Tillamook County

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

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

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

Land of Cheese, Trees and Ocean Breeze

FLOODWAY DEVELOPMENT PERMIT #851-22-000239-PLNG: WHITAKER

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

January 23, 2023

Dear Property Owner:

This is to confirm that the Tillamook County Department of Community Development **APPROVED WITH CONDITIONS** the above-cited requests on January 23, 2023. 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.co.tillamook.or.us/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 6, 2023.** This decision will become final on February 6, 2023 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 an addition to an existing single-family dwelling near the Nestucca River and within the Nestucca River Floodway.
Location:	The subject property is accessed from via Brooten Road, a County road, is located at 34080 Brooten Road and is designated as Tax Lot 5703, of Section 19AC of Township 4 South, Range 10 West of the Willamette Meridian, Tillamook County, Oregon.
Zone:	Pacific City/Woods Medium Density Residential (PCW-R1) Zone
Applicant/ Property Owner:	Debbie Whitaker, 34080 Brooten Road, Cloverdale, OR 97112

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 50-foot riparian setback from the Nestucca 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 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 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.
5. The applicant/property owner shall obtain an approved Road Approach permit from the Tillamook County Public Works Department. Documentation confirming the Road Approach requirements have been met is required at time of Consolidated Zoning/Building permit submittal.
6. Development shall comply with the applicable standards of TCLUO Section 3.332, 'Pacific City/Woods Low Density Residential (PCW-R1) 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 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 January 23, 2025, 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

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

Tillamook County

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FLOODWAY DEVELOPMENT PERMIT #851-22-000239-PLNG: WHITAKER ADMINISTRATIVE DECISION & STAFF REPORT

Decision Date: January 23, 2023

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

Report Prepared by: Melissa Jenck, CFM, Senior Planner

I. GENERAL INFORMATION:

Request: A review of a Floodway Development Permit for an addition to an existing single-family dwelling near the Nestucca River and within the Nestucca River Floodway.

Location: The subject property is accessed from via Brooten Road, a County road, is located at 34080 Brooten Road and is designated as Tax Lot 5703, of Section 19AC of Township 4 South, Range 10 West of the Willamette Meridian, Tillamook County, Oregon.

Zone: Pacific City/Woods Medium Density Residential (PCW-R1) Zone

Applicant/ Property Owner: Debbie Whitaker, 34080 Brooten Road, Cloverdale, OR 97112

Proposal Description: The subject property encompasses 0.26 acres, is currently improved with a single-family dwelling, abuts the Nestucca River to the north, and is accessed via Brooten Road, a County road, to the south (Exhibit A). The topography at the location is fairly flat with a slope change as the property approaches the Nestucca River according to County LIDAR data (Exhibits A and B). The Nestucca River is zoned Estuary Conservation 1 (EC1) up to the more landward of Mean Higher High Water or the Line of Non-Aquatic Vegetation (Exhibit A). No wetlands or geologic hazards are mapped on the subject property within the proposed development (Exhibit B).

As indicated on FEMA FIRM 41057C0855F dated September 28, 2018, the subject property is located entirely in an 'AE' Area of Special Flood Hazard and entirely in the Floodway of the Nestucca River (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 an addition to the existing dwelling, adjacent to the Nestucca 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 3.332, 'Pacific City/Woods Medium Density Residential (PCW-R1) Zone'
B. TCLUO Section 3.106, 'Estuary Conservation 1 (EC1) Zone'
C. TCLUO Section 3.510, 'Flood Hazard Overlay (FH) Zone'
D. TCLUO Section 3.545, 'Shoreland Overlay'
E. 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 August 11, 2022. Staff finds that notification requirements have been met. Comments were received from the Tillamook County Public Works and FEMA Region X and are included as "Exhibit C". Comments were received from the Tillamook County Public Works (TCPW) detailing that Applicants submittal includes additional vehicular use on the subject property (Exhibit C). TCPW will require that any changes to the Road Approach will need reviewed by their department before commencement of construction activity (Exhibit C). Staff will require as a Condition of Approval that verification of compliance with TCPW for Road Approach standards be demonstrated at time of the Consolidated Zoning/Building permit submittal.

A. TCLUO Section 3.332, 'Pacific City/Woods Low Density Residential (PCW-R1) Zone'

PURPOSE: The purpose of the PCW-R1 zone is to designate areas for low-density single-family residential development and other, compatible, uses. Suitability of land for low-density use sis determined by the availability of public sewer service, and such limitations to density such as geologic and flood hazards, shoreline erosion, and the aesthetic or resource values of nearby natural features.

TCLUO Section 3.332(2)(a), 'Uses Permitted Outright', lists *single-family dwelling* as a use permitted outright in the PCW-R1 zone subject to applicable supplementary regulations contained in ordinance.

Findings: Applicant is proposing an addition to an existing single-family dwelling in the Pacific City/Woods Low Density Residential (PCW-R1) zone (Exhibit B). Staff finds that the existing use and its accessory uses are allowed outright in the Pacific City/Woods Low Density Residential (PCW-R1) zone subject to applicable standards. 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 3.106, 'Estuary Conservation 1 (EC1) Zone'

The estuary boundary and zones are defined in TCLUO Section 3.100 as *"ESTUARY ZONES shall be applied to all estuarine waters, intertidal areas, submerged and submersible lands and tidal wetlands up to the line of non-aquatic vegetation or the Mean Higher High Water (MHHW) line, whichever is most landward."*

Findings: Applicant is proposing to construct an addition to an existing single-family dwelling (Exhibit B). A site plan was included in 'Exhibit B', which demonstrates the approximate location of the 50-ft riparian setback measured from the edge of vegetation. The site plan indicates that the proposed siting location of the dwelling is landward of the Mean Higher High water (MHHW) and the line of non-aquatic vegetation, along with maintaining more than 50-ft from the estuary boundary.

Staff finds that the proposed development is located outside the Estuary Conservation 1 (EC1) zone, as it is located landward of the estuary boundary. Staff find the Applicant will be required to demonstrate compliance with such standards for any future development on the site subject to the EC1 boundary at time of consolidated zoning/building permit approval.

C. 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 foundation design improvements to site structure to prevent flotation and lateral movement, along with a floor plan indicating the utilization of space subject to flood waters (Exhibit B). An Elevation Certificate prepared by Douglas H. Kellow of Kellow Land Surveying dated July 6, 2022, details the location of the lowest machinery or equipment of the building, including proposed lowest floor heights (Exhibit B). Floor plans and foundation design provided confirm improvements, living space, utilities and machinery located on the next higher floor of the proposed addition (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 41057C0855F dated September 28, 2018 (Exhibit A). Applicant is proposing to develop an addition to the existing dwelling (Exhibit B).

Applicant provided a pre-construction elevation certificate prepared by Douglas H. Kellow of Kellow Land Surveying, a licensed professional surveyor, for the proposed residential development. The proposed design includes a main floor level at 22.3-feet (Exhibit B). Mr. Kellow stated Base Flood Elevation (BFE) for the subject property is 19.3-feet (Exhibit A & B). The bottom floor of the proposed addition is to be maintained as garage space and is proposed to be located at 13.1-feet NAVD 88 (Exhibit B). The next higher floor, which is indicated to maintain the proposed living space of the dwelling, is located at 22.3-feet NAVD 88, which meets the 3-feet above BFE requirement (Exhibit B). Applicant has provided foundation 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 Waterways Consulting, Inc. to complete the no-rise analysis required for development within the regulatory floodway (Exhibit B). The analysis was performed for the proposed addition to an existing dwelling (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 Waterways Consulting, Inc.'s 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 Waterways Consulting, Inc. 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 an 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 Waterways Consulting, Inc. 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 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 Nestucca River and no alternative upland location exists (Exhibits A and B). Waterways Consulting, Inc. provided a no-rise analysis certifying that the proposed addition to the dwelling will not create a rise in flood levels (Exhibit B). Staff finds that these criteria are met.

D. TCLUO Section 3.545 'Shoreland Overlay'

In the vicinity of the proposed project, the Goal 17 element of the Tillamook County Comprehensive Plan identifies all areas within 1,000 feet of estuaries and 500 feet of coastal lakes as within the Shorelands Boundary which may be subject to the provisions of TCLUO Section 3.545, 'SH Shoreland Overlay'. TCLUO Section 3.545 defines those areas within the Shorelands Boundary included within the Shoreland Overlay Zone. Relevant to the proposed development, TCLUO Section 3.545(2) identifies areas within 50 feet of estuaries as areas included in the Shorelands Overlay zone.

Findings: Staff finds that portions of the proposed addition are located within the Shorelands Boundary as identified in the Goal 17 element of the Tillamook County Comprehensive Plan. Staff have reviewed the proposed development and determined that shoreland areas on the subject property are categorized as 'Rural Shorelands' as described in TCLUO 3.545(3) and are subject to the use limitations identified in TCLUO 3.545(4)(a)(1) and the standards identified in TCLUO 3.545(6). Staff have reviewed the significant shoreland inventory contained in the Goal 17 element of the Comprehensive Plan and has verified that there are no inventoried shorelands near the subject property.

TCLUO Section 3.545(4) USES PERMITTED: Uses authorized by the underlying zone as outright or conditional uses are permitted, except at locations identified in (3) above.

(a) Rural Shorelands in General:

(1) Rural Shorelands uses are limited to:

(a) Farm uses

(b) Propagation and harvesting of forest products consistent with the Oregon Forest Practices Act,

(c) Aquaculture,

(d) Water-dependent recreational, industrial and commercial uses,

(e) Replacement, repair or improvement of existing state park facilities,

(f) Other uses are allowed only upon a finding by the County that such uses satisfy a need which cannot be accommodated at any alternative upland location, except in the following cases:

(1) In built and committed exception shoreland areas, where all uses permitted in the underlying zone are permitted, and

...

Findings: Staff finds that the subject property is in a built and committed exception area and the existing residential use is allowed in the underlying Pacific City/Woods Low Density Residential (PCW-R1) zone.

TCLUO Section 3.545(6) STANDARDS: Uses within the SHORELAND OVERLAY ZONE are subject to the provisions and standards of the underlying zone and of this section. Where the standards of the SHORELANDS OVERLAY ZONE and the underlying zone conflict, the more restrictive provisions shall apply.

(a) Riparian vegetation shall be protected and retained according to the provisions outlined in Section 4.140, REQUIREMENTS FOR PROTECTION OF WATER QUALITY AND STREAMBANK STABILIZATION.

(b) Development in flood hazard areas shall meet the requirements of Section 3.510, FLOOD HAZARD OVERLAY ZONE.

...

Findings: The requirements of TCLUO Section 4.140 and 3.510 are addressed in the body of this Report. Staff find these standards are met.

E. 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 Nestucca 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 Nestucca River, which defines the riparian area as 50-feet. Applicant has provided a site plan which identifies the approximate estuary boundary along with the 50-foot setback from the Nestucca River (Exhibit B). Applicants site plan indicates that the existing dwelling along with the addition will exceed the 50-foot riparian setback Exhibit B).

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 851-22-000239-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 6, 2023.**

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 50-foot riparian setback from the Nestucca 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 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 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.
5. The applicant/property owner shall obtain an approved Road Approach permit from the Tillamook County Public Works Department. Documentation confirming the Road Approach requirements have been met is required at time of Consolidated Zoning/Building permit submittal.
6. Development shall comply with the applicable standards of TCLUO Section 3.332, 'Pacific City/Woods Low Density Residential (PCW-R1) 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 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 January 23, 2025, unless construction of approved plans has begun, or an extension is requested from, and approved by this Department.

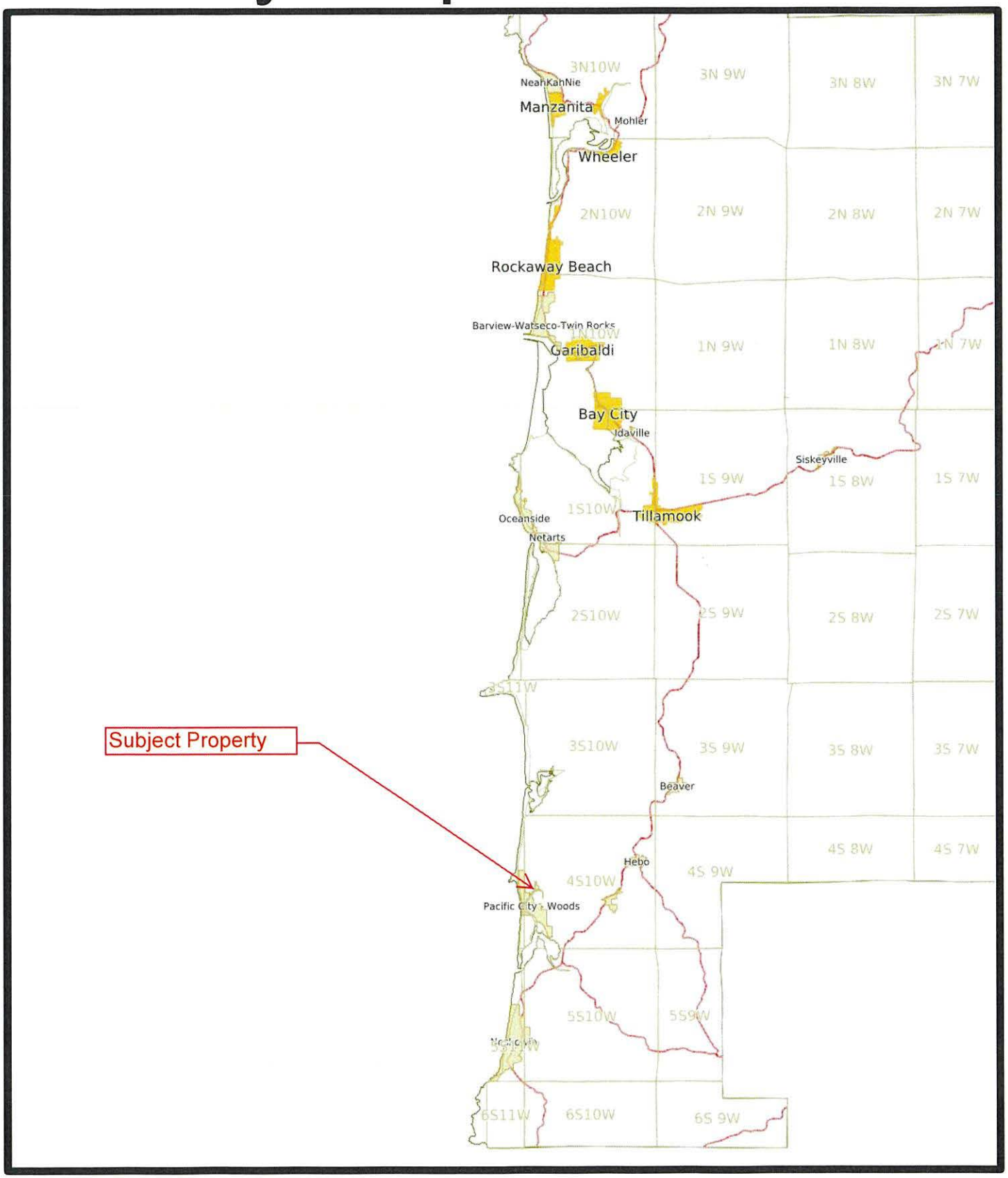
VII. EXHIBITS

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

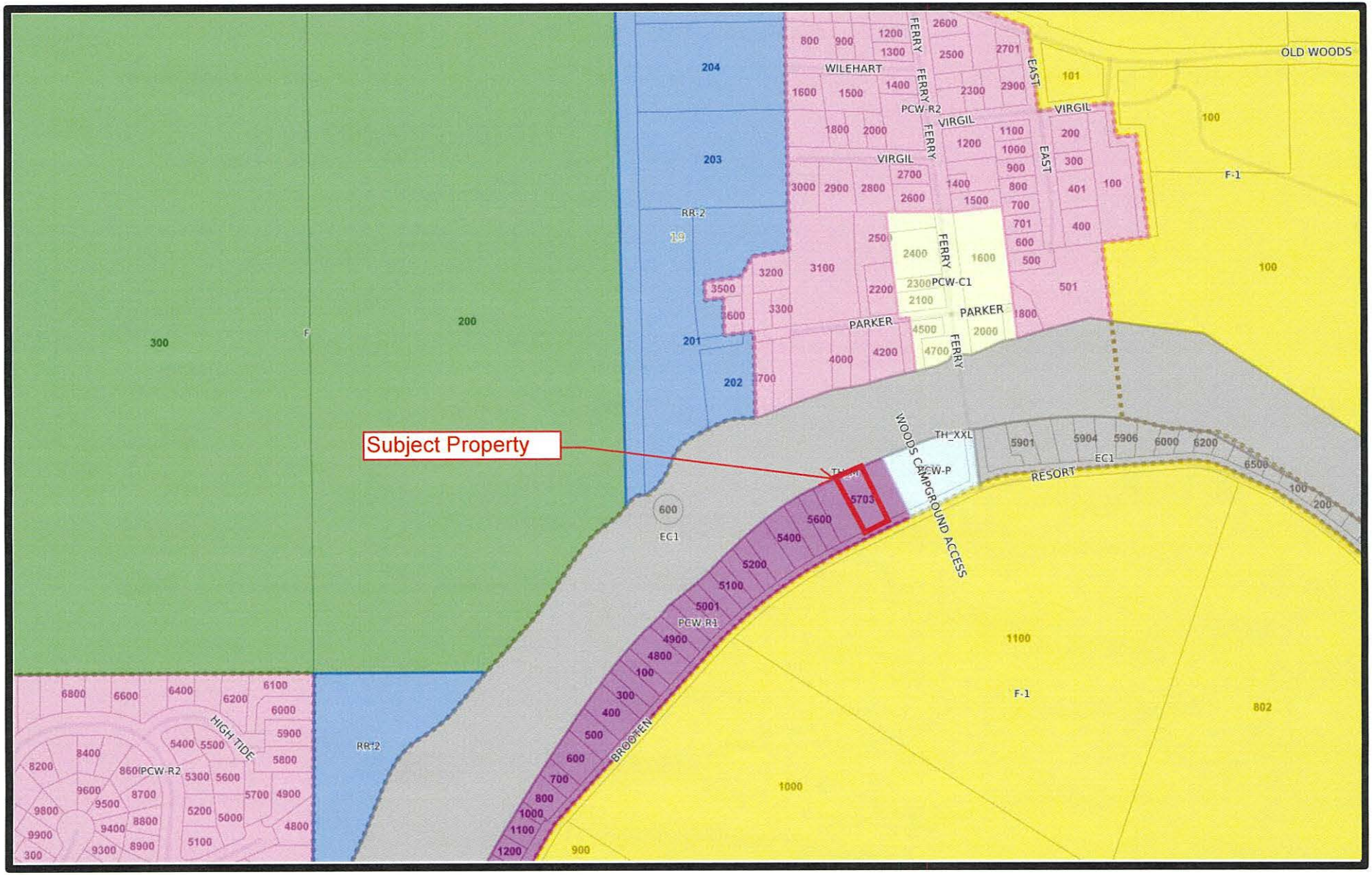
EXHIBIT A

Vicinity Map

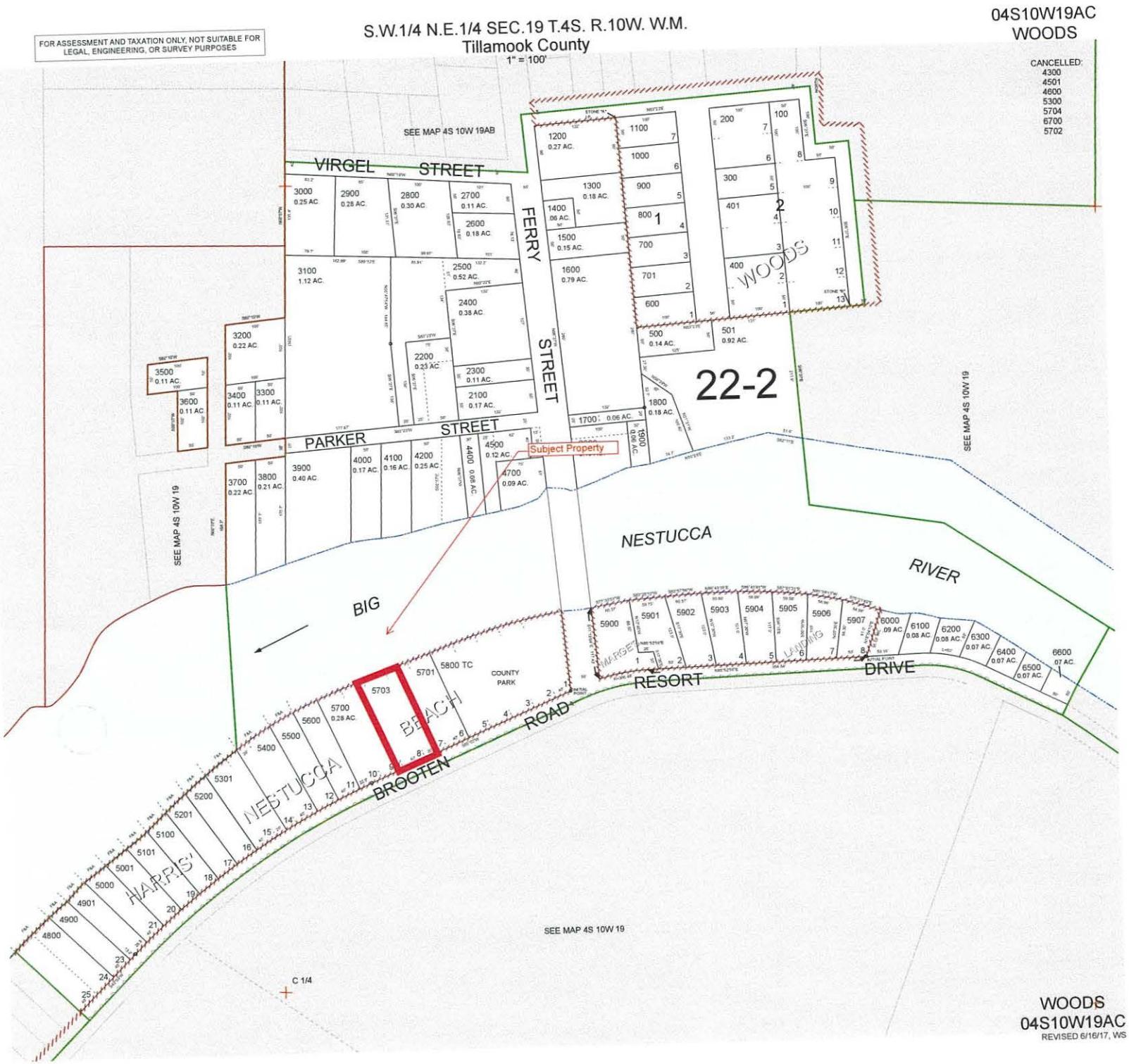


Generated with the GeoMOOSE Printing Utilities

Zoning Map



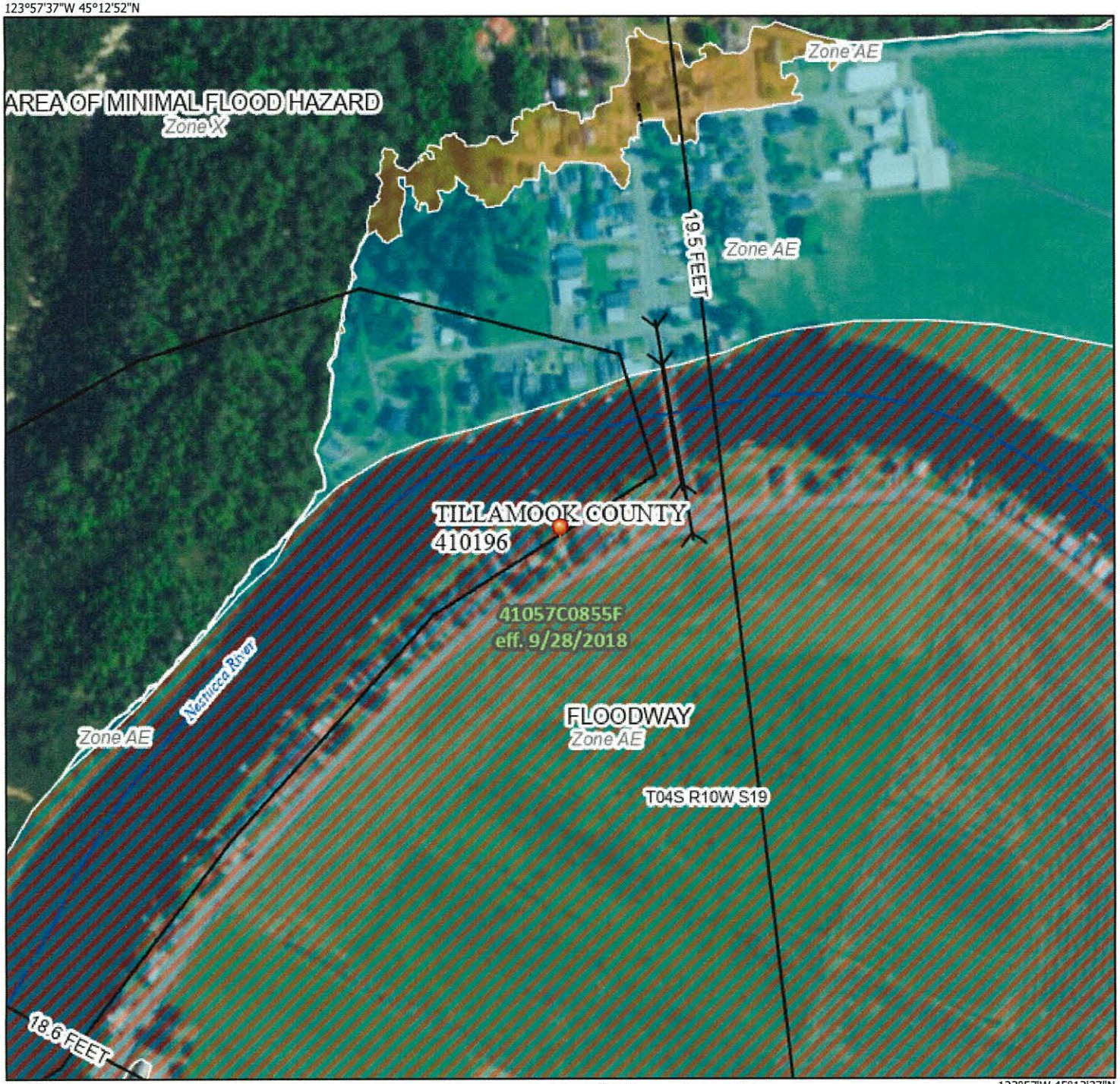
Generated with the GeoMOOSE Printing Utilities


FOR ASSESSMENT AND TAXATION ONLY, NOT SUITABLE FOR LEGAL, ENGINEERING, OR SURVEY PURPOSES
S.W.1/4 N.E.1/4 SEC.19 T.4S. R.10W. W.M.
Tillamook County
1" = 100'
04S10W19AC
WOODS
CANCELLED:
4300
4501
4600
5300
5704
6700
5702
SEE MAP 4S 10W 19AB
VIRGEL STREET
FERRY STREET
PARKER STREET
22-2
WOODS
Subject Property
SEE MAP 4S 10W 19
SEE MAP 4S 10W 19
NESTUCCA RIVER
BIG
NESTUCCA BEACH
HARRIS
BROOTEN ROAD
RESORT DRIVE
COUNTY PARK
5800 TC
SEE MAP 4S 10W 19
C 1/4
WOODS
04S10W19AC
REVISED 6/16/17, WS

National Flood Hazard Layer FIRMette

FEMA

123°57'37"W 45°12'52"N



123°57'27"W 45°12'27"N

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

1:6,000

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag 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*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 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

N

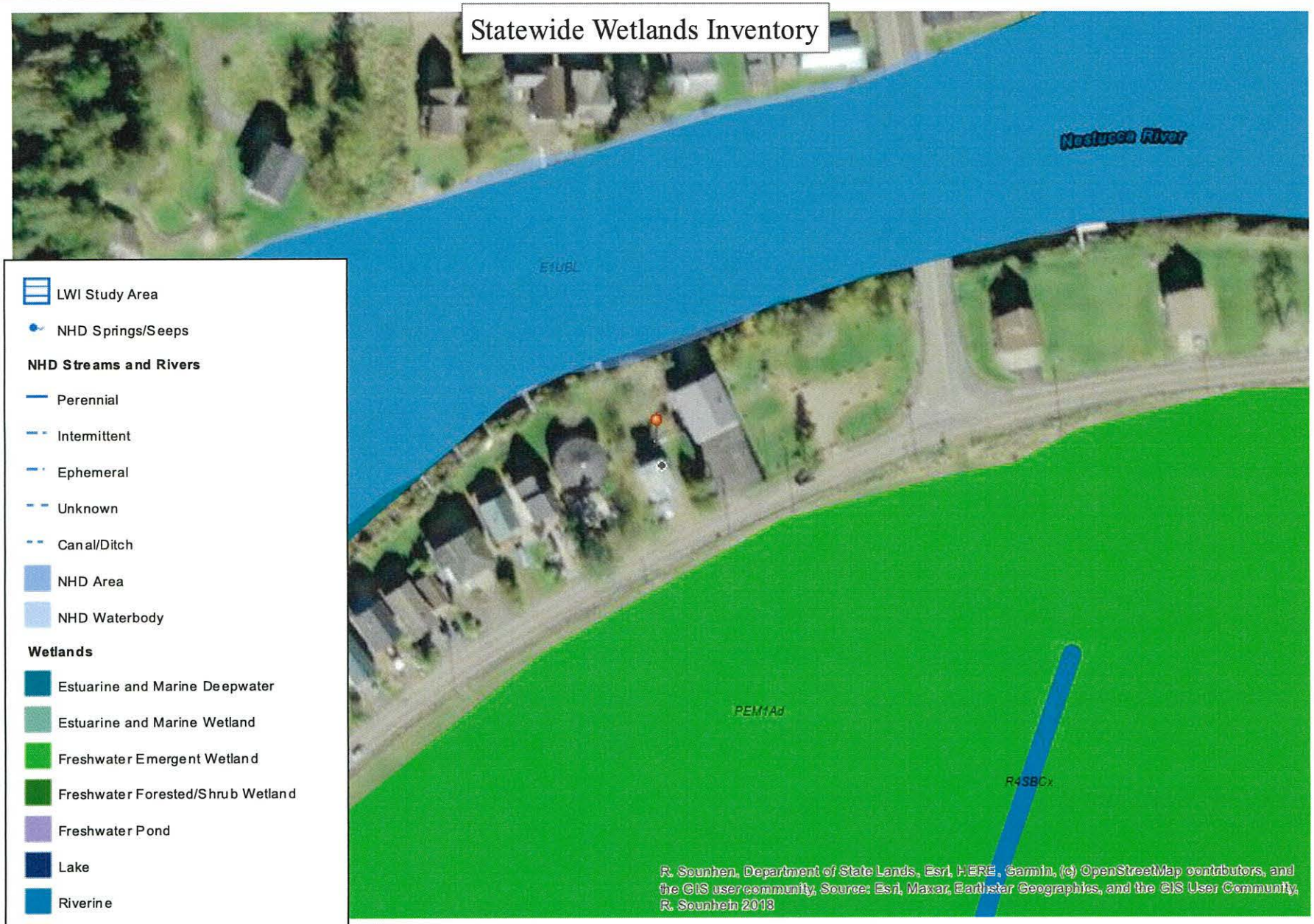
The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

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 1/23/2023 at 12:40 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.

Statewide Wetlands Inventory



- LWI Study Area
- 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 Predominantly Hydric Soil Map Units
- SWI Agate-Winlo Soils

1 inch = 0.04 miles

0 0.0125 0.025 0.05 0.075 0.1 mi

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

N

Date: 1/23/2023

State of Oregon
Department of State Lands
775 Summer Street, NE, Ste 100
Salem, OR. 97301-1279
(503) 986-5200

https://www.oregon.gov/dsl/WW/Pages/SWI.aspx

TILLAMOOK County Assessor's Summary Report

Real Property Assessment Report

FOR ASSESSMENT YEAR 2021

January 23, 2023 9:43:25 am

Account #	363626	**Tax Status**	ASSESSABLE
Map #	4S1019AC05703	**Acct Status**	ACTIVE
Code - Tax #	2202-363626	**Subtype**	NORMAL
Legal Descr	Multiple Lots - See legal report for full description.		
Mailing Name	WHITAKER, JAMES E TRUSTEE &	**Deed Reference #**	2020-1320
Agent		**Sales Date/Price**	02-28-2020 / $0.00
In Care Of	WHITAKER, DEBORAH LEE TRUSTEE	**Appraiser**	ROBERT BUCKINGHAM
Mailing Address	6530 SE PLUM DR MILWAUKIE, OR 97222		

Prop Class	101	**MA**	**SA**	**NH**	**Unit**
RMV Class	101	09	WF	903	17621-1

Situs Address(s)	Situs City
ID# 1 34080 BROOTEN RD	COUNTY

Value Summary

Code Area		RMV	MAV	AV	RMV Exception		CPR %
2202	Land	129,270			Land	0	
	Impr.	303,040			Impr.	0	
Code Area Total		432,310	361,590	361,590		0	
Grand Total		432,310	361,590	361,590		0	

Land Breakdown

Code Area	ID#	RFPD	Ex	Plan Zone	Value Source	TD%	LS	Size	Land Class	Trended RMV
2202					LANDSCAPE - FAIR	100				500
2202	1	☑		PCW-R 1	Market	104	A	0.28		100,270
2202					OSD - AVERAGE	100				28,500
					Grand Total			0.28		129,270

Improvement Breakdown

Code Area	ID#	Yr Built	Stat Class	Description	TD%	Total Sq. Ft.	Ex%	MS Acct #	Trended RMV
2202	1	1990	146	Two story or more, with basement	123	1,768			303,040
				Grand Total		1,768			303,040

Exemptions / Special Assessments / Potential Liability

Code Area 2202

SPECIAL ASSESSMENTS:

■ SOLID WASTE — **Amount** 12.00 **Acres** 0 **Year** 2021

NOTATIONS:

■ CLERICAL OR OTHER ERROR 311.205 ADDED 2003

Comments: 1/28/03 Corrected MAV after conversion error. dv. 5/23/06-Entered Inventory/Changed Class to a 4- and Sunroom ran as 3rd floor living area-LM 1/23/09 Dry rot repairs, new siding and windows. Raised efffective age and class to 4. dv 01/27/14 Reappraised land; tabled values. RBB

EXHIBIT B

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

PLANNING APPLICATION

OFFICE USE ONLY
Date Stamp: RECEIVED JUN 09 2022 Email
☐Approved ☐Denied
Received by:
Receipt #:
Fees: 983.00
Permit No: 851-22-000237-PLNG

Applicant ☑ *(Check Box if Same as Property Owner)*
Name: Debbie Whitaker Phone: 503 709 3334
Address: 34080 Brooten rd.
City: Clouerdale State: OR Zip: 97112
Email: dwhitaker0040gmail.com

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

Request: addition

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

Location:
Site Address:
Map Number: taxlot 5703 4S-10-19AC lot 9 a portion of lot 7 & 9
Township Range Section Tax Lot(s)

Clerk's Instrument #: _____

Authorization

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

Debbie Whitaker — 4-5-22
Property Owner Signature (Required) — Date

Applicant Signature — Date

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

DEVELOPMENT PERMIT

OFFICE USE ONLY
Date Stamp
☐Approved ☐Denied
Received by:
Receipt #:
Fees:
Permit No: 851-___-_____-PLNG

Applicant ☐ *(Check Box if Same as Property Owner)*
Name: Debbie Whitaker Phone: 5037093334
Address: 34080 Brooten road
City: Clouverdale State: OR Zip: 97112
Email: dwhitaker004@gmail.com

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

Description of Work: addition

Location:
Site Address: 34080 Brooten road
Map Number: tax lot 5703 4S-10-19-AC lot 8 a portion of 7a9
Township Range Section Tax Lot(s)

Complete all applicable fields:

Regulatory Floodway: ☒ Estuary: ☐ Floodplain: ☐	
New: ☐ Addition: ☐ Replacement: ☐ Remodel: ☐ Demolish: ☐	
Dwelling:	Accessory Structure: 800
Culvert Diameter: Length:	Bridge Length: Width:
Fence Height:	Retaining Wall Height:
Streambank Stabilization:	Other:
Fill/Removal/Grading: CY	Vegetation Removal: CY

Structure/Damage $:	5 Year Construction $:
Substantial Improvement/damage threshold 50% cost vs. value	

Flood Insurance Rate Map (FIRM) Panel Info

Tillamook County	Panel Number: 410196_____
Effective Date:	Property Flood Zone(s):
Floodway: Y ☐ N ☐	Project Flood Zone(s):
Stream/Waterbody Name:	

Elevation Data (NAVD 88)

Base Flood Elevation:	First Habitable Floor:
Lowest Floor/Horizontal Member:	
Enclosed Area:	Flood Vent Area:

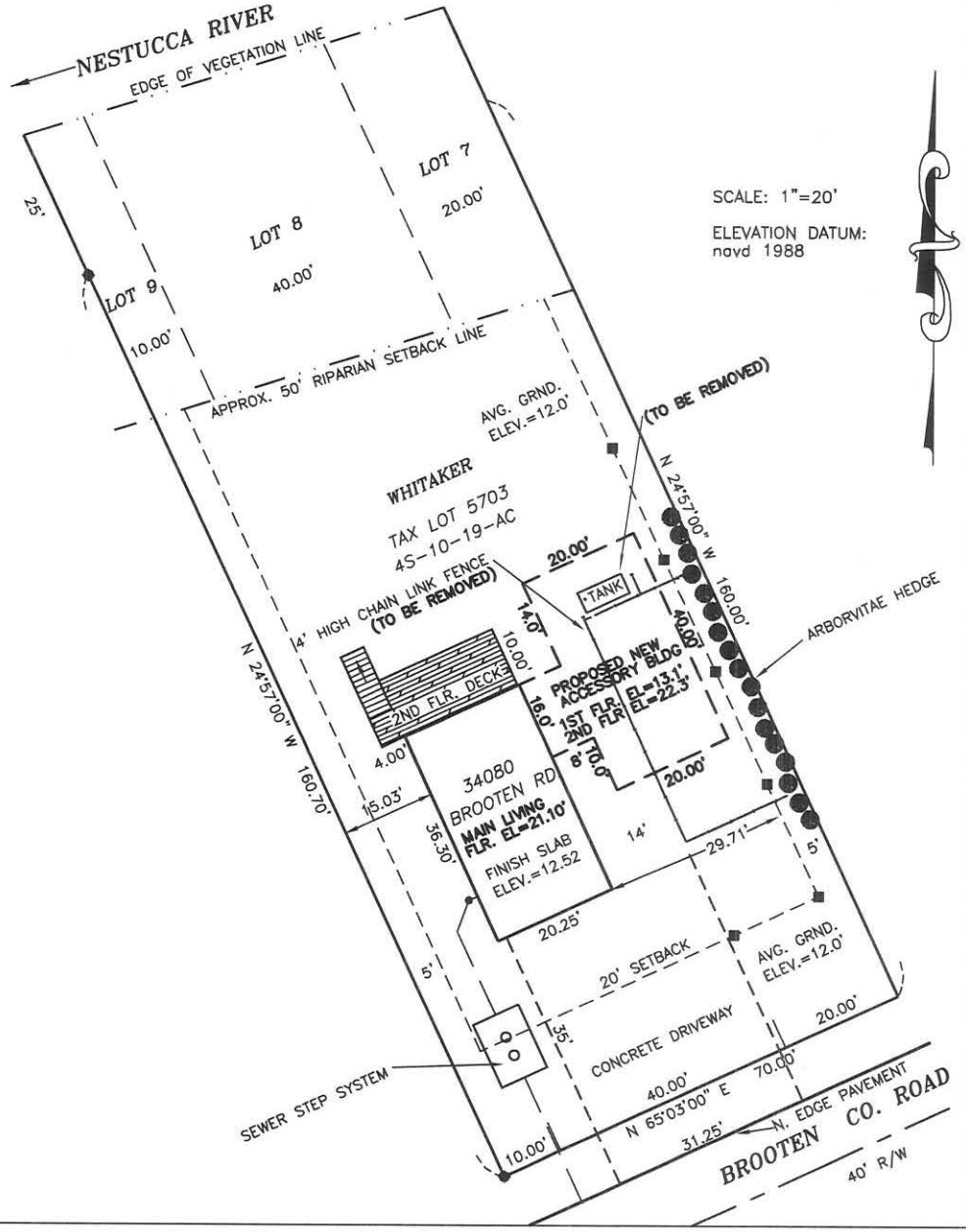
Other Required Permits

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.

Debbie Whitaker 4-5-22
Property Owner Signature (Required) Date

Applicant Signature Date



PLOT PLAN FOR JAMES & DEBORAH WHITAKER

IN LOT 8 AND A PORTION LOTS 7 AND 9, "HARRIS' NESTUCCA BEACH"

NARRATIVE,

THE PURPOSE OF THIS SURVEY WAS TO SHOW THE LOCATION OF EXISTING HOUSE AND TO SHOW THE OTHER IMPROVEMENTS TO SAID TRACT OF LAND.
THE LOWER FINISH (SLAB) FLOOR ELEVATION HAS BEEN SHOWN IN NAVD 1988 DATUM.
ALSO, I HAVE INDICATED THE APPROXIMATE "50 FOOT RIPARIAN SETBACK" ON THE RIVER SIDE OF THE SUBJECT TRACT....AND THE AVERAGE GROUND ELEVATION ON THE NORTHEAST SIDE OF THE TRACT.
ALSO: TO SHOW THE LOCATION AND PROPOSED ELEVATIONS OF THE NEW ACCESSORY BUILDING TO BE CONSTRUCTED ON THE SUBJECT PARCEL.

SURVEY & MAP BY:

KELLOW LAND SURVEYING
P.O. BOX 335
PACIFIC CITY, OR 97135
503-801-3537

JULY 19, 2019
REVISED: AUG. 9. 2019
REVISED: JULY 5, 2022

REGISTERED PROFESSIONAL LAND SURVEYOR

Douglas H. Kellow

OREGON
FEBRUARY 3, 1983
DOUGLAS H. KELLOW
2027
RENEWS: 06/30/23

SET WOOD HUB & STAKE – ■

Melissa Jenck

From: debbie whitaker <dwhitaker004@gmail.com>
Sent: Thursday, June 16, 2022 11:01 AM
To: Melissa Jenck
Subject: Re: EXTERNAL: Whitaker

1. **No, fill is not within the Coastal High Hazard Area.**
2. **The hydraulics report by Waterways Consulting shows that the fill placed in the regulatory floodway will have no effect on the flood levels during the occurrence of the base flood discharge.**
3. **Yes, the fill is necessary for the approved use.**
4. **Yes, the fill is the minimum amount necessary for the approved use.**
5. **The entire property is located within the regulatory floodway, so there is no feasible alternative to this approved use location.**
6. **This fill will not impede or alter drainage flow of the floodwaters.**
7. **This is not a critical facility.**
8. **This is not a flood refuge platform.**

These are the answers to these questions. I was having difficulty finding the form to fill out. Does this work?

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

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

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1–9.

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

SECTION A – PROPERTY INFORMATION

FOR INSURANCE COMPANY USE

A1. Building Owner's Name
JAMES AND DEBORAH WHITAKER

Policy Number:

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
34080 BROOTEN ROAD

Company NAIC Number:

City: PACIFIC CITY | State: Oregon | ZIP Code: 97135

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
TAX LOT 5703, 4S-10-19-AC; LOT 8 AND A PORTION OF LOTS 7 AND 9, "HARRIS' NESTUCCA BEACH", TILLAMOOK CO., OR

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

A5. Latitude/Longitude: Lat. 45.21100 Long. 123.95500 Horizontal Datum: ☐ NAD 1927 ☒ NAD 1983

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

A7. Building Diagram Number 1A

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

a) Square footage of crawlspace or enclosure(s) 722 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 11

c) Total net area of flood openings in A8.b 781 sq in

d) Engineered flood openings? ☐ Yes ☒ 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? ☐ Yes ☐ No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
TILLAMOOK COUNTY 410196	TILLAMOOK	Oregon

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)
41057C0855	F	09/28/2018	09/28/2018	AE	19.3

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

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

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

ELEVATION CERTIFICATE

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

IMPORTANT: In these spaces, copy the corresponding information from Section A.

FOR INSURANCE COMPANY USE

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 34080 BROOTEN ROAD

Policy Number:

City: PACIFIC CITY | State: OREGON | ZIP Code: 97135

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: TILL.CO.SURVEY PC#8 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)	13.1	☒ feet	☐ meters
b) Top of the next higher floor	22.3	☒ feet	☐ meters
c) Bottom of the lowest horizontal structural member (V Zones only)		☐ feet	☐ meters
d) Attached garage (top of slab)		☐ feet	☐ meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	22.3	☒ feet	☐ meters
f) Lowest adjacent (finished) grade next to building (LAG)	12.3	☒ feet	☐ meters
g) Highest adjacent (finished) grade next to building (HAG)	12.5	☒ feet	☐ meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	12.3	☒ feet	☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

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

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

Certifier's Name: DOUGLAS H. KELLOW
License Number: OREGON PLS NO. 2027

REGISTERED PROFESSIONAL LAND SURVEYOR

Title: PROFESSIONAL LAND SURVEYOR

Company Name: KELLOW LAND SURVEYING

Douglas H Kellow

Address: P.O. BOX 335

OREGON
February 3, 1983
DOUGLAS H. KELLOW
2027
Renewal: 06/30/23

City: PACIFIC CITY | State: Oregon | ZIP Code: 97135

Signature: Douglas H Kellow | Date: 07/06/2022 | Telephone: 503-801-3537 | 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)

C2e.) THE WATER HEATER WILL BE LOCATED ON THE UPPER FLOOR OF THE ACCESSORY STRUCTURE AT AN ELEVATION OF 22.3 FEET (MINIMUM) ABOVE MSL NAVD 1988.

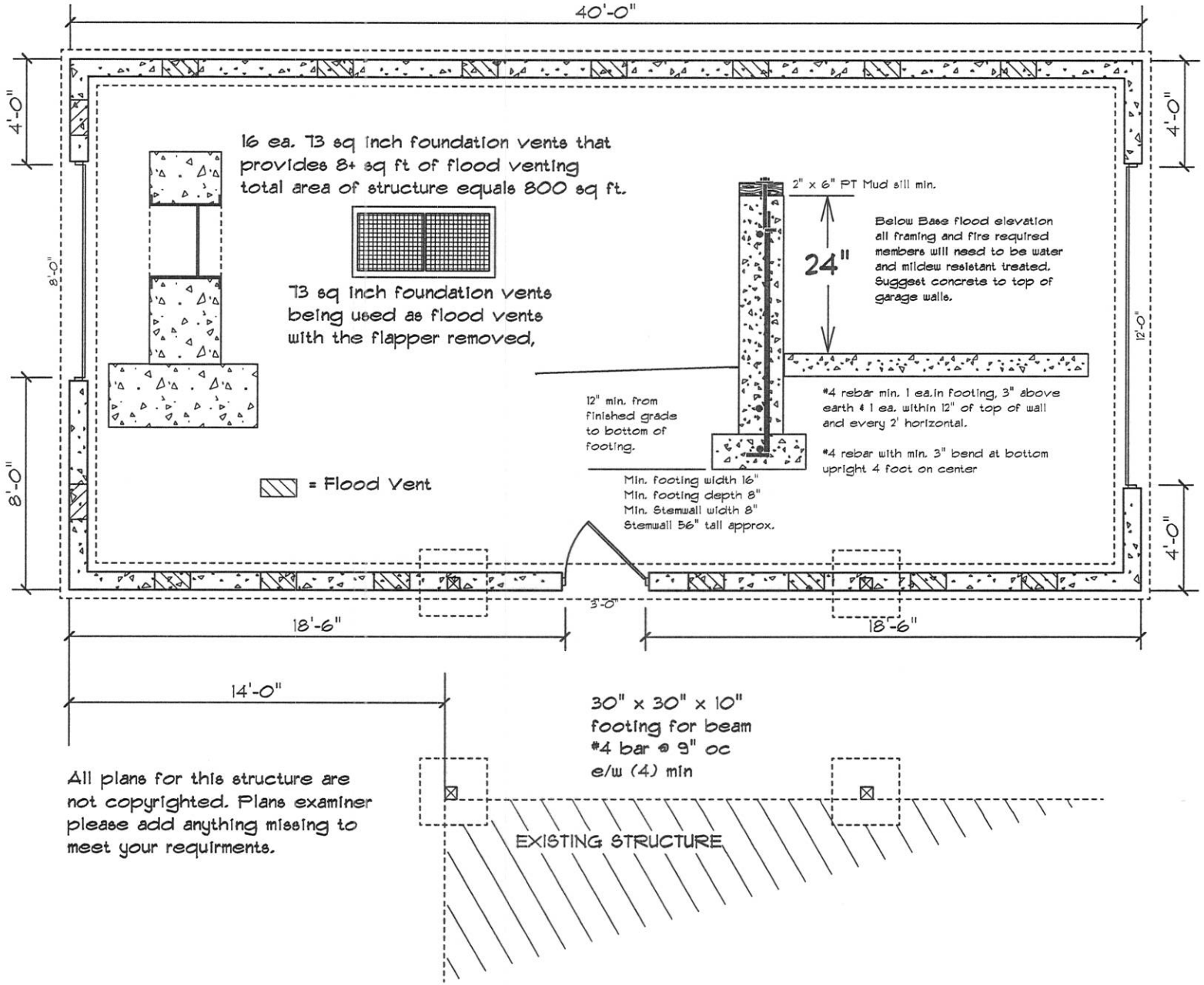
RIGHT ELEVATION

All plans for this structure are not copyrighted. Plans examiner please add anything missing to meet your requirments.

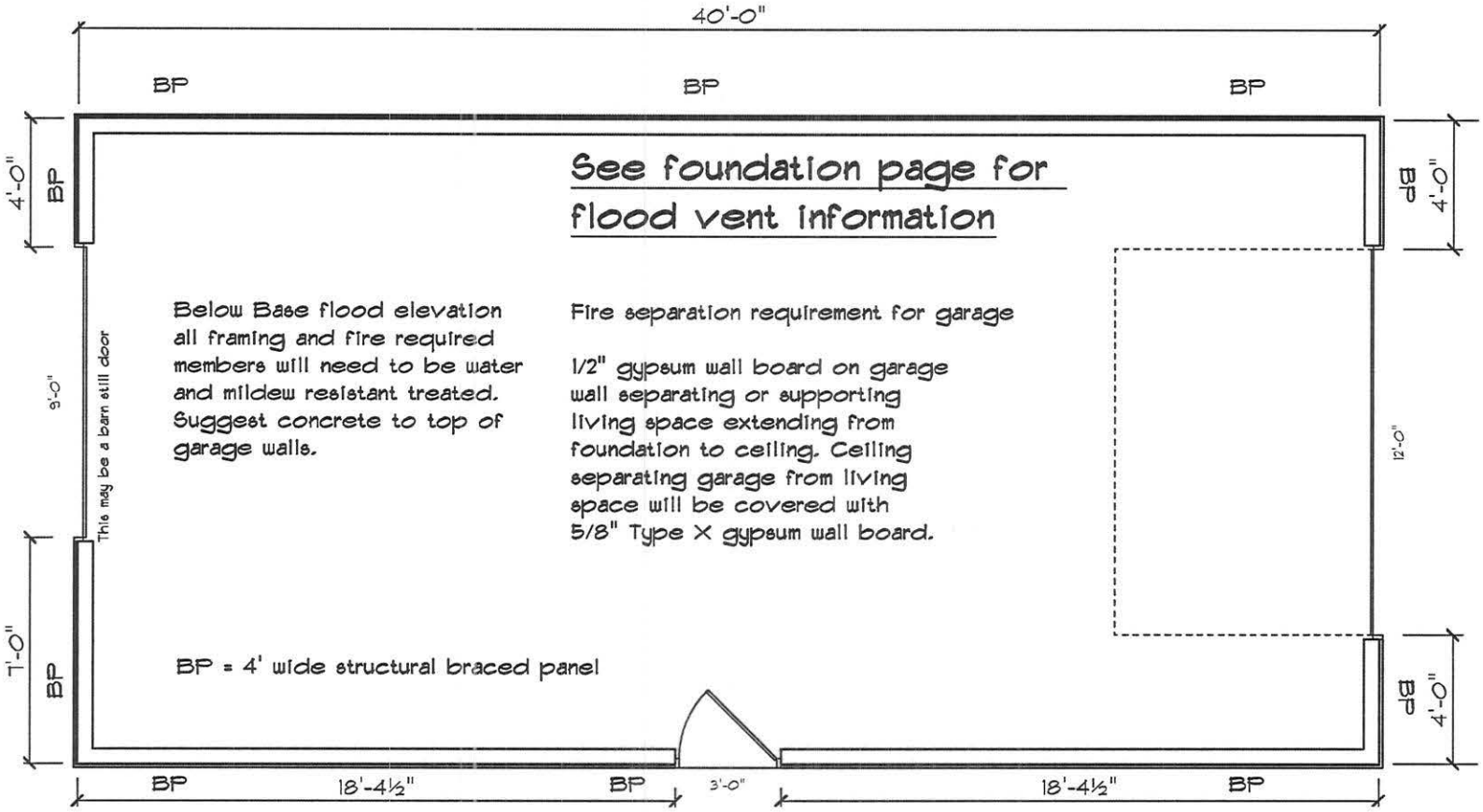
Not to any given scale so this would fit page.

REAR ELEVATION

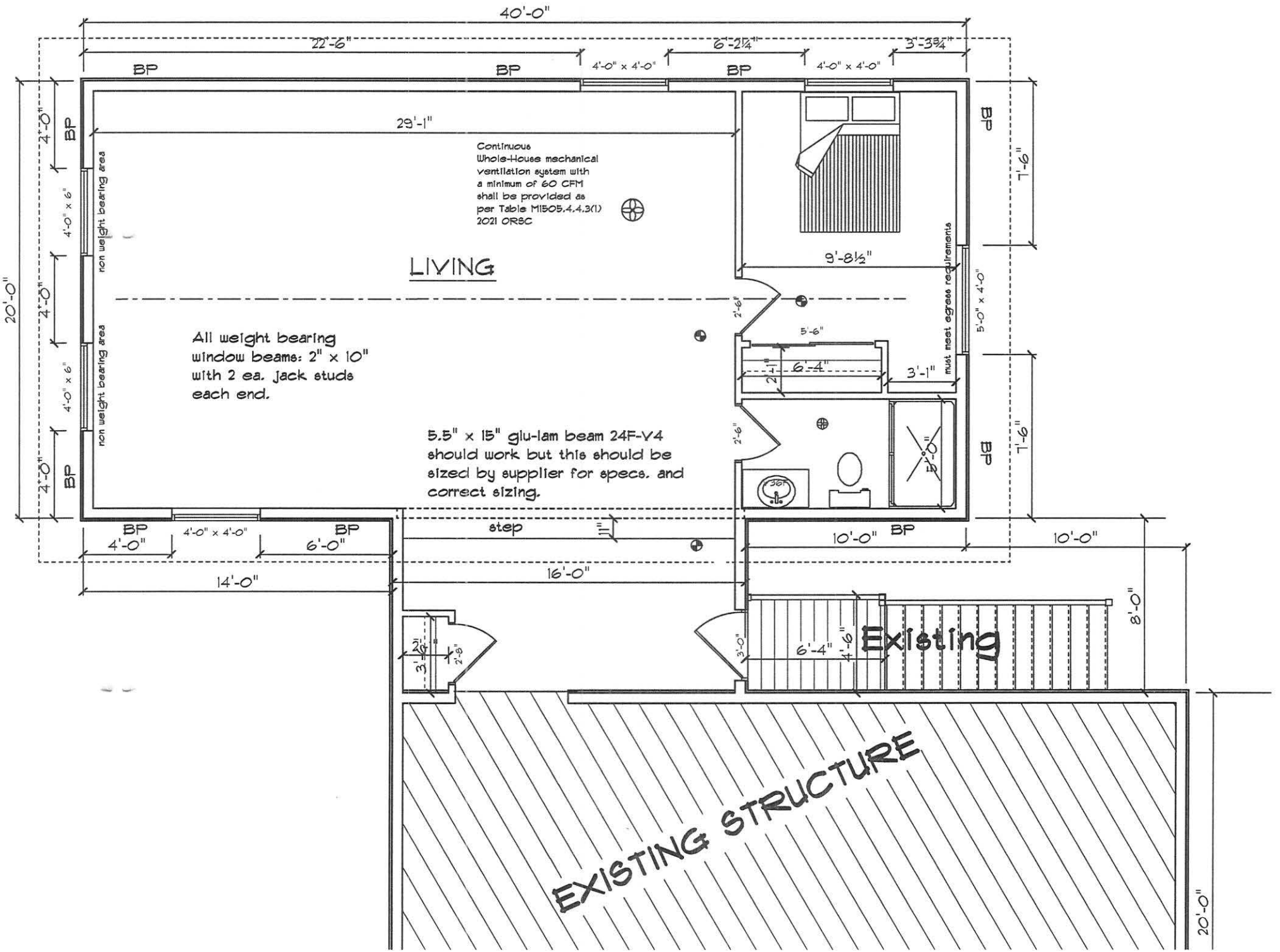
LEFT ELEVATION



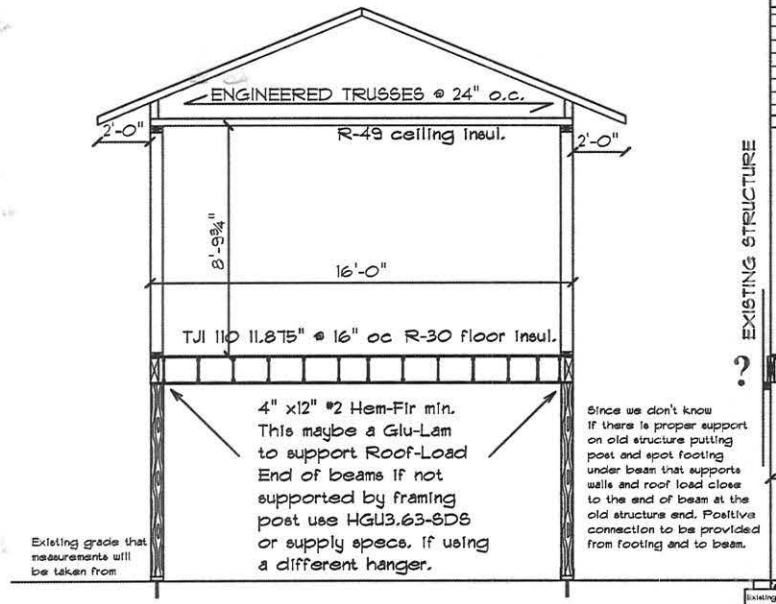
All plans for this structure are not copyrighted. Plans examiner please add anything missing to meet your requirments.

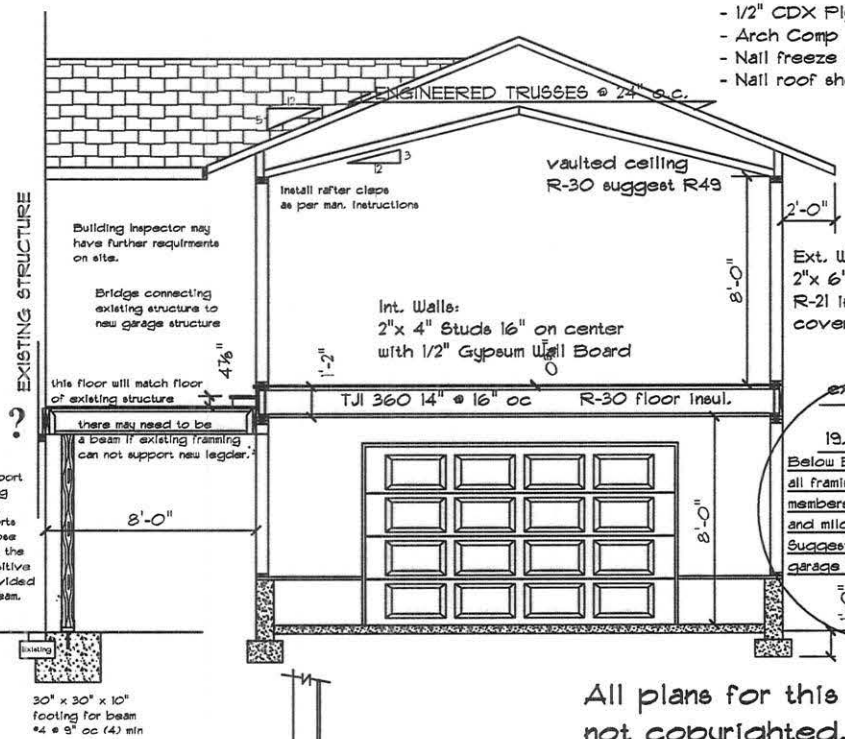


All plans for this structure are not copyrighted. Plans examiner please add anything missing to meet your requirments.


40'-0"
22'-6"
6'-2¼"
3'-3¾"
4'-0" x 4'-0"
4'-0" x 4'-0"
BP
BP
BP
BP
BP
BP
BP
BP
29'-1"
Continuous
Whole-House mechanical
ventilation system with
a minimum of 60 CFM
shall be provided as
per Table M1505.4.4.3(1)
2021 ORSC
LIVING
non weight bearing area
non weight bearing area
4'-0" x 6"
4'-0" x 6"
4'-0"
4'-0"
4'-0"
20'-0"
All weight bearing
window beams: 2" x 10"
with 2 ea. jack studs
each end.
5.5" x 15" glu-lam beam 24F-V4
should work but this should be
sized by supplier for specs. and
correct sizing.
9'-8½"
must meet egress requirements
5'-0" x 4'-0"
7'-6"
7'-6"
2'-6"
2'-6"
5'-6"
6'-4"
3'-1"
2'-1"
2'-8"
step
11"
4'-0"
4'-0" x 4'-0"
6'-0"
14'-0"
16'-0"
10'-0"
10'-0"
8'-0"
3'-0"
6'-4"
4'-6"
Existing
3'-2"
2'-8"
EXISTING STRUCTURE
20'-0"

Not to any given scale



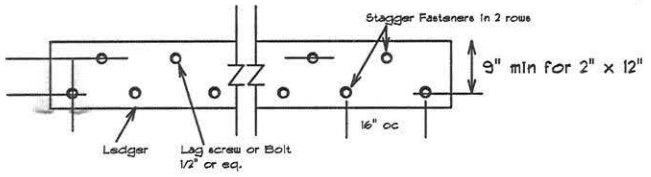


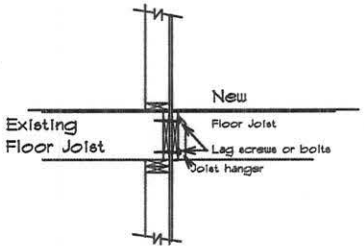
Roofing Material
- Vents - Vent Block at Tails
- 1/2" CDX Plywood - 15 lb. Felt
- Arch Comp - 8d nails 4" on center over gables
- Nail freeze blocks 6" on center
- Nail roof sheathing 6" on edges and 12" in field

Ext. Walls:
2"x 6" Studs 16" on center with 1/2" CDX sheathing
R-21 insulation
covered with 1/2" gypsum wall board

Fire separation requirement for garage
1/2" gypsum wall board on garage
wall separating or supporting
living space extending from
foundation to ceiling. Ceiling
separating garage from living
space will be covered with
5/8" Type X gypsum wall board.

Ledger if used if not supported
on walls in framing.





All plans for this structure are not copyrighted. Plans examiner please add anything missing to meet your requirments.

= Smoke Detector/Carbon Monoide alarms - wired in with battery backup - and interconnected as per 2021 ORSC Sections R314, R315 and Table M1505.5

= Exhaust fan - intermittent - max. 3 sone - rooms with bathing facilities 80 cfm
- toilet only rooms with out natural ventilation 50 cfm
- kitchen 150 cfm
ORSC 2021 Section M1505 and Table M1505.5

Taken from ORSC 2021 Section R315 - CARBON MONOXIDE ALARMS
R315.2 Where required. Carbon Monoxide alarms shall be provided in accordance with Sections R315.2.1. and R315.2.2
R315.2.1 New construction. For new construction, carbon monoxide alarms shall be provided in dwelling units.
R315.2.2 Existing dwellings. Where a new carbon monoxide source is introduce or work requiring a structural permit occure in existing dwellings, carbon monoxide alarms shall be provided in accordance with this section.
Exception: Work involving the exterior surfaces of dwellings, such as the replacement of footing or siding, the addition or replacement of windows or doors, of the addition of a porch or deck, are exempt form the requirements of this section.
R315.3 Location. Carbon monoxide alarms shall be located in each sleeping room or within 15 feet outside of each sleeping room door. Sleeping rooms on separate floor levels in a structure consisting of two or more stories shall have separate carbon monoxide alarms serving each story. Where a fuel-burning appliance is located within a sleeping room or its attached bathroom, a carbon monoxide alarm shall be installed within the sleeping room.
315.4 Combination alarms. Combinations carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms.
R315.5 Interconnectivity. Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section 315.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical inter connection of carbon monoxide alarm shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required where alterations or repairs do rot result in removal of interior wall or ceiling finishes exposing the structure.
R315.6 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and with out a disconnection switch other than those required for over current protection.

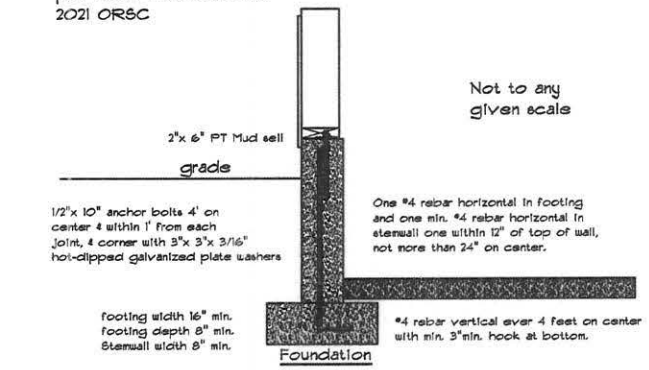
Fire separation requirement for garage

1/2" gypsum wall board on garage wall separating or supporting living space extending from foundation to ceiling. Ceiling separating garage from living space will be covered with 5/8" Type X gypsum wall board. Door from garage to living space will be 20 minute fire rating.

as per chapter 11 2021 ORSC
Table N1101.1(1) page 450
Flat ceiling R-48
Vaulted ceiling R-30
Walls R-21
Floor R-30

Ductless heat pump. HSPF 10.0 in primary zone of building.

= Whole-House mechanical ventilation system with a minimum of 60 CFM shall be provided as per Table M1505.4.4.3(1) 2021 ORSC



34080 Brooten Road Addition
Hydraulic Analysis Report

Hydraulics Analysis Report

prepared for

Debbie Whitaker

prepared by

Jake Hofeld, P.E.

EXPIRES: 6/30/2023

2022.04.05
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WATERWAYS
CONSULTING, INC.

April 05, 2022

WATERWAYS CONSULTING

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Attachment A – HEC-RAS Model Output Files

INTRODUCTION

Waterways Consulting Inc. (Waterways) has been retained by Debbie Whitaker to evaluate the hydraulic effects on the Nestucca River during a 100-year base flood discharge from a proposed addition to an existing residential structure. The project is located on the east (left) bank floodplain of the Nestucca River at 34080 Brooten Road in Pacific City, Oregon (Figure 1). The existing property currently includes a building with an approximate 730 square foot footprint with an attached second story deck. The proposed addition will include an 800 square foot footprint structure immediately to the north of the existing structure connected. The new and existing structures will be connected by an enclosed "bridge" structure between the second story finished floors. This section will also include an exterior stairway that leads to the ground level. The entire property is located within the FEMA designated floodway, effective September 28, 2018 (Figure 2).

The following report has been prepared to support floodplain development permitting with Tillamook County for the proposed project and presents our hydraulic analysis of existing and proposed conditions for the 100-year flood event along the Nestucca River within the vicinity of the proposed residential structure addition. This report is based on the guidance outlined in Section 3.510(9)(a) of the Tillamook County Land Use Ordinance which requires, "...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 based flood discharge."

HYDRAULIC MODELING METHODOLOGY

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) has mapped Nestucca River at the project area as a Special Flood Hazard Area (SFHA) within the regulatory floodway Zone AE (Figure 2). Tillamook County provided Waterways with a hydraulic model of the Nestucca River covering the project area for a Letter of Map Revision (LOMR), effective September 24, 2015 (Case. Number 14-10-1727P). The LOMR and corresponding hydraulic model conducted in the United States Army Corps of Engineers (USACE) Hydraulic Engineering Center River Analysis Software (HEC-RAS) by West Consultants updated the previous modeling and FIRM Panels dated August 1, 1978. All elevations are referenced to a NAVD 88 vertical datum. This model was used as the basis for all hydraulic modeling.

Waterways updated the hydraulic analysis using HEC-RAS, version 6.0.0. A one-dimensional hydraulic model was completed to characterize the existing and proposed conditions at the project site during the 100-year recurrence interval peak flow at the Nestucca River. Additional cross sections were added to the provided model in the vicinity of the project area. The two modeling scenarios include the Existing Conditions Model ("Ex. Cond." is the Plan identifier in the model) and the Proposed Conditions Model ("Prop. Cond." is the Plan identifier in the model). Figure 3 shows the proposed project location, cross section locations used in the hydraulic analysis, and the effective FEMA floodplain and floodway boundaries (FEMA 2018).

Existing Conditions Model

Additional cross sections added to the LOMR model were sampled from a terrain surface derived from LiDAR data from the Department of Geology and Mineral Industries (DOGAMI) North Coast collected by Watershed Sciences Inc. in 2009. LiDAR was updated and overlain with existing topographic survey data for the project parcel. The existing topographic survey was provided by Kellow Land Surveying, dated August 9, 2019 (Figure 3). Bathymetry for the additional cross sections were interpolated from upstream and downstream cross sections of the LOMR model.

The downstream model boundary extends approximately 1.1 miles downstream of the project area and the upstream model boundary extends approximately 2.7 miles upstream of the project area (Figure 5). The bridge crossing geometry at Ferry Street and at Pacific Avenue downstream of the project area were included in the model from drawings provided by Oregon Department of Transportation (ODOT) and Tillamook County. Hydraulic roughness values for the additional cross sections were based on values published in the provided model. Hydraulic roughness values, known as Manning's Roughness, for the additional cross sections are outlined in Table 1.

Table 1. *Manning's Roughness for Different Land Use Types*

Land Use Type	Manning's 'n'
Channel	0.031
Open Pervious Areas (grassed)	0.04
Residential Area	0.08
Open Pervious Areas (trees)	0.10

Proposed Conditions Model

The proposed conditions model included the additional cross sections created in the existing conditions model. The existing conditions terrain was updated with the proposed residential structure footprint of 40 feet by 20 feet provided by design drawings supplied from the client (Figure 4). The proposed residential structure was modeled as a blocked obstruction at cross sections located at the upstream and downstream sides of the proposed structure. The location of the proposed structure is approximate due to the surveyed property boundaries being in an arbitrary horizontal datum but is considered accurate enough for the purposes of this analysis. The proposed conditions model did not update the existing topography of the site.

Boundary Conditions

The downstream boundary condition used in the two models was set to a known water surface elevation of 14.15 feet (NAVD 88) per the provided model. The downstream boundary condition is located downstream of FEMA Cross Section A near where Nestucca River meets the Nestucca Bay.

Peak Flow Hydrology

According to the FEMA FIS report and the provided model, the 100-year peak flow event for this portion of the Nestucca River is 49,700 cubic feet per second (cfs). Therefore, 49,700 cfs was assumed for the 100-year peak flow (i.e. base flood discharge) in all models.

RESULTS

Results of the hydraulic modeling are presented in Attachment A. These results show that the proposed structure will not result in a rise to the water surface elevations at any cross sections in the model. No change between the Existing Conditions Model and Proposed Conditions Model can likely be attributed to the relatively small building footprints as compared to a much larger/wider floodplain area.

CONCLUSIONS

The results of this hydraulic analysis indicate no rise in the 100-year water surface elevations for the Proposed Conditions Model when compared to the Existing Conditions Model. Based on this, the proposed project satisfies the requirement of Section 3.510(9)(a) of the Tillamook County Land Use Ordinance.

REFERENCES

Federal Emergency Management Agency. 2018. Flood Insurance Rate Maps (FIRMs) for Tillamook County (panel 0855), Oregon and Incorporated Areas. September 28, 2018.

Federal Emergency Management Agency. 2018. Flood Insurance Study (FIS) for Tillamook County, Oregon and Incorporated Areas. September 8, 2018.

U.S. Army Corps of Engineers. Hydrologic Engineering Center. Computer Program HEC-RAS Version 6.0.0 Davis, California. March 2019.

U.S. Army Corps of Engineers. Hydrologic Engineering Center. Hydraulic Reference Manual. Version 5.0 Davis, California. February 2016.

Watershed Sciences. LiDAR Remote Sensing Data Collection Oregon North Coast. Prepared for Department of Geology and Mineral Industries (DOGAMI). December 21, 2009.

West Consultants. Hydraulic Engineering Center River Analysis Software (HEC-RAS) Model of the Nestucca River. 2014.

FIGURES

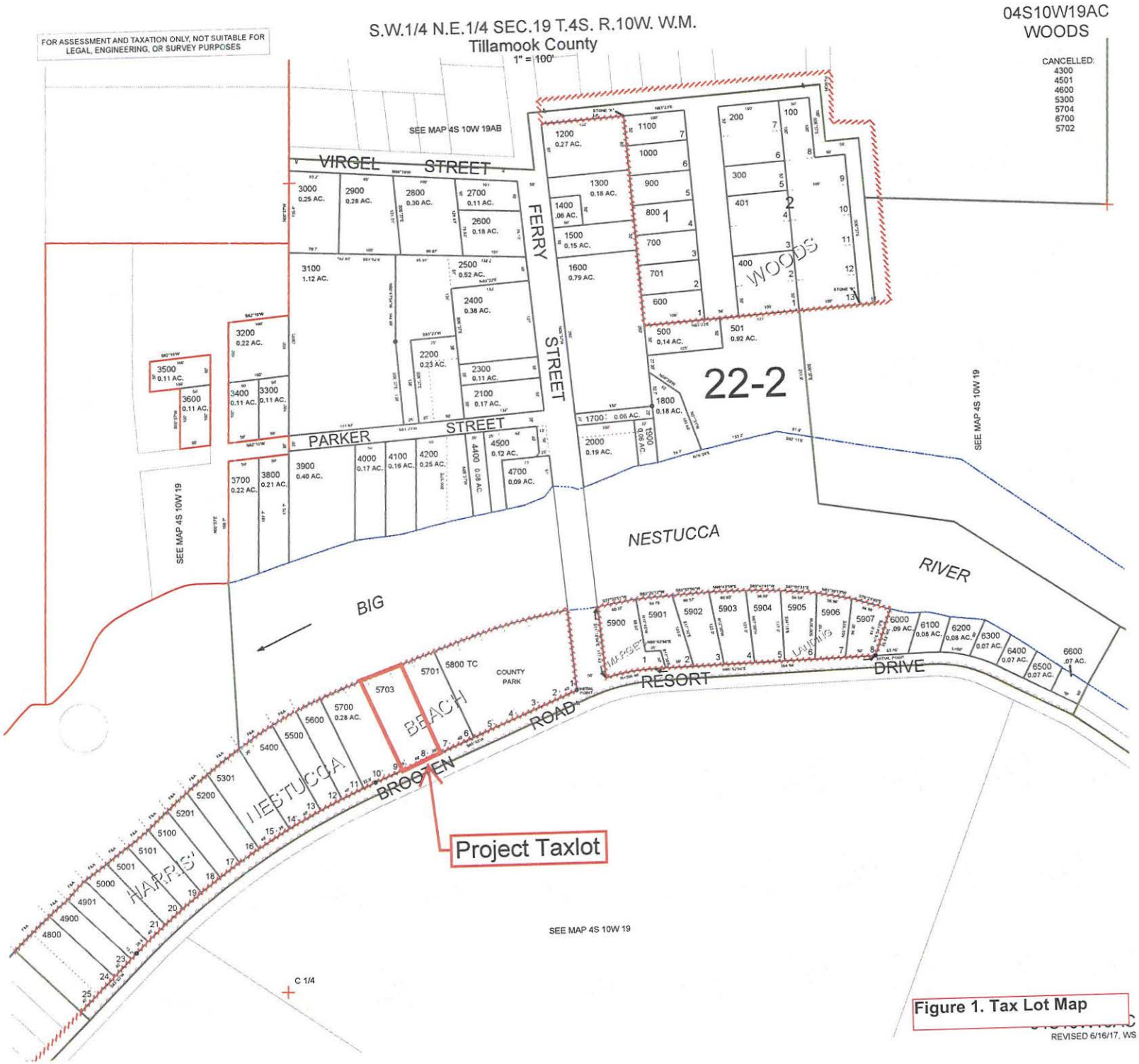
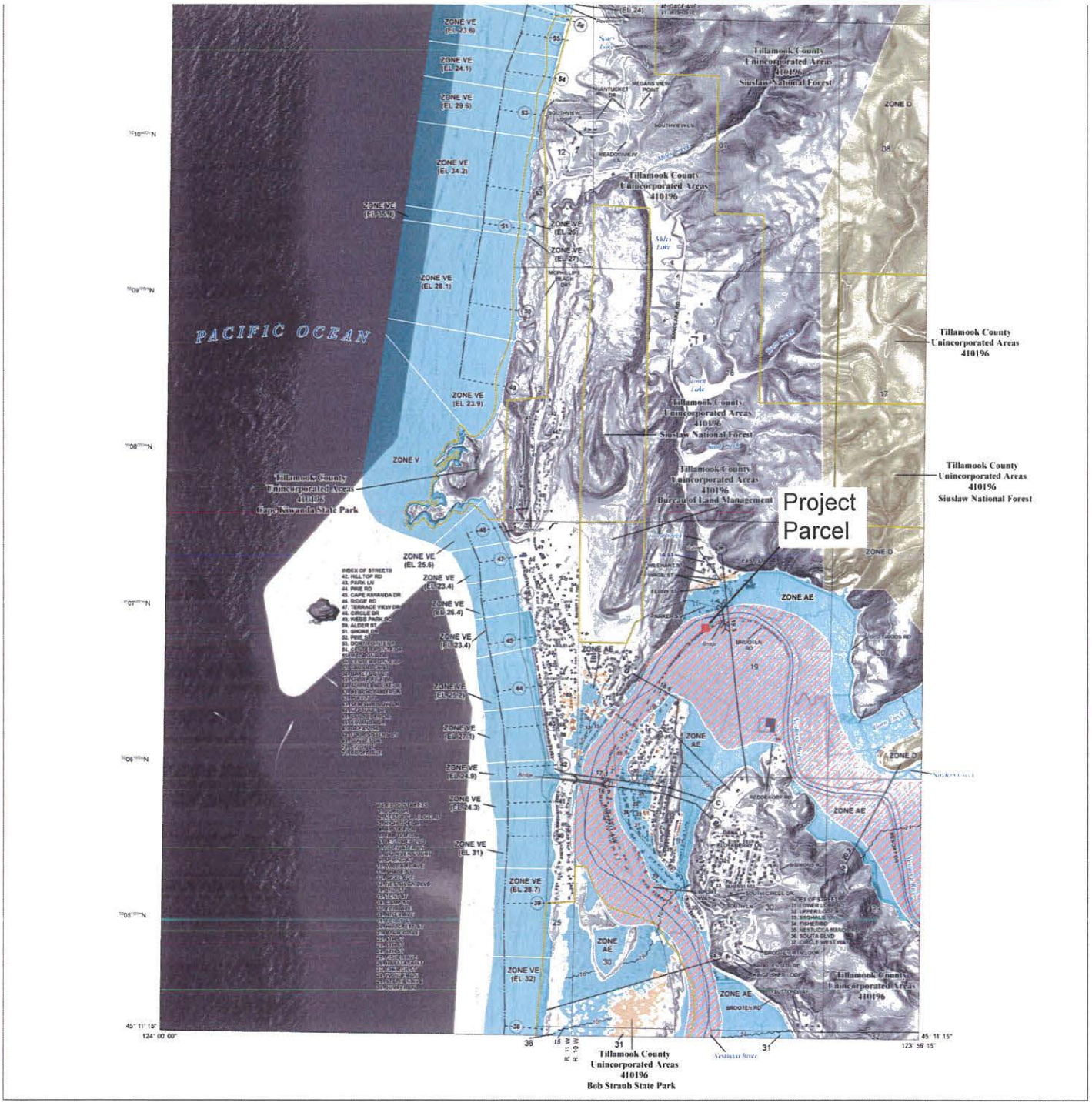


Figure 1. Tax Lot Map

REVISED 6/16/17, WS

Figure 2. FEMA Map



FLOOD HAZARD INFORMATION

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

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- 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, 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

OTHER AREAS OF FLOOD HAZARD
- 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
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

NOTES TO USERS

For information and questions about this map, available products associated with the FIRM including historic versions of the FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

The topographic base map for the FIRM revision is derived from aerial lidar surveys conducted between 2007 and 2011. Orthophotography acquired in 2006 was used where lidar coverage was unavailable for portions of Tillamook County.

SCALE

Map Projection: Universal Transverse Mercator Zone 10N, North American Datum 1983, Western Hemisphere, Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 1,000 2,000 4,000 Feet

0 255 510 1,020 Meters

PANEL LOCATOR

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

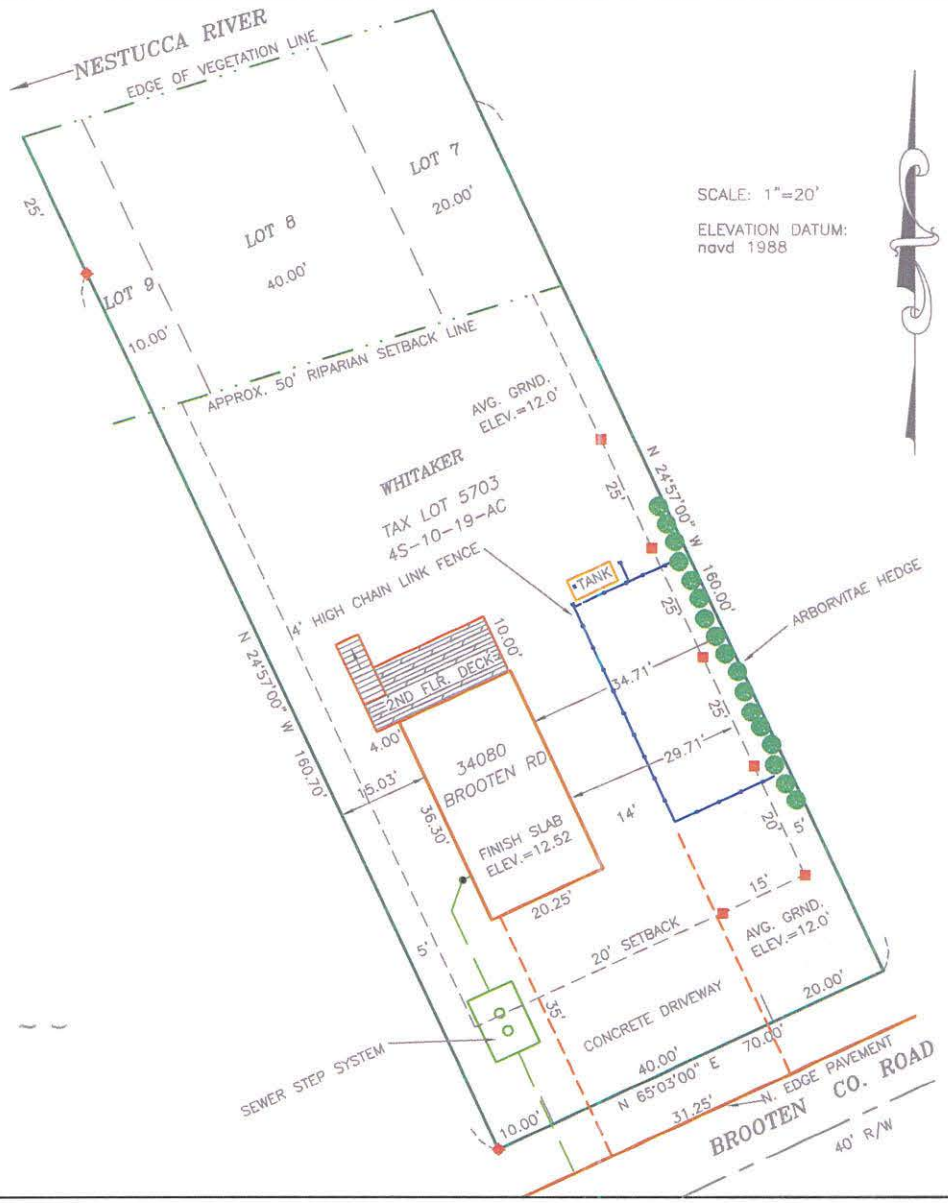
FLOOD INSURANCE RATE MAP

TILLAMOOK COUNTY, OREGON

And Incorporated Areas

PANEL 855 OF 1075

COMMUNITY	NUMBER	PANEL	SUFFIX
TILLAMOOK COUNTY	410196	0855	F



SCALE: 1"=20'

ELEVATION DATUM: navd 1988

PLOT PLAN FOR JAMES & DEBORAH WHITAKER

IN LOT 8 AND A PORTION LOTS 7 AND 9, "HARRIS' NESTUCCA BEACH"

NARRATIVE.

THE PURPOSE OF THIS SURVEY WAS TO SHOW THE LOCATION OF EXISTING HOUSE AND TO SHOW THE OTHER IMPROVEMENTS TO SAID TRACT OF LAND.
THE LOWER FINISH (SLAB) FLOOR ELEVATION HAS BEEN SHOWN IN NAVD 1988 DATUM.
ALSO, I HAVE INDICATED THE APPROXIMATE "50 FOOT RIPARIAN SETBACK" ON THE RIVER SIDE OF THE SUBJECT TRACT....AND THE AVERAGE GROUND ELEVATION ON THE NORTHEAST SIDE OF THE TRACT.

SURVEY & MAP BY:

KELLOW LAND SURVEYING
P.O. BOX 335
PACIFIC CITY, OR 97135
503-801-3537

JULY 19, 2019
REVISED: AUG. 9. 2019

REGISTERED PROFESSIONAL LAND SURVEYOR

Douglas H. Kellow

OREGON
FEBRUARY 3, 1983
DOUGLAS H. KELLOW
2027

RENEWS: 06/30/21

SET WOOD HUB & STAKE – ■

Figure 3: Property Survey

RIGHT ELEVATION

All plans for this structure are not copyrighted. Plans examiner please add anything missing to meet your requirments.

Not to any given scale so this would fit page.

REAR ELEVATION

LEFT ELEVATION

Figure 4a. Proposed Addition Site Elevations

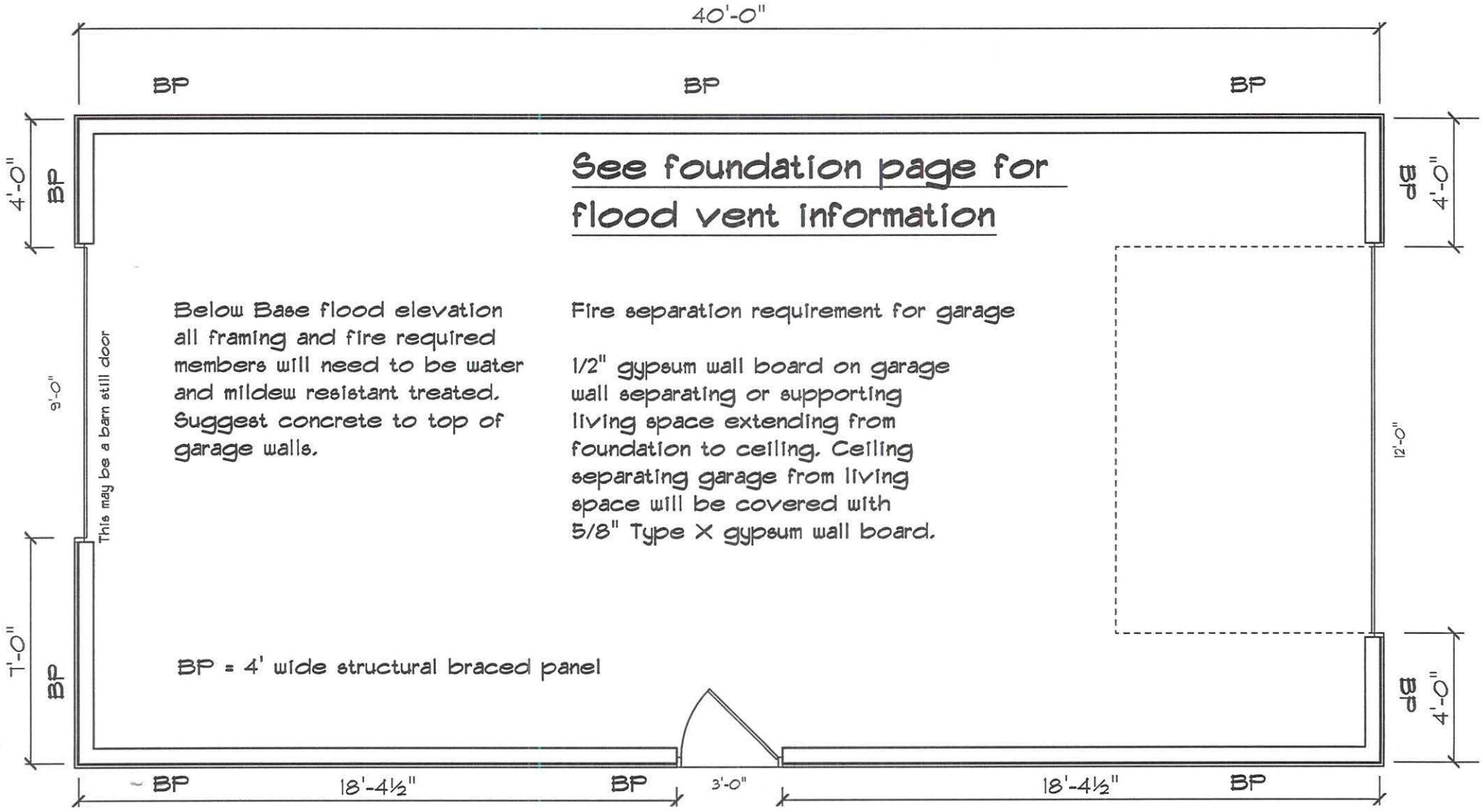


Figure 4b. Proposed Addition Site Plan

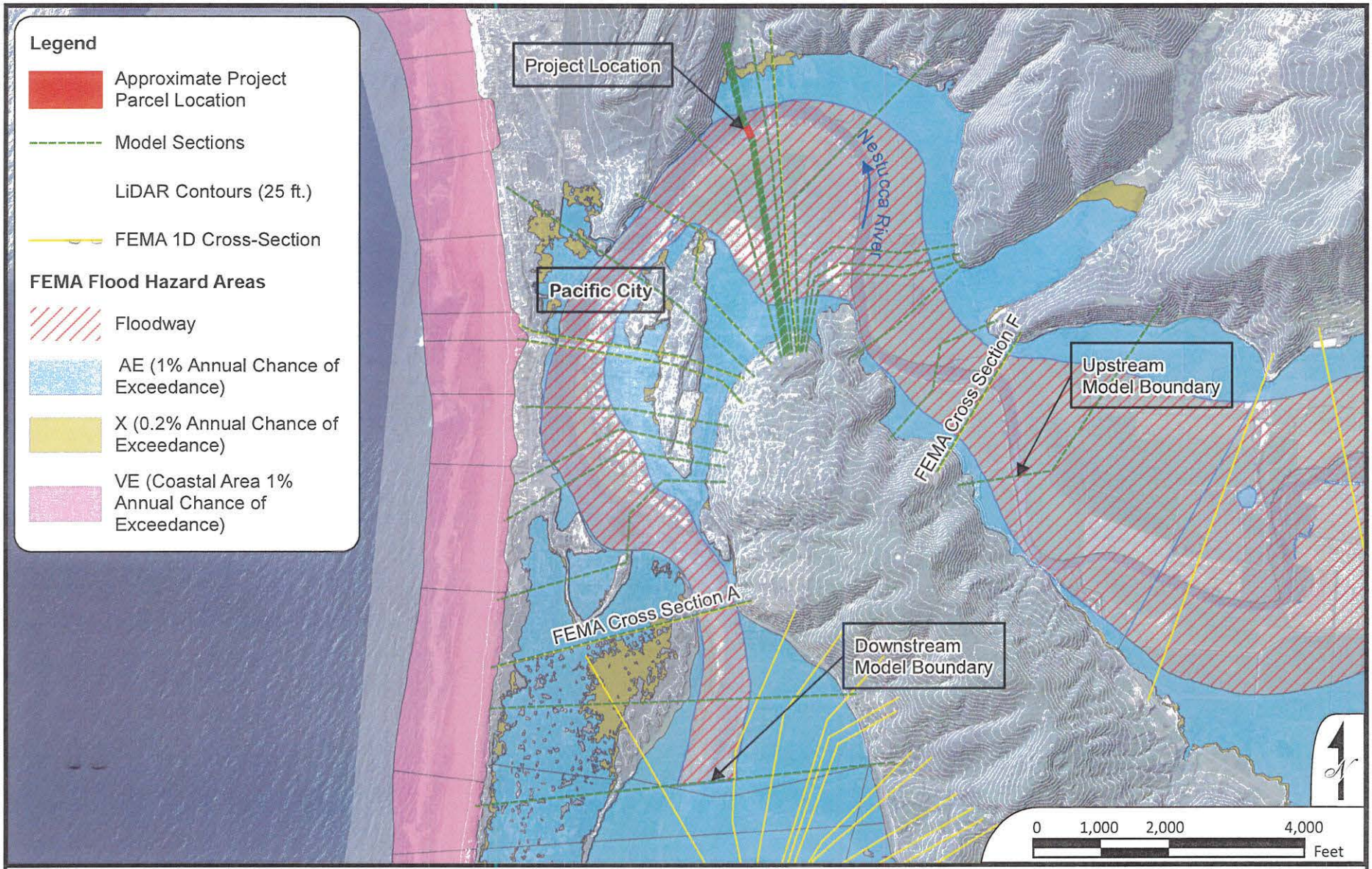


FIGURE 5

Hydraulic Analysis Overview Map

34080 Brooten Road Addition
Hydraulic Analysis Report

WATERWAYS CONSULTING, INC.
Santa Cruz, CA | watways.com | Portland, OR

Attachment A

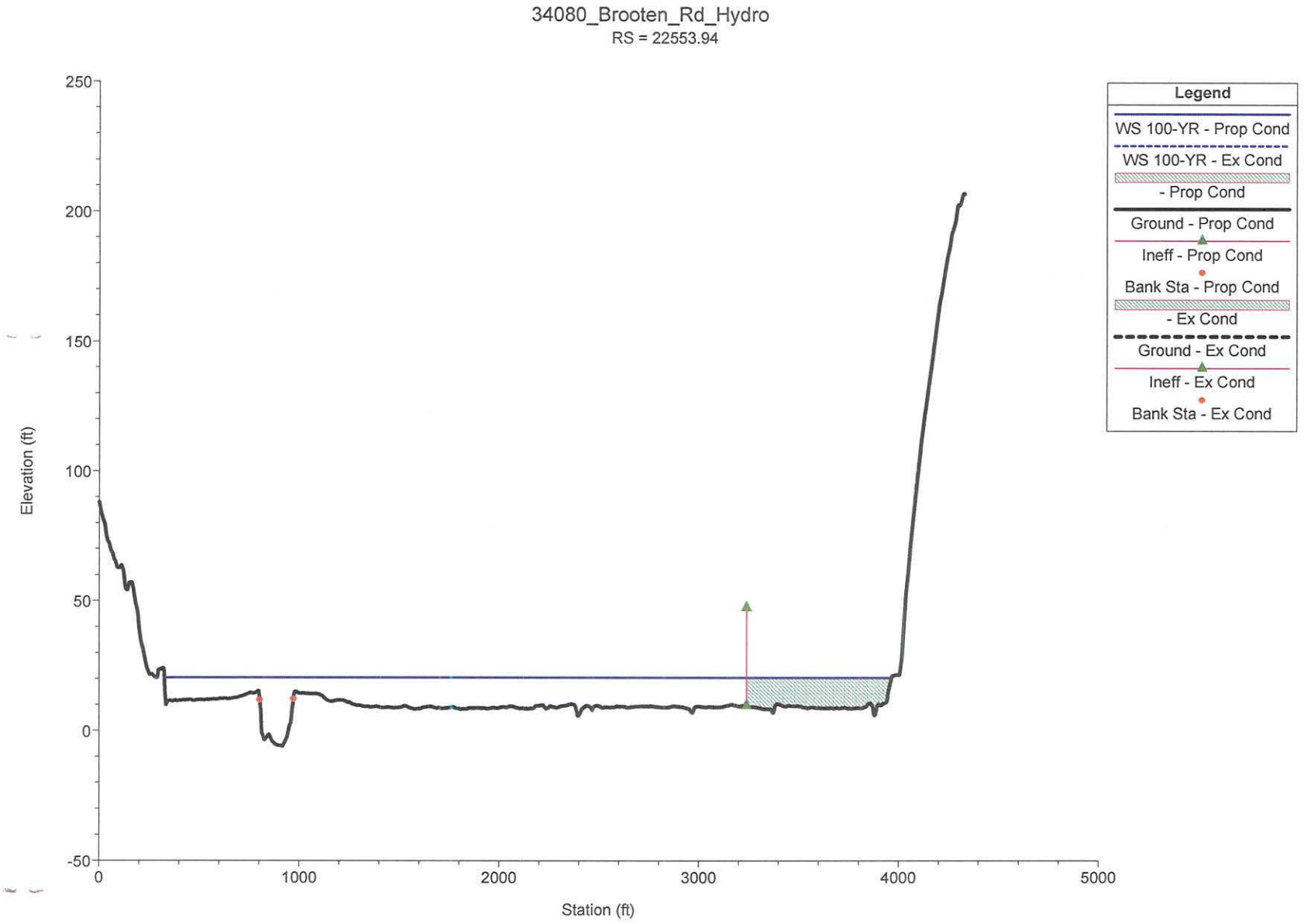
HEC-RAS Output Files

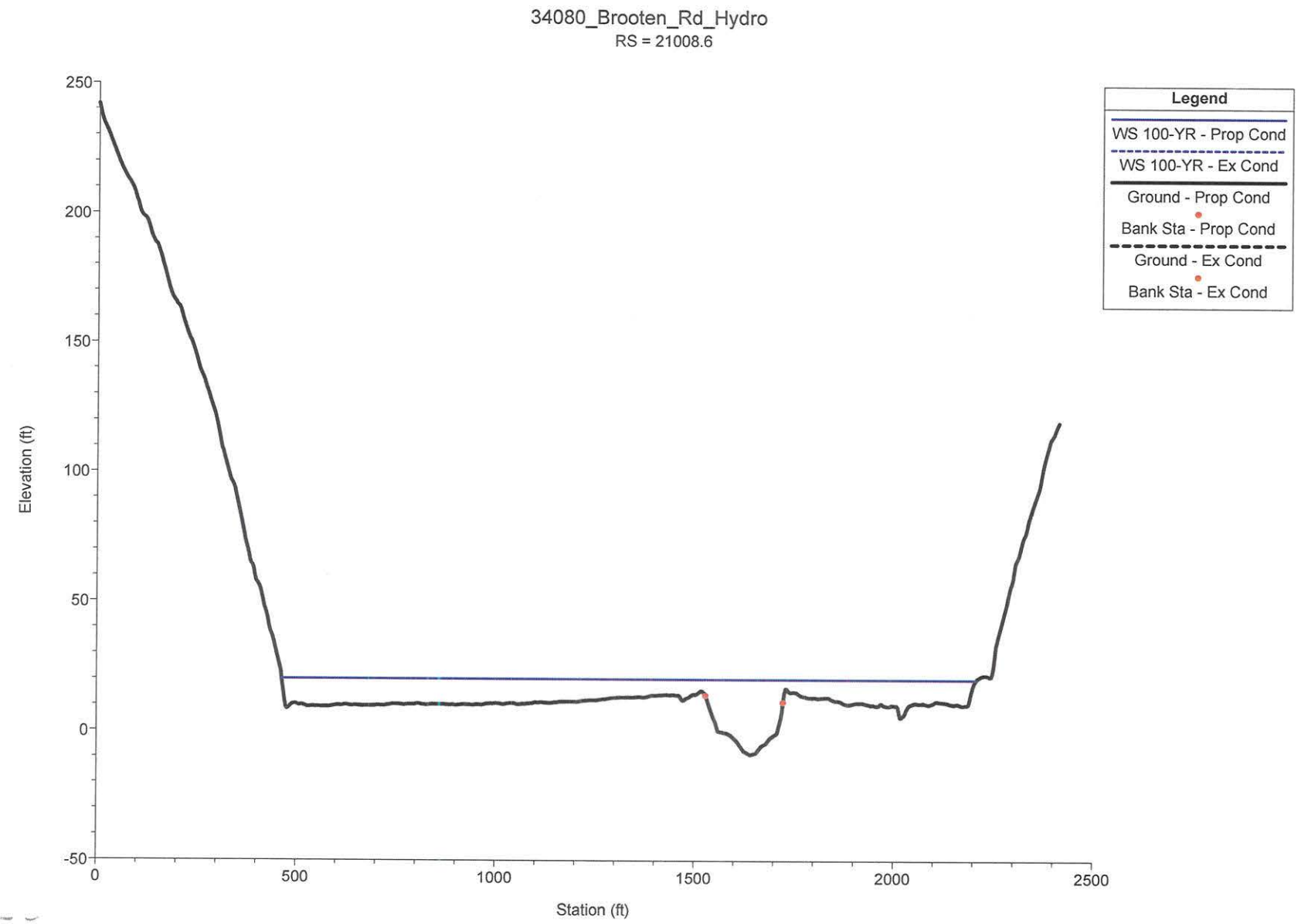
HEC-RAS River: Nestucca River Reach: Lower Profile: 100-YR

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Lower	22553.94	100-YR	Ex Cond	49700.00	-5.99	20.50	12.22	20.55	0.000090	3.06	32251.77	3644.73	0.11
Lower	22553.94	100-YR	Prop Cond	49700.00	-5.99	20.50	12.22	20.55	0.000090	3.06	32252.63	3644.74	0.11
Lower	21008.6	100-YR	Ex Cond	49700.00	-8.92	20.09		20.31	0.000259	5.18	17868.70	1743.78	0.20
Lower	21008.6	100-YR	Prop Cond	49700.00	-8.92	20.09		20.31	0.000259	5.18	17869.28	1743.78	0.20
Lower	20157.05	100-YR	Ex Cond	49700.00	-9.15	19.95	12.36	20.10	0.000212	4.43	20018.16	2302.31	0.17
Lower	20157.05	100-YR	Prop Cond	49700.00	-9.15	19.95	12.36	20.10	0.000212	4.43	20018.80	2302.31	0.17
Lower	19079.89	100-YR	Ex Cond	49700.00	-11.85	19.71		19.89	0.000228	5.02	20299.33	1888.76	0.18
Lower	19079.89	100-YR	Prop Cond	49700.00	-11.85	19.71		19.89	0.000228	5.02	20300.02	1888.76	0.18
Lower	18019.8	100-YR	Ex Cond	49700.00	-7.69	19.54	11.35	19.68	0.000186	4.31	22194.66	2668.28	0.16
Lower	18019.8	100-YR	Prop Cond	49700.00	-7.69	19.54	11.35	19.68	0.000186	4.31	22195.45	2668.28	0.16
Lower	17875.97	100-YR	Ex Cond	49700.00	-7.60	19.53	11.05	19.65	0.000168	4.13	23069.31	2677.07	0.16
Lower	17875.97	100-YR	Prop Cond	49700.00	-7.60	19.53	11.05	19.65	0.000168	4.13	23070.13	2677.07	0.16
Lower	17653.2	100-YR	Ex Cond	49700.00	-4.67	19.54	11.28	19.61	0.000095	3.21	29287.64	3181.66	0.12
Lower	17653.2	100-YR	Prop Cond	49700.00	-4.67	19.54	11.28	19.61	0.000095	3.21	29288.66	3181.66	0.12
Lower	15949.74	100-YR	Ex Cond	49700.00	-7.67	19.50	9.86	19.52	0.000032	1.90	46756.41	4377.65	0.07
Lower	15949.74	100-YR	Prop Cond	49700.00	-7.67	19.50	9.86	19.52	0.000032	1.90	46757.94	4377.65	0.07
Lower	14728.64	100-YR	Ex Cond	49700.00	-9.90	19.44	10.23	19.48	0.000043	2.46	37338.25	3855.81	0.09
Lower	14728.64	100-YR	Prop Cond	49700.00	-9.90	19.44	10.23	19.48	0.000043	2.46	37339.61	3855.82	0.09
Lower	14621.23			Bridge									
Lower	14544.91	100-YR	Ex Cond	49700.00	-8.62	19.42	10.32	19.46	0.000045	2.54	36922.60	3871.15	0.10
Lower	14544.91	100-YR	Prop Cond	49700.00	-8.62	19.42	10.32	19.47	0.000045	2.54	36923.95	3871.15	0.10
Lower	14278	100-YR	Ex Cond	49700.00	-8.55	19.41	10.38	19.45	0.000049	2.57	36885.62	3893.93	0.10
Lower	14278	100-YR	Prop Cond	49700.00	-8.55	19.41	10.38	19.45	0.000049	2.58	36581.84	3853.91	0.10
Lower	14255	100-YR	Ex Cond	49700.00	-8.54	19.41	10.35	19.45	0.000047	2.52	36698.96	3834.06	0.10
Lower	14255	100-YR	Prop Cond	49700.00	-8.54	19.41	10.35	19.45	0.000047	2.52	36698.96	3834.06	0.10
Lower	14226	100-YR	Ex Cond	49700.00	-8.53	19.41	10.29	19.45	0.000046	2.47	37040.01	3820.99	0.10
Lower	14226	100-YR	Prop Cond	49700.00	-8.53	19.41	10.29	19.45	0.000046	2.47	37040.01	3820.99	0.10

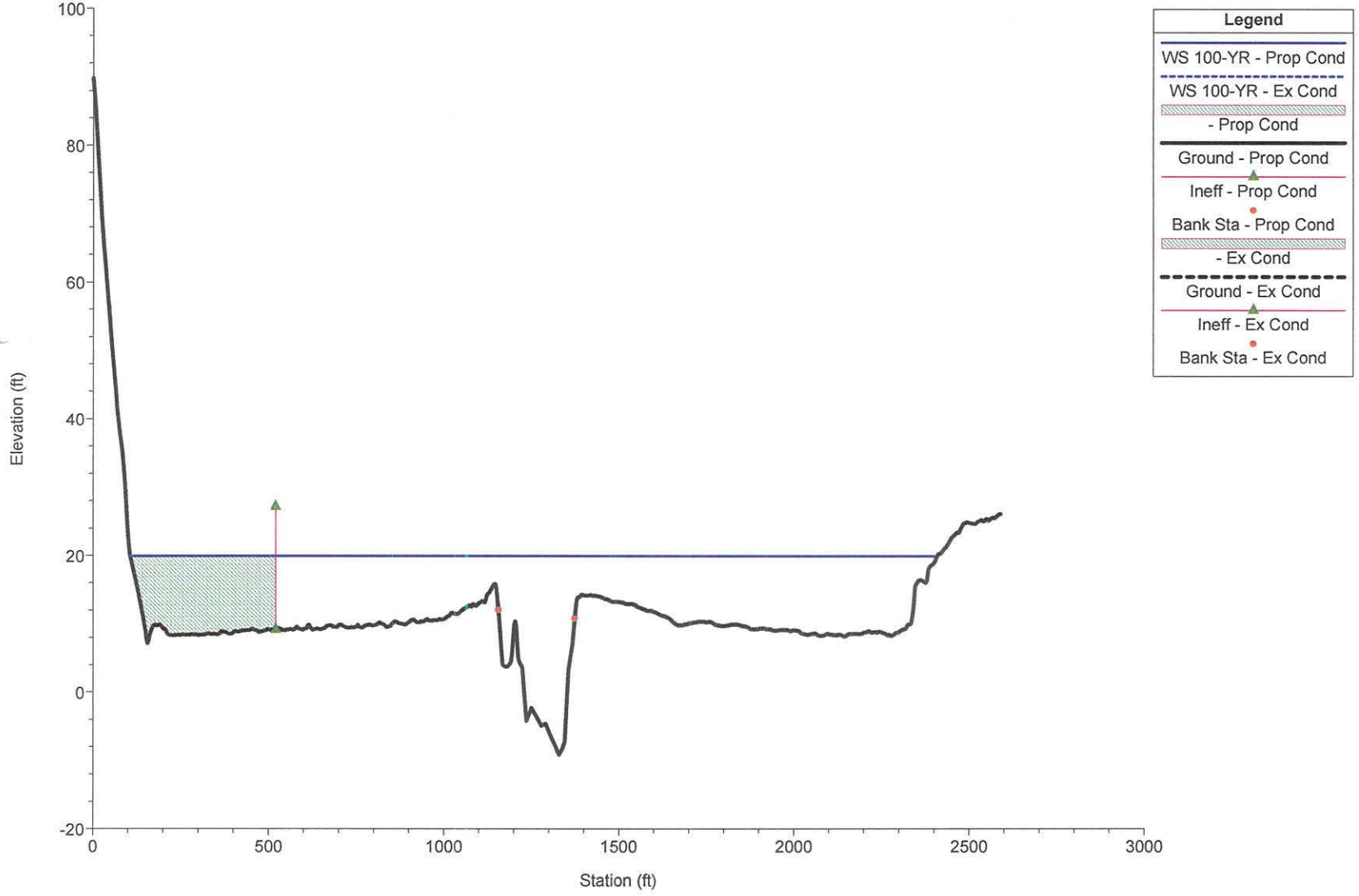
HEC-RAS River: Nestucca River Reach: Lower Profile: 100-YR (Continued)

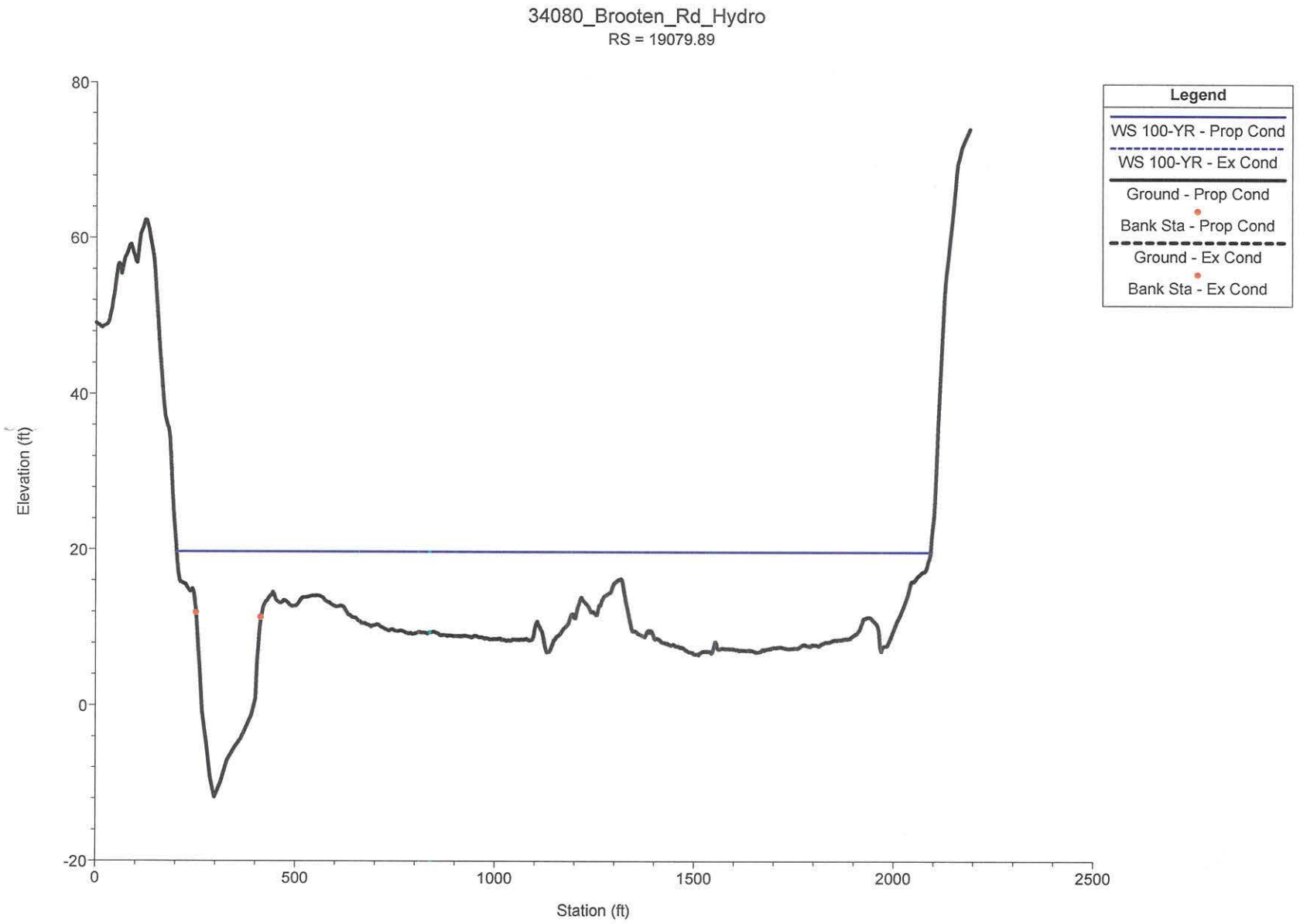
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Lower	14210	100-YR	Ex Cond	49700.00	-8.53	19.41	10.29	19.45	0.000046	2.45	37057.29	3902.26	0.10
Lower	14210	100-YR	Prop Cond	49700.00	-8.53	19.41	10.29	19.45	0.000046	2.45	37057.29	3902.26	0.10
Lower	13541.26	100-YR	Ex Cond	49700.00	-7.81	19.37	10.21	19.41	0.000052	2.50	32776.04	3280.36	0.10
Lower	13541.26	100-YR	Prop Cond	49700.00	-7.81	19.37	10.21	19.41	0.000052	2.50	32776.04	3280.36	0.10
Lower	12396	100-YR	Ex Cond	49700.00	-3.59	18.50		19.22	0.000463	7.06	9092.69	2049.83	0.30
Lower	12396	100-YR	Prop Cond	49700.00	-3.59	18.50		19.22	0.000463	7.06	9092.69	2049.83	0.30
Lower	11367.2	100-YR	Ex Cond	49700.00	-3.05	17.73	9.51	18.65	0.000621	7.83	7532.11	2017.15	0.34
Lower	11367.2	100-YR	Prop Cond	49700.00	-3.05	17.73	9.51	18.65	0.000621	7.83	7532.11	2017.15	0.34
Lower	10048.77	100-YR	Ex Cond	49700.00	-3.49	16.97	9.18	17.81	0.000619	7.53	8674.57	2062.18	0.34
Lower	10048.77	100-YR	Prop Cond	49700.00	-3.49	16.97	9.18	17.81	0.000619	7.53	8674.57	2062.18	0.34
Lower	9942.323			Bridge									
Lower	9904.361	100-YR	Ex Cond	49700.00	-8.44	16.82	8.05	17.51	0.000542	6.93	10023.92	2094.07	0.31
Lower	9904.361	100-YR	Prop Cond	49700.00	-8.44	16.82	8.05	17.51	0.000542	6.93	10023.92	2094.07	0.31
Lower	8988.11	100-YR	Ex Cond	49700.00	-4.80	16.61	8.14	16.97	0.000329	5.36	12949.13	1986.55	0.24
Lower	8988.11	100-YR	Prop Cond	49700.00	-4.80	16.61	8.14	16.97	0.000329	5.36	12949.13	1986.55	0.24
Lower	8192.259	100-YR	Ex Cond	49700.00	-18.19	16.35	6.30	16.72	0.000308	5.47	12921.58	2041.81	0.23
Lower	8192.259	100-YR	Prop Cond	49700.00	-18.19	16.35	6.30	16.72	0.000308	5.47	12921.58	2041.81	0.23
Lower	7839.108	100-YR	Ex Cond	49700.00	-6.96	16.25	6.76	16.61	0.000310	5.16	12464.76	1879.15	0.23
Lower	7839.108	100-YR	Prop Cond	49700.00	-6.96	16.25	6.76	16.61	0.000310	5.16	12464.76	1879.15	0.23
Lower	6628.945	100-YR	Ex Cond	49700.00	-1.36	16.04	6.84	16.27	0.000208	3.91	14212.35	3171.30	0.19
Lower	6628.945	100-YR	Prop Cond	49700.00	-1.36	16.04	6.84	16.27	0.000208	3.91	14212.35	3171.30	0.19
Lower	4746.314	100-YR	Ex Cond	49700.00	-11.72	14.76	7.45	15.56	0.000672	7.30	7417.23	2442.34	0.34
Lower	4746.314	100-YR	Prop Cond	49700.00	-11.72	14.76	7.45	15.56	0.000672	7.30	7417.23	2442.34	0.34
Lower	3370.732	100-YR	Ex Cond	49700.00	-3.40	14.28	6.63	14.73	0.000430	5.53	9803.55	3594.57	0.27
Lower	3370.732	100-YR	Prop Cond	49700.00	-3.40	14.28	6.63	14.73	0.000430	5.53	9803.55	3594.57	0.27
Lower	2099.855	100-YR	Ex Cond	49700.00	-3.90	14.15	5.85	14.31	0.000175	3.42	17693.71	5262.50	0.17
Lower	2099.855	100-YR	Prop Cond	49700.00	-3.90	14.15	5.85	14.31	0.000175	3.42	17693.71	5262.50	0.17

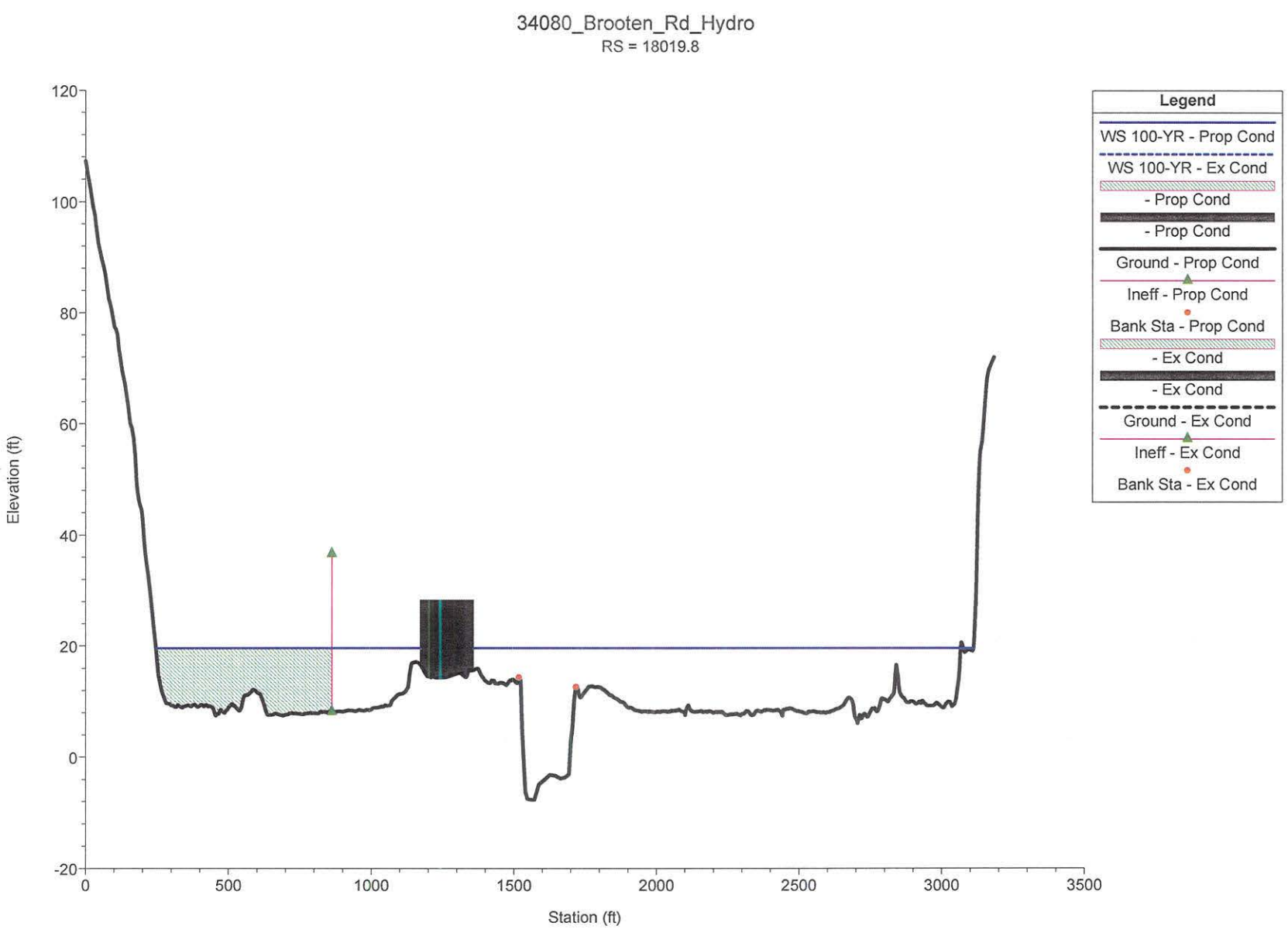

34080_Brooten_Rd_Hydro
RS = 22553.94
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
250
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
Station (ft)

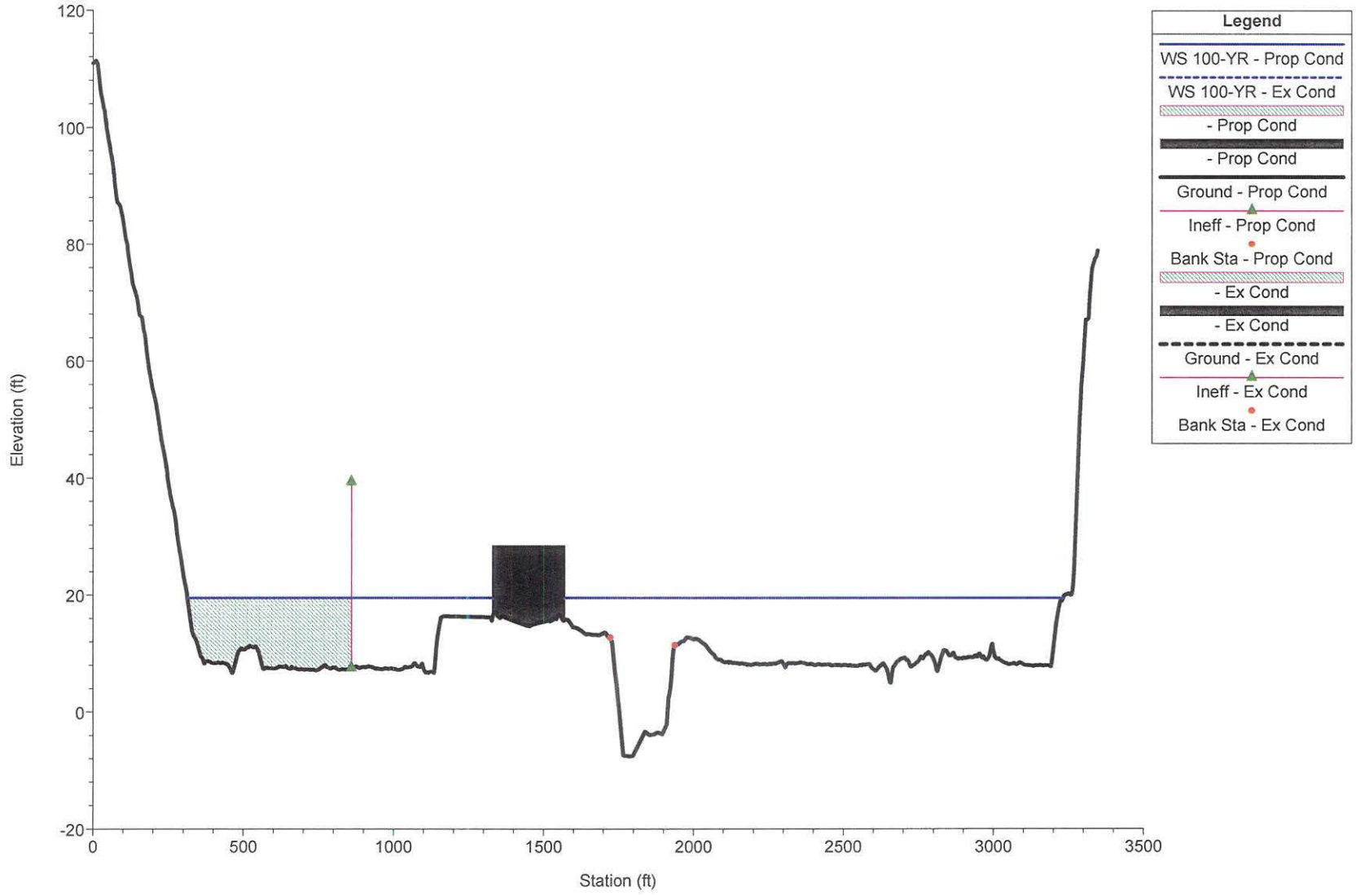

34080_Brooten_Rd_Hydro
RS = 21008.6
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
Ground - Prop Cond
Bank Sta - Prop Cond
Ground - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
250
200
150
100
50
0
-50
0
500
1000
1500
2000
2500
Station (ft)

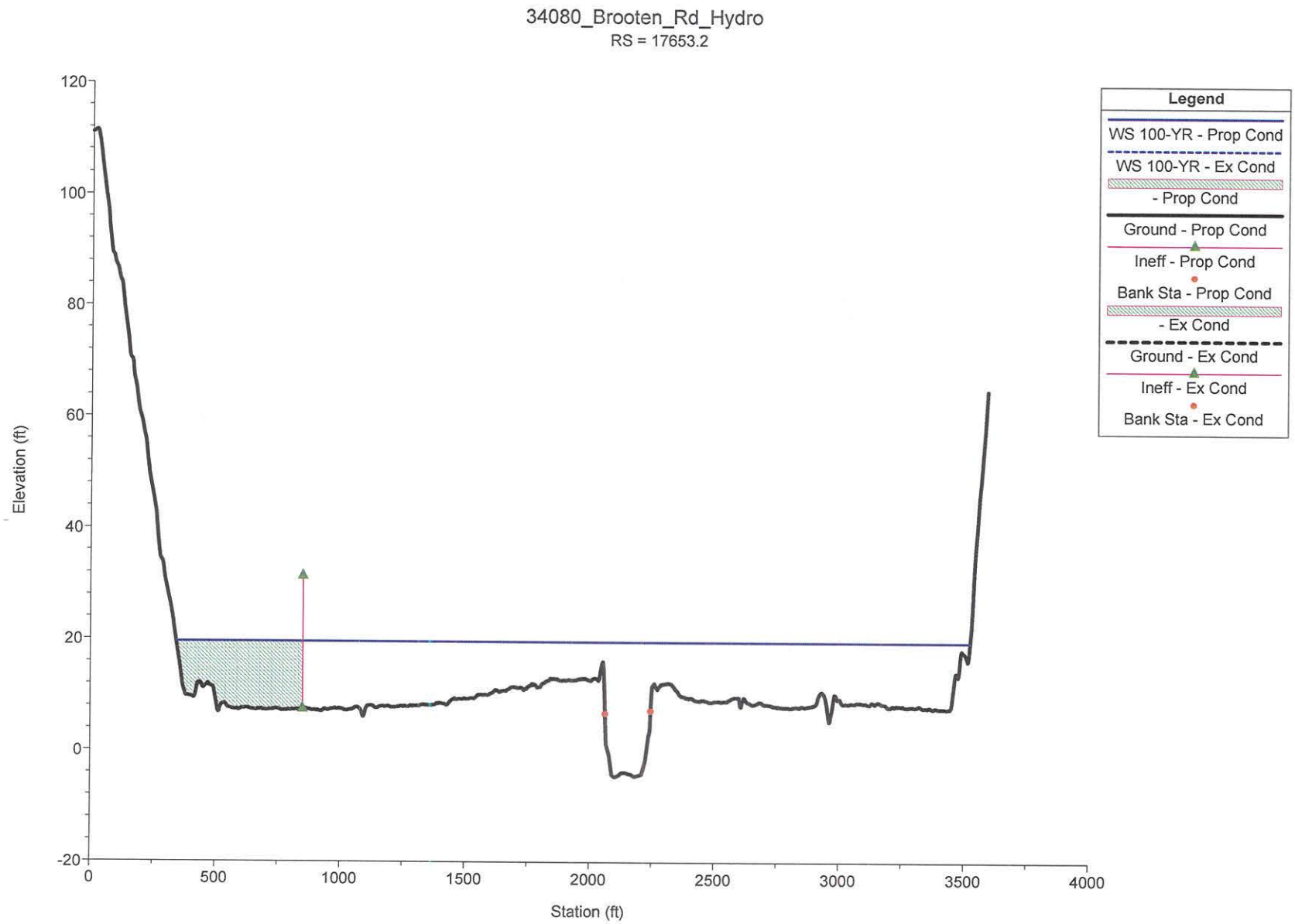
34080_Brooten_Rd_Hydro
RS = 20157.05

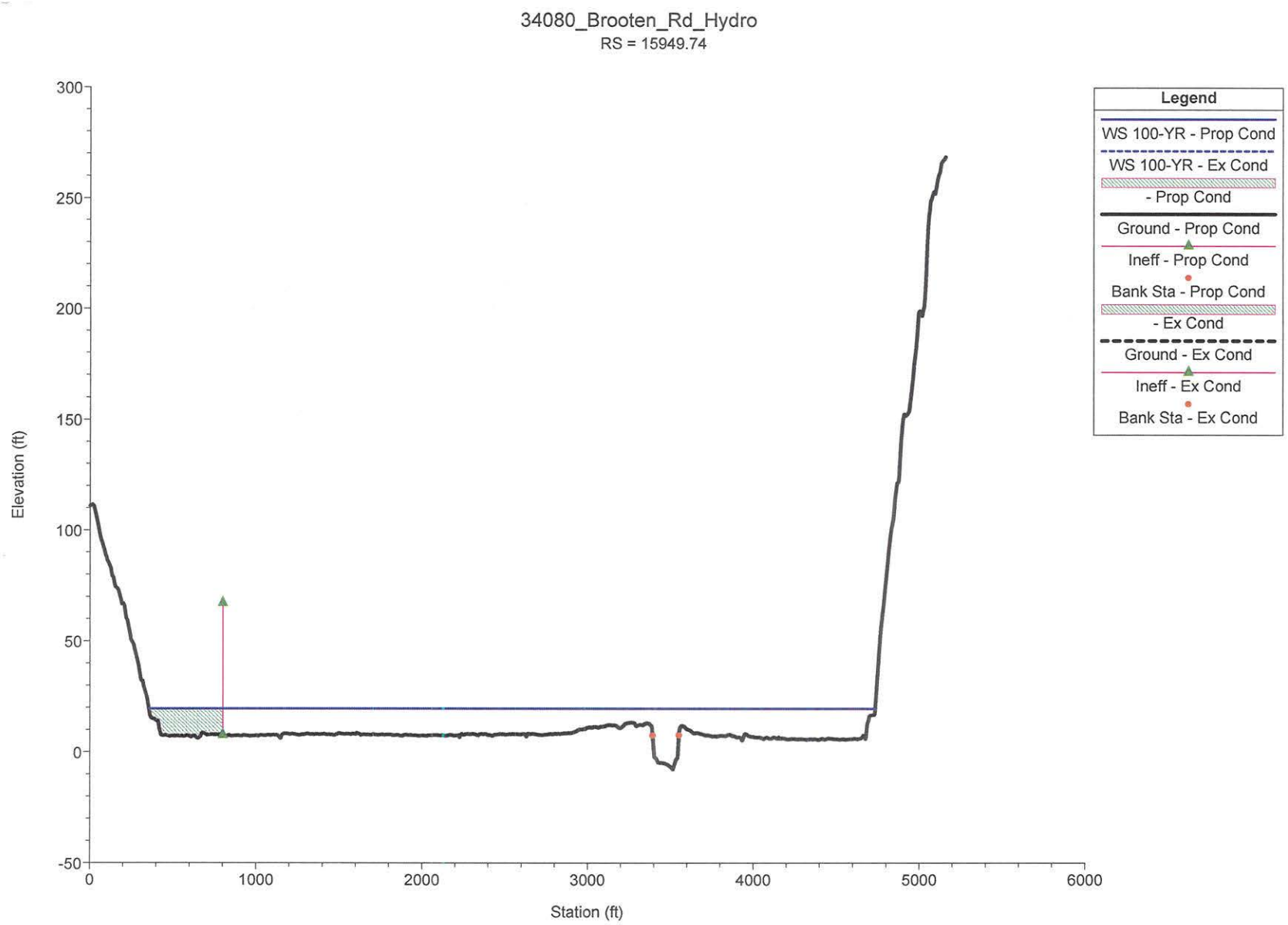


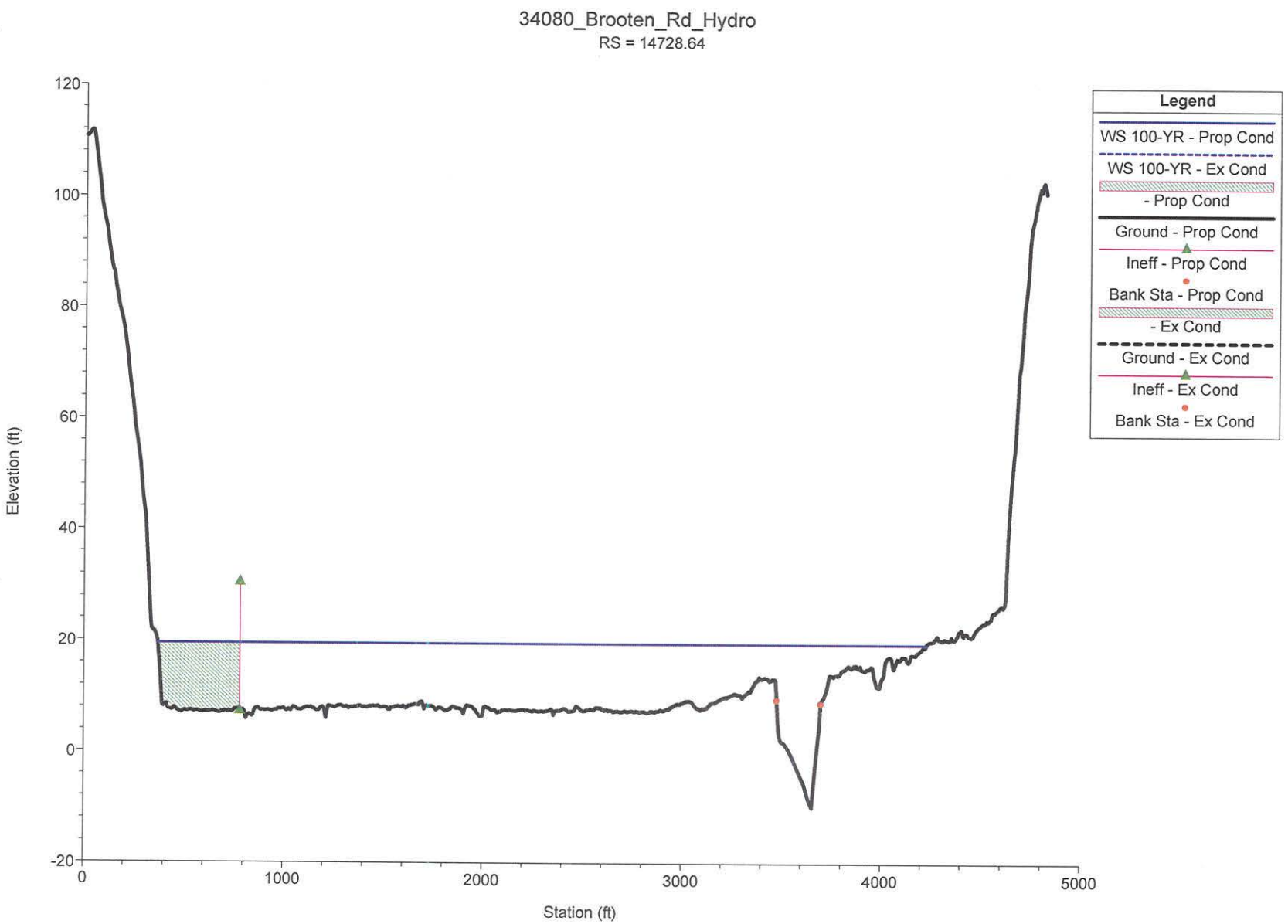

34080_Brooten_Rd_Hydro
RS = 19079.89
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
Ground - Prop Cond
Bank Sta - Prop Cond
Ground - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
Station (ft)


34080_Brooten_Rd_Hydro
RS = 18019.8
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

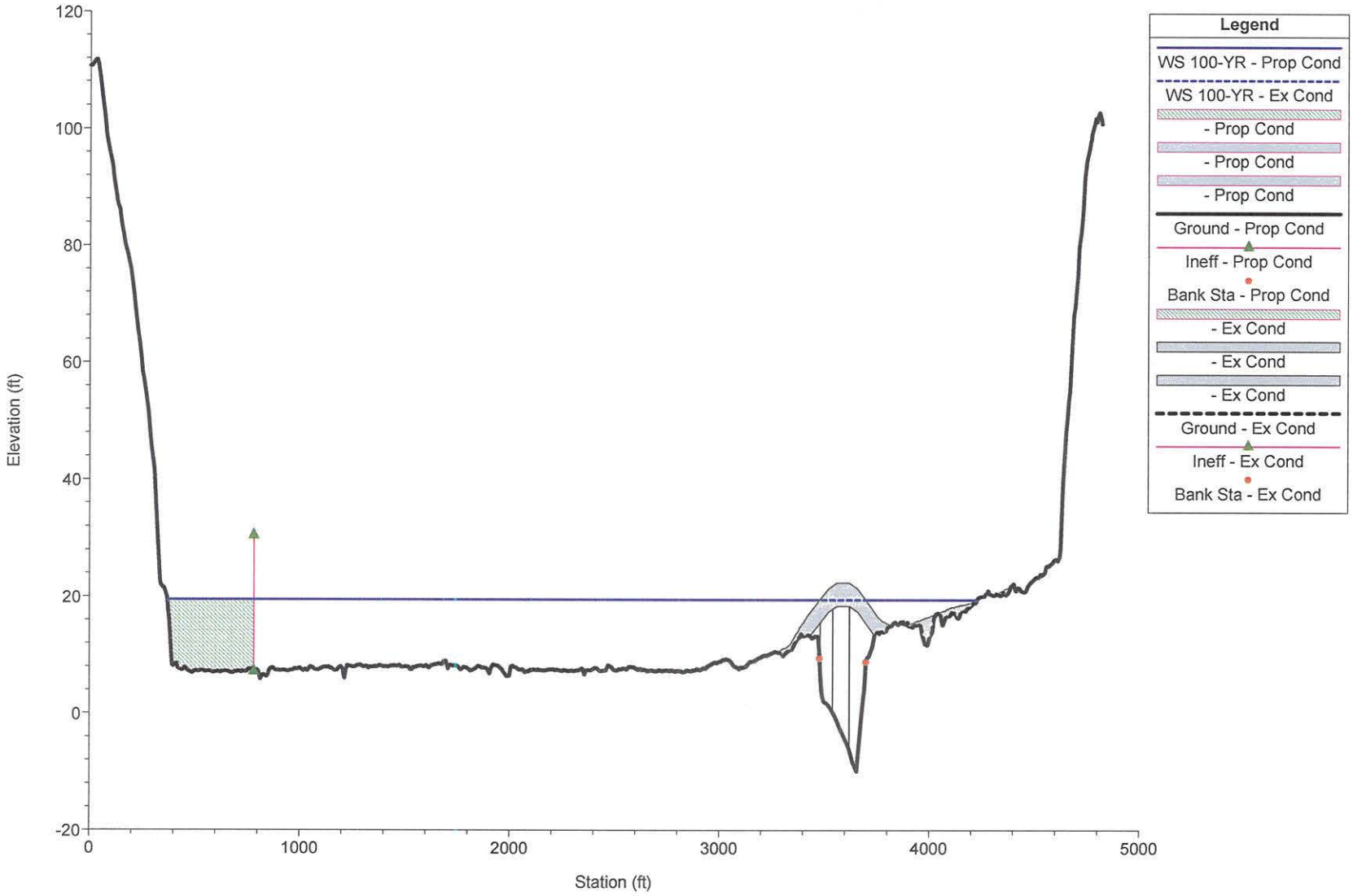

34080_Brooten_Rd_Hydro
RS = 17875.97
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)


34080_Brooten_Rd_Hydro
RS = 17653.2
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

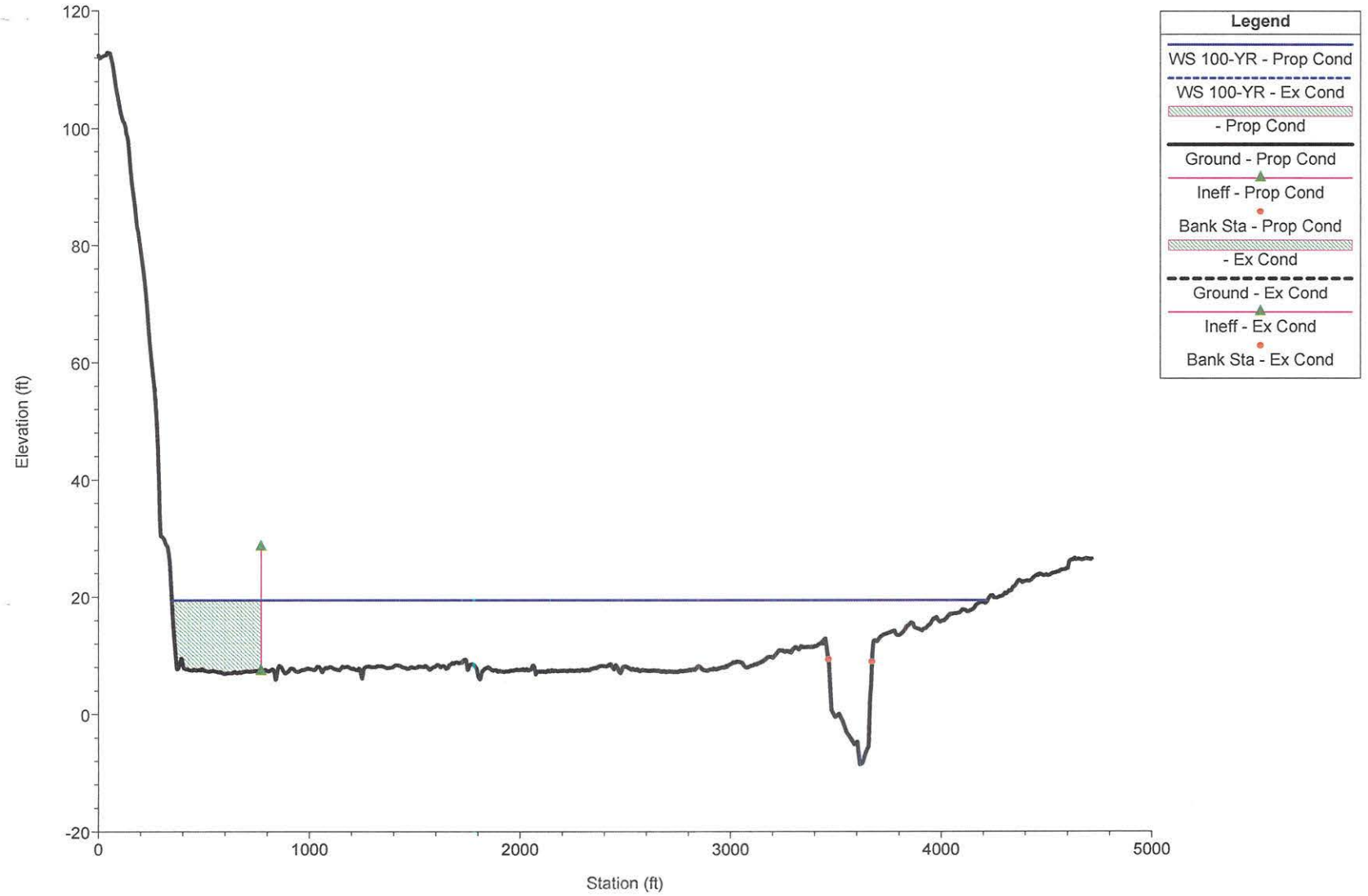

34080_Brooten_Rd_Hydro
RS = 15949.74
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
300
250
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
6000
Station (ft)

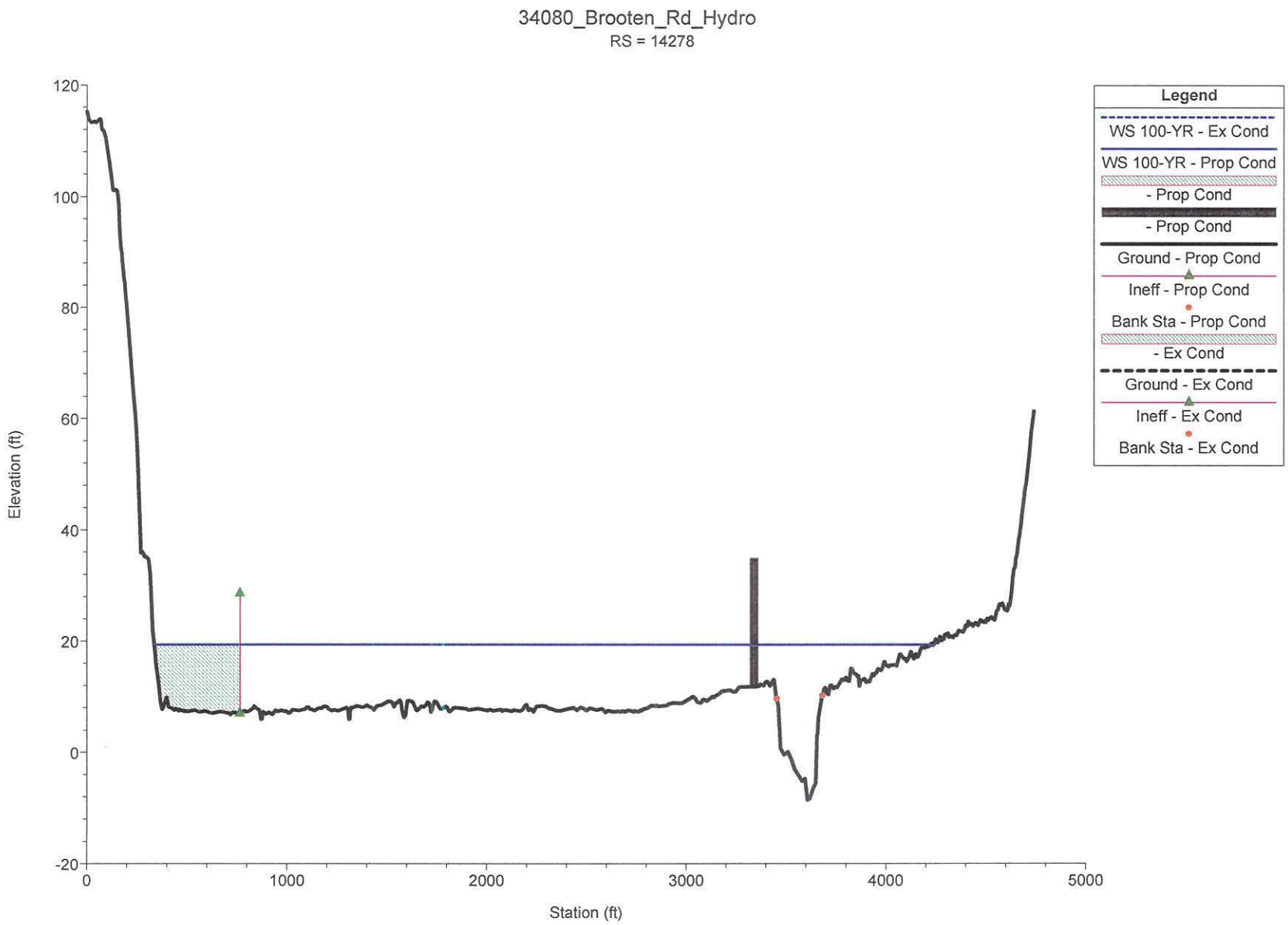

34080_Brooten_Rd_Hydro
RS = 14728.64
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

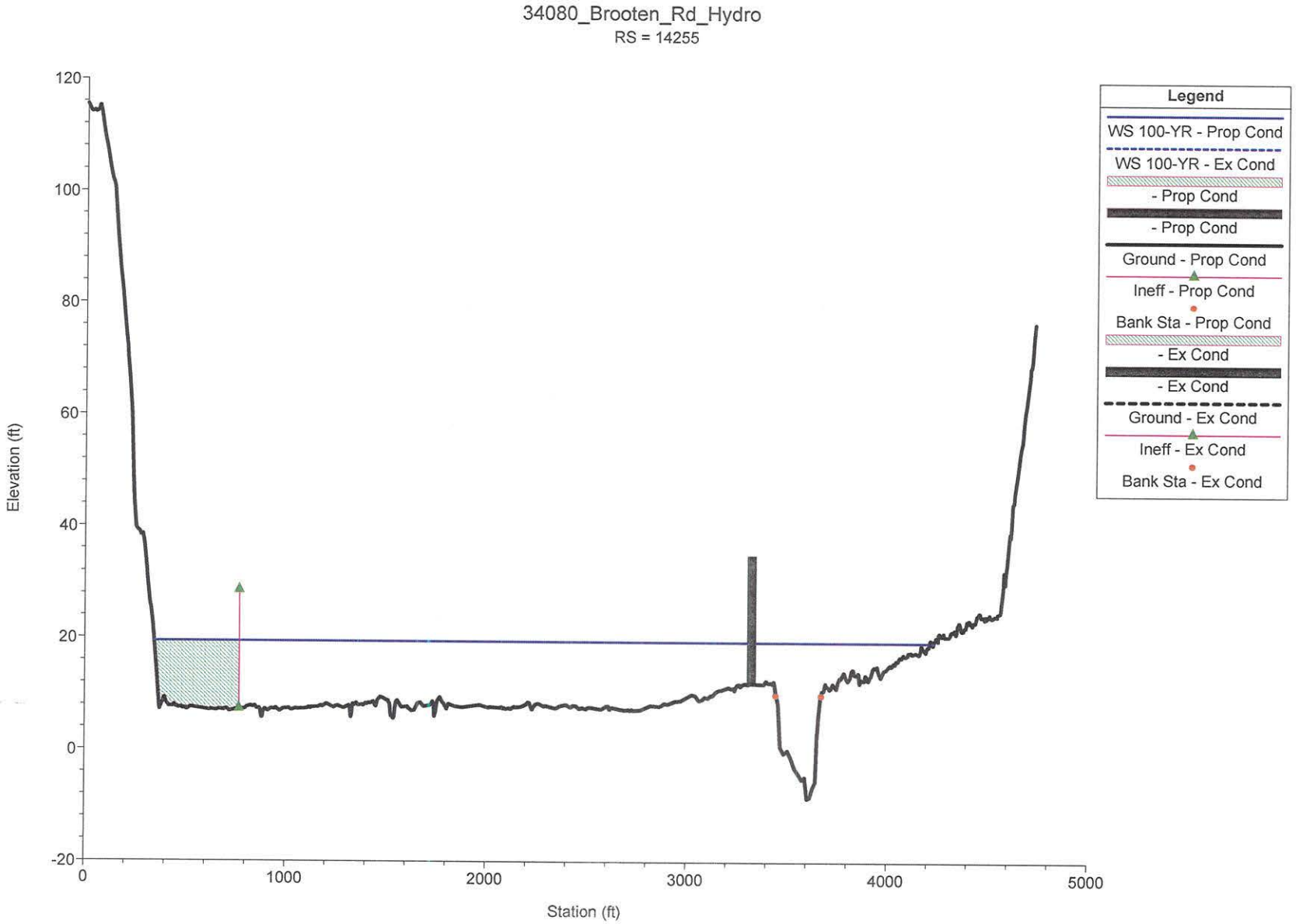
34080_Brooten_Rd_Hydro
RS = 14621.23 BR

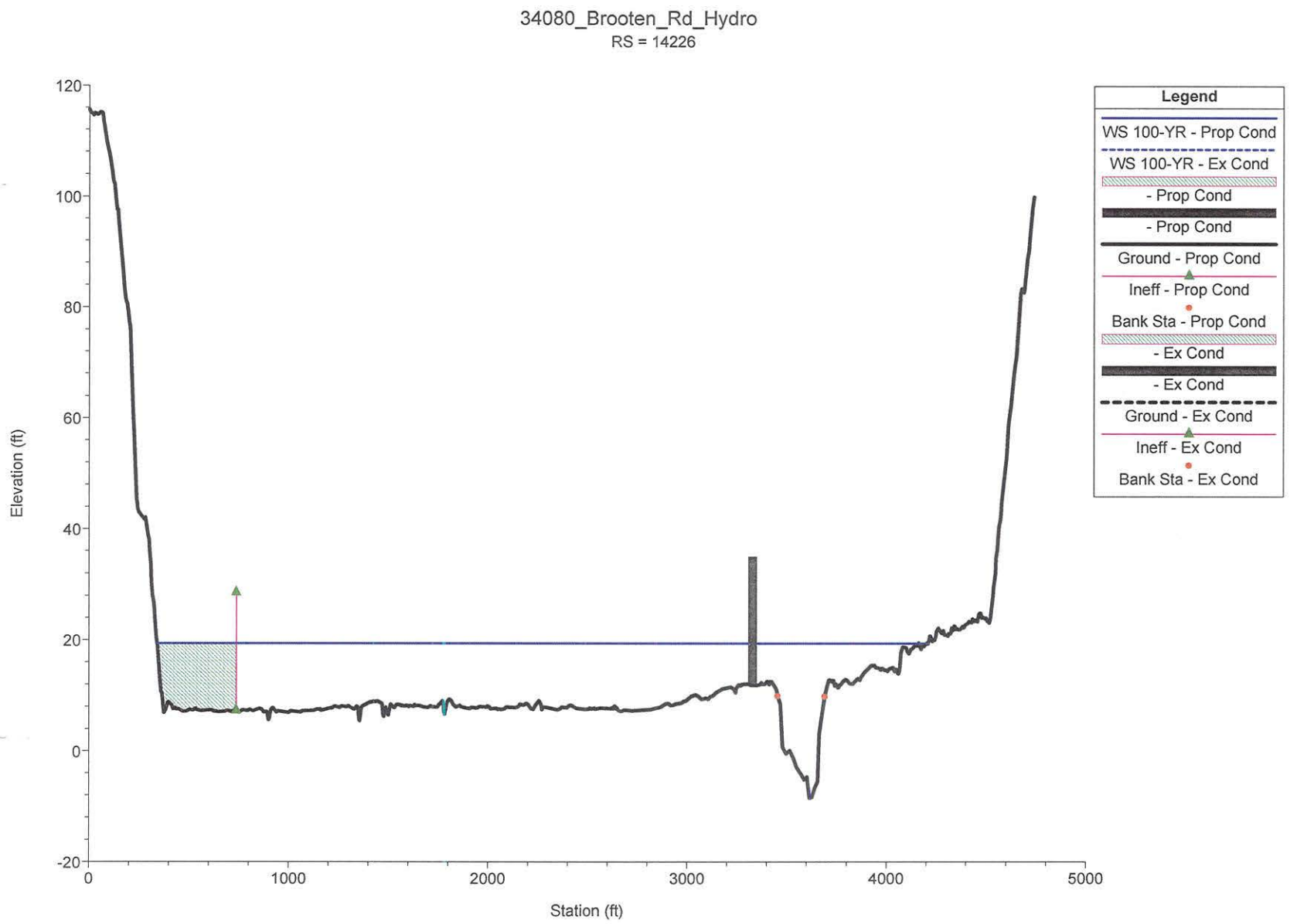


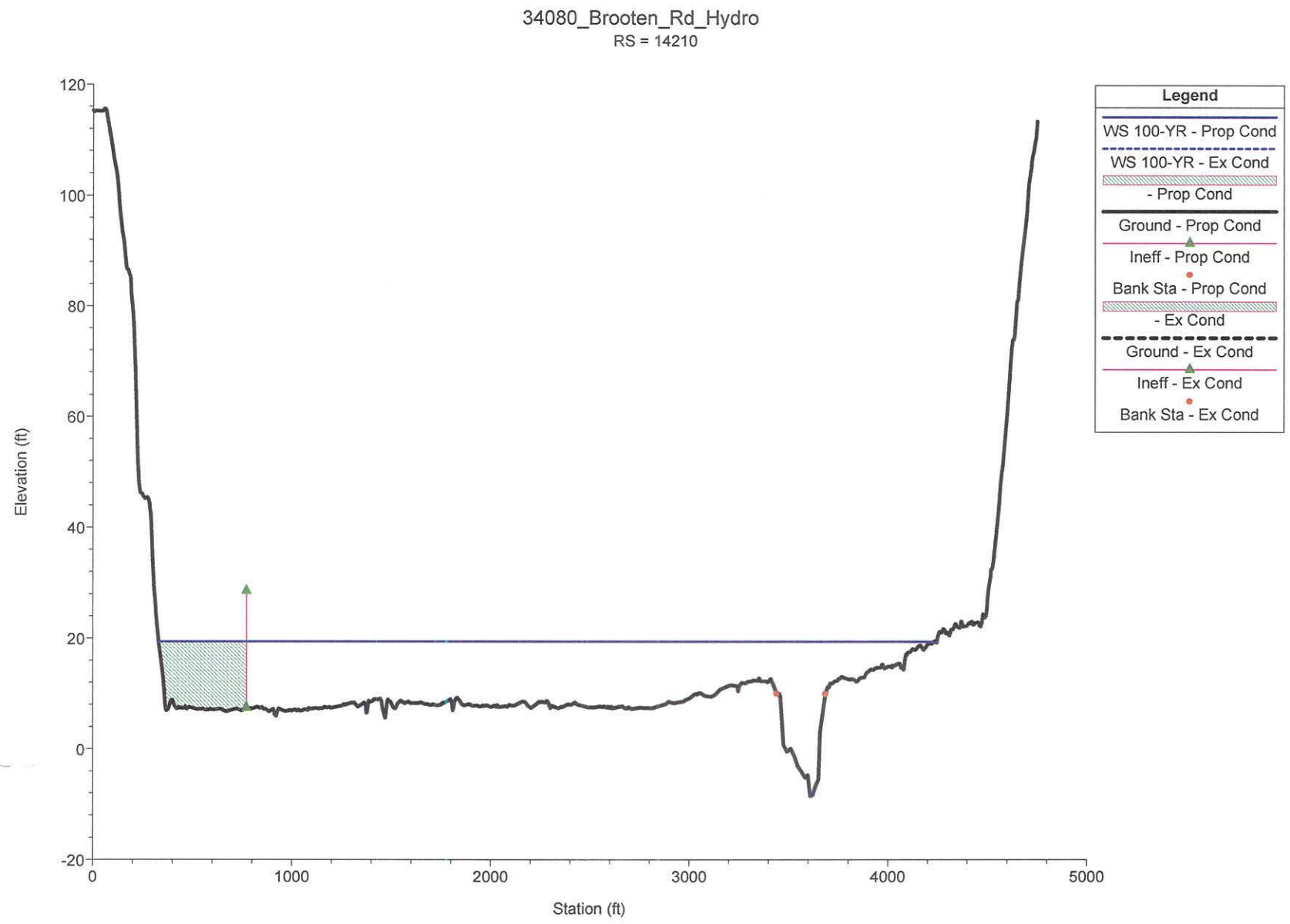
34080_Brooten_Rd_Hydro
RS = 14544.91

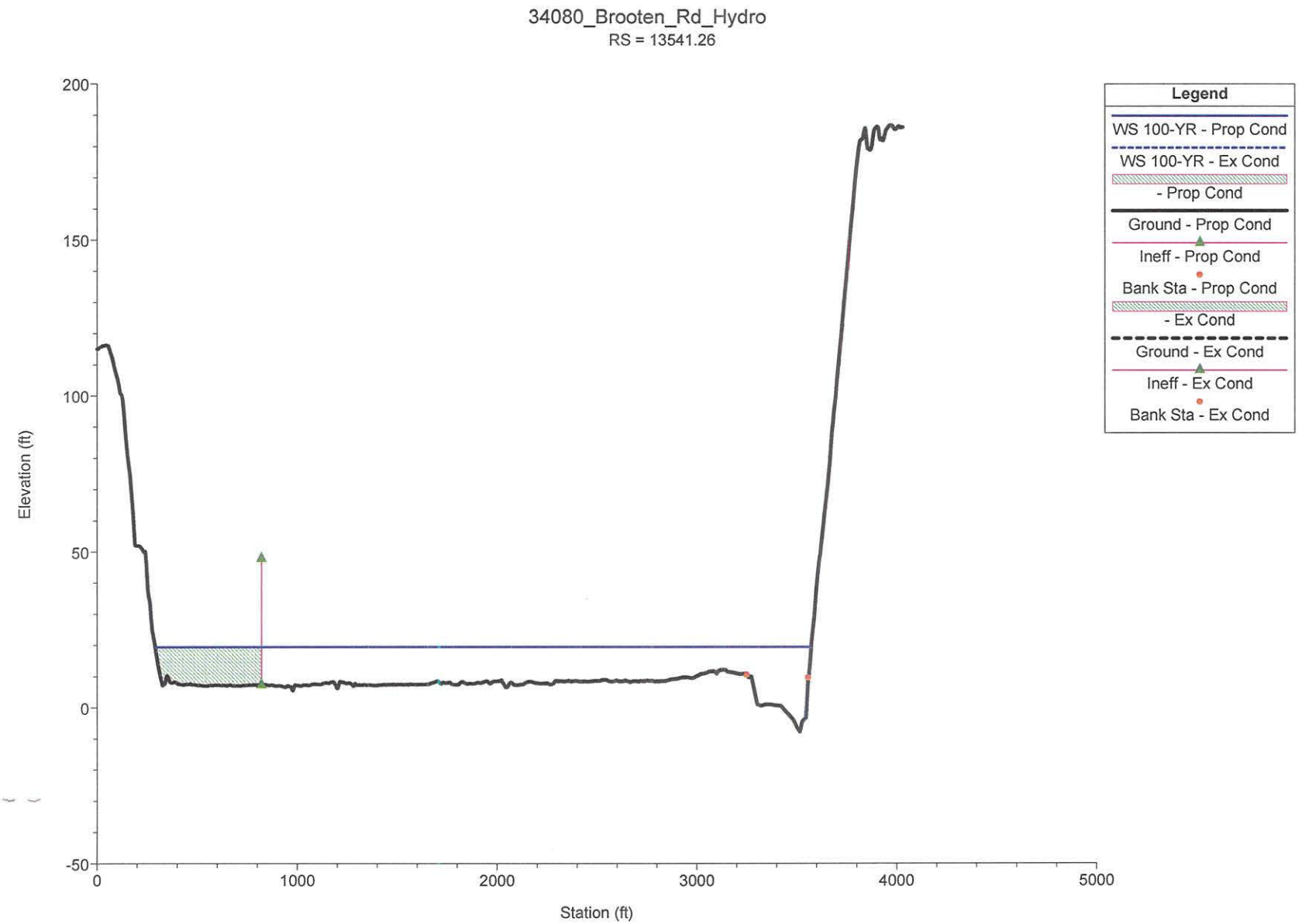


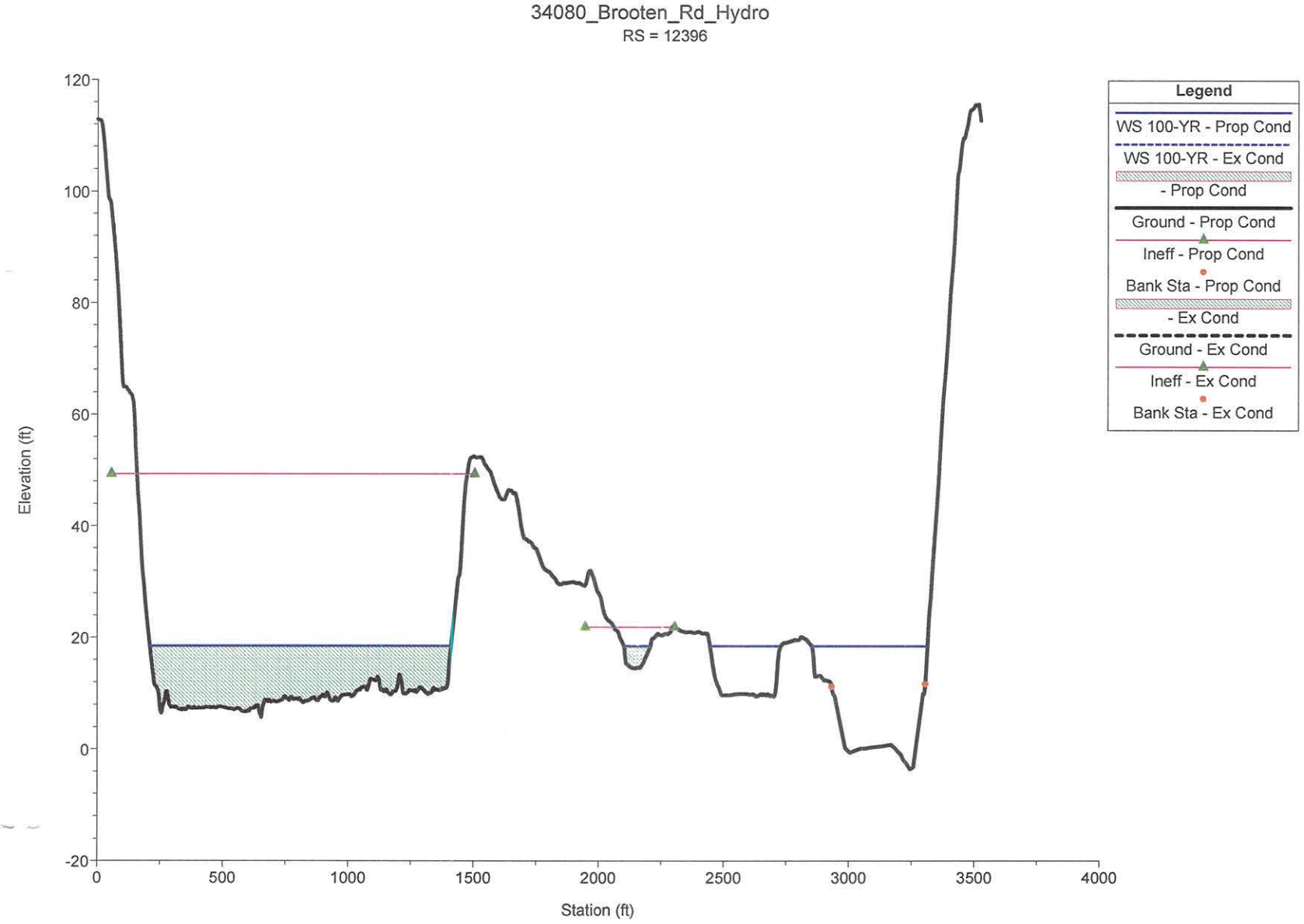

34080_Brooten_Rd_Hydro
RS = 14278
Legend
WS 100-YR - Ex Cond
WS 100-YR - Prop Cond
- Prop Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

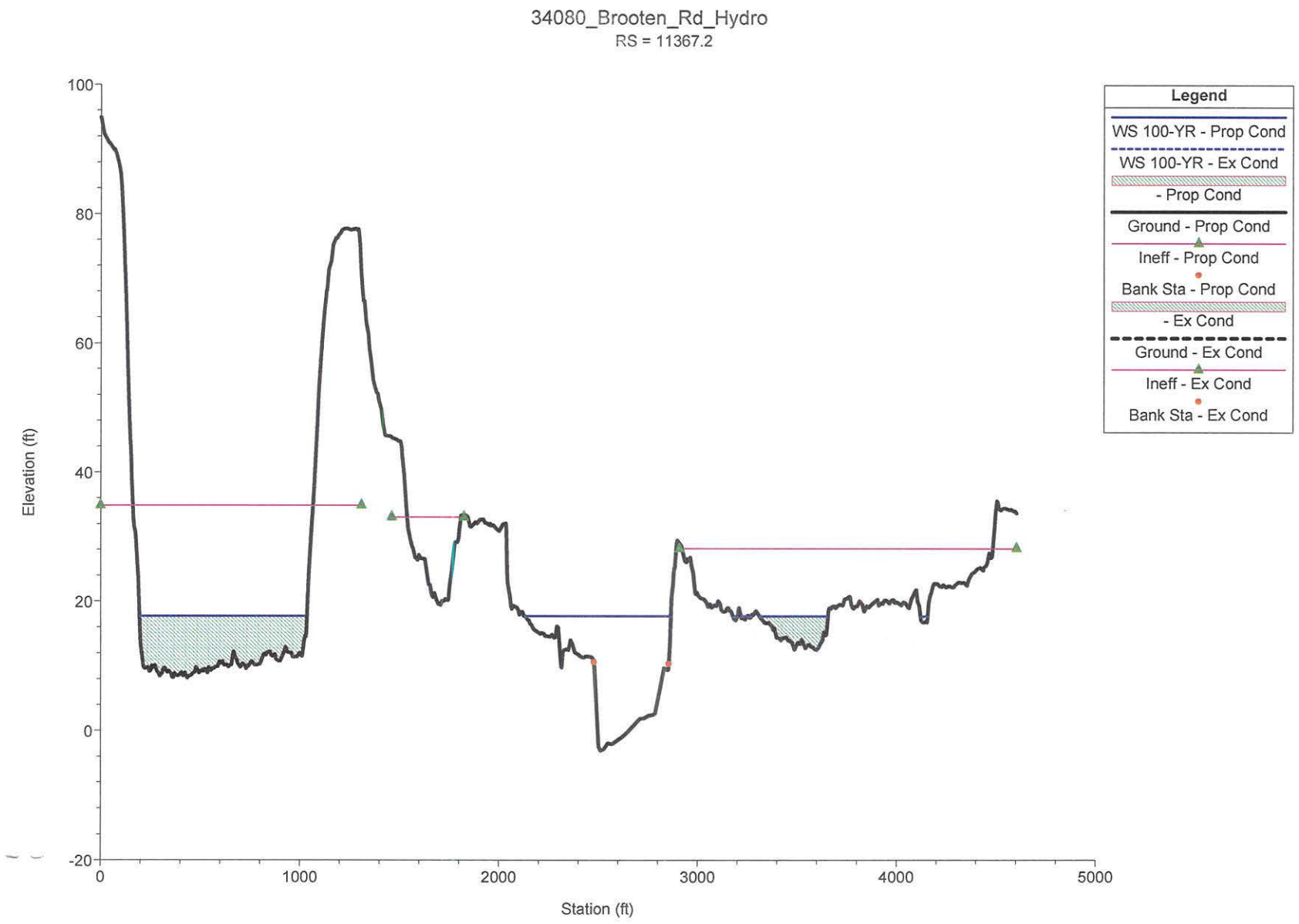

34080_Brooten_Rd_Hydro
RS = 14255
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond

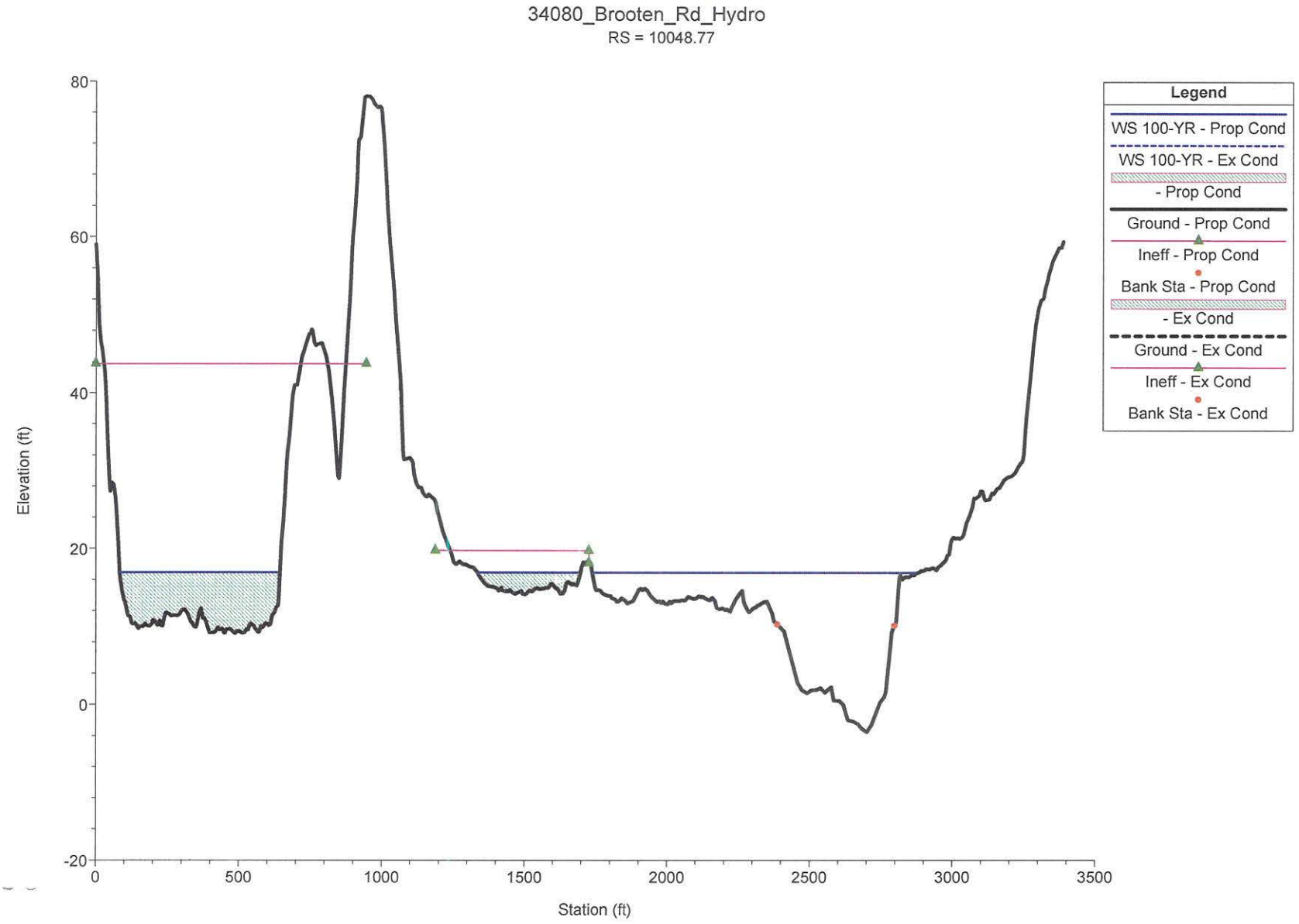

34080_Brooten_Rd_Hydro
RS = 14226
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

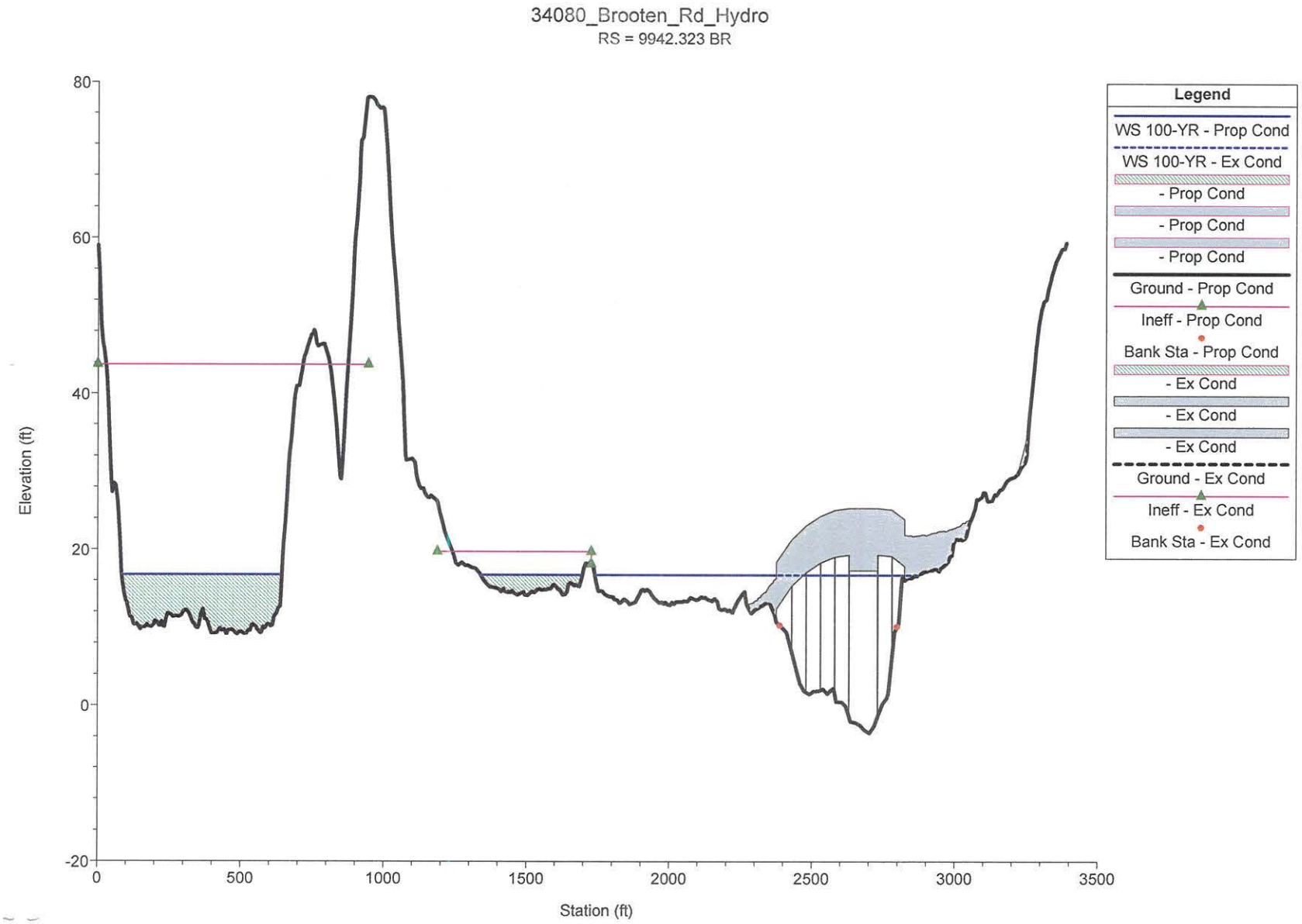

34080_Brooten_Rd_Hydro
RS = 14210
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

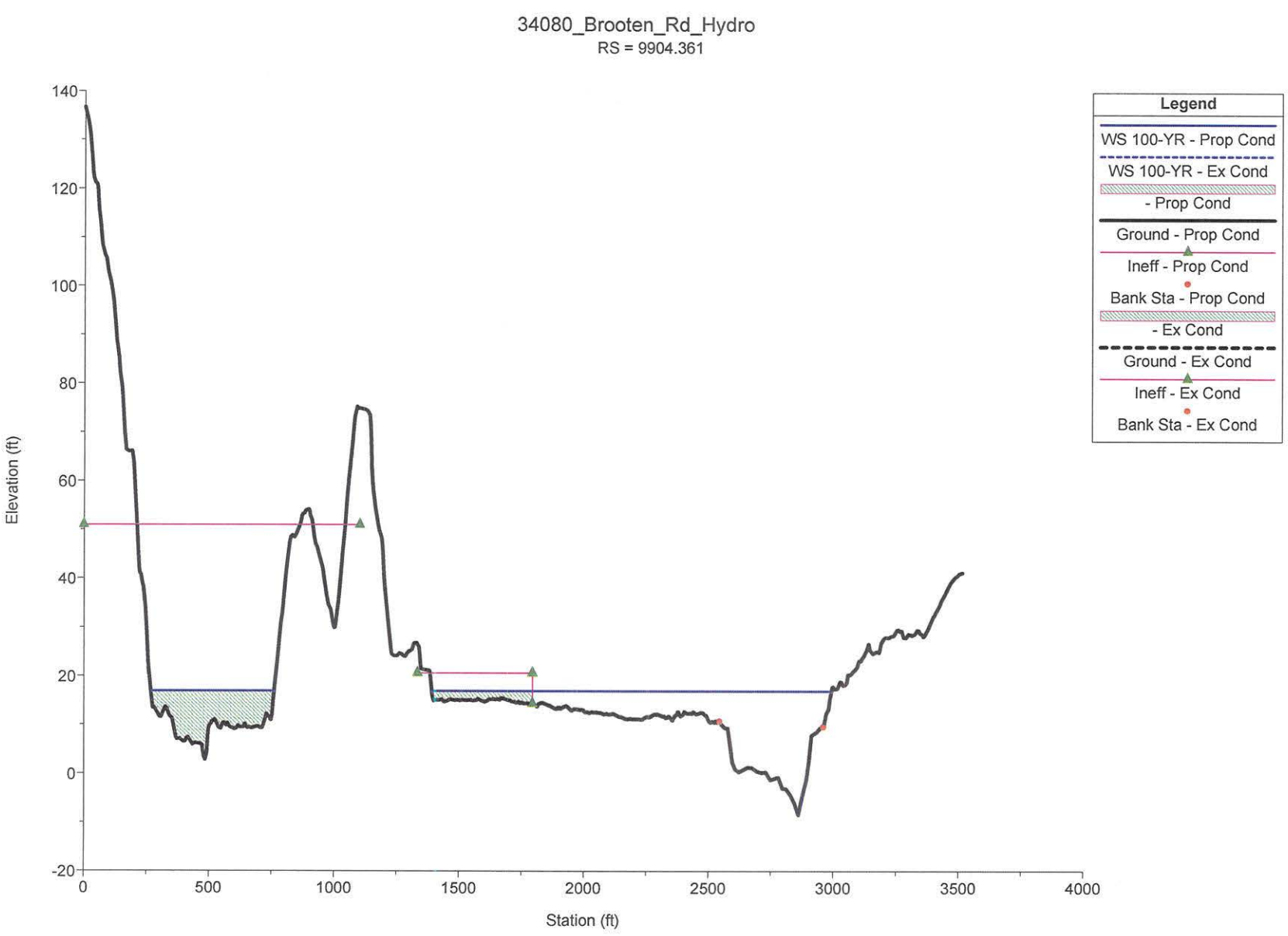

34080_Brooten_Rd_Hydro
RS = 13541.26
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
Station (ft)


34080_Brooten_Rd_Hydro
RS = 12396
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

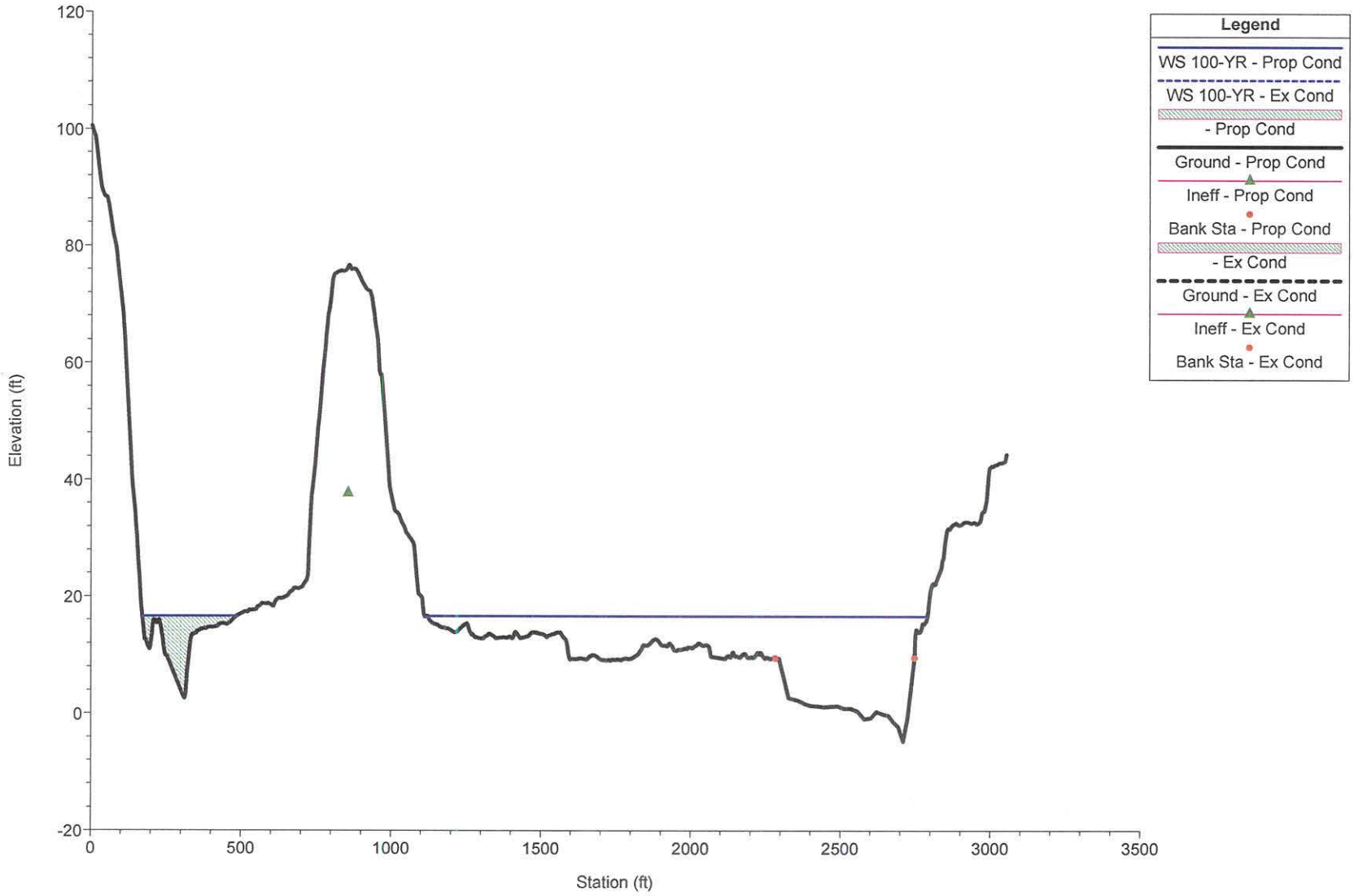

34080_Brooten_Rd_Hydro
RS = 11367.2
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)


34080_Brooten_Rd_Hydro
RS = 10048.77
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

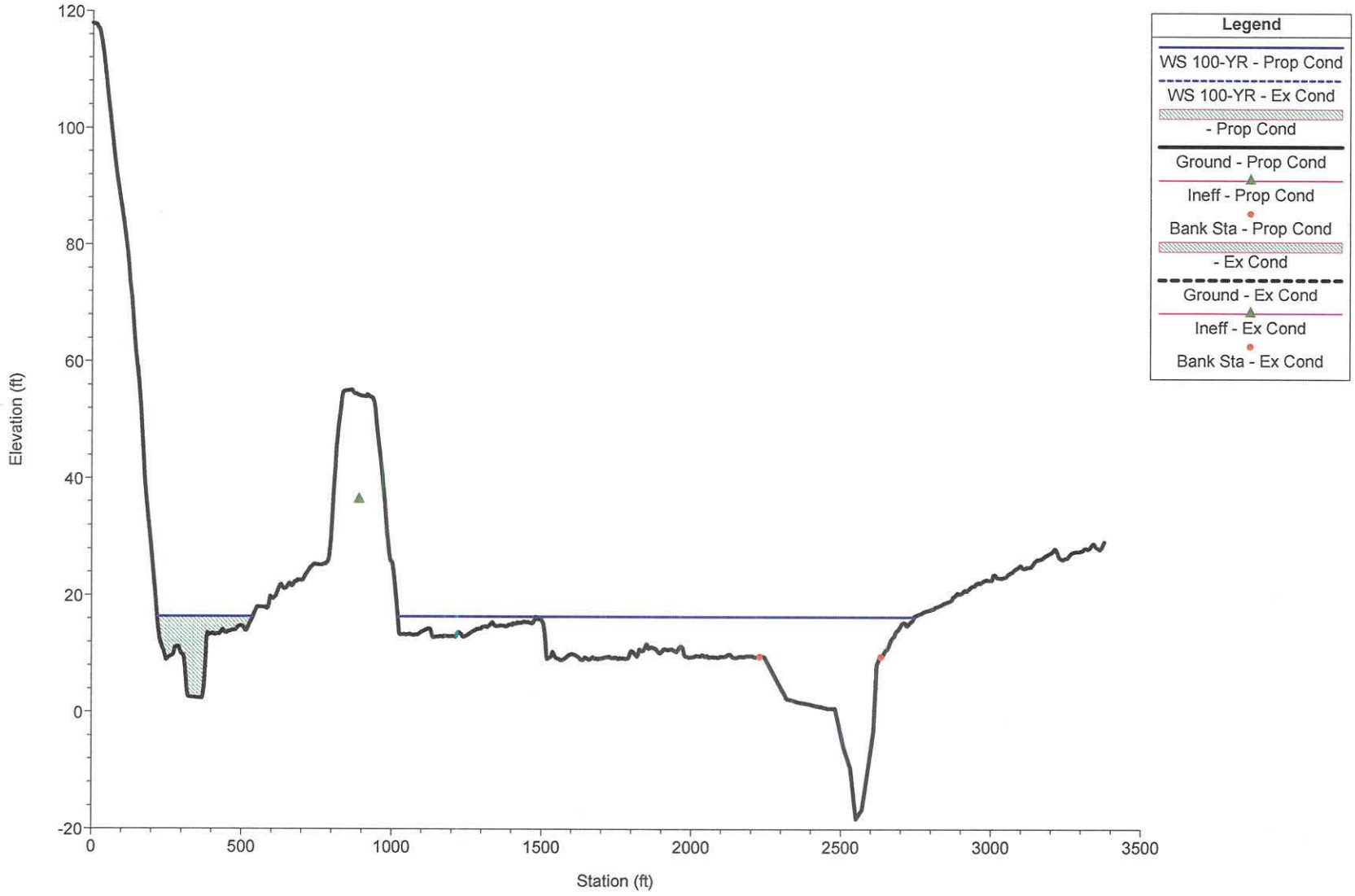

34080_Brooten_Rd_Hydro
RS = 9942.323 BR
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
- Prop Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
- Ex Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond


34080_Brooten_Rd_Hydro
RS = 9904.361
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
140
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

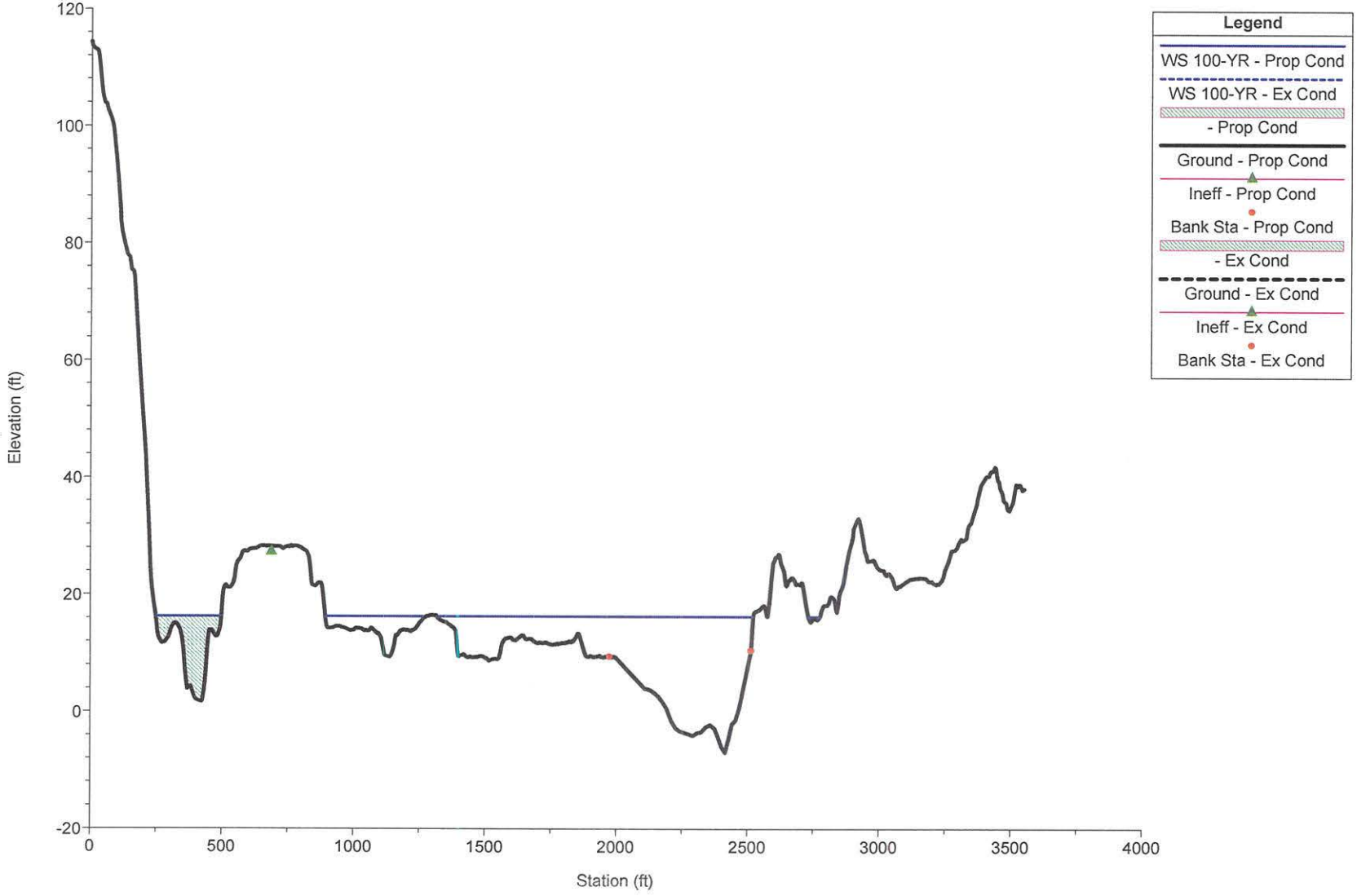
34080_Brooten_Rd_Hydro
RS = 8988.11



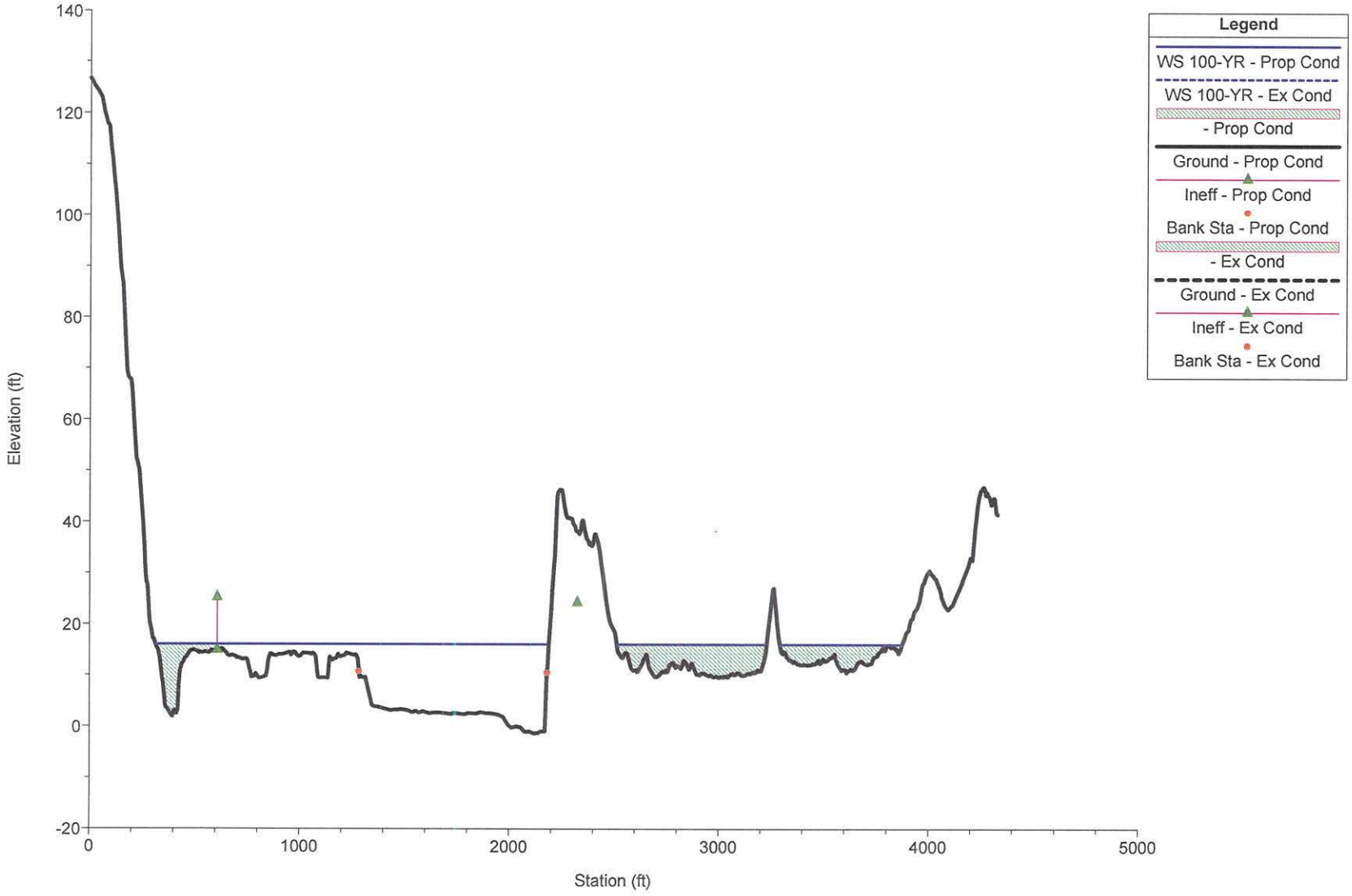
34080_Brooten_Rd_Hydro
RS = 8192.259

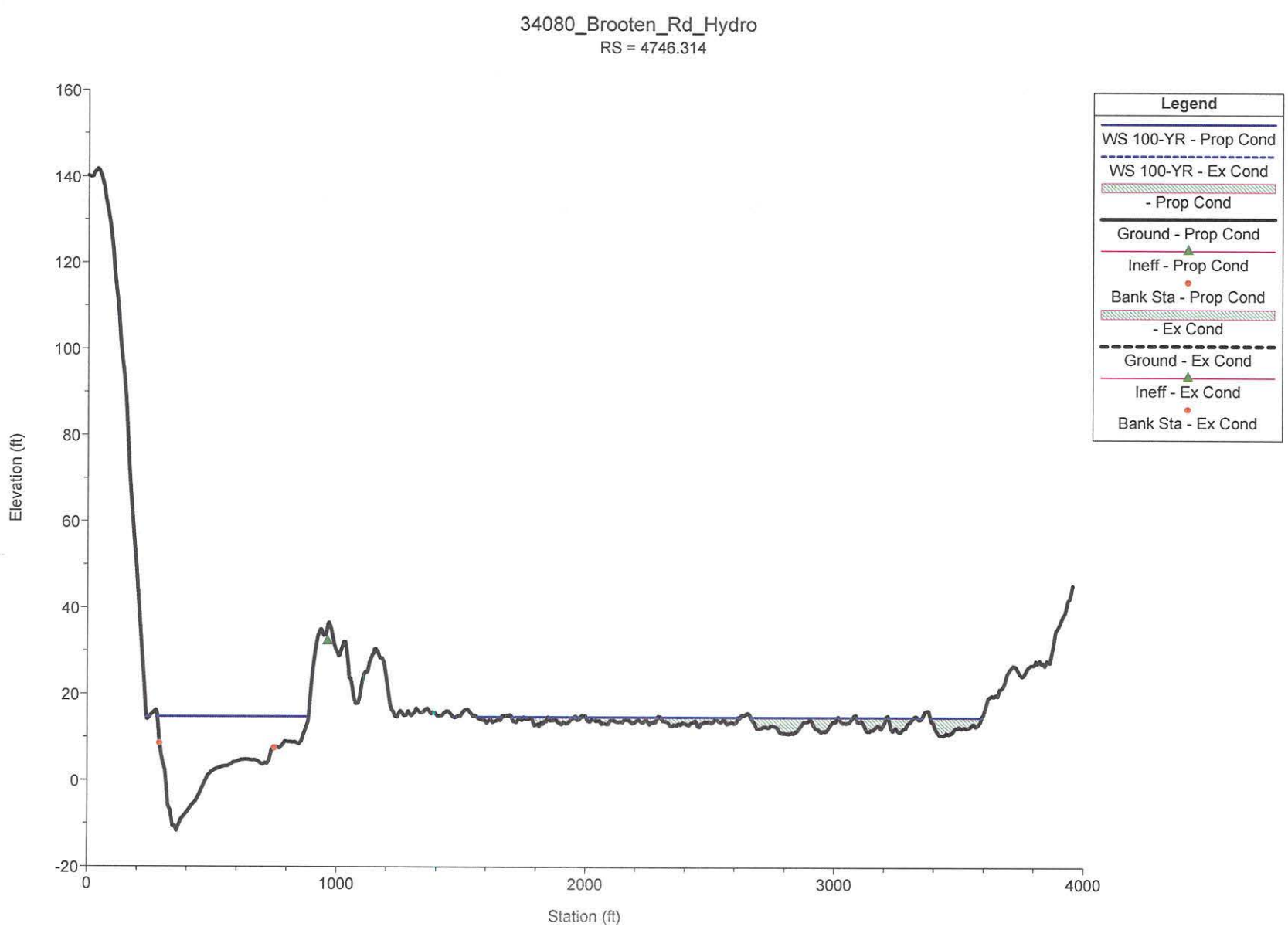


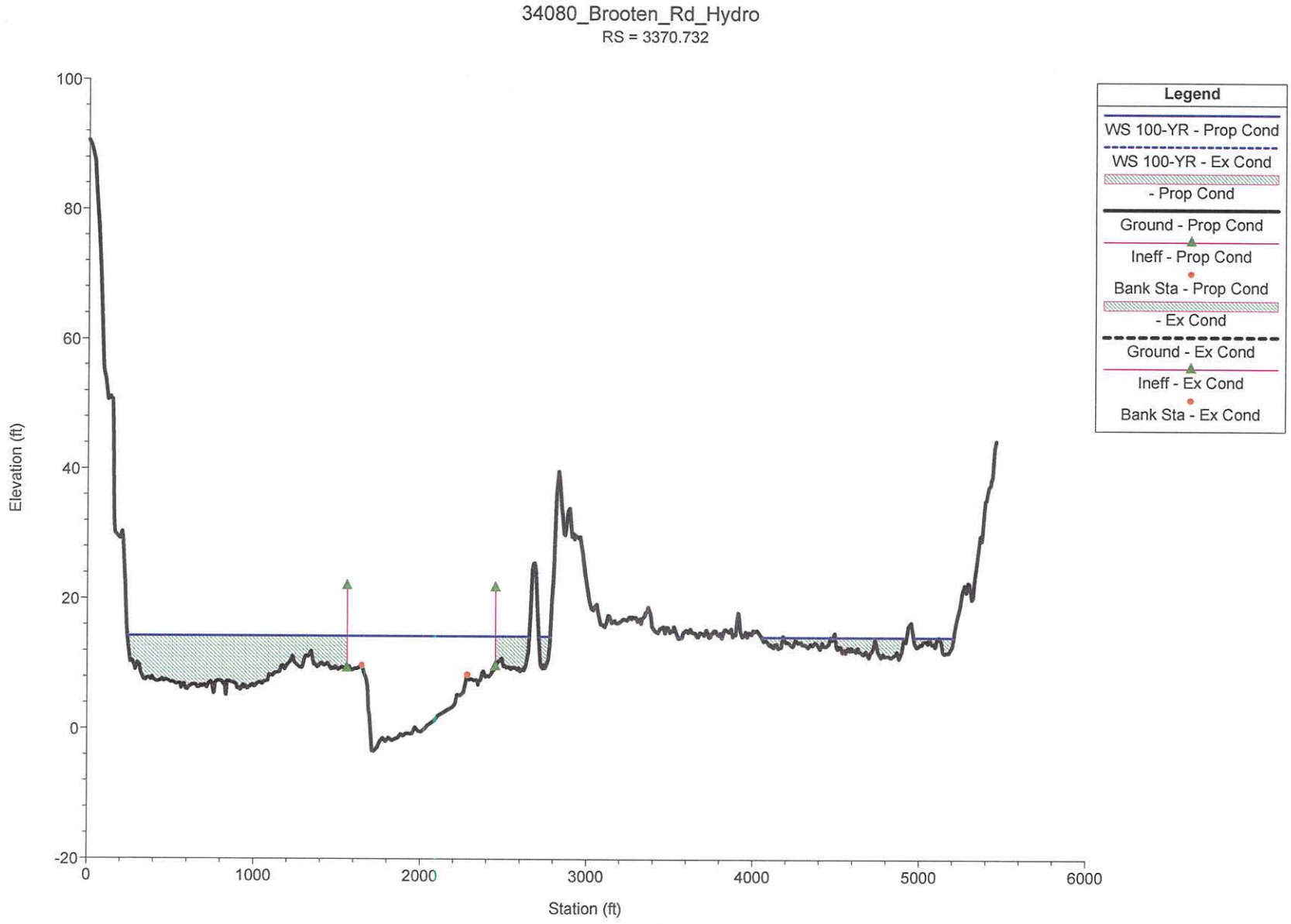
34080_Brooten_Rd_Hydro
RS = 7839.108

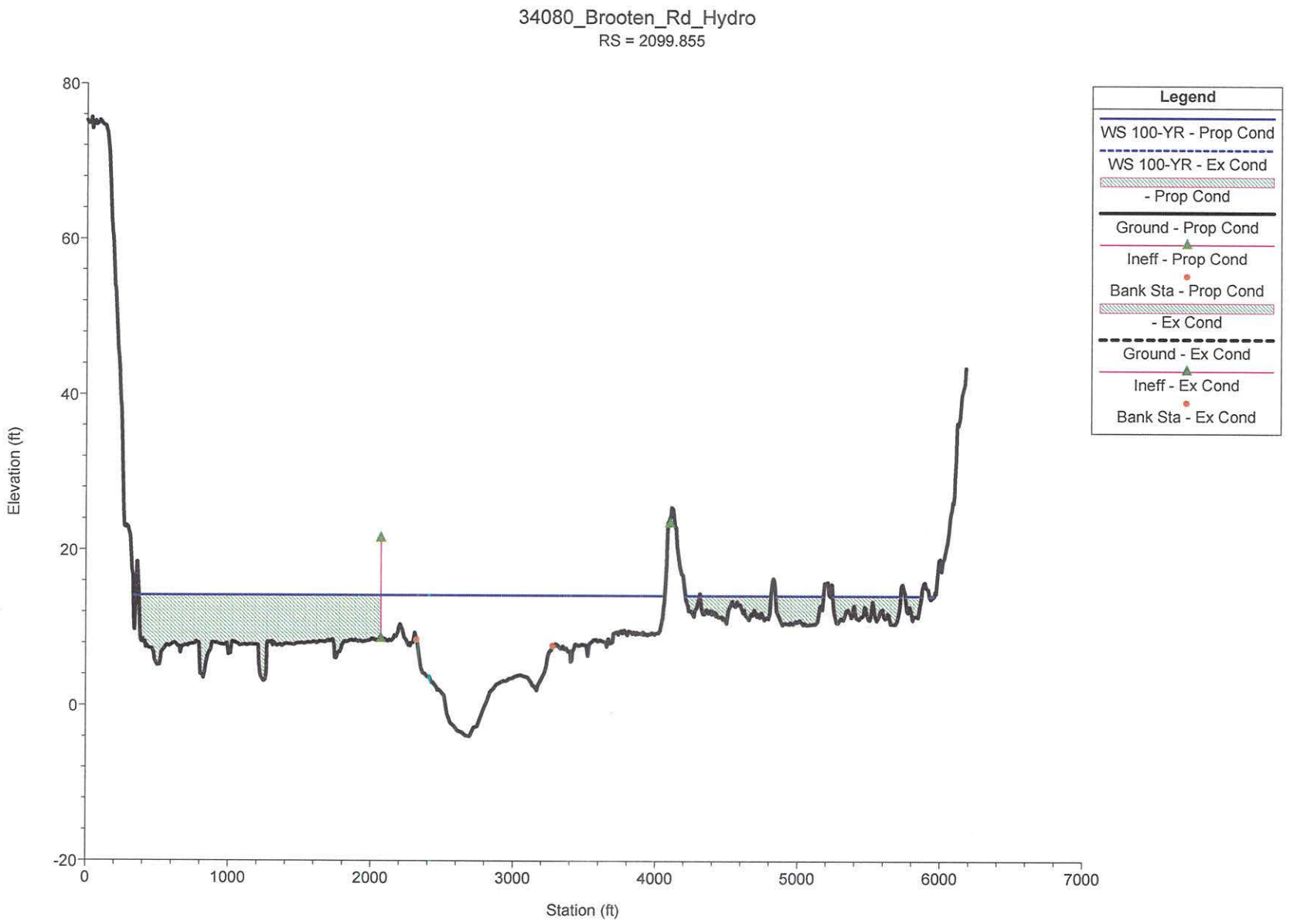


34080_Brooten_Rd_Hydro
RS = 6628.945




34080_Brooten_Rd_Hydro
RS = 4746.314
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
Station (ft)


34080_Brooten_Rd_Hydro
RS = 3370.732
Legend
WS 100-YR - Prop Cond
WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
6000
Station (ft)


34080_Brooten_Rd_Hydro
RS = 2099.855
Legend
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WS 100-YR - Ex Cond
- Prop Cond
Ground - Prop Cond
Ineff - Prop Cond
Bank Sta - Prop Cond
- Ex Cond
Ground - Ex Cond
Ineff - Ex Cond
Bank Sta - Ex Cond
Elevation (ft)
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
6000
7000
Station (ft)

EXHIBIT C

Melissa Jenck

From: Crowley, Josha <Josha.Crowley@atkinsglobal.com>
Sent: Wednesday, June 15, 2022 3:46 PM
To: Melissa Jenck
Subject: RE: EXTERNAL: RE: Whitaker Hydraulic Report

Yep – this looks good too. Very low velocities in this area too and zero impact from the changes.

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: Wednesday, June 15, 2022 10:33 AM
To: Crowley, Josha <Josha.Crowley@atkinsglobal.com>
Subject: RE: EXTERNAL: RE: Whitaker Hydraulic Report

Good morning Josha,

See attached for the documentation for updated materials.

Thanks!

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

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: Crowley, Josha <Josha.Crowley@atkinsglobal.com>
Sent: Tuesday, June 14, 2022 10:09 AM
To: Melissa Jenck <mjenck@co.tillamook.or.us>
Subject: EXTERNAL: RE: Whitaker Hydraulic Report

Can you please ask the requester to verify the HEC-RAS model? I only see a proposed conditions geometry and plan. I would like the HEC-RAS model to include the duplicate effective, and existing conditions geometries and plans to facilitate comparison. Thank you!

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: Monday, June 13, 2022 3:21 PM
To: Crowley, Josha <Josha.Crowley@atkinsglobal.com>
Subject: Whitaker Hydraulic Report

Good afternoon Josha,

Hope you're doing well. I've got a hydraulic report for a property in Pacific City. This is an addition to an existing dwelling. I've attached the modeling data, as well. Would, as always, appreciate your eye on this to ensure it's been prepared appropriately.

Thanks!

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

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.

Melissa Jenck

From: Lynn Tone
Sent: Tuesday, August 16, 2022 8:09 AM
To: Melissa Jenck
Subject: FW: 851-22-000239-PLNG

From: Ron Newton <rnewton@co.tillamook.or.us>
Sent: Friday, August 12, 2022 10:54 AM
To: Lynn Tone <ltone@co.tillamook.or.us>
Cc: Jasper Lind <jlind@co.tillamook.or.us>
Subject: Re: 851-22-000239-PLNG

Lynn

Application 851-22-000239 indicates that the new accessory structure will be built with a garage door, indicating additional vehicular use of the subject parcel. Tillamook County ordinance #44, Section III (B), requires any change to the use of an existing Road Approach to be reviewed by Public Works Engineering staff.

The applicant should be directed to contact the Public Works office prior to the commencement of any construction on the property.

Thank you

Ron Newton
Engineering Tech. ///
Tillamook County Public Works
Working Remote
Until Further Notice
Cell - (503) 812-1441

"The two most important days in your life are the day you are born, and the day you find out why"
Mark Twain

From: Lynn Tone <ltone@co.tillamook.or.us>
Sent: Thursday, August 11, 2022 2:51 PM
To: ESTES Brett DLCD <Brett.ESTES@dlcd.oregon.gov>
Subject: 851-22-000239-PLNG

Please see attached pdf for Notice of Administrative Review; 851-22-000239-PLNG: Whitaker

Thank you

Lynn Tone | Office Specialist II
TILLAMOOK COUNTY | Surveyor's Office/Community Development
1510 3rd Street Ste C
Tillamook, OR 97141
Phone (503) 842-3423
ltone@co.tillamook.or.us