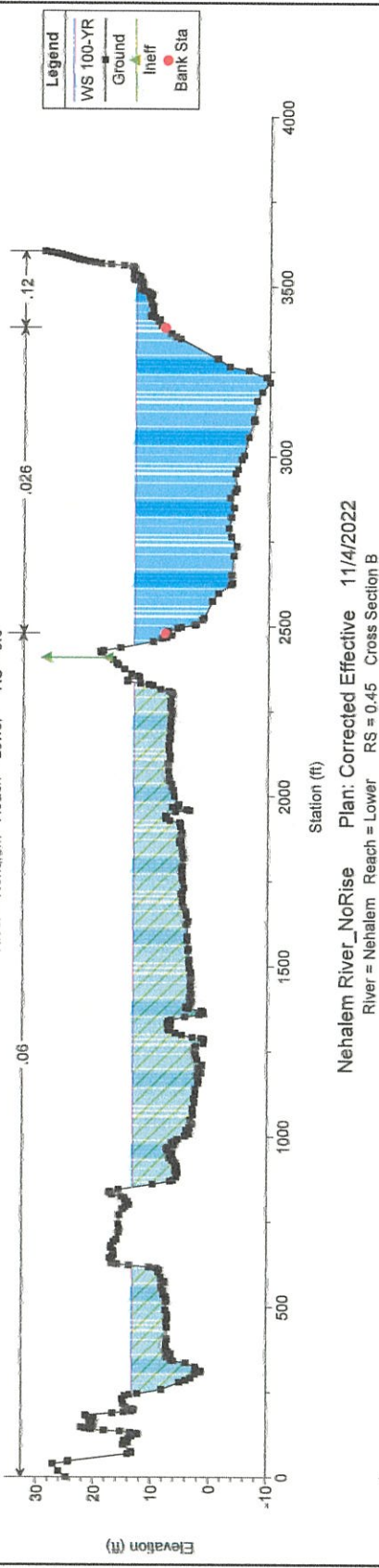




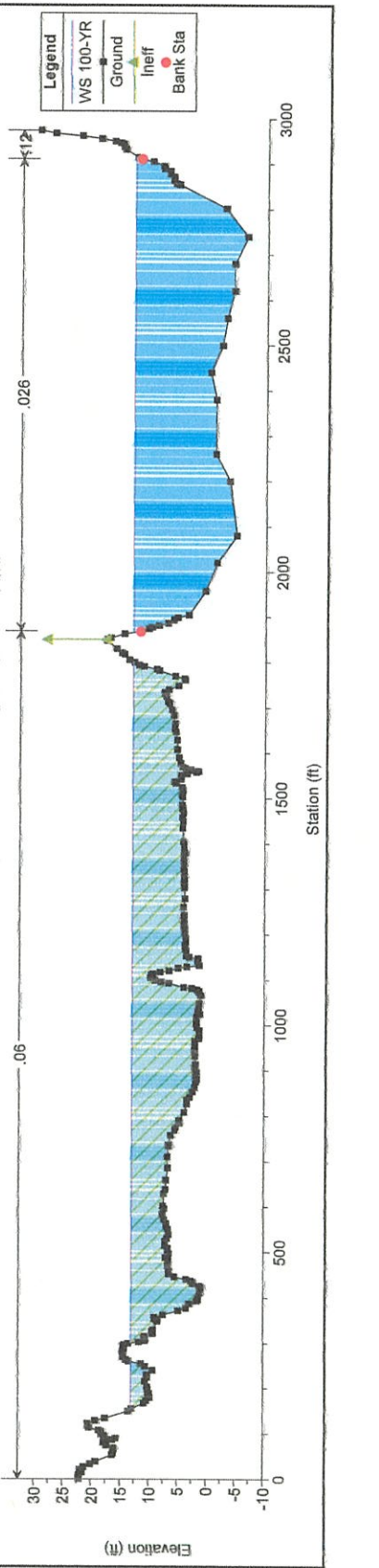
Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022  
 River = Nehalem Reach = Lower RS = 0.73



Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022  
 River = Nehalem Reach = Lower RS = 0.6



Nehalem River\_NoRise Plan: Corrected Effective 11/4/2022  
 River = Nehalem Reach = Lower RS = 0.45 Cross Section B



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**APPENDIX B**

Proposed Conditions Hydraulic Model Output

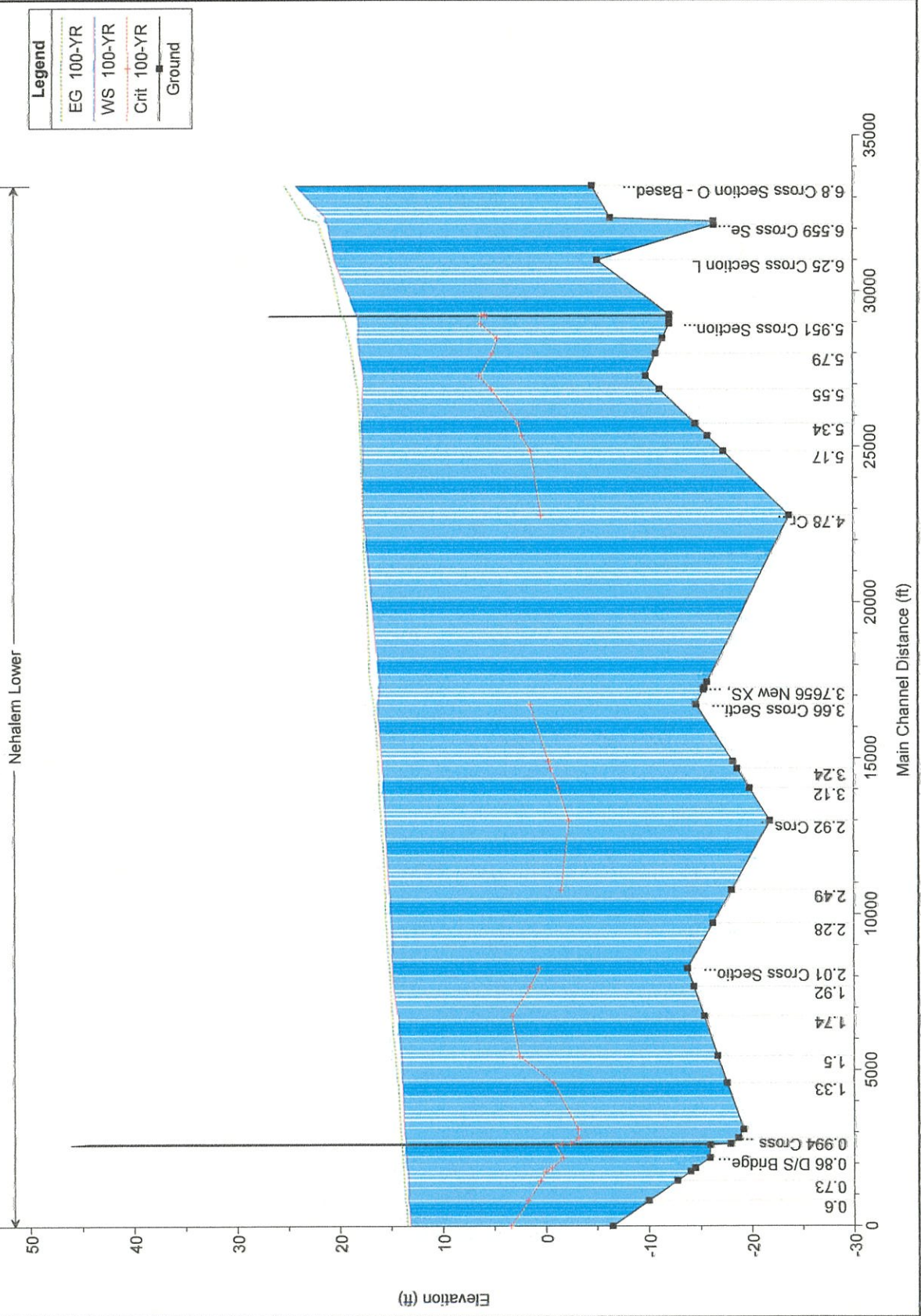
*Profile*

*Output Summary*

*Cross-Sections*

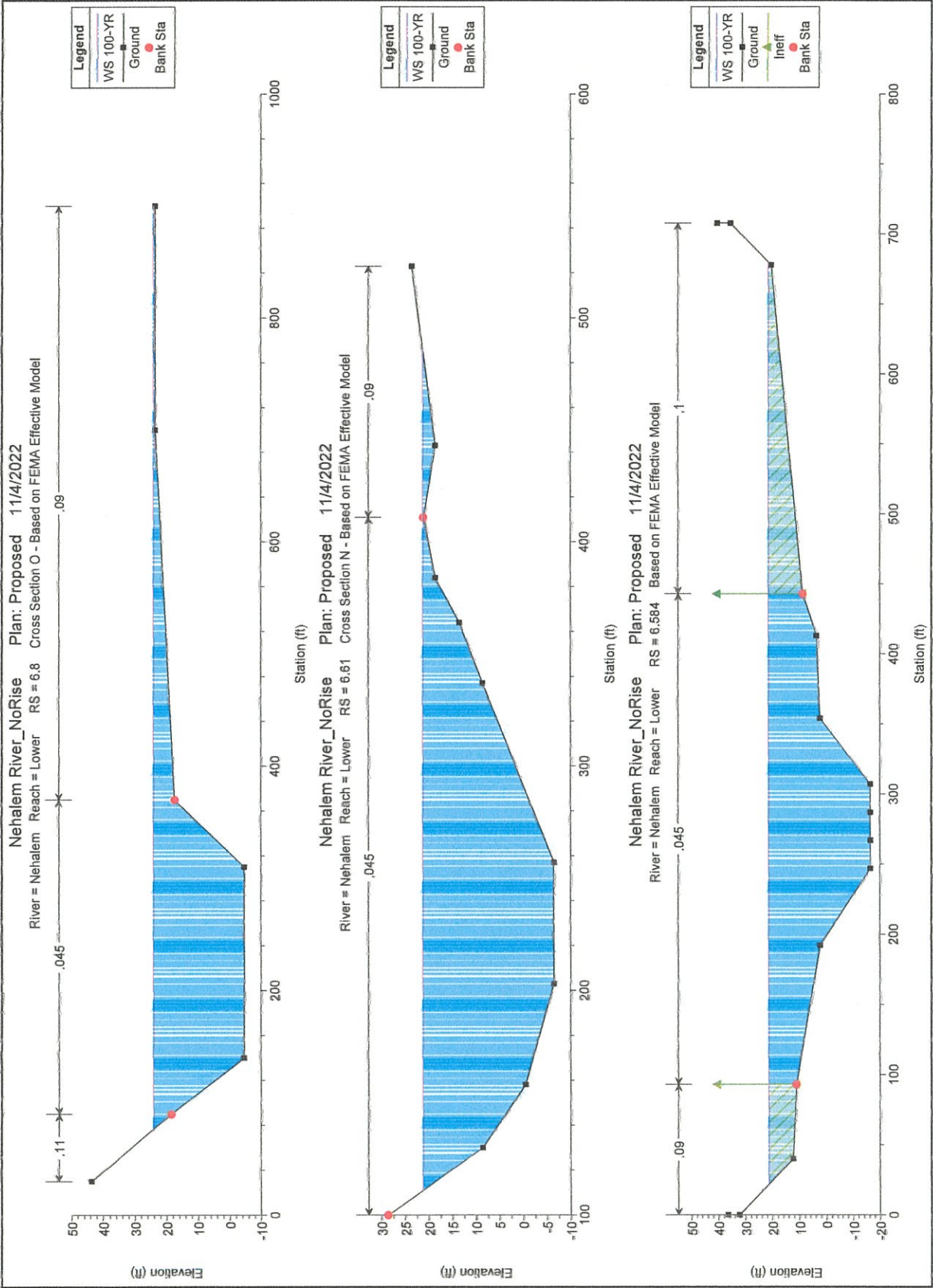


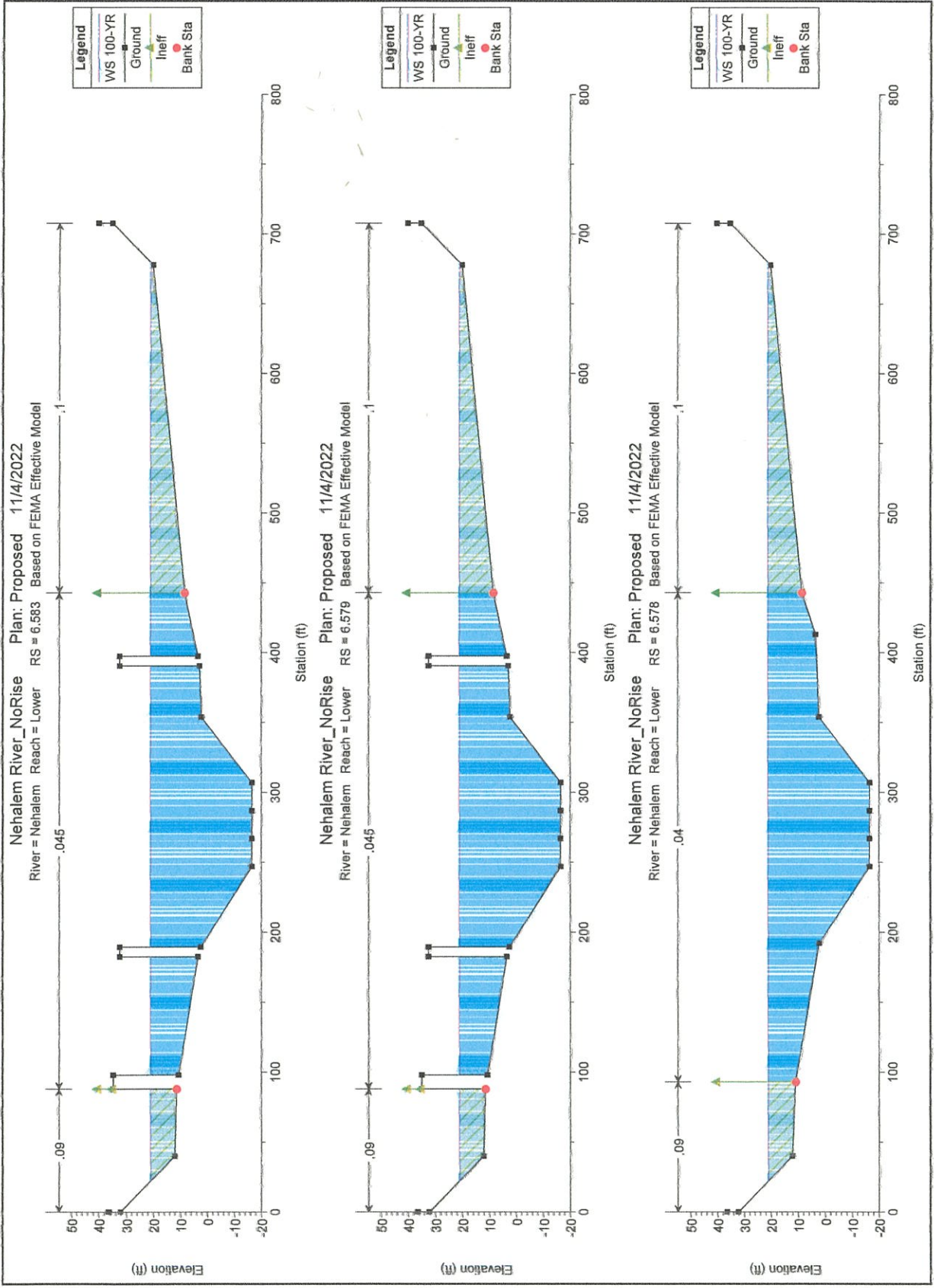
Nehalem River\_NoRise Plan: Proposed 11/4/2022

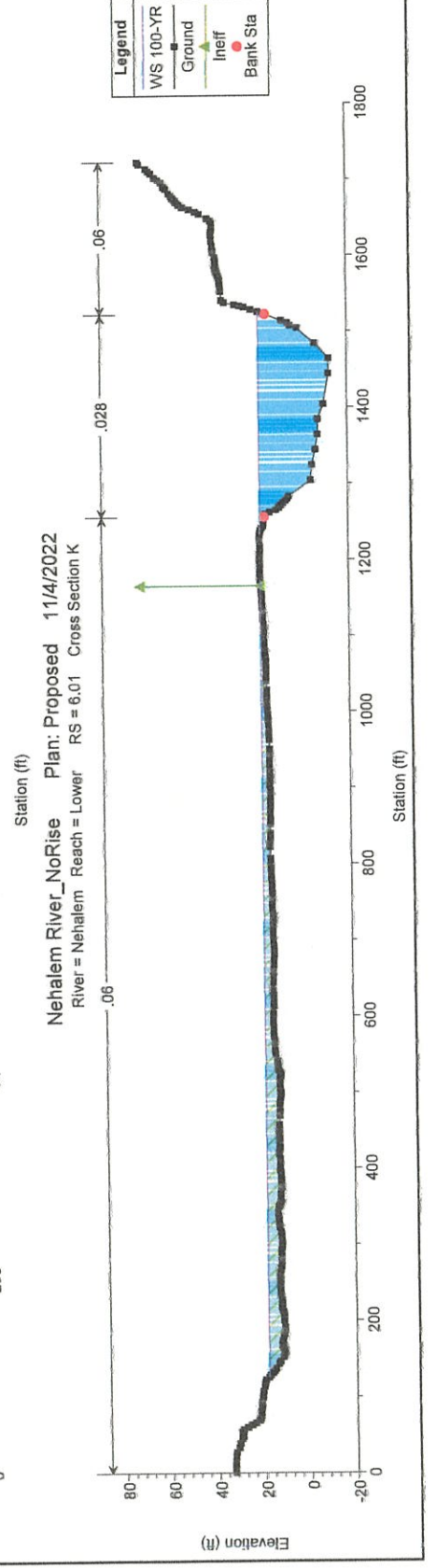
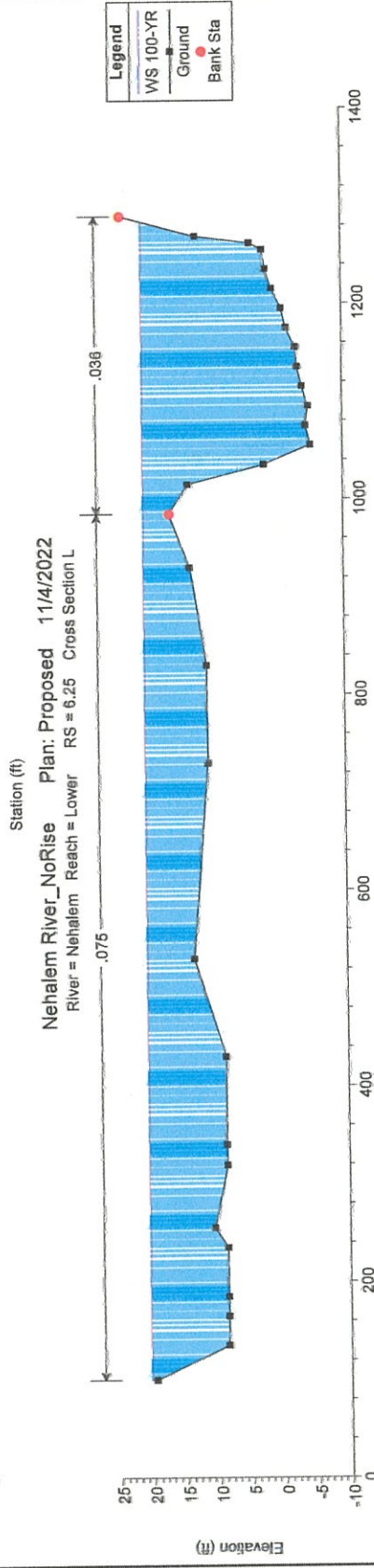
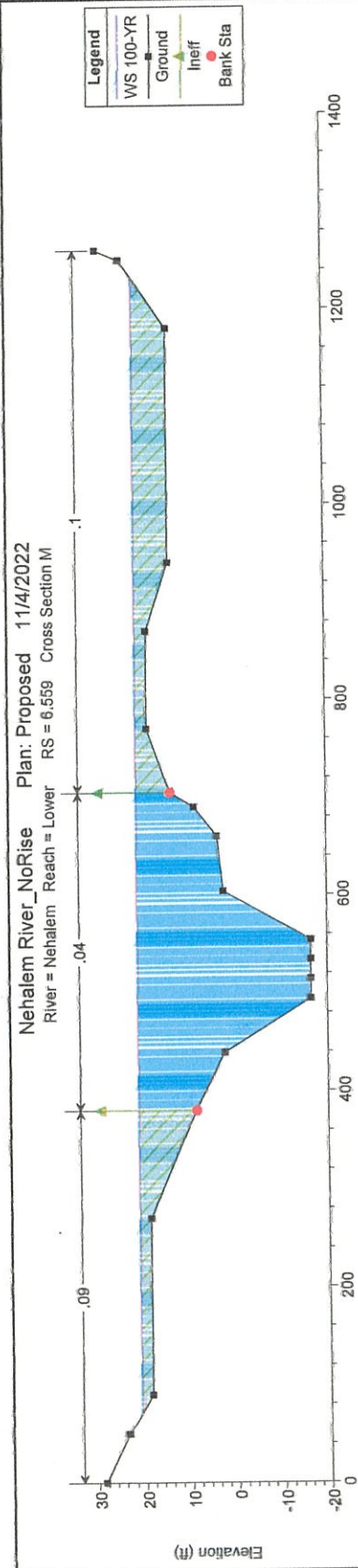


HEC-RAS Plan: Proposed River: Nehalem Reach: Lower Profile: 100-YR

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Lower	6.8	100-YR	59000.00	-4.66	24.09		25.19	0.000981	8.49	8120.84	823.32	0.30
Lower	6.61	100-YR	59000.00	-6.46	21.20		23.17	0.002661	11.25	5335.78	374.63	0.47
Lower	6.584	100-YR	59000.00	-16.46	21.30		22.12	0.000745	7.24	8145.95	657.94	0.26
Lower	6.563	100-YR	59000.00	-16.46	21.17		22.07	0.001092	7.61	7751.20	633.43	0.28
Lower	6.579	100-YR	59000.00	-16.46	21.15		22.05	0.001095	7.62	7743.74	633.34	0.28
Lower	6.578	100-YR	59000.00	-16.46	21.16		21.99	0.000600	7.29	8098.15	657.40	0.27
Lower	6.559	100-YR	59000.00	-16.46	20.98		21.88	0.000642	7.65	7713.52	1161.53	0.28
Lower	6.25	100-YR	59000.00	-5.16	20.33		20.91	0.000643	7.22	13892.81	1184.08	0.29
Lower	6.01	100-YR	56700.00	-12.16	18.23	5.84	19.63	0.000538	9.50	5999.57	1340.51	0.35
Lower	5.99	Bridge										
Lower	5.98	100-YR	54700.00	-12.16	18.06		19.25	0.000456	8.77	6244.93	1318.88	0.33
Lower	5.951	100-YR	54700.00	-12.16	18.00	6.21	19.19	0.000507	8.72	6275.69	1429.67	0.34
Lower	5.98	100-YR	54700.00	-11.52	18.11	4.60	18.88	0.000320	7.06	8622.83	2388.97	0.27
Lower	5.79	100-YR	54700.00	-10.84	17.89	5.05	18.70	0.000361	7.46	10111.57	3409.91	0.29
Lower	5.85	100-YR	54700.00	-9.86	17.53	6.25	18.41	0.000437	7.99	11568.22	4657.80	0.31
Lower	5.55	100-YR	54700.00	-11.18	17.58	5.07	18.18	0.000284	6.70	14757.94	5541.31	0.26
Lower	5.34	100-YR	54700.00	-14.61	17.69	2.53	17.87	0.000102	4.31	27736.84	6611.26	0.16
Lower	5.26	100-YR	54700.00	-15.84	17.66	2.23	17.83	0.000098	4.22	29536.22	7050.74	0.15
Lower	5.17	100-YR	54700.00	-17.37	17.64	1.38	17.77	0.000085	4.00	33449.73	7419.24	0.14
Lower	4.78	100-YR	54700.00	-23.76	17.56	0.30	17.66	0.000071	3.63	41855.25	10506.47	0.13
Lower	3.8	100-YR	54700.00	-15.74	16.03		16.94	0.000417	8.22	13126.32	10639.93	0.31
Lower	3.7656	100-YR	54700.00	-15.48	16.15		16.80	0.000333	7.32	16281.59	10806.40	0.28
Lower	3.7542	100-YR	54700.00	-15.39	16.06		16.78	0.000367	7.55	15683.24	10909.10	0.29
Lower	3.66	100-YR	52600.00	-14.66	16.22	1.47	16.56	0.000169	5.42	23223.57	11590.21	0.20
Lower	3.28	100-YR	52600.00	-18.19	15.79	-0.38	16.23	0.000214	5.87	17036.40	9955.88	0.22
Lower	3.24	100-YR	52600.00	-18.62	15.75	-0.56	16.19	0.000178	5.78	17935.52	10082.66	0.21
Lower	3.12	100-YR	52600.00	-19.83	15.68	-1.27	16.08	0.000162	5.45	18725.99	9947.19	0.20
Lower	2.92	100-YR	52900.00	-21.86	15.53	-2.28	15.91	0.000149	5.30	20021.14	9515.87	0.19
Lower	2.49	100-YR	52900.00	-18.06	15.15	-1.60	15.58	0.000133	5.39	17039.17	9030.33	0.19
Lower	2.28	100-YR	52900.00	-16.24	14.95		15.42	0.000153	5.57	11800.45	8050.01	0.21
Lower	2.01	100-YR	66400.00	-13.76	14.84	0.65	15.18	0.000129	4.68	14932.24	7786.01	0.19
Lower	1.92	100-YR	66400.00	-14.37	14.74	1.50	15.10	0.000151	5.15	15560.50	7606.61	0.20
Lower	1.74	100-YR	66400.00	-15.36	14.31	3.28	14.89	0.000256	6.64	13656.08	7451.94	0.26
Lower	1.5	100-YR	66400.00	-16.69	14.04	2.57	14.54	0.000250	6.10	13180.32	7425.06	0.26
Lower	1.33	100-YR	66400.00	-17.61	13.88	-0.79	14.35	0.000162	5.55	12351.71	6337.32	0.21
Lower	1.05	100-YR	66700.00	-19.16	13.70	-3.17	14.12	0.000135	5.20	12996.39	5319.91	0.19
Lower	0.994	100-YR	67000.00	-18.66	13.68	-3.15	14.06	0.000131	4.96	13691.29	4996.52	0.19
Lower	0.95	100-YR	67000.00	-17.89	13.63	-2.40	14.03	0.000142	5.09	13390.30	4808.98	0.20
Lower	0.92	Bridge										
Lower	0.86	100-YR	67000.00	-15.91	13.55	-1.63	13.87	0.000132	4.52	15040.76	4184.05	0.19
Lower	0.8	100-YR	67000.00	-14.49	13.50	-0.51	13.82	0.000139	4.59	15109.85	3994.19	0.19
Lower	0.78	100-YR	67000.00	-14.02	13.40	0.06	13.80	0.000157	5.07	14066.78	3874.91	0.21
Lower	0.73	100-YR	67000.00	-12.75	13.36	0.59	13.75	0.000160	5.06	14091.68	3594.73	0.21
Lower	0.6	100-YR	67000.00	-10.00	13.32	1.72	13.63	0.000147	4.49	15373.60	2975.78	0.19
Lower	0.45	100-YR	74000.00	-6.46	13.11	3.38	13.48	0.000207	4.89	15150.11	2656.06	0.23

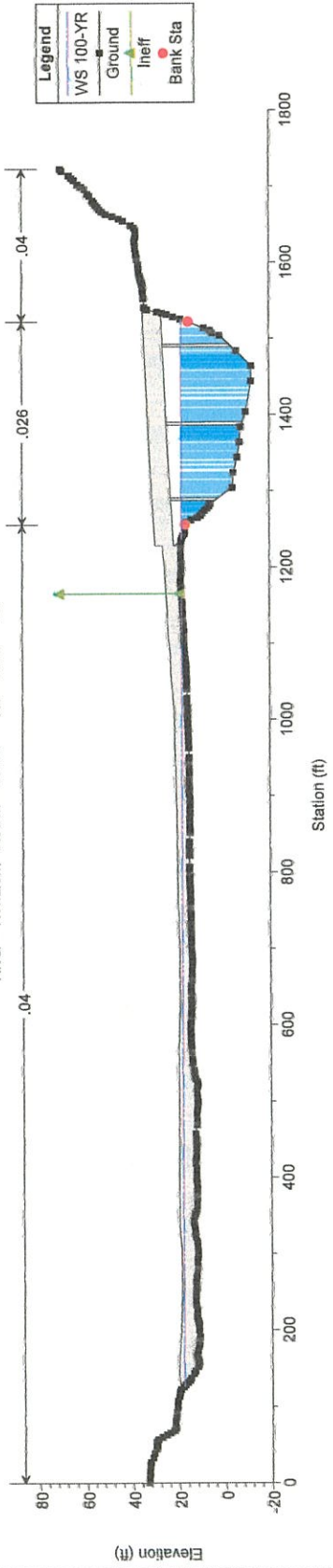






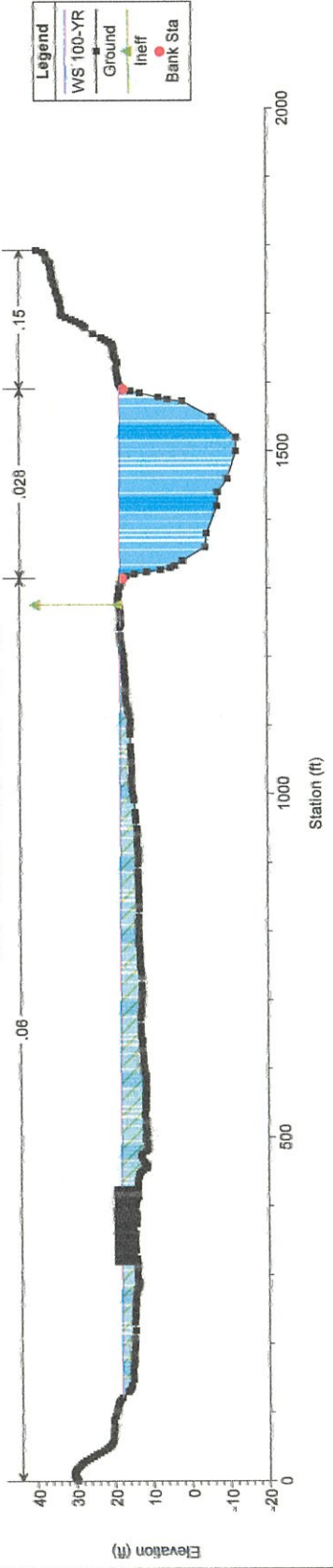
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.99 BR



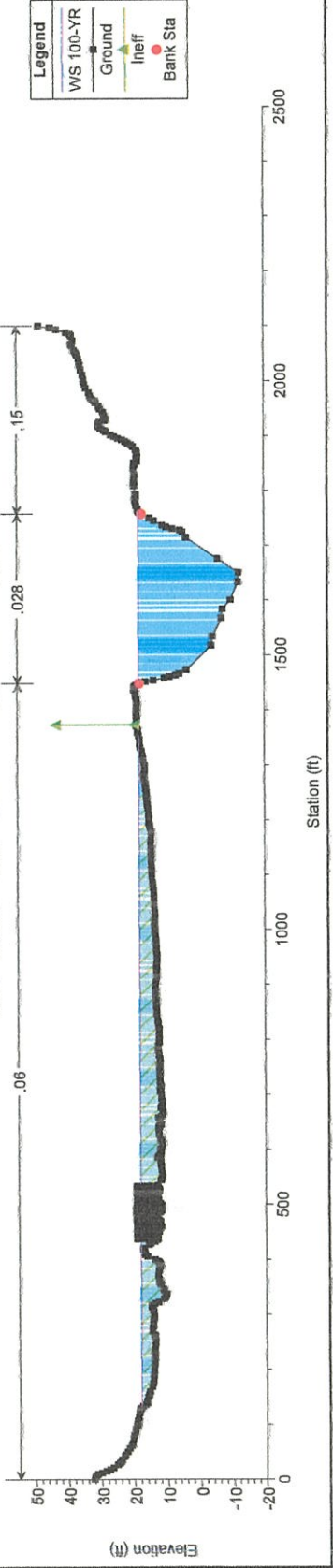
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.98



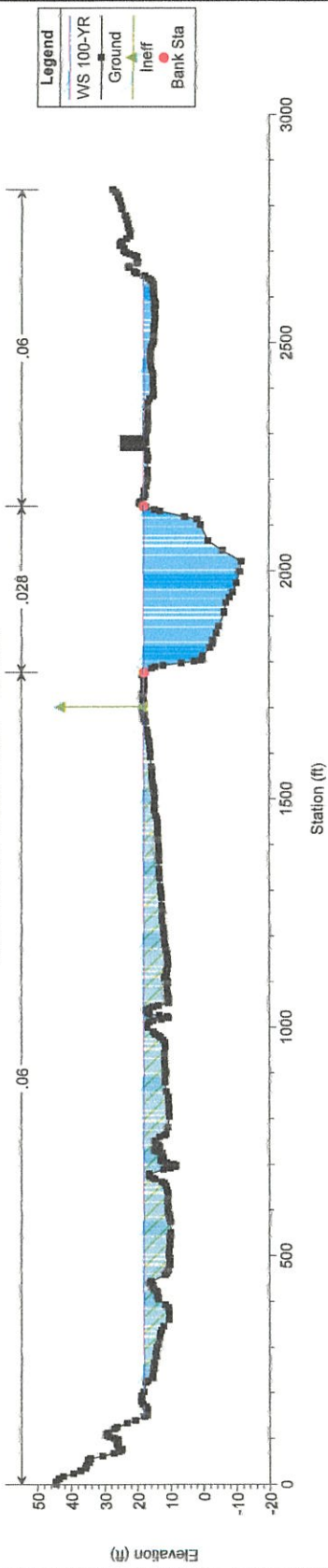
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.951 Cross Section J



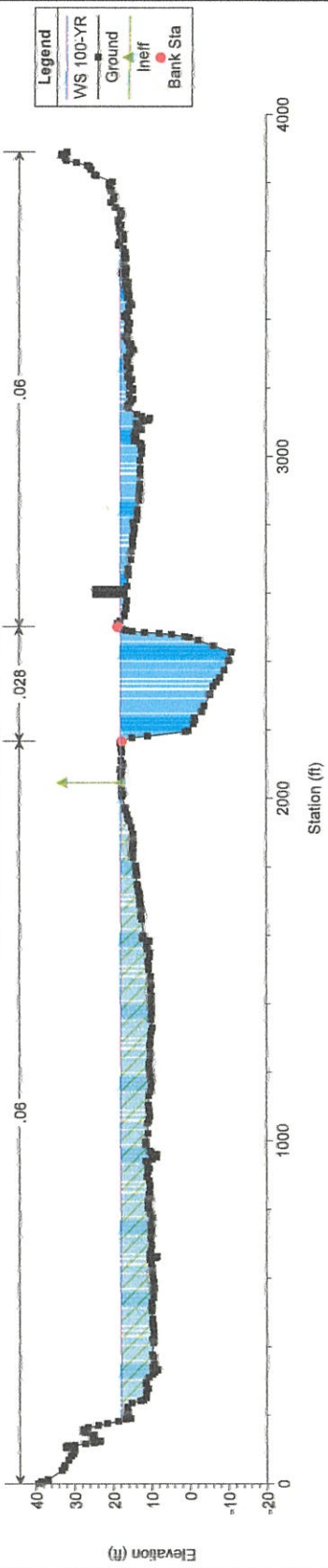
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.88



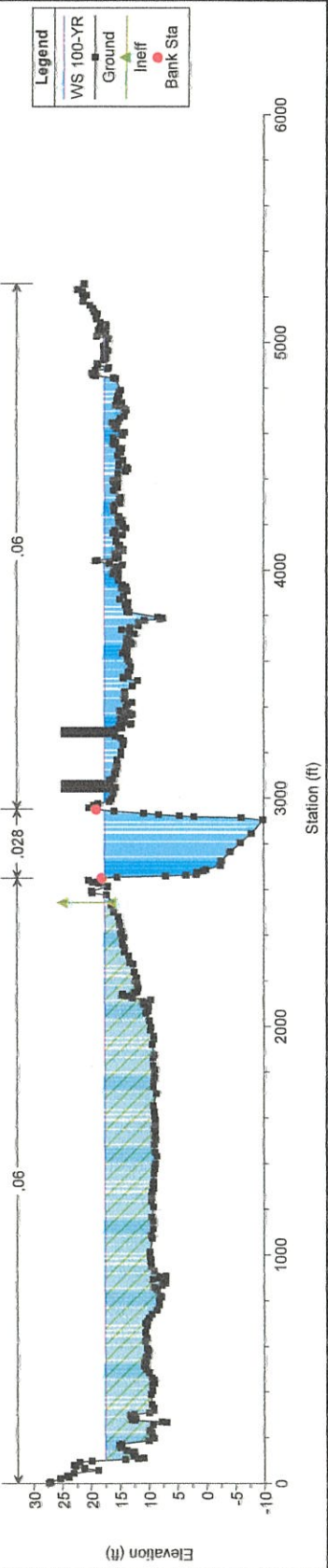
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.79



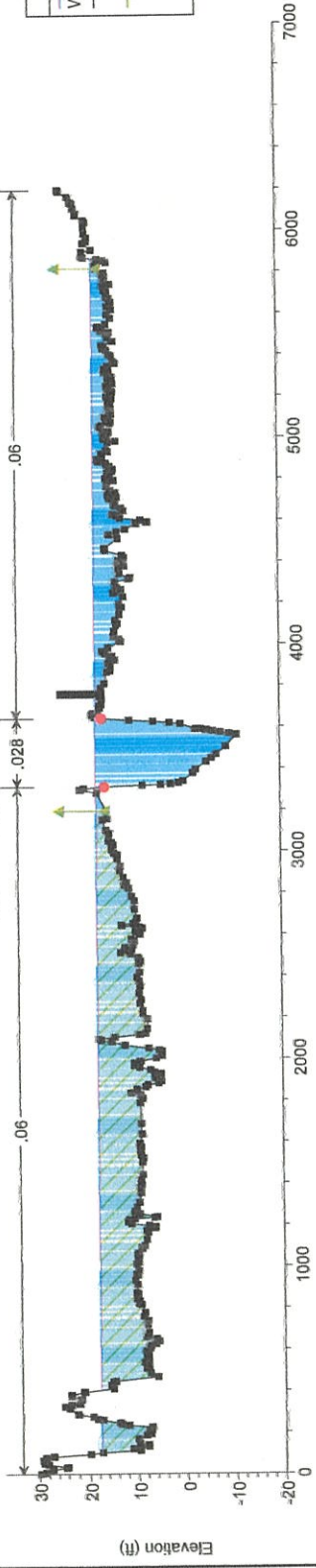
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.65 Cross Section I



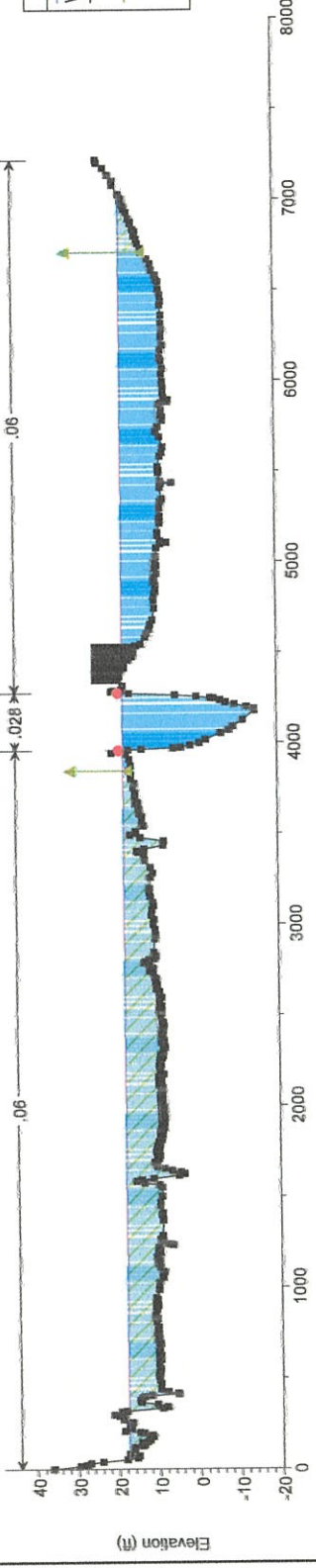
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.55



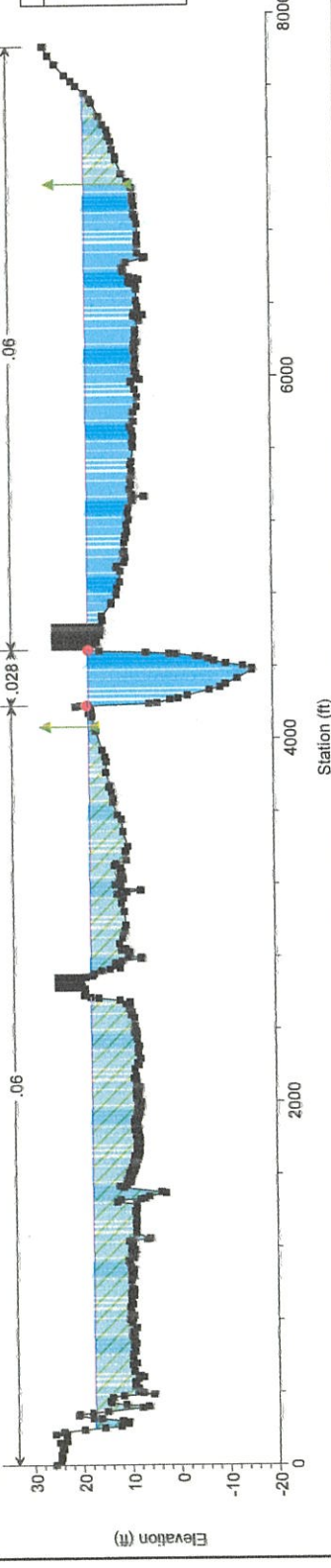
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.34



Nehalem River\_NoRise Plan: Proposed 11/4/2022

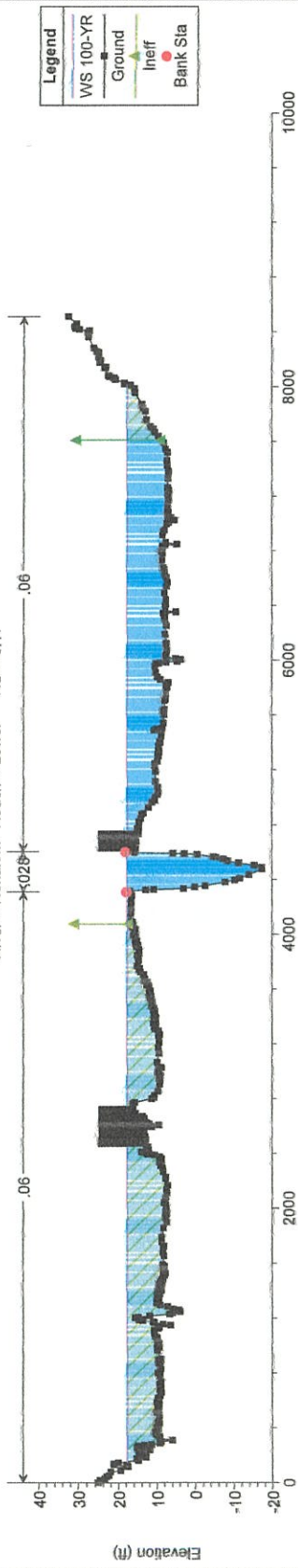
River = Nehalem Reach = Lower RS = 5.26





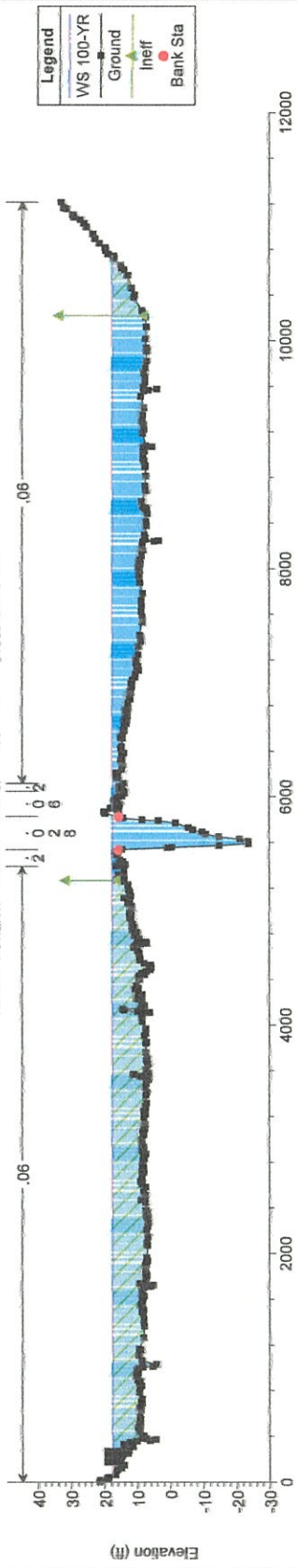
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 5.17



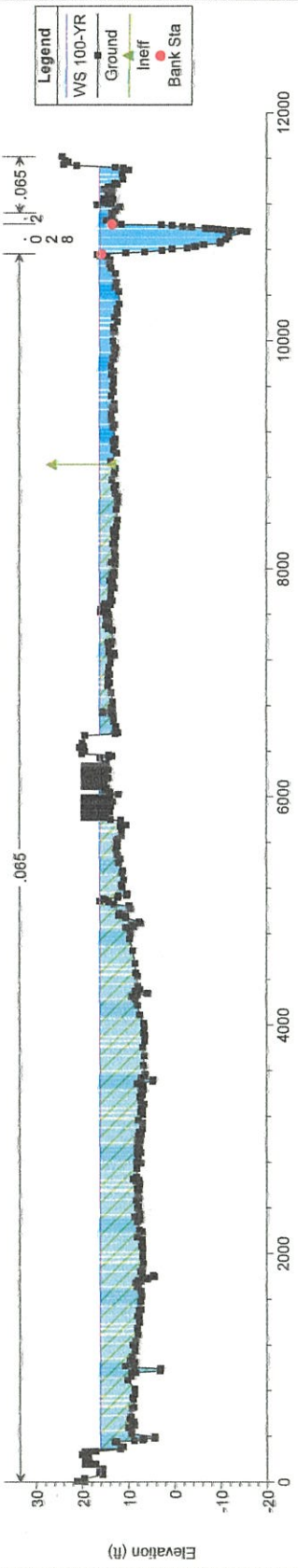
Nehalem River\_NoRise Plan: Proposed 11/4/2022

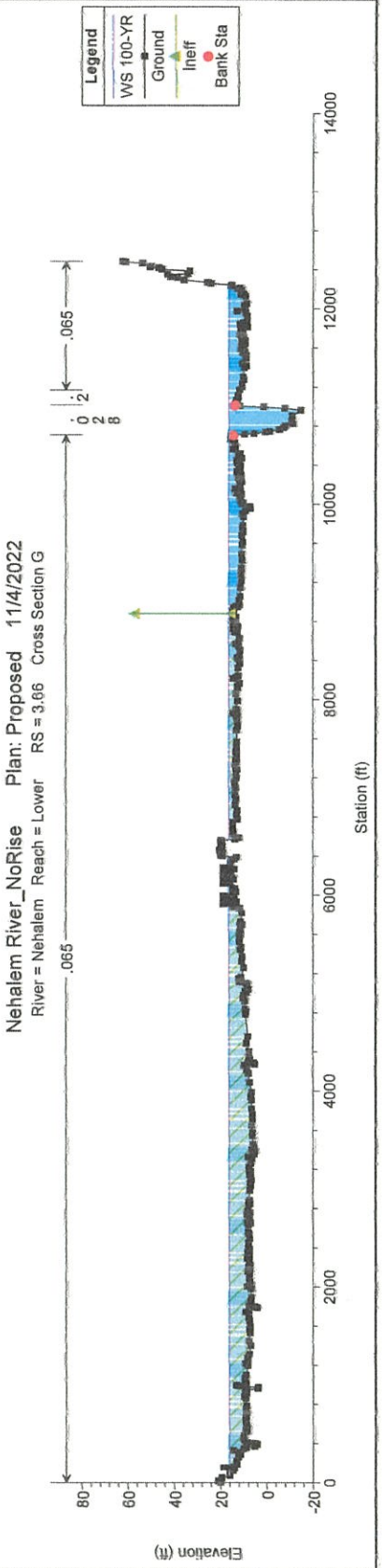
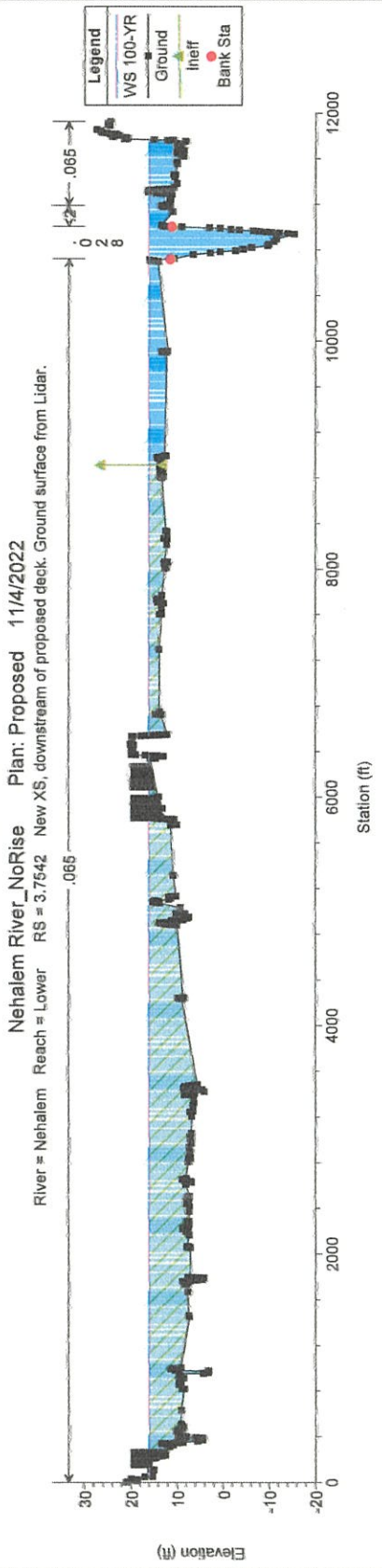
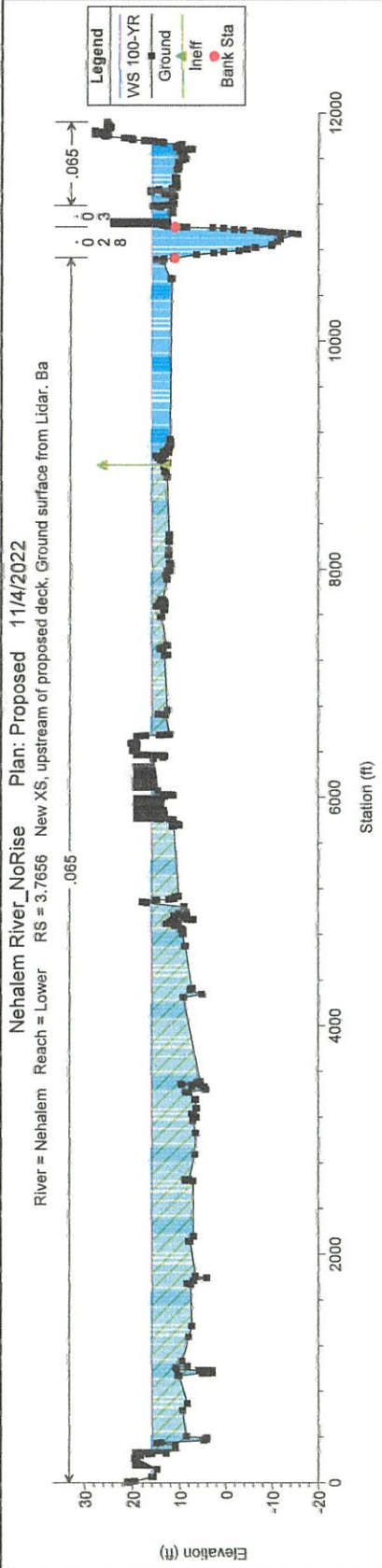
River = Nehalem Reach = Lower RS = 4.78 Cross Section H

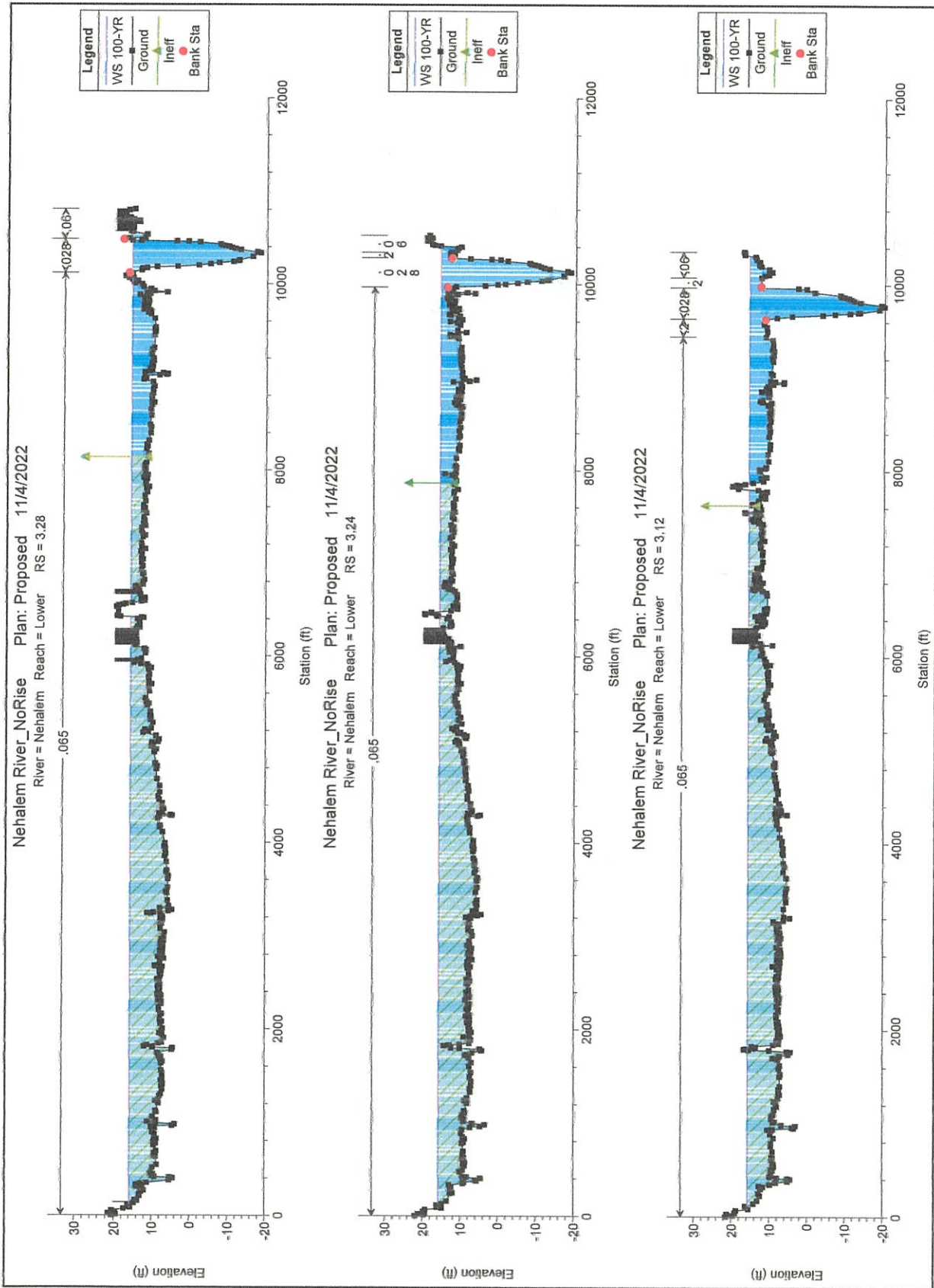


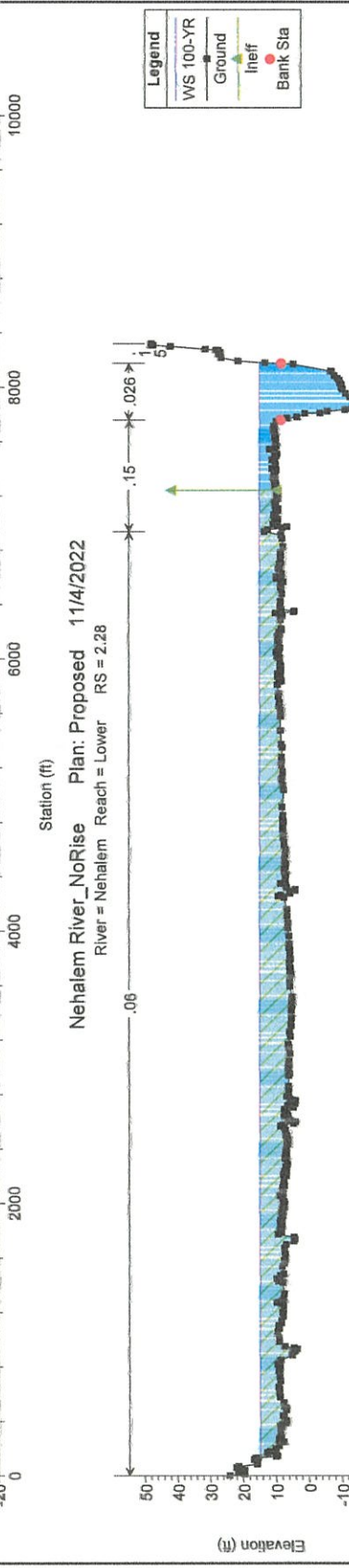
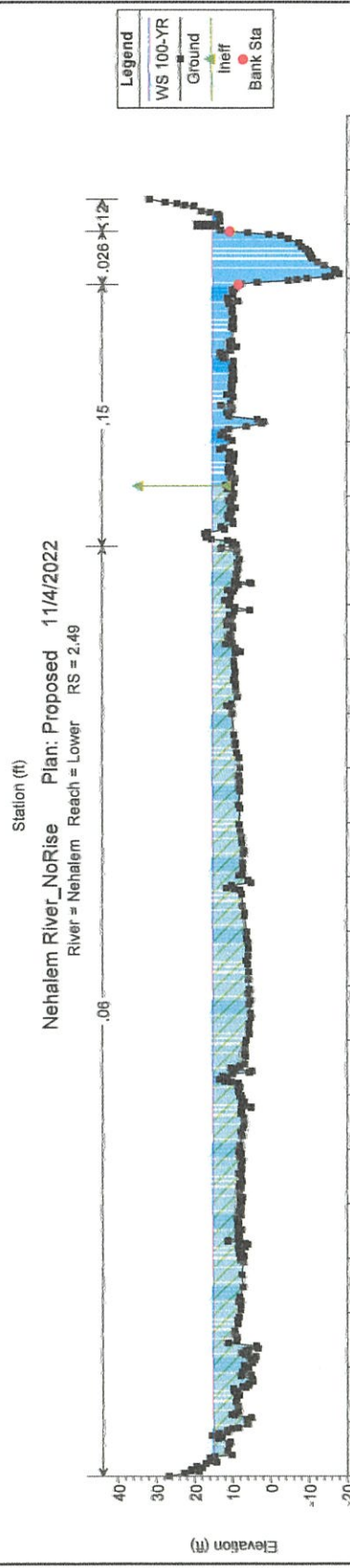
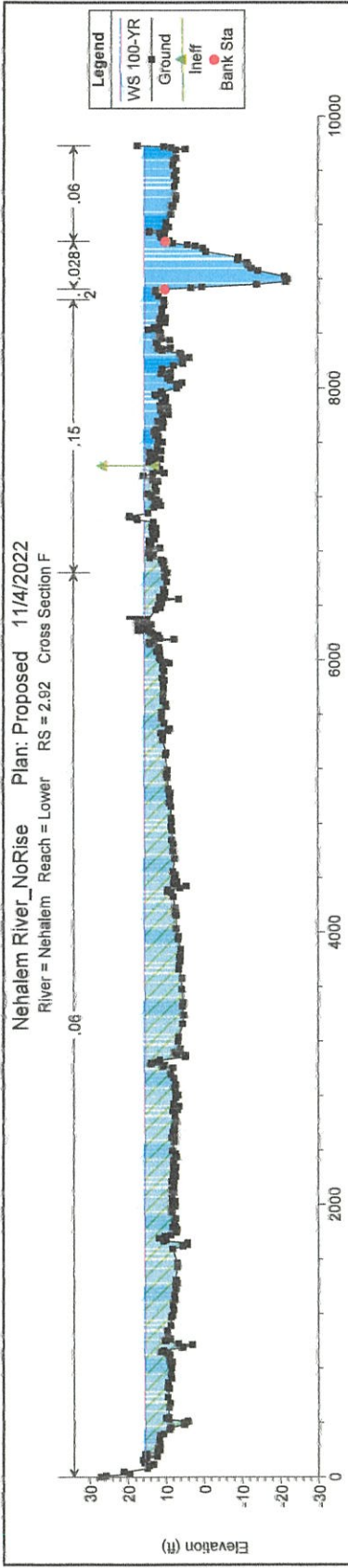
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 3.8



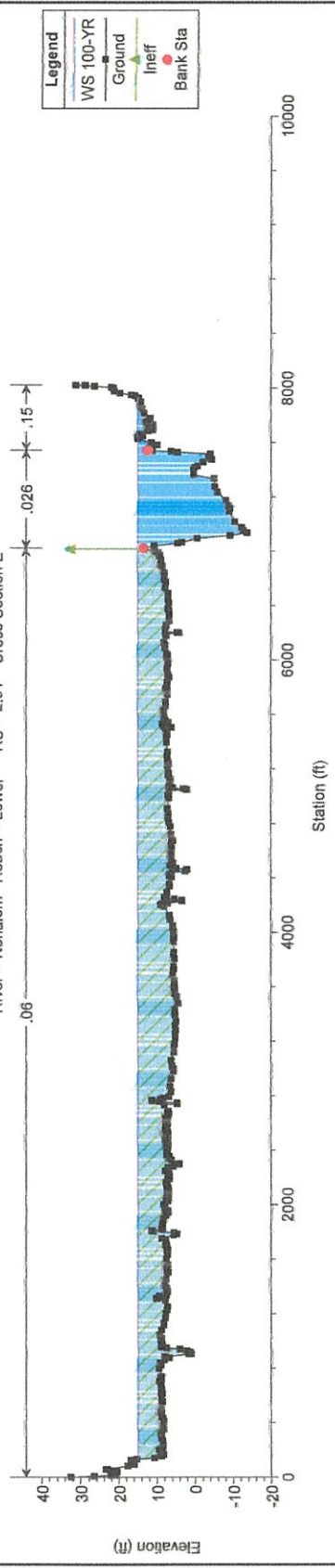






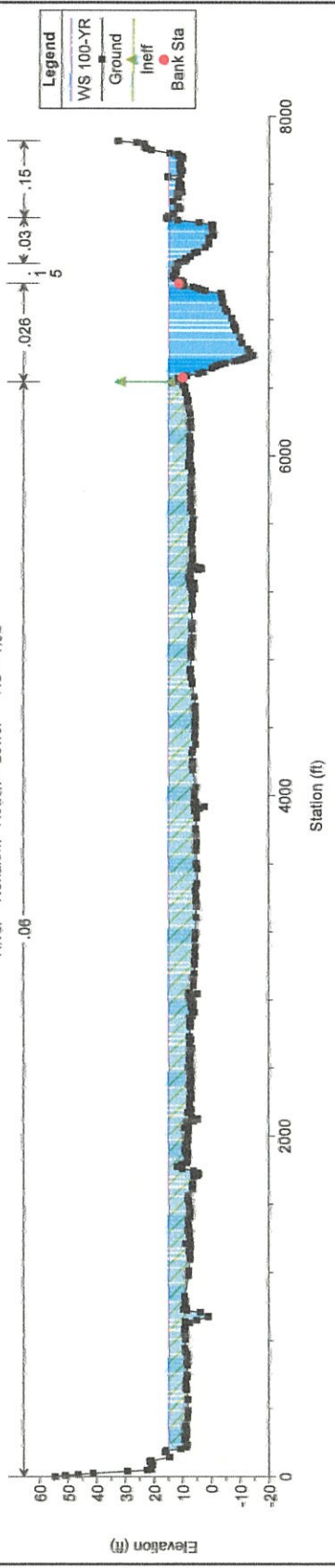
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 2.01 Cross Section E



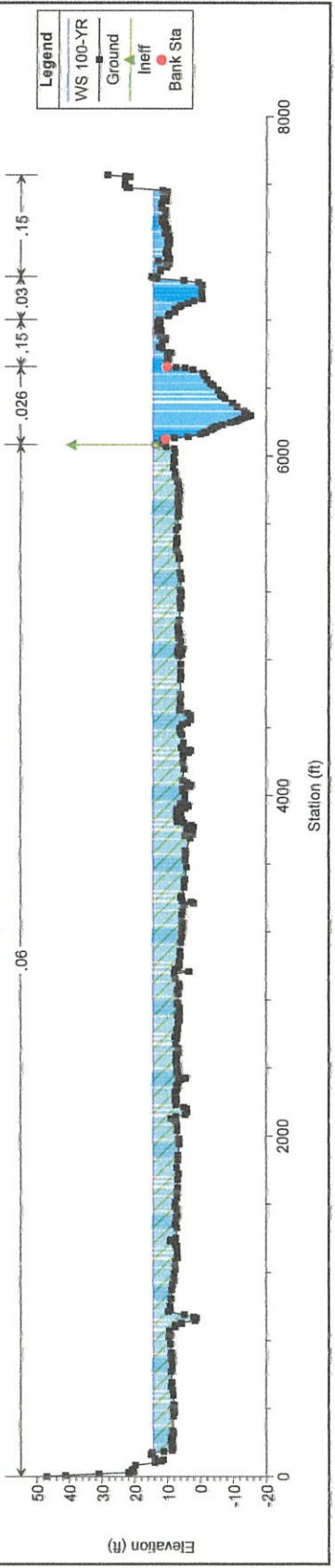
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 1.92



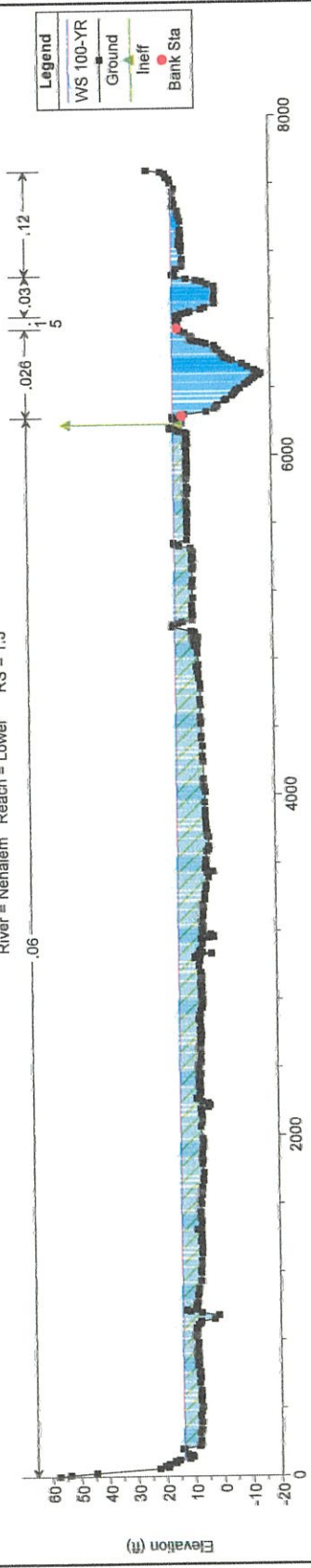
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 1.74



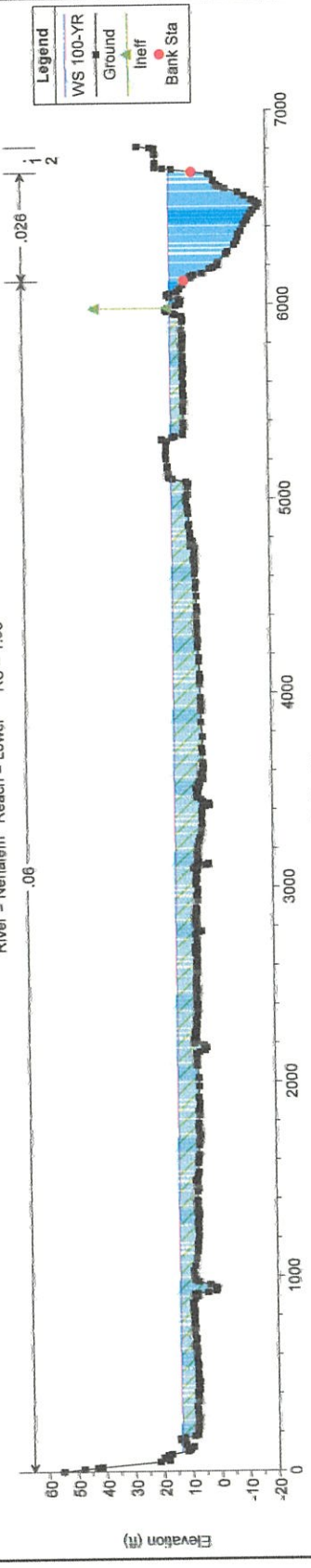
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 1.5



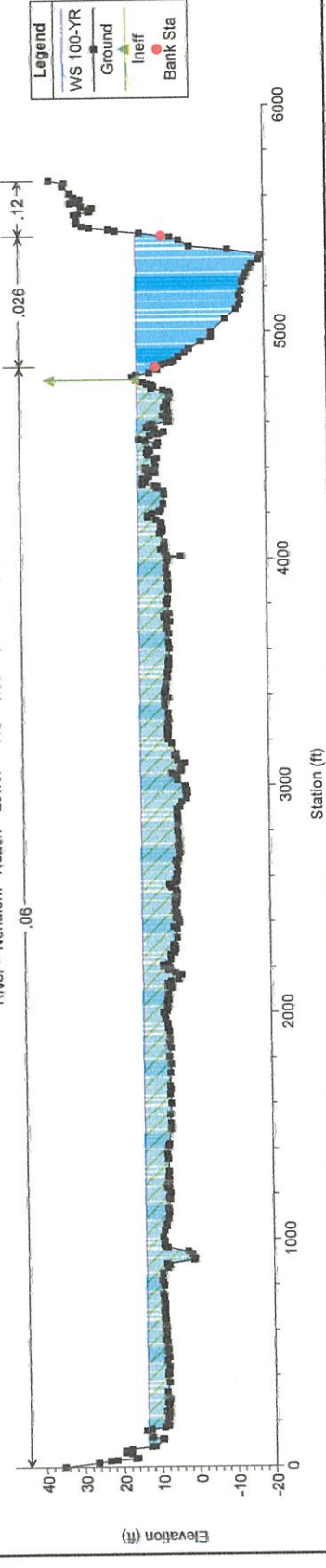
Nehalem River\_NoRise Plan: Proposed 11/4/2022

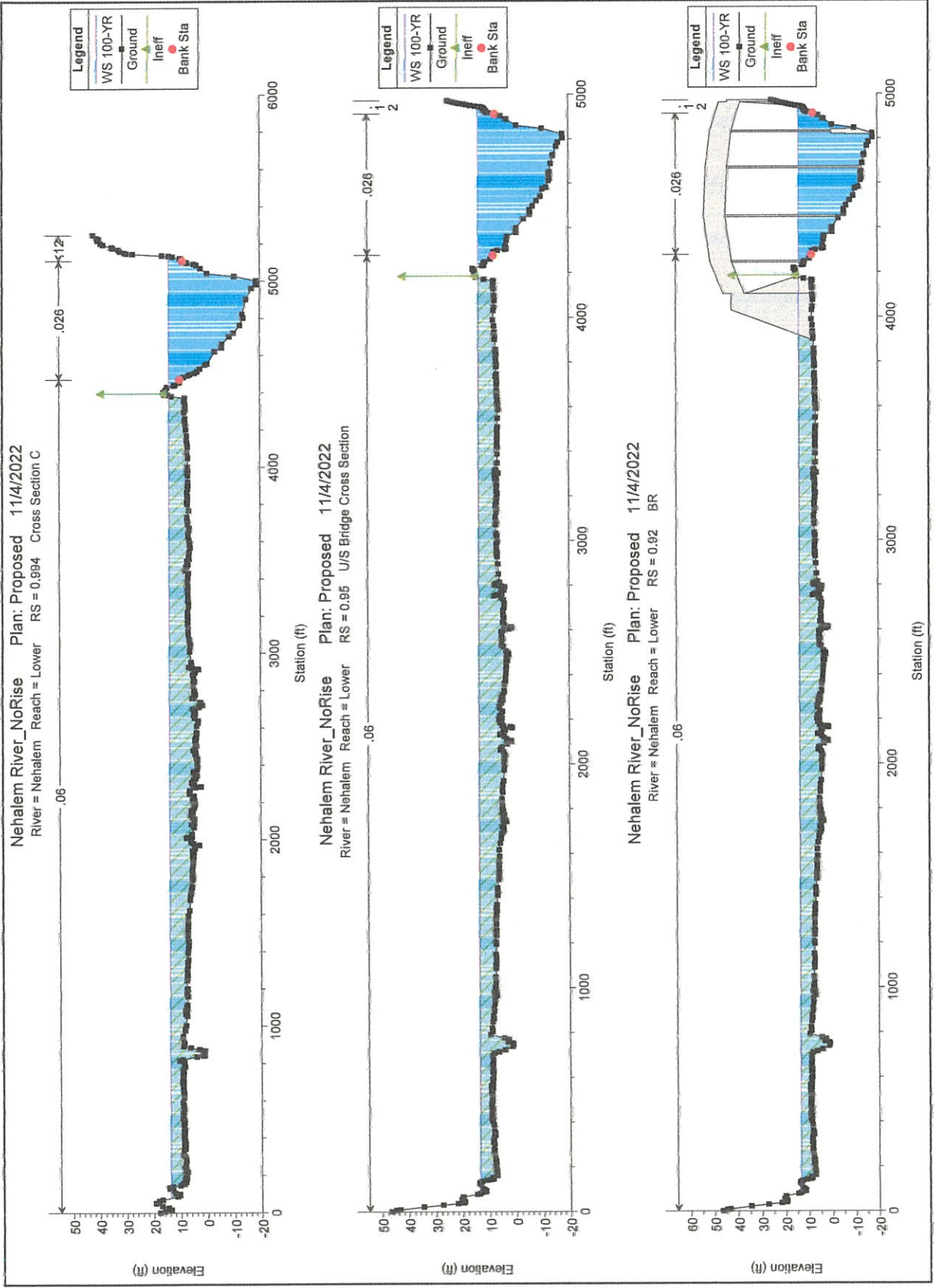
River = Nehalem Reach = Lower RS = 1.33

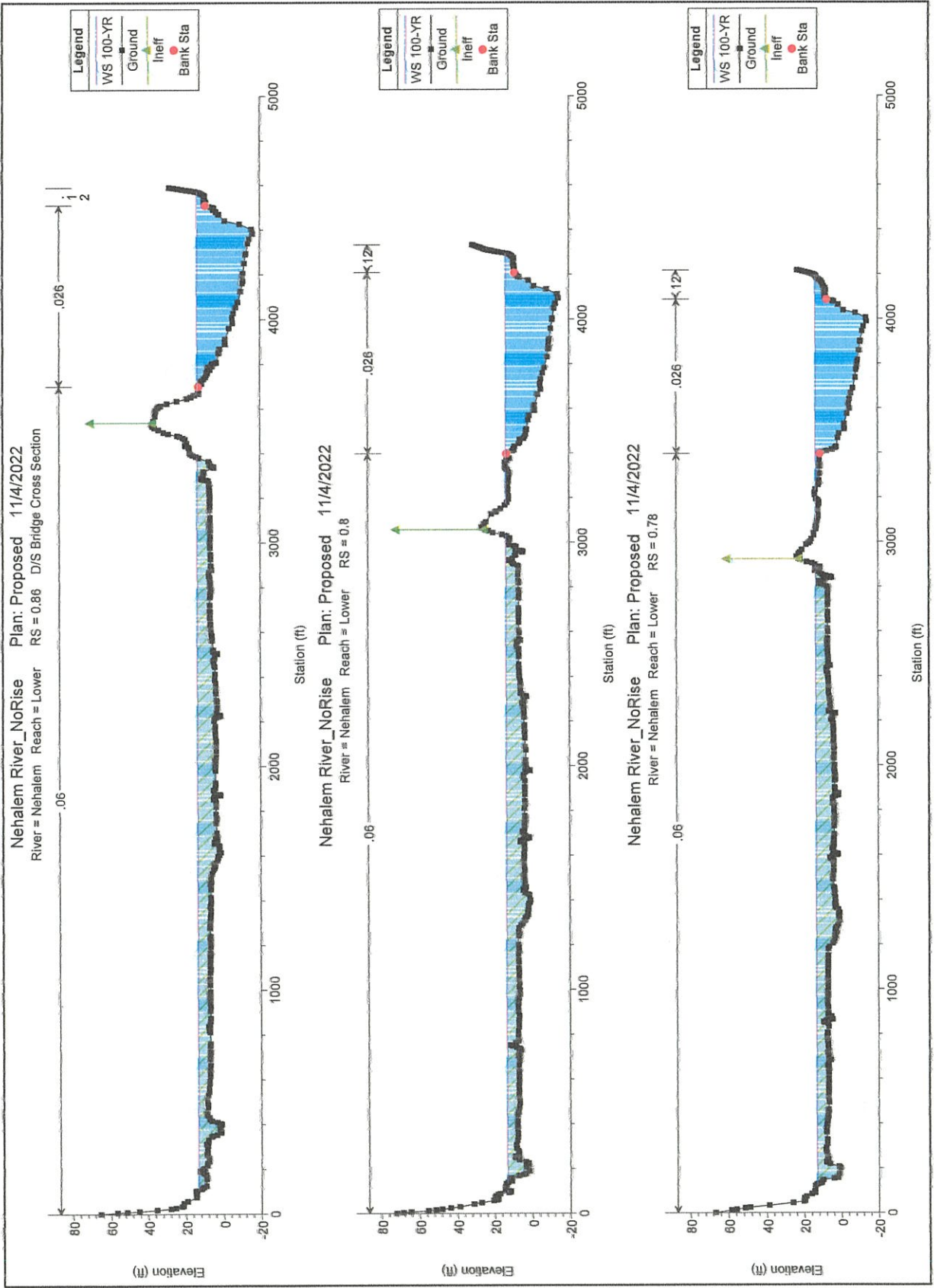


Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 1.05 Cross Section D



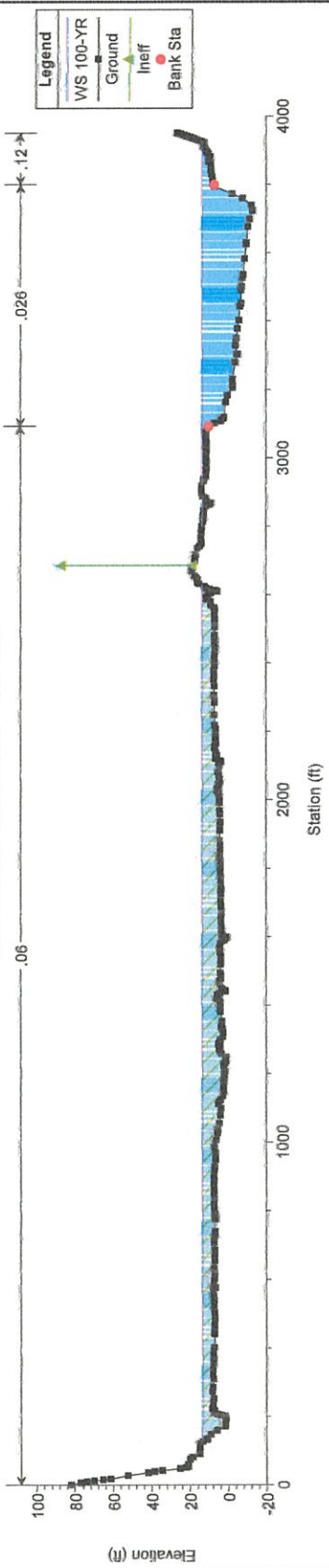






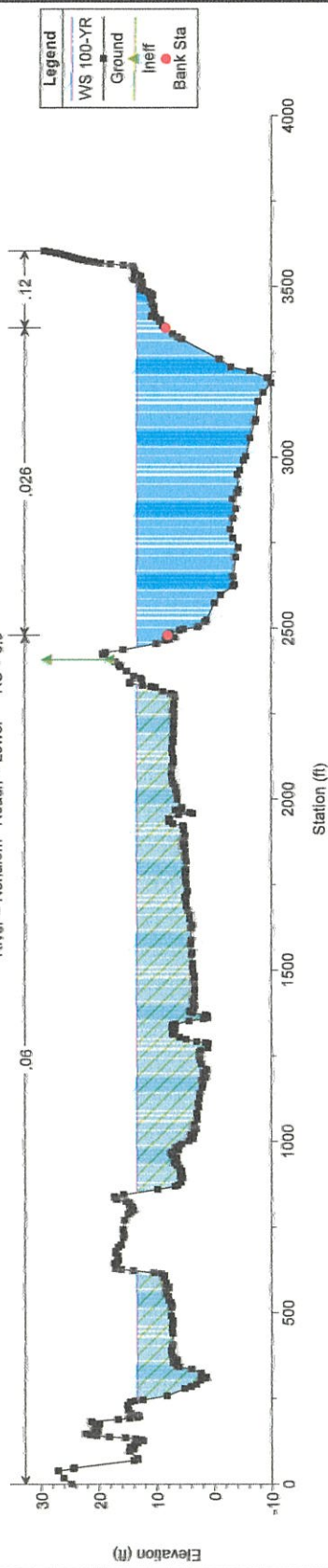
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 0.73



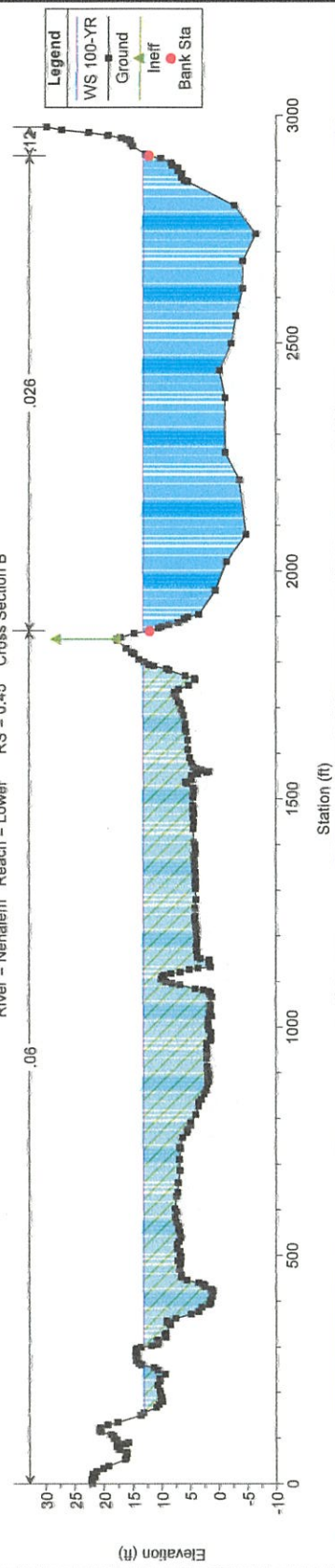
Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 0.6



Nehalem River\_NoRise Plan: Proposed 11/4/2022

River = Nehalem Reach = Lower RS = 0.45 Cross Section B

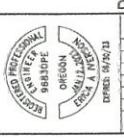


**APPENDIX C**

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Proposed Deck Construction Plans by Stricker Engineering





REVISIONS	
REV	DATE
1	
2	
3	
4	

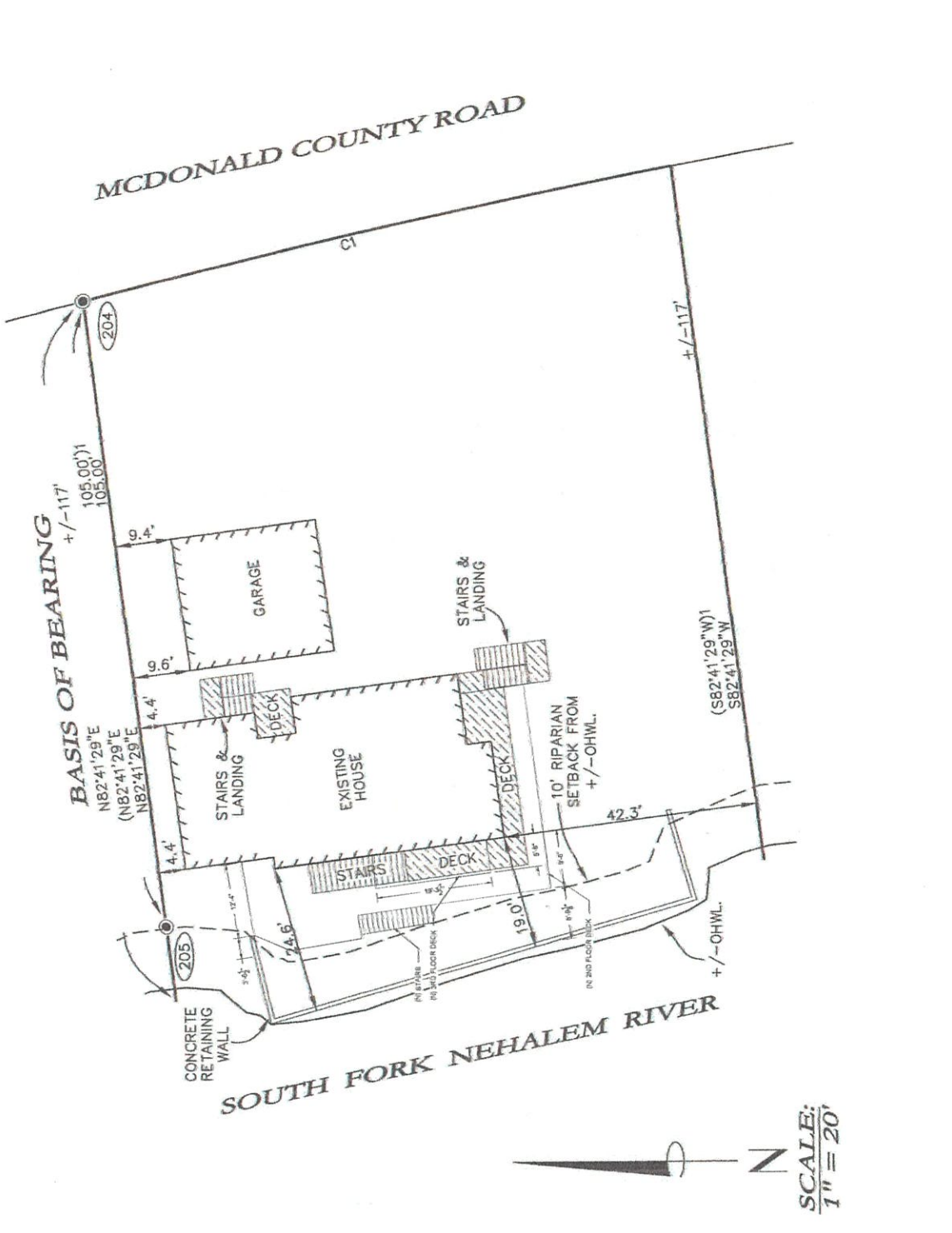
105 East Cypress  
Garbair, OH 97118  
503-322-2442  
strickerengineering.com  
john@strickerengineering.com



TRENT AND KELLIE DAVIS  
HOUSE RENOVATION  
16985 McDONALD RD  
NEHALEM, OR 97131

OWNER: DAVIS  
DESIGNER: STRICKER  
SCALE: AS SHOWN  
JOB NO: 1000000  
Drawing N.C.

**C1.0**



1 SITE PLAN  
SCALE: 1/8" = 1'-0"

SCALE:  
1" = 20'





S2.0

Drawing N.O.

DATE: 08/20/18  
SCALE: AS SHOWN  
PROJECT: HOUSE RENOVATION  
JOB NO: 180889

TRANT AND KELLIE DAVIS  
HOUSE RENOVATION  
19395 McDONALD RD  
NEHELEM, OR 97131  
2ND FLOOR DECK FRAMING PLAN

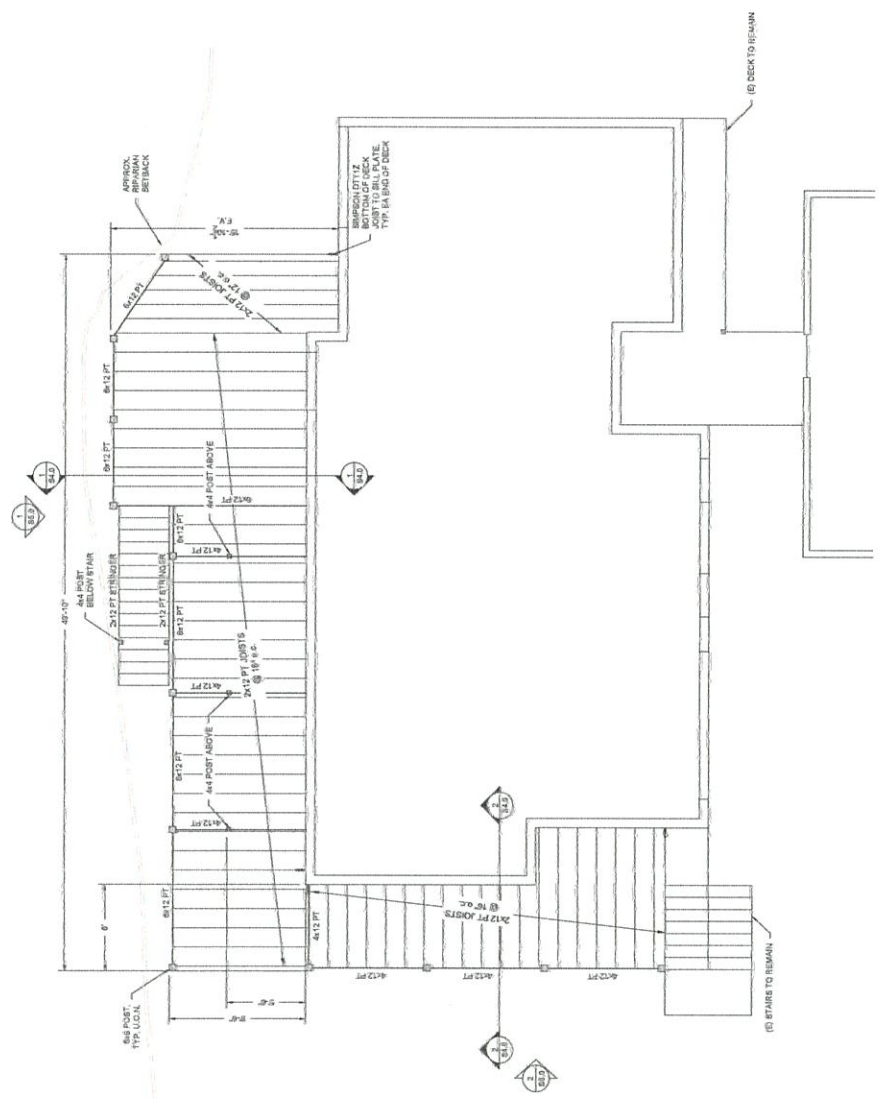


STRICKER  
ENGINEERING  
105 East Cypress  
Cantfield, OR 97118  
503-322-2442  
strickerengineering.com  
john@strickerengineering.com



REV	DATE	DESCRIPTION
1	08/20/18	PERMIT REVISION
2	08/20/18	REV. PLAN AND ELECTRICAL NOTES

1. 2ND FLOOR DECK FRAMING PLAN  
SCALE: 1/4" = 1'-0"



2 3 4 5 6

2 3 4 5 6





S3.0

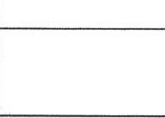
Drawing N.C.

3RD FLOOR DECK FRAMING PLAN  
TRENT AND KELLIE DAVIS  
HOUSE RENOVATION  
16985 McDONALD RD  
NEHELEM, OR 97131

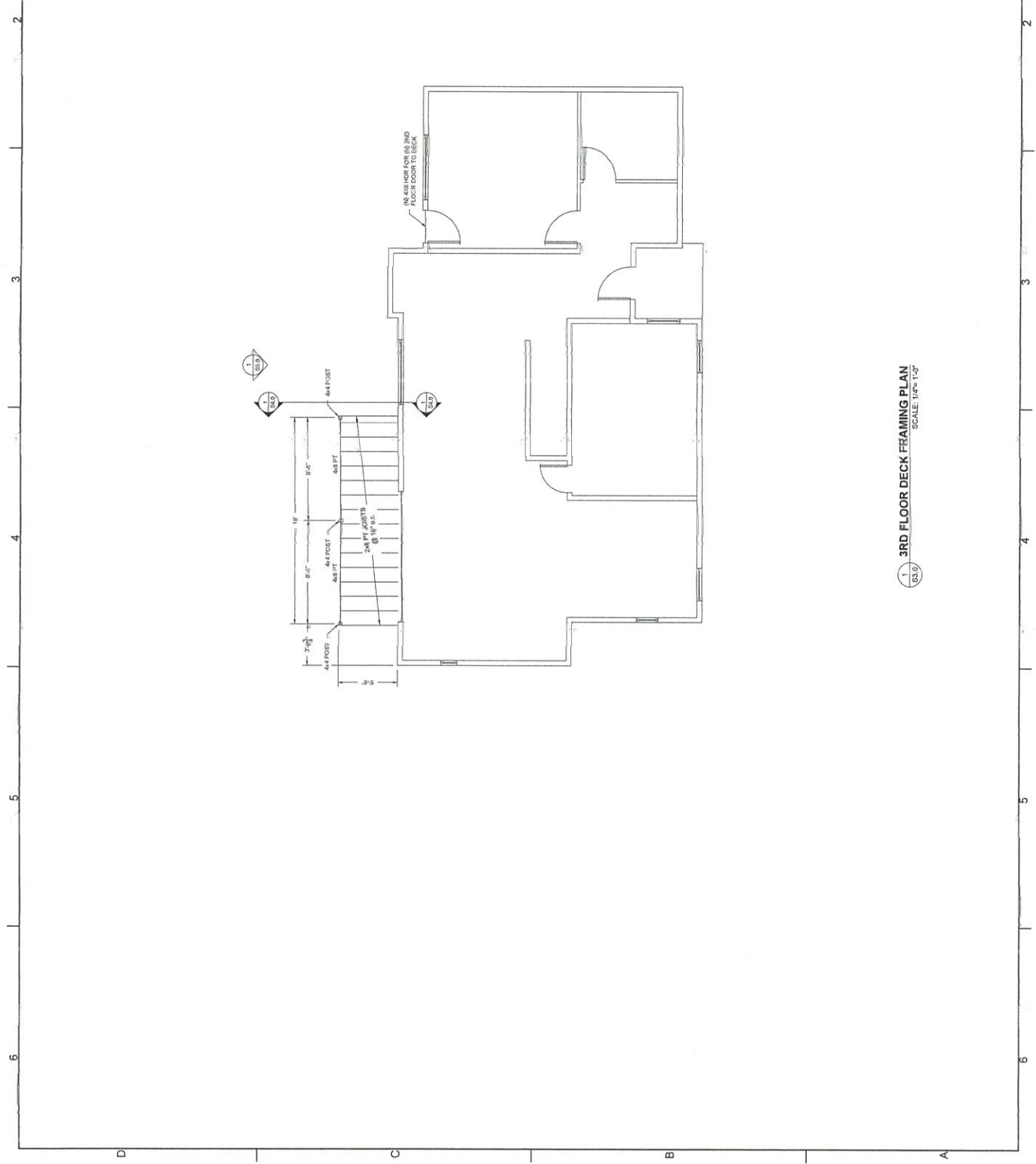
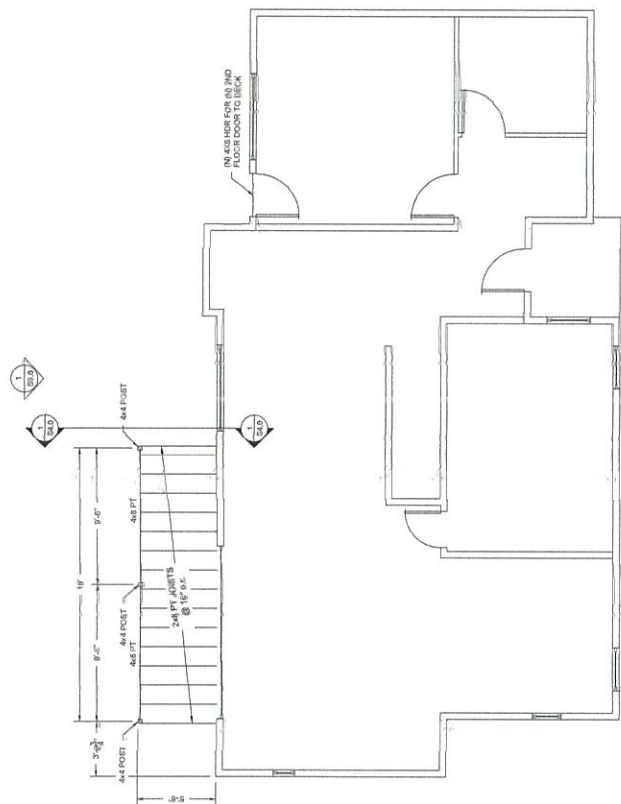
STRICKER  
ARCHITECTS  
503-922-2442  
Garibaldi, OR 97118  
strickerengineering.com  
John@strickerengineering.com

REVISIONS

REV	DATE	DESCRIPTION
1	11/28/21	FINAL REVISION
2	11/22/21	DATE PLANNING & ELECTRICAL SERVICES
3	11/22/21	REVISIONS



1 3RD FLOOR DECK FRAMING PLAN  
SCALE: 1/4" = 1'-0"



# S4.0

Drawing N.O.

OWNER: TRENT DAVIS  
 PROJECT: HOUSE RENOVATION  
 SCALE: AS SHOWN  
 DATE: 11/20/18

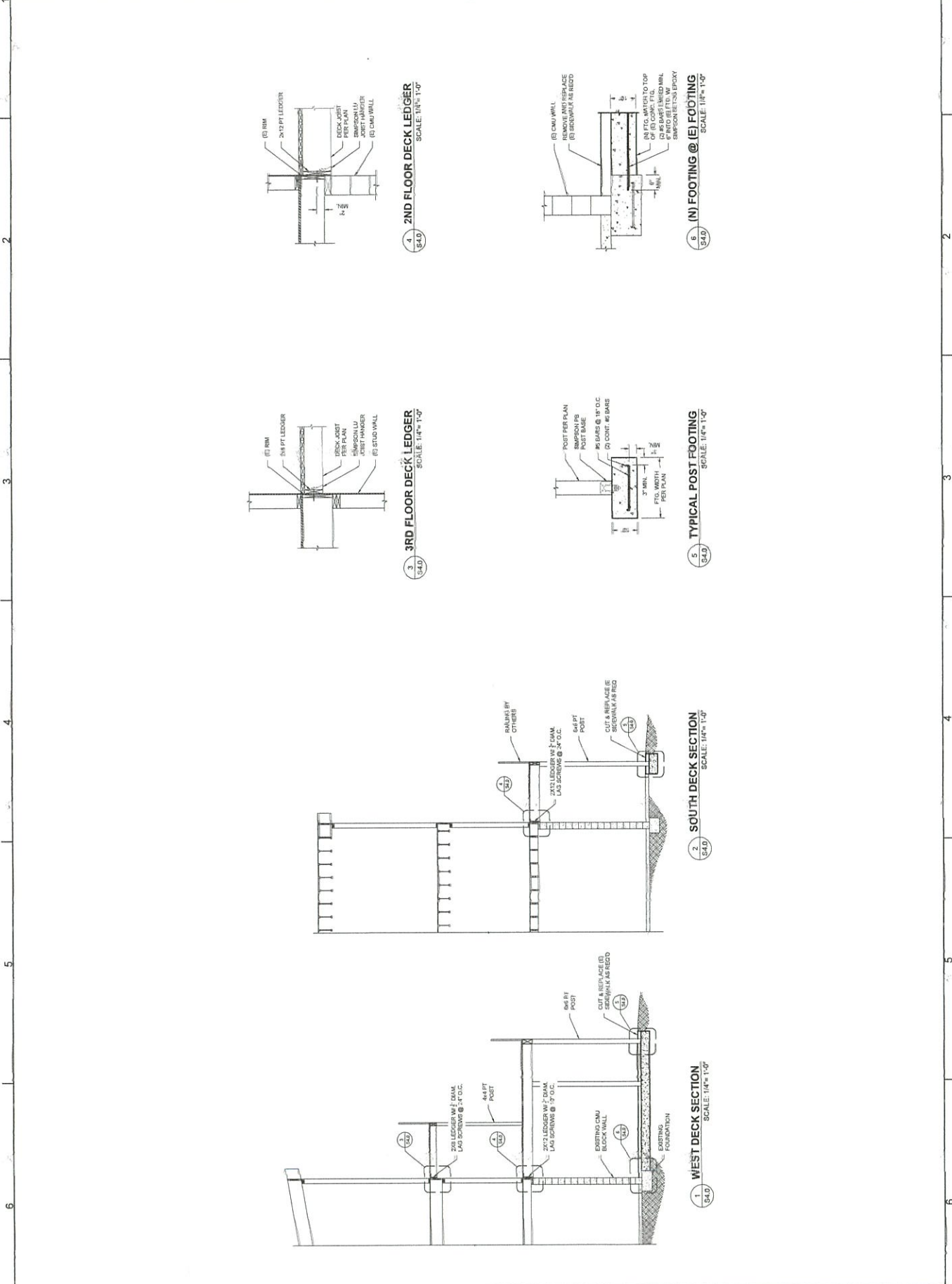
TRENT AND KELIE DAVIS  
 HOUSE RENOVATION  
 18395 McDONALD RD  
 NEHALEM, OR 97131

FOUNDATION AND FRAMING DETAILS



105 East Cypress  
 Gresham, OR 97118  
 503-662-0602  
 john@strickeringraining.com

REV	DATE	DESCRIPTION
1		REVISIONS
2		REVISED PER PLAN AND CLIENT COMMENTS
3		REVISED PER PLAN
4		REVISED PER PLAN
5		REVISED PER PLAN



1 WEST DECK SECTION  
 SCALE: 1/4" = 1'-0"

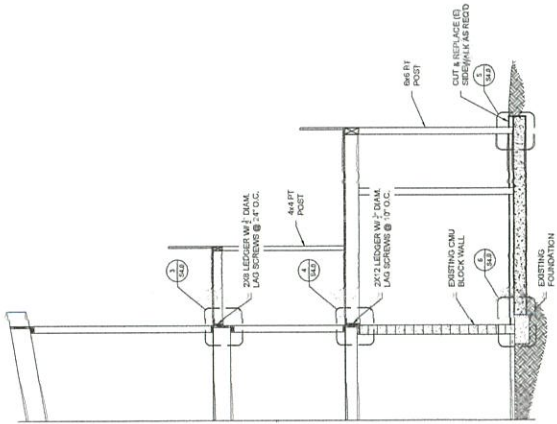
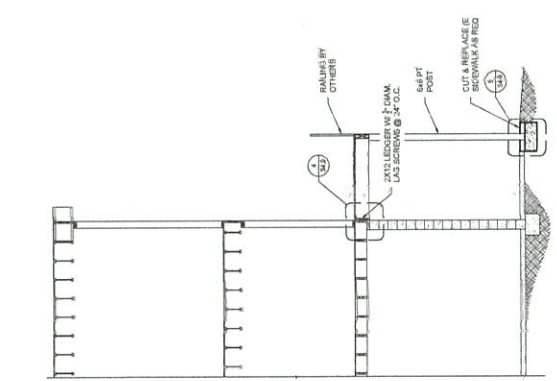
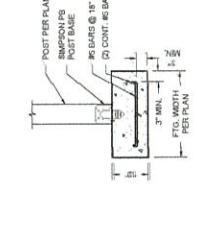
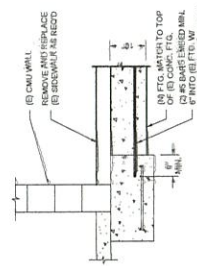
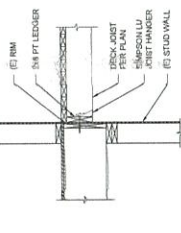
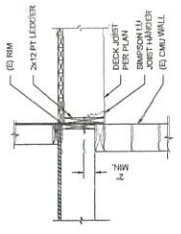
2 SOUTH DECK SECTION  
 SCALE: 1/4" = 1'-0"

3 2ND FLOOR DECK LEDGER  
 SCALE: 1/4" = 1'-0"

4 3RD FLOOR DECK LEDGER  
 SCALE: 1/4" = 1'-0"

5 TYPICAL POST FOOTING  
 SCALE: 1/4" = 1'-0"

6 (N) FOOTING @ (E) FOOTING  
 SCALE: 1/4" = 1'-0"





S5.0

Drawing N.O.

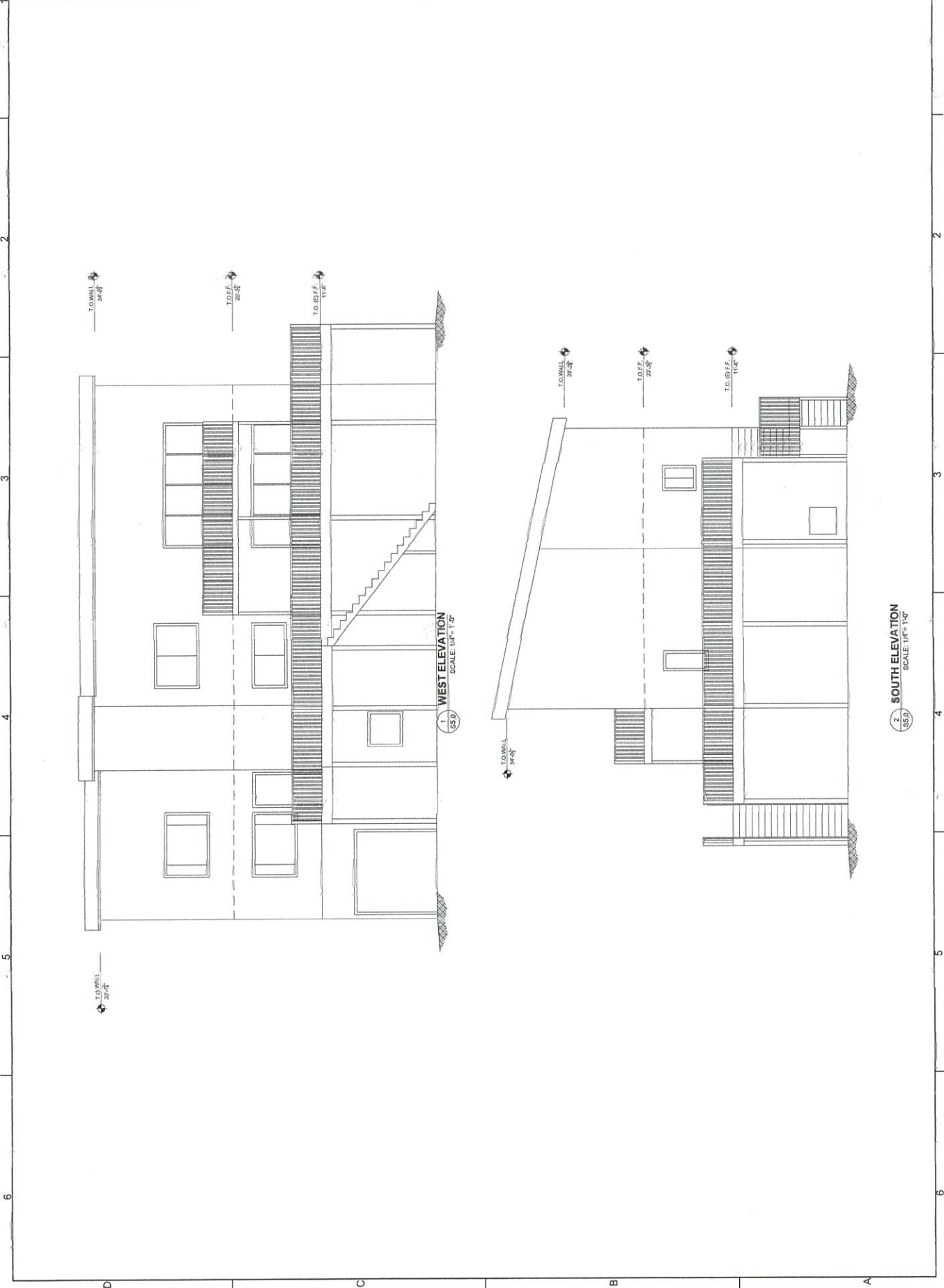
OWNER: TRENT AND KELLIE DAVIS  
PROJECT: HOUSE RENOVATION  
SCALE: AS SHOWN  
DATE: 07/18/18

TRENT AND KELLIE DAVIS  
HOUSE RENOVATION  
16365 McDONALD RD  
NEHALEM, OH 97131  
SOUTH AND WEST MAIN HOUSE ELEVATIONS



105 East Cypress  
Gresham, OR 97118  
503-922-2442  
strickerengineering.com  
john@strickerengineering.com

REV	DATE	DESCRIPTION
1	07/18/18	PERMIT REVISIONS
2	07/18/18	NOTES FOR PERMIT SUBMISSION
3	07/18/18	REVISIONS



1 WEST ELEVATION  
SCALE: 1/4" = 1'-0"

2 SOUTH ELEVATION  
SCALE: 1/4" = 1'-0"

---

**APPENDIX D**

Photo Log



**Photo 1:**  
*West side of Davis property*

Western side of the Davis property, with the Nehalem River on the left, the existing deck and house on the right, and a grass lawn between the two.



**Photo 2:**  
*Nehalem River - Upstream*

Looking upstream at the Nehalem River from the Davis property.

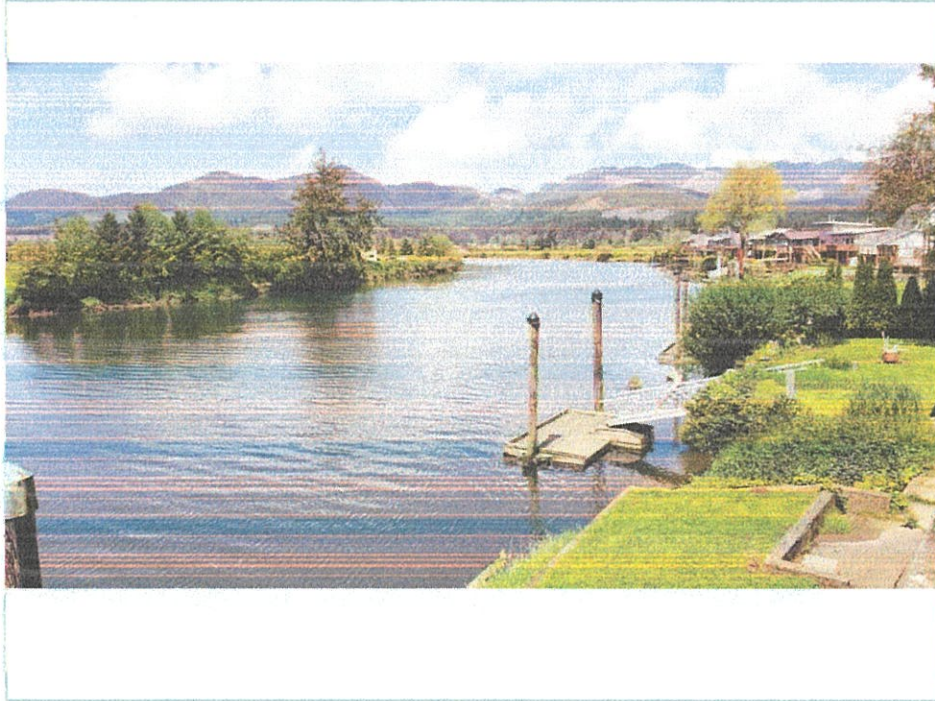


Cascade Water Resources, LLC

PROJECT NO.: 1026  
 PROCESSED: RS  
 DATE: Nov 2022  
 PAGE: 1  
 APPENDIX D

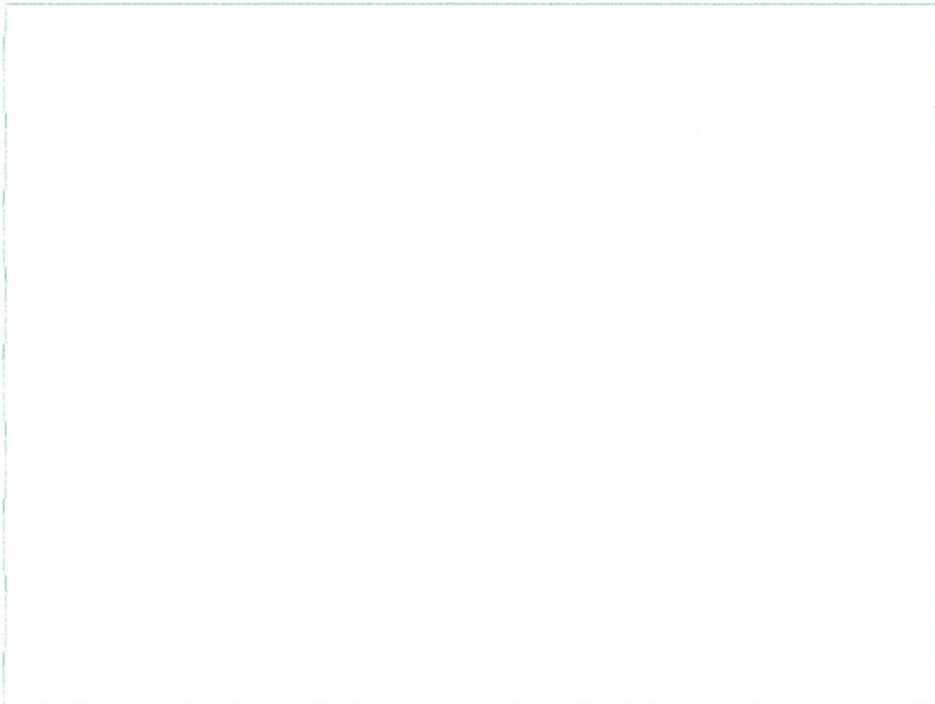
No-Rise Report  
 Nehalem River at 16395 McDonald  
 Dike Road  
 Nehalem, Oregon

PHOTOGRAPH LOG



**Photo 3:**  
*Nehalem River -  
Downstream*

Looking downstream at  
the Nehalem River from  
the Davis property.



Cascade Water Resources, LLC

PROJECT NO.: 1026  
PROCESSED: RS  
DATE Nov 2022  
PAGE 2  
APPENDIX D

No-Rise Report  
Nehalem River at 16395 McDonald  
Dike Road  
Nehalem, Oregon

PHOTOGRAPH LOG

# **EXHIBIT C**



# Wetland Land Use Notice Response

## Response Page

Department of State Lands (DSL) WN#\*

WN2023-0615

### Responsible Jurisdiction

**Staff Contact**

Lynn Tone

**Jurisdiction Type**

County

**Municipality**

Tillamook

**Local case file #**

851-23-000136-PLNG

**County**

Tillamook

### Activity Location

Township	Range	Section	QQ section	Tax Lot(s)
03N	10W	24	CB	1400

Street Address

16395 McDonald Rd

Address Line 2

City

Nehalem

State / Province / Region

OR

Postal / Zip Code

97131

Country

Tillamook

**Latitude**

45.728811

**Longitude**

-123.859981

### Wetland/Waterway/Other Water Features



- There are/may be wetlands, waterways or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey and other available information.
- The National Wetlands Inventory shows wetland, waterway or other water features on the property
- The property includes or is adjacent to designated Essential Salmonid Habitat.
- The property includes or is adjacent to state-owned waters.

### Your Activity



- A state permit will not be required for the proposed project because, based on the submitted site plan, the project avoids impacts to jurisdictional wetlands, waterways, or other waters.

## Applicable Oregon Removal-Fill Permit Requirement(s)



- A state permit is required for any amount of fill, removal, and/or other ground alteration in Essential Salmonid Habitat and within adjacent off-channel rearing or high-flow refugia habitat with a permanent or seasonal surface water connection to the stream.

## Closing Information



### Additional Comments

Based on a review of the available information, the proposed home addition appears to avoid impacts to onsite wetlands and waters.

Best management practices for sediment and erosion control are recommended to prevent impacts to the Nehalem River, an ESH waterway. Any impact to an ESH waterway may require a permit.

Please note that the Nehalem River is a state-owned waterway. Any dock structure may need a registration from DSL. Please contact Proprietary Coordinator Dario Frisone at (503) 302-6094 or more information.

**This is a preliminary jurisdictional determination and is advisory only.**

This report is for the State Removal-Fill law only. City or County permits may be required for the proposed activity.

### Contact Information

- For information on permitting, use of a state-owned water, wetland determination or delineation report requirements please contact the respective DSL Aquatic Resource, Proprietary or Jurisdiction Coordinator for the site county. The current list is found at: <http://www.oregon.gov/dsl/ww/pages/wwstaff.aspx>
- The current Removal-Fill permit and/or Wetland Delineation report fee schedule is found at: <https://www.oregon.gov/dsl/WW/Documents/Removal-FillFees.pdf>

### Response Date

8/18/2023

### Response by:

Chris Stevenson

### Response Phone:

503-986-5246

## Melissa Jenck

---

**From:** BRADLEY Robert \* ODFW <Robert.BRADLEY@odfw.oregon.gov>  
**Sent:** Thursday, August 17, 2023 2:06 PM  
**To:** Melissa Jenck  
**Subject:** EXTERNAL: FW: Floodway Development Permit 851-23-000136-PLNG

[**NOTICE:** This message originated outside of Tillamook County -- **DO NOT CLICK** on links or open attachments unless you are sure the content is safe.]

Melissa,

Just had a chance to review this after returning from vacation.

Looks like they are proposing to expand the deck to within about 10 feet or so of the ordinary high water. This is less than the 20 feet specified for heavily developed areas (and does not appear to be any associated justification included, other than perhaps the desire for a larger deck). This would encroach further toward the estuary than the development on either side of the property also, looking at the photos provided. If permitted, this will result in a permanent loss of potential riparian area above and beyond what is already lost (the 50 foot setback would be located near the east side of the house judging by the scale on the drawing).

If permitted, ODFW recommends that mitigation be required in the form of planting native trees and/or shrubs along the length of the west (estuary) side of the property. The owners could work with our habitat biologist, TEP, or other qualified entity to develop a planting plan, which should be reviewed and approved by the county as part of the permitting process. The plan should include a requirement for maintenance of the vegetation until it is established and free to grow, with replacement those plants that don't survive as needed.

Robert

Robert W. Bradley  
District Fish Biologist  
Oregon Department of Fish and Wildlife  
North Coast Watershed District  
4907 Third St  
Tillamook, OR 97141  
503-842-2741 x18613 (w)  
503-842-8385 (fax)

---

**From:** Lynn Tone <ltone@co.tillamook.or.us>  
**Sent:** Monday, July 31, 2023 2:04 PM  
**To:** Melissa Jenck <mjenck@co.tillamook.or.us>  
**Subject:** Floodway Development Permit 851-23-000136-PLNG

Please see link for Notice of Administrative Review, thank you

<https://www.co.tillamook.or.us/commdev/project/851-23-000136-plng>



## Melissa Jenck

---

**From:** Crowley, Josha <Josha.Crowley@atkinsglobal.com>  
**Sent:** Tuesday, May 23, 2023 6:53 PM  
**To:** Melissa Jenck  
**Subject:** EXTERNAL: RE: EXTERNAL: FW: FW: Nehalem River No Rise

**[NOTICE: This message originated outside of Tillamook County -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]**

Melissa – this looks fine to me. They created a model based on the effective model and they show that the proposed encroachment will result in a change of 0.00 feet (or less) at every modeled cross section. Thanks.

Josha Crowley, PE, PMP, CFM, D.WRE  
RSC Lead | STARR II - Region 10 Service Center  
Phone: (425) 329-3679  
Cell: (206) 499-2440

---

**From:** Melissa Jenck <mjenck@co.tillamook.or.us>  
**Sent:** Tuesday, May 23, 2023 4:09 PM  
**To:** Crowley, Josha <Josha.Crowley@atkinsglobal.com>  
**Subject:** FW: EXTERNAL: FW: FW: Nehalem River No Rise

Good afternoon Josha,

I'm working on a Floodway improvement off the Nehalem River. The applicant is proposing to expand a deck with some additional footings within the Floodway. They have provided the digitals for the data prepared for the No-Rise Analysis. The documents can be found here: <https://drive.google.com/drive/folders/1QL0C1GI1K4xI2xATOUseXRBECqV940t-?usp=sharing>

Can you confirm if the analysis is prepared appropriately?

Thanks for your assistance!



**Melissa Jenck** (she/her) | CFM, Senior Planner  
TILLAMOOK COUNTY | Community Development  
1510-B Third Street  
Tillamook, OR 97141  
Phone (503) 842-3408 x3301  
[mjenck@co.tillamook.or.us](mailto:mjenck@co.tillamook.or.us)

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*The Department is excited to announce that we are OPEN to the public by appointment. To review the list of services provided and to schedule an appointment with us, please visit <https://www.co.tillamook.or.us/gov/ComDev/> to access the appointment scheduler portal.*

---

**From:** Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)>  
**Sent:** Friday, May 12, 2023 6:51 AM  
**To:** Melissa Jenck <[mjenck@co.tillamook.or.us](mailto:mjenck@co.tillamook.or.us)>  
**Cc:** Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>  
**Subject:** EXTERNAL: FW: FW: Nehalem River No Rise

[**NOTICE:** This message originated outside of Tillamook County -- **DO NOT CLICK** on links or open attachments unless you are sure the content is safe.]

Hello Melissa, this is for our project at 16395 McDonald in Nehalem.

Thanks, Trent  
503-720-9756

---

**From:** Tyler Marley <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>  
**Sent:** Tuesday, May 9, 2023 8:31 PM  
**To:** Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)>  
**Cc:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>; Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>  
**Subject:** Re: FW: Nehalem River No Rise

Thanks Trent!

The electronic files can be obtained at this Google Drive link: <https://drive.google.com/drive/folders/1QL0C1G1K4xI2xATOUseXRBEcQV94Ot-?usp=sharing>

The Google Drive folder includes the HEC-RAS hydraulic model, AutoCAD workmap, the ArcGIS files that were used to create the figures, and a digital version of the no-rise report. Please share that link with Tillamook County. They will be able to download the digital files for their review and submittal to FEMA.

Please let me know if the County has any issues downloading the files.

Thanks,  
-Tyler Marley

On Thu, May 4, 2023 at 1:56 PM Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)> wrote:

Sounds good, thanks Roger and congrats Tyler!

Trent

----- Original message -----

**From:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>  
**Date:** 5/4/23 1:46 PM (GMT-08:00)  
**To:** Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)>  
**Cc:** "Marley, Tyler" <[Tyler.marley8@gmail.com](mailto:Tyler.marley8@gmail.com)>, Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>  
**Subject:** Re: FW: Nehalem River No Rise

Trent

No.. the No Rise report does not have the digital copies. That is usually provided in the form of a link that takes one to a Google One website. I have Tyler on this CC and he is the one that can provide you guys with that link and you can forward it to anyone at the County.

Tyler just became a father last week and I know he's been Sleepless in Seattle but hopefully he can provide this link sometime this week or early next. I will also send him a text today.

Roger C. Sutherland, PE  
Cascade Water Resources LLC  
503-704-0522

On Thu, May 4, 2023 at 12:50 PM Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)> wrote:

Hello Roger and Tyler, I just met with Tillamook county and they noted that in your cover letter that "Digital copies of the hydraulic model and work up map are also provided for your reference." They are asking if those digital copies are included in the No-Rise analysis attached here that you provided me, or are there separate attachments that I may not have received originally? Apparently, they will need that to submit to FEMA.

Thanks, Trent

---

**From:** Tyler Marley <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>  
**Sent:** Monday, March 6, 2023 10:51 PM  
**To:** Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>; Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>  
**Subject:** Re: Nehalem River No Rise

Hello Trent,

I have attached the stamped and sealed no-rise report for your records.

Warm regards,

-Tyler Marley

On Mon, Mar 6, 2023 at 7:20 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Sounds good, thanks and enjoy the vacation.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 3/6/23 6:31 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>, "Marley, Tyler" <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>

Subject: Re: Nehalem River No Rise

Sorry I just saw this since I'm on vacation in Myrtle Beach SC and I was out.

Yes I got the payment thanks. And I already notified Tyler and he should be sending you the stamped and sealed report. I'm not sure when but it will probably be in the next few days unless he is out of town.

Thanks for your business.

Roger

On Mon, Mar 6, 2023, 5:58 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger, I just sent it over. Please let me know when you get it.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 3/6/23 2:05 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>, Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

Cc: "Marley, Tyler" <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>

Subject: Re: Nehalem River No Rise

Trent and Kellie

It is time for your final payment of \$700 for the No Rise Certification. Once I receive the payment I will let Tyler know and he will email you the stamped and sealed version of the report that you can submit to the County which is required before any permits are issued for your deck.

Thanks

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Fri, Feb 3, 2023 at 2:30 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Perfect, thank you.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 2/3/23 11:46 AM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

Subject: Re: Nehalem River No Rise

Trent

I just received it. Thanks

I'll remind you again in early March.

Roger

On Fri, Feb 3, 2023, 2:32 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger, thank you for the reminder and I just sent a venmo for \$700. Please let me know when you receive it.

Thanks, trent

---

**From:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

**Sent:** Friday, February 3, 2023 10:57 AM

**To:** Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

**Cc:** Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

**Subject:** Re: Nehalem River No Rise

Trent & Kelli

The remaining amount for the Nehalem River No Rise we created for your proposed deck expansion on your Nehalem River house is \$1400.

You can pay in full now or in two more \$700 monthly payments.

Once you are paid in full I will send you a sealed and signed copy of the No Rise Certification that you can then provide the County.

Thanks

Roger

On Wed, Dec 28, 2022, 8:43 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Sounds good. Very much appreciated.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/28/22 5:41 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Subject: Re: Nehalem River No Rise

Yes I got it. Thanks very much. I will send this to Tyler and bug you again next month around the 28th for the next payment. Once you have made all three payments near the end of February I will send you the stamped and sealed report and certification

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522



On Wed, Dec 28, 2022 at 5:27 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger it looks like the payment went through. Please verify it got to you.

Thanks and sorry for the inconvenience.

We will get the balance paid in January.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/28/22 4:46 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>

Subject: Re: Nehalem River No Rise

I do have Venmo. It's @Roger-Sutherland-2

Thanks

On Wed, Dec 28, 2022, 4:43 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger my apologies. It is not a matter of funds but negligence and miscommunication on our part. I have copied Kellie who can take care of that for you. We can send it via Venmo if you are set up for that.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/28/22 4:16 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Subject: Re: Nehalem River No Rise

Trent

I just got home from a two week trip to visit my youngest son and was expecting to see a \$700 check from you in my held mail which was promised by you on December 10th. I'm starting to get a little concerned. I understand being tight on funds but I owe my contract employee \$2100 which I don't have either. Monthly payments of \$700 were acceptable to Tyler so I really need that first one payment to get this started.

Remember the No Rise Certification is not valid unless it is stamped and sealed.

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Sat, Dec 10, 2022 at 1:44 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Thanks and you as well.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/10/22 12:24 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Subject: Re: Nehalem River No Rise

That will work.

Happy Holidays

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Sat, Dec 10, 2022 at 11:13 AM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Sounds good Roger, we will get a payment out this week. Sorry for the delay.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/10/22 11:09 AM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

Subject: Re: Nehalem River No Rise

Trent and Kelli

I know this can be a busy time and that money may be tight at this time of the year. I wanted to remind you about the invoice I sent you 30 days ago. Another copy is attached if you misplaced it.

If you want to pay it off in 2 or 3 monthly payments interest free that will be fine.

Let me know

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Thu, Nov 10, 2022 at 7:56 AM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Thanks so much Roger and no worries on the timing, all good.

Trent

---

**From:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

**Sent:** Thursday, November 10, 2022 7:51 AM

**To:** Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>; Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

**Subject:** Nehalem River No Rise

Trent and Kellie

Great news we achieved a No Rise condition for your proposed deck at your house on the Nehalem River. The draft report and certification is attached and available for view.

I have also attached an invoice for the costs encountered. Please pay the invoice at your convenience and when that has occurred. I will deliver to you and your engineer a stamped and sealed final version of the document.

Once again I'm so sorry it took way too long to get this done. But when working with a part time contract employee faced with another huge unexpected project that is what occurred.

Thanks again and let me know if you have any questions

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

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**EXHIBIT**

**C**

## Melissa Jenck

---

**From:** BRADLEY Robert \* ODFW <Robert.BRADLEY@odfw.oregon.gov>  
**Sent:** Friday, December 8, 2023 3:53 PM  
**To:** Melissa Jenck  
**Subject:** EXTERNAL: RE: EXTERNAL: FW: Floodway Development Permit 851-23-000136-PLNG

**[NOTICE: This message originated outside of Tillamook County -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]**

No, I would stand by my earlier statement below that the estuary side should be planted in native vegetation.

Robert

Robert W. Bradley  
District Fish Biologist  
Oregon Department of Fish and Wildlife  
North Coast Watershed District  
4907 Third St  
Tillamook, OR 97141  
503-842-2741 x18613 (w)  
503-842-8385 (fax)

---

**From:** Melissa Jenck <mjenck@co.tillamook.or.us>  
**Sent:** Thursday, December 7, 2023 2:35 PM  
**To:** BRADLEY Robert \* ODFW <Robert.BRADLEY@odfw.oregon.gov>  
**Subject:** RE: EXTERNAL: FW: Floodway Development Permit 851-23-000136-PLNG

Hello Robert,

This subject property maintains a Riparian Exception granted back in 2020 to the 50-ft setback to allow for a 10-ft riparian setback. There was vegetative mitigation measures that were prescribed by yourself back in 2020. But, that land use decision was granted and approved, neither was it appealed.

For this project, which already maintains the land use approval for the 10-ft riparian setback, is there additional concerns or measures, outside those prescribed back in 2020 you would request of the Applicant?

Sincerely,

\*\*\* Please note that the Tillamook County domain has changed, and my email address is now [Melissa.Jenck@tillamookcounty.gov](mailto:Melissa.Jenck@tillamookcounty.gov) so please update your contact information as needed. Thank you. \*\*\*



**Melissa Jenck** (she/her) | Senior Planner  
TILLAMOOK COUNTY | Community Development  
1510-B Third Street  
Tillamook, OR 97141  
Phone (503) 842-3408 x 3301  
[Melissa.Jenck@tillamookcounty.gov](mailto:Melissa.Jenck@tillamookcounty.gov)



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*The Department is excited to announce that we are OPEN to the public by appointment. To review the list of services provided and to schedule an appointment with us, please visit <https://www.co.tillamook.or.us/gov/ComDev/> to access the appointment scheduler portal.*

---

**From:** BRADLEY Robert \* ODFW <[Robert.BRADLEY@odfw.oregon.gov](mailto:Robert.BRADLEY@odfw.oregon.gov)>  
**Sent:** Thursday, August 17, 2023 2:06 PM  
**To:** Melissa Jenck <[mjenck@co.tillamook.or.us](mailto:mjenck@co.tillamook.or.us)>  
**Subject:** EXTERNAL: FW: Floodway Development Permit 851-23-000136-PLNG

**[NOTICE: This message originated outside of Tillamook County -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]**

Melissa,

Just had a chance to review this after returning from vacation.

Looks like they are proposing to expand the deck to within about 10 feet or so of the ordinary high water. This is less than the 20 feet specified for heavily developed areas (and does not appear to be any associated justification included, other than perhaps the desire for a larger deck). This would encroach further toward the estuary than the development on either side of the property also, looking at the photos provided. If permitted, this will result in a permanent loss of potential riparian area above and beyond what is already lost (the 50 foot setback would be located near the east side of the house judging by the scale on the drawing).

If permitted, ODFW recommends that mitigation be required in the form of planting native trees and/or shrubs along the length of the west (estuary) side of the property. The owners could work with our habitat biologist, TEP, or other qualified entity to develop a planting plan, which should be reviewed and approved by the county as part of the permitting process. The plan should include a requirement for maintenance of the vegetation until it is established and free to grow, with replacement those plants that don't survive as needed.

Robert

Robert W. Bradley  
District Fish Biologist  
Oregon Department of Fish and Wildlife  
North Coast Watershed District  
4907 Third St  
Tillamook, OR 97141  
503-842-2741 x18613 (w)  
503-842-8385 (fax)

---

**From:** Lynn Tone <[ltone@co.tillamook.or.us](mailto:ltone@co.tillamook.or.us)>  
**Sent:** Monday, July 31, 2023 2:04 PM  
**To:** Melissa Jenck <[mjenck@co.tillamook.or.us](mailto:mjenck@co.tillamook.or.us)>  
**Subject:** Floodway Development Permit 851-23-000136-PLNG

Please see link for Notice of Administrative Review, thank you



# Wetland Land Use Notice Response

## Response Page

Department of State Lands (DSL) WN#\*

WN2023-0615

### Responsible Jurisdiction

<b>Staff Contact</b>	<b>Jurisdiction Type</b>	<b>Municipality</b>
Lynn Tone	County	Tillamook
<b>Local case file #</b>	<b>County</b>	
851-23-000136-PLNG	Tillamook	

### Activity Location

<b>Township</b>	<b>Range</b>	<b>Section</b>	<b>QQ section</b>	<b>Tax Lot(s)</b>
03N	10W	24	CB	1400

Street Address

16395 McDonald Rd

Address Line 2

City

Nehalem

Postal / Zip Code

97131

State / Province / Region

OR

Country

Tillamook

**Latitude**

45.728811

**Longitude**

-123.859981

### Wetland/Waterway/Other Water Features

- There are/may be wetlands, waterways or other water features on the property that are subject to the State Removal-Fill Law based upon a review of wetland maps, the county soil survey and other available information.
- The National Wetlands Inventory shows wetland, waterway or other water features on the property
- The property includes or is adjacent to designated Essential Salmonid Habitat.
- The property includes or is adjacent to state-owned waters.

### Your Activity

- A state permit will not be required for the proposed project because, based on the submitted site plan, the project avoids impacts to jurisdictional wetlands, waterways, or other waters.

## Applicable Oregon Removal-Fill Permit Requirement(s)



- A state permit is required for any amount of fill, removal, and/or other ground alteration in Essential Salmonid Habitat and within adjacent off-channel rearing or high-flow refugia habitat with a permanent or seasonal surface water connection to the stream.

## Closing Information



### Additional Comments

Based on a review of the available information, the proposed home addition appears to avoid impacts to onsite wetlands and waters.

Best management practices for sediment and erosion control are recommended to prevent impacts to the Nehalem River, an ESH waterway. Any impact to an ESH waterway may require a permit.

Please note that the Nehalem River is a state-owned waterway. Any dock structure may need a registration from DSL. Please contact Proprietary Coordinator Dario Frisone at (503) 302-6094 or more information.

**This is a preliminary jurisdictional determination and is advisory only.**

This report is for the State Removal-Fill law only. City or County permits may be required for the proposed activity.

### Contact Information

- For information on permitting, use of a state-owned water, wetland determination or delineation report requirements please contact the respective DSL Aquatic Resource, Proprietary or Jurisdiction Coordinator for the site county. The current list is found at: <http://www.oregon.gov/dsl/ww/pages/wwstaff.aspx>
- The current Removal-Fill permit and/or Wetland Delineation report fee schedule is found at: <https://www.oregon.gov/dsl/WW/Documents/Removal-FillFees.pdf>

### Response Date

8/18/2023

### Response by:

Chris Stevenson

### Response Phone:

503-986-5246

## Melissa Jenck

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**From:** Crowley, Josha <Josha.Crowley@atkinsglobal.com>  
**Sent:** Tuesday, May 23, 2023 6:53 PM  
**To:** Melissa Jenck  
**Subject:** EXTERNAL: RE: EXTERNAL: FW: FW: Nehalem River No Rise

**[NOTICE: This message originated outside of Tillamook County -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]**

Melissa – this looks fine to me. They created a model based on the effective model and they show that the proposed encroachment will result in a change of 0.00 feet (or less) at every modeled cross section. Thanks.

Josha Crowley, PE, PMP, CFM, D.WRE  
RSC Lead | STARR II - Region 10 Service Center  
Phone: (425) 329-3679  
Cell: (206) 499-2440

---

**From:** Melissa Jenck <mjenck@co.tillamook.or.us>  
**Sent:** Tuesday, May 23, 2023 4:09 PM  
**To:** Crowley, Josha <Josha.Crowley@atkinsglobal.com>  
**Subject:** FW: EXTERNAL: FW: FW: Nehalem River No Rise

Good afternoon Josha,

I'm working on a Floodway improvement off the Nehalem River. The applicant is proposing to expand a deck with some additional footings within the Floodway. They have provided the digitals for the data prepared for the No-Rise Analysis. The documents can be found here: <https://drive.google.com/drive/folders/1QL0C1Gl1K4xI2xATOUseXRBEcQV94Ot-?usp=sharing>

Can you confirm if the analysis is prepared appropriately?

Thanks for your assistance!



**Melissa Jenck** (she/her) | CFM, Senior Planner  
TILLAMOOK COUNTY | Community Development  
1510-B Third Street  
Tillamook, OR 97141  
Phone (503) 842-3408 x3301  
[mjenck@co.tillamook.or.us](mailto:mjenck@co.tillamook.or.us)

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*The Department is excited to announce that we are OPEN to the public by appointment. To review the list of services provided and to schedule an appointment with us, please visit <https://www.co.tillamook.or.us/gov/ComDev/> to access the appointment scheduler portal.*

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**From:** Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)>  
**Sent:** Friday, May 12, 2023 6:51 AM  
**To:** Melissa Jenck <[mjenck@co.tillamook.or.us](mailto:mjenck@co.tillamook.or.us)>  
**Cc:** Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>  
**Subject:** EXTERNAL: FW: FW: Nehalem River No Rise

**[NOTICE: This message originated outside of Tillamook County -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]**

Hello Melissa, this is for our project at 16395 McDonald in Nehalem.

Thanks, Trent  
503-720-9756

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**From:** Tyler Marley <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>  
**Sent:** Tuesday, May 9, 2023 8:31 PM  
**To:** Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)>  
**Cc:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>; Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>  
**Subject:** Re: FW: Nehalem River No Rise

Thanks Trent!

The electronic files can be obtained at this Google Drive link: <https://drive.google.com/drive/folders/1QL0C1GI1K4xI2xATOUseXRBEcQV94Ot-?usp=sharing>

The Google Drive folder includes the HEC-RAS hydraulic model, AutoCAD workmap, the ArcGIS files that were used to create the figures, and a digital version of the no-rise report. Please share that link with Tillamook County. They will be able to download the digital files for their review and submittal to FEMA.

Please let me know if the County has any issues downloading the files.

Thanks,  
-Tyler Marley

On Thu, May 4, 2023 at 1:56 PM Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)> wrote:

Sounds good, thanks Roger and congrats Tyler!

Trent

----- Original message -----

**From:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>  
**Date:** 5/4/23 1:46 PM (GMT-08:00)  
**To:** Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)>  
**Cc:** "Marley, Tyler" <[Tyler.marley8@gmail.com](mailto:Tyler.marley8@gmail.com)>, Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>  
**Subject:** Re: FW: Nehalem River No Rise

Trent

No.. the No Rise report does not have the digital copies. That is usually provided in the form of a link that takes one to a Google One website. I have Tyler on this CC and he is the one that can provide you guys with that link and you can forward it to anyone at the County.

Tyler just became a father last week and I know he's been Sleepless in Seattle but hopefully he can provide this link sometime this week or early next. I will also send him a text today.

Roger C. Sutherland, PE  
Cascade Water Resources LLC  
503-704-0522

On Thu, May 4, 2023 at 12:50 PM Trent Davis <[trent@td-advisors.com](mailto:trent@td-advisors.com)> wrote:

Hello Roger and Tyler, I just met with Tillamook county and they noted that in your cover letter that "Digital copies of the hydraulic model and work up map are also provided for your reference." They are asking if those digital copies are included in the No-Rise analysis attached here that you provided me, or are there separate attachments that I may not have received originally? Apparently, they will need that to submit to FEMA.

Thanks, Trent

---

**From:** Tyler Marley <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>  
**Sent:** Monday, March 6, 2023 10:51 PM  
**To:** Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>; Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>  
**Subject:** Re: Nehalem River No Rise

Hello Trent,

I have attached the stamped and sealed no-rise report for your records.

Warm regards,

-Tyler Marley

On Mon, Mar 6, 2023 at 7:20 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Sounds good, thanks and enjoy the vacation.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 3/6/23 6:31 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>, "Marley, Tyler" <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>

Subject: Re: Nehalem River No Rise

Sorry I just saw this since I'm on vacation in Myrtle Beach SC and I was out.

Yes I got the payment thanks. And I already notified Tyler and he should be sending you the stamped and sealed report. I'm not sure when but it will probably be in the next few days unless he is out of town.

Thanks for your business.

Roger

On Mon, Mar 6, 2023, 5:58 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger, I just sent it over. Please let me know when you get it.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 3/6/23 2:05 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>, Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

Cc: "Marley, Tyler" <[tyler.marley8@gmail.com](mailto:tyler.marley8@gmail.com)>

Subject: Re: Nehalem River No Rise

Trent and Kellie

It is time for your final payment of \$700 for the No Rise Certification. Once I receive the payment I will let Tyler know and he will email you the stamped and sealed version of the report that you can submit to the County which is required before any permits are issued for your deck.

Thanks



Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Fri, Feb 3, 2023 at 2:30 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Perfect, thank you.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 2/3/23 11:46 AM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

Subject: Re: Nehalem River No Rise

Trent

I just received it. Thanks

I'll remind you again in early March.

Roger

On Fri, Feb 3, 2023, 2:32 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger, thank you for the reminder and I just sent a venmo for \$700. Please let me know when you receive it.

Thanks, trent

---

**From:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

**Sent:** Friday, February 3, 2023 10:57 AM

**To:** Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

**Cc:** Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

**Subject:** Re: Nehalem River No Rise

Trent &Kelli

The remaining amount for the Nehalem River No Rise we created for your proposed deck expansion on your Nehalem River house is \$1400.

You can pay in full now or in two more \$700 monthly payments.

Once you are paid in full I will send you a sealed and signed copy of the No Rise Certification that you can then provide the County.

Thanks

Roger

On Wed, Dec 28, 2022, 8:43 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Sounds good. Very much appreciated.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/28/22 5:41 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Subject: Re: Nehalem River No Rise

Yes I got it. Thanks very much. I will send this to Tyler and bug you again next month around the 28th for the next payment. Once you have made all three payments near the end of February I will send you the stamped and sealed report and certification

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Wed, Dec 28, 2022 at 5:27 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger it looks like the payment went through. Please verify it got to you.

Thanks and sorry for the inconvenience.

We will get the balance paid in January.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/28/22 4:46 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[davis.oswego@outlook.com](mailto:davis.oswego@outlook.com)>

Subject: Re: Nehalem River No Rise

I do have Venmo. It's @Roger-Sutherland-2

Thanks

On Wed, Dec 28, 2022, 4:43 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Roger my apologies. It is not a matter of funds but negligence and miscommunication on our part. I have copied Kellie who can take care of that for you. We can send it via Venmo if you are set up for that.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/28/22 4:16 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Subject: Re: Nehalem River No Rise

Trent

I just got home from a two week trip to visit my youngest son and was expecting to see a \$700 check from you in my held mail which was promised by you on December 10th. I'm starting to get a little concerned. I understand being tight on funds but I owe my contract employee \$2100 which I don't have either. Monthly payments of \$700 were acceptable to Tyler so I really need that first one payment to get this started.

Remember the No Rise Certification is not valid unless it is stamped and sealed.

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Sat, Dec 10, 2022 at 1:44 PM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Thanks and you as well.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/10/22 12:24 PM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Subject: Re: Nehalem River No Rise

That will work.

Happy Holidays

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Sat, Dec 10, 2022 at 11:13 AM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Sounds good Roger, we will get a payment out this week. Sorry for the delay.

Trent

Sent via the Samsung Galaxy Note20 Ultra 5G, an AT&T 5G smartphone

----- Original message -----

From: Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

Date: 12/10/22 11:09 AM (GMT-08:00)

To: Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>

Cc: Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

Subject: Re: Nehalem River No Rise

Trent and Kelli

I know this can be a busy time and that money may be tight at this time of the year. I wanted to remind you about the invoice I sent you 30 days ago. Another copy is attached if you misplaced it.

If you want to pay it off in 2 or 3 monthly payments interest free that will be fine.

Let me know

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

On Thu, Nov 10, 2022 at 7:56 AM Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)> wrote:

Thanks so much Roger and no worries on the timing, all good.

Trent

---

**From:** Roger Sutherland <[sutherland.roger1@gmail.com](mailto:sutherland.roger1@gmail.com)>

**Sent:** Thursday, November 10, 2022 7:51 AM

**To:** Trent Davis <[trent-davis@outlook.com](mailto:trent-davis@outlook.com)>; Kellie Davis <[Davis.oswego@outlook.com](mailto:Davis.oswego@outlook.com)>

**Subject:** Nehalem River No Rise

Trent and Kellie



Great news we achieved a No Rise condition for your proposed deck at your house on the Nehalem River. The draft report and certification is attached and available for view.

I have also attached an invoice for the costs encountered. Please pay the invoice at your convenience and when that has occurred. I will deliver to you and your engineer a stamped and sealed final version of the document.

Once again I'm so sorry it took way too long to get this done. But when working with a part time contract employee faced with another huge unexpected project that is what occurred.

Thanks again and let me know if you have any questions

Roger C. Sutherland, PE

Cascade Water Resources LLC

503-704-0522

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