Tillamook County

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

1510 – B Third Street
Tillamook, Oregon 97141
www.tillamookcounty.gov
(503) 842-3408

Land of Cheese, Trees and Ocean Breeze

Floodway Development Permit #851-24-000641-PLNG:
COUTLER

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

NOTICE OF ADMINISTRATIVE REVIEW
Date of Notice: July 25, 2025

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

851-24-000641-PLNG: A review of a Floodway Development Permit for the placement single-family dwelling near the Nestucca River. Located in the Unincorporated Community of Pacific City/Woods, the subject property is accessed via Rueppell Ave, a County local access road, zoned Pacific City/Woods Airpark (PCW-AP), and designated as Tax Lot 4700 of Section 30BD, Township 4 South, Range 10 West of the Willamette Meridian, Tillamook County, Oregon. The Applicant is Tim Coulter. The property owner is Dave Coulter.

Written comments received by the Department of Community Development prior to 4:00p.m. on August 8, 2025, will be considered in rendering a decision. Comments should address the criteria upon which the Department must base its decision. A decision will be rendered no sooner than the next business day, August 11, 2025.

Notice of the application, a map of the subject area, and the applicable criteria are being mailed to all property owners within 250 feet of the exterior boundaries of the subject parcel for which an application has been made and other appropriate agencies at least 14 days prior to this Department rendering a decision on the request.

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

If you have any questions about this application, please call the Department of Community Development at 503-842-3408 Ext. 3423 or sarah.thompson@tillamookcounty.gov.

Sincerely,

Melissa Jenck, CFM, Senior Planner

Sarah Absher, CFM, Director
Enc. Applicable Ordinance Criteria, Maps

REVIEW CRITERIA

ARTICLE III – ZONE REGULATIONS

TCLUO SECTION 3.510: FLOOD HAZARD OVERLAY ZONE

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

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

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

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

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

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

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

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

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

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

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

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

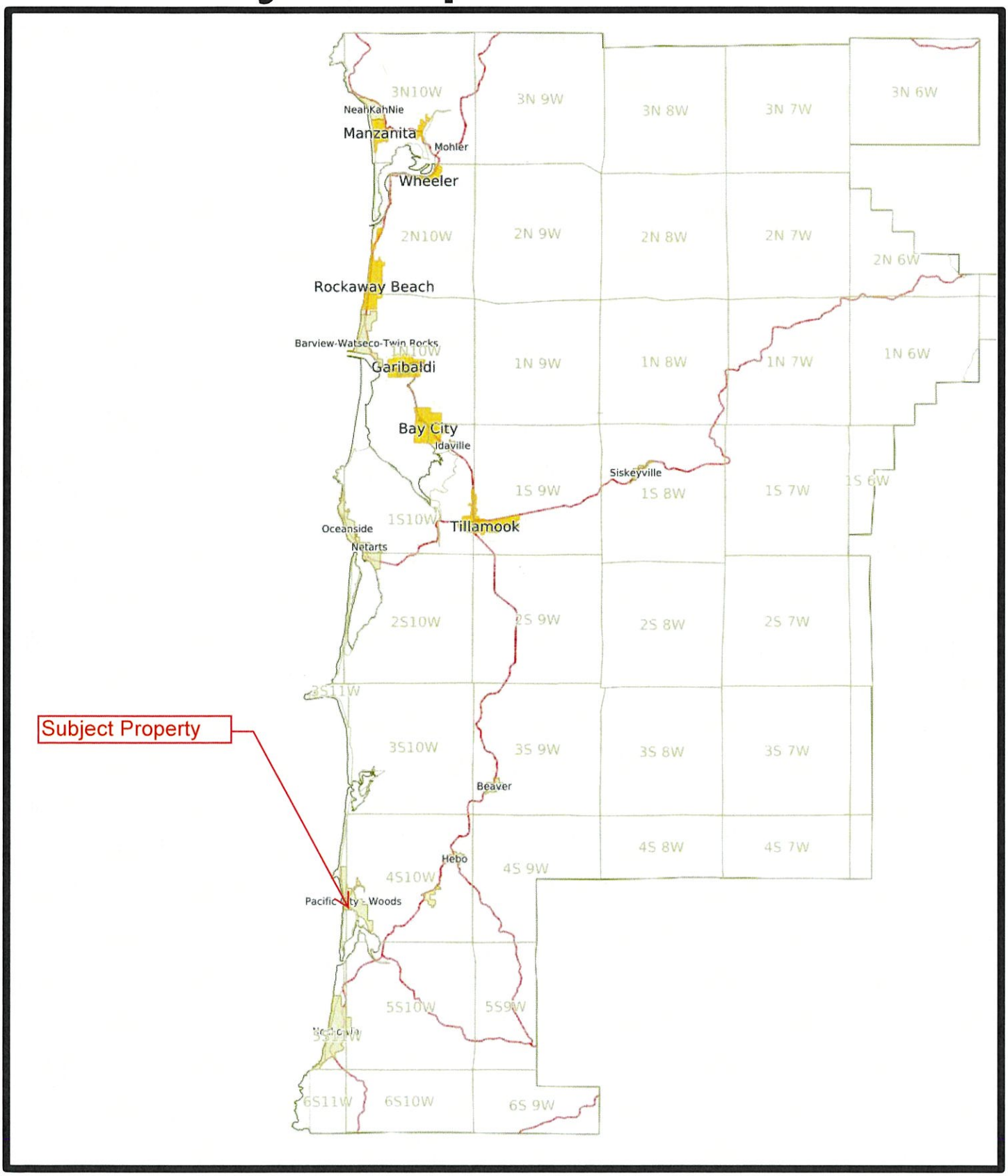
v. Slope of fill shall be no steeper than 1.5 horizontal to 1 vertical,

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

Conditions of approval may require that if 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.

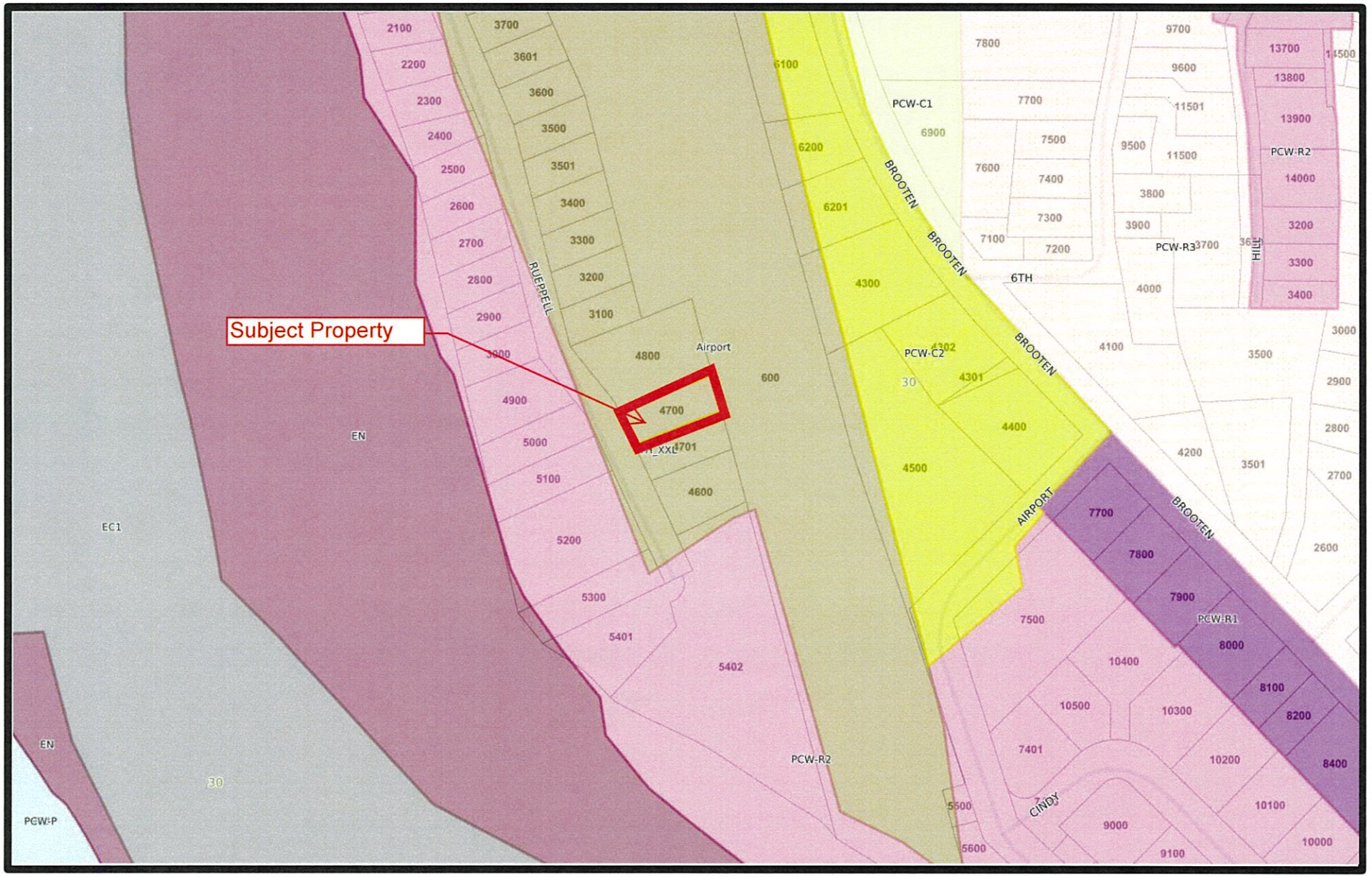
EXHIBIT A

Vicinity Map

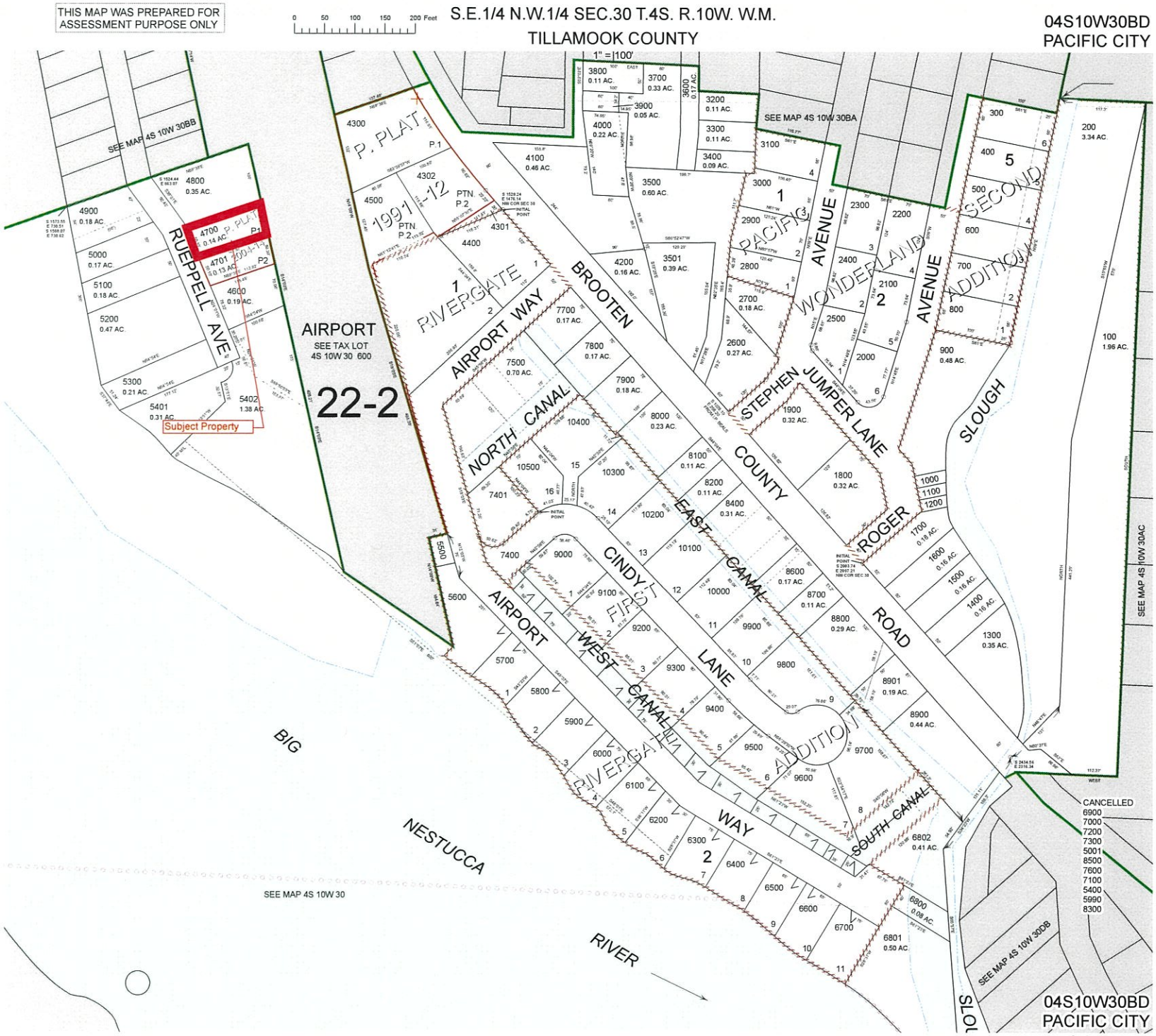


Generated with the GeoMOOSE Printing Utilities

Zoning Map



Generated with the GeoMOOSE Printing Utilities


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
0 50 100 150 200 Feet
S.E.1/4 N.W.1/4 SEC.30 T.4S. R.10W. W.M.
TILLAMOOK COUNTY
04S10W30BD
PACIFIC CITY
1" = 100'
SEE MAP 4S 10W 30BB
SEE MAP 4S 10W 30BA
SEE MAP 4S 10W 30AC
SEE MAP 4S 10W 30DB
SEE MAP 4S 10W 30
AIRPORT
SEE TAX LOT 4S 10W 30 600
22-2
Subject Property
P. PLAT
1991-12
RUEPPELL AVE
AIRPORT WAY
RIVERGATE
BROOTEN
NORTH CANAL
EAST CANAL
CINDY FIR
AIRPORT WEST CANAL
RIVERGATE ADDITION
SOUTH CANAL
STEPHEN JUMPER LANE
COUNTY ROAD
ROGER
PACIFIC AVENUE
WONDERLAND ADDITION
SECOND AVENUE
SLOUGH
BIG NESTUCCA RIVER
CANCELLED
6900
7000
7200
7300
5001
8500
7600
7100
5400
5990
8300
Revised 2/14/23, WS

Tillamook County
2024 Real Property Assessment Report
Account 240689

Map	4S1030BD04700	**Tax Status**	Assessable
Code - Tax ID	2202 - 240689	**Account Status**	Active
		Subtype	NORMAL
Legal Descr	PARTITION PLAT 2004-14		
	Lot - PARCEL 1		
Mailing	COULTER, DAVID PO BOX 952 TOLEDO WA 98591-0952	**Deed Reference #**	2010-3465
		Sales Date/Price	06-09-2010 / $100,000
		Appraiser	ROBERT BUCKINGHAM

Property Class	120	**MA**	**SA**	**NH**
RMV Class	100	09	ST	901

Site	Situs Address	City

Value Summary

Code Area		RMV	MAV	AV	RMV Exception	CPR %
2202	Land	88,920		Land	0	
	Impr	0		Impr	0	
Code Area Total		88,920	61,830	61,830	0	
Grand Total		88,920	61,830	61,830	0	

Land Breakdown

Code Area	ID #	RFPD	Ex	Plan Zone	Value Source	Trend %	Size	Land Class	Trended RMV
2202	0	☑		PCW-AP	Market	117	0.14 AC		88,920
					Code Area Total		0.14 AC		88,920

Improvement Breakdown

Code Area	ID #	Year Built	Stat Class	Description	Trend %	Total Sqft	Ex%	MS Acct	Trended RMV

Comments 4/9/04 Changed land value to reflect neighborhood trends. sm. 6/22/04 Apportioned value after Partition Plat 2004 -14. Old shed is on TL 4701. This is a vacant lot. dv. 3/18/05 Land to market after partition plat 2004-14 to TL 4701. dv 01/29/14 Reappraised land; tabled values. RBB

National Flood Hazard Layer FIRMette

FEMA

123°58'3"W 45°12'6"N

123°57'25"W 45°11'41"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

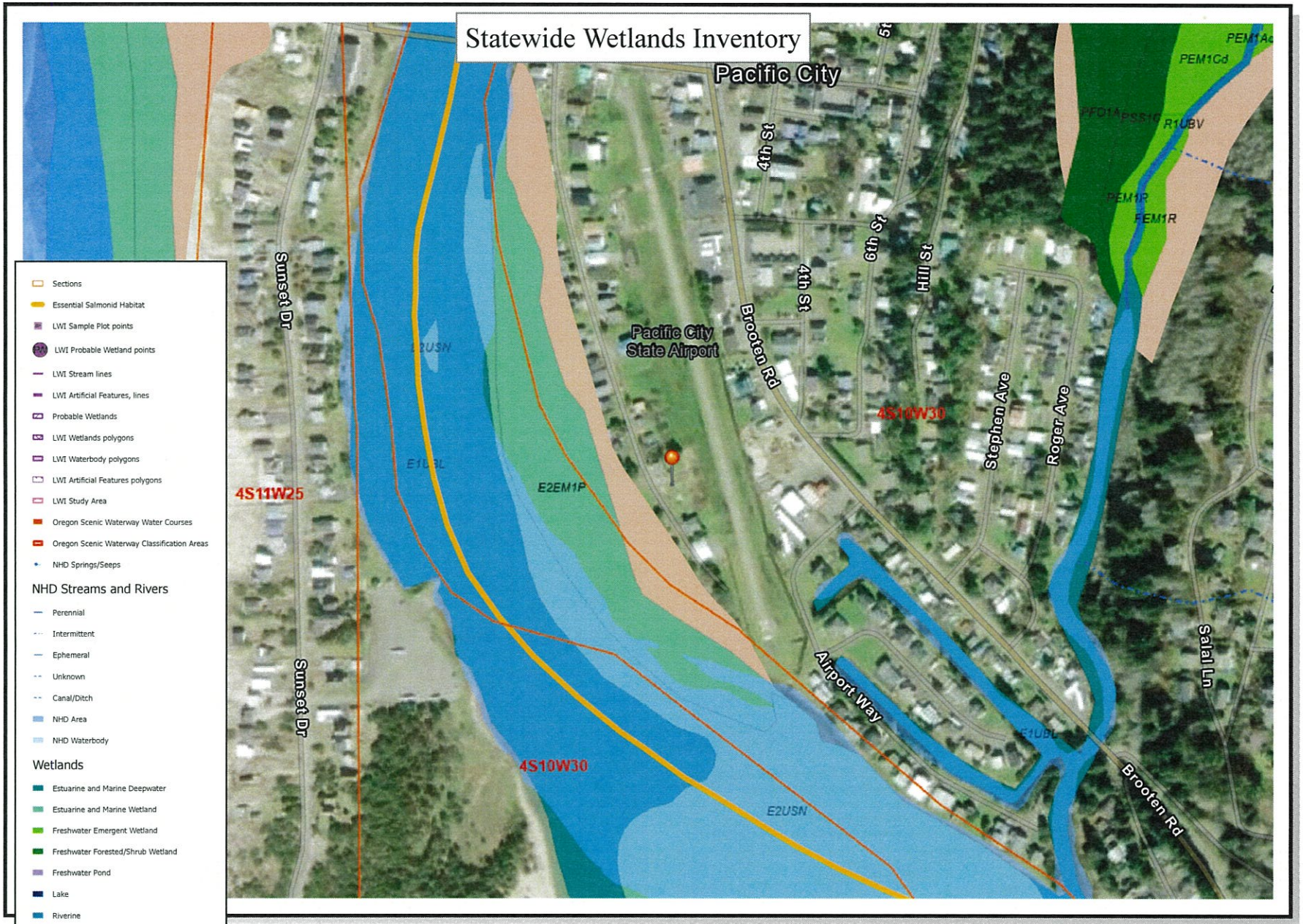
The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

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 7/25/2025 at 7:12 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



- Sections
- Essential Salmonid Habitat
- LWI Sample Plot points
- LWI Probable Wetland points
- LWI Stream lines
- LWI Artificial Features, lines
- Probable Wetlands
- LWI Wetlands polygons
- LWI Waterbody polygons
- LWI Artificial Features polygons
- LWI Study Area
- Oregon Scenic Waterway Water Courses
- Oregon Scenic Waterway Classification Areas
- 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

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

1:6,817

0 0.04 0.09 0.17 0.26 0.34 mi

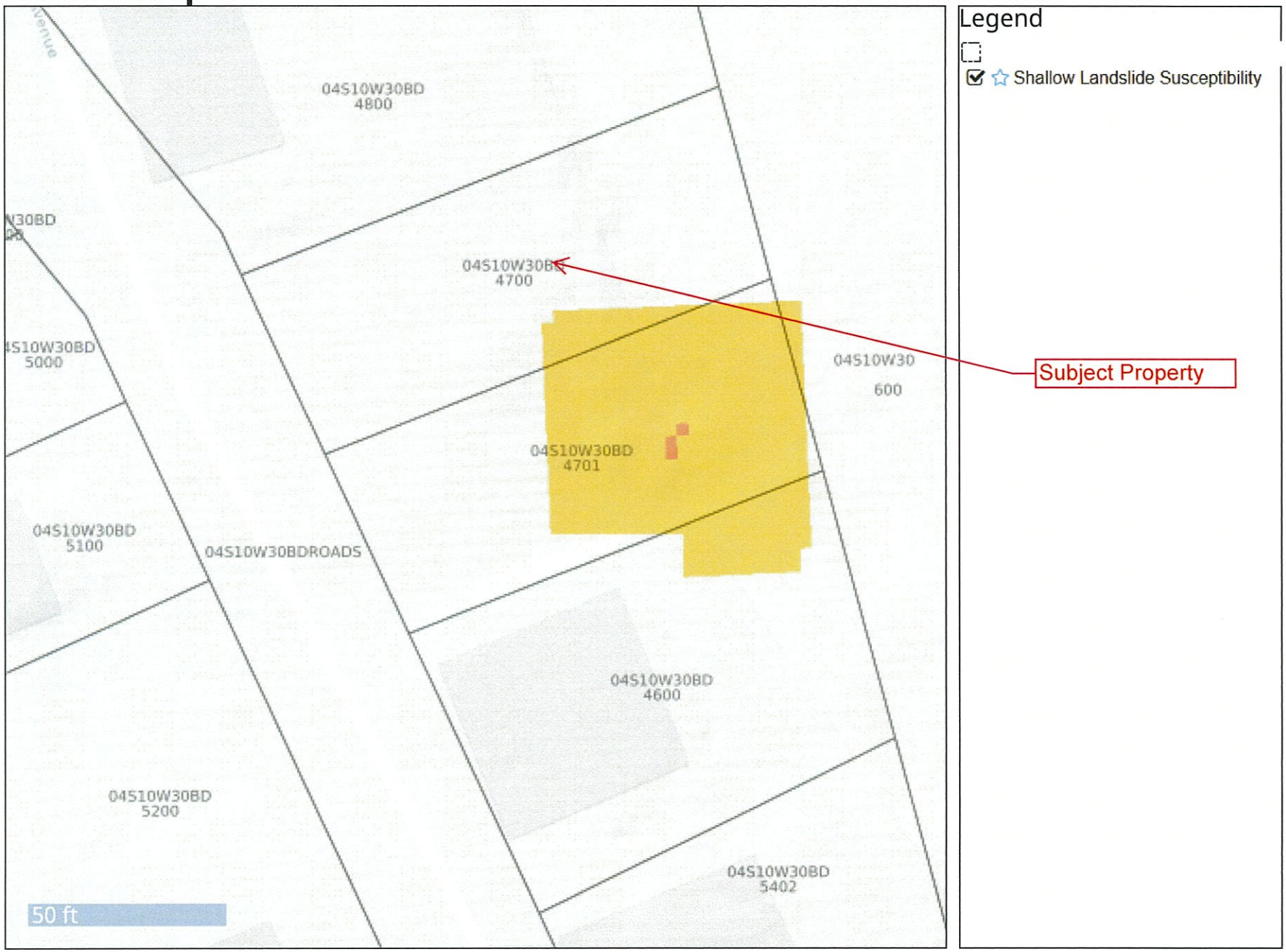
The Statewide Wetlands Inventory (SWI) represents the best data available at the time this map was published and is updated as new data becomes available. In all cases, actual field conditions determine the presence, absence and boundaries of wetlands and waters (such as creeks and ponds). An onsite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

N

Date: 7/25/2025

State of Oregon
Department of State Lands
775 Summer Street, NE, Ste 100
Salem, OR. 97301-1279

Hazard Map



Printed on 7 / 25 / 2025

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

DEVELOPMENT PERMIT

OFFICE USE ONLY
Date Stamp: RECEIVED NOV 27 2024 BY: counter
☐Approved ☐Denied
Received by: MJ
Receipt #: 140620
Fees: 1680.00
Permit No: 851-24-000641-PLNG

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

Name: Tim Coulter Phone: 425.417.7772
Address: PO Box 28993
City: Seattle State: WA Zip: 98118
Email: tim@madisonmbi.com

Property Owner

Name: Dave Coulter Phone: 360.508.0960
Address: 35400 Salal Lane
City: Pacific City State: OR Zip: 97135
Email: davecoulter@kirbyco.net

Description of Work: New single family, residential construction.
PROPOSED BURIED L.P. TANK

Location:
Site Address: Lot 4700 Rueppell Ave. Pacific City, OR 97135

Map Number: 23 North	04 East	12	4S1030BD04700
Township	Range	Section	Tax Lot(s)

Complete all applicable fields:

Regulatory Floodway: ☒ Estuary: ☐ Floodplain: ☐	
New: ☒ Addition: ☐ Replacement: ☐ Remodel: ☐ Demolish: ☐	
Dwelling: Single Family 1477	Accessory Structure:
Culvert Diameter: Length:	Bridge Length: Width:
Fence Height:	Retaining Wall Height:
Streambank Stabilization:	Other:
Fill/Removal/Grading: CY	Vegetation Removal: CY

BALANCE NET 0 SEE ATTACHED

Structure/Damage $: 800,000	5 Year Construction $:
Substantial improvement/damage threshold 50% cost vs. value	

Flood Insurance Rate Map (FIRM) Panel Info

Tillamook County	Panel Number: 41057C _____
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.

Property Owner Signature (Required) — Date: 11.25.2024

Applicant Signature — Date: 11.25.2024

GRADING PLAN

for 4700 Rueppell Ave Pacific City, OR

Excavation and Grading activities:

The building footprint, extended two feet beyond the building at all four sides, will be scrapped of organic material. The organic material is lawn grass, no other vegetation exists in this area of the building footprint. The organic material will be removed from the site to an appropriate fill location. The footings will be excavated with the native soil spoils temporarily store on site as indicated on the attached A-0.1Drawing. Additionally, the propane tank will be excavated. After the footings are poured and the first coursing of CMU is placed (4'-0"), the soil temporarily stored on site will be backfilled at the CMU stem walls and the propane storage tank. The building footprint will be built up approximately one to two inches with native material. Five to six inches of ABC will be imported for the interior of the building footprint. Excess native soil (approximately 5 YD3) will be exported to an appropriate site.

Export Materials:

Estimated volume of surface organics 23 YD3.

Estimated volume of footing/stem wall, P. tank material 18.5 YD3 (use 1.2 for compacted soil spoils).

Temporary storage on site of native soils for backfill 18.5 YD3 (Use BMP for onsite soil storage). See attached A-0.1 for location.

Imported Materials:

Estimated imported aggregate base course 28 YD3 (ABC).

Net Exported materials: 28 YD3

Net Imported Materials: 28 YD3

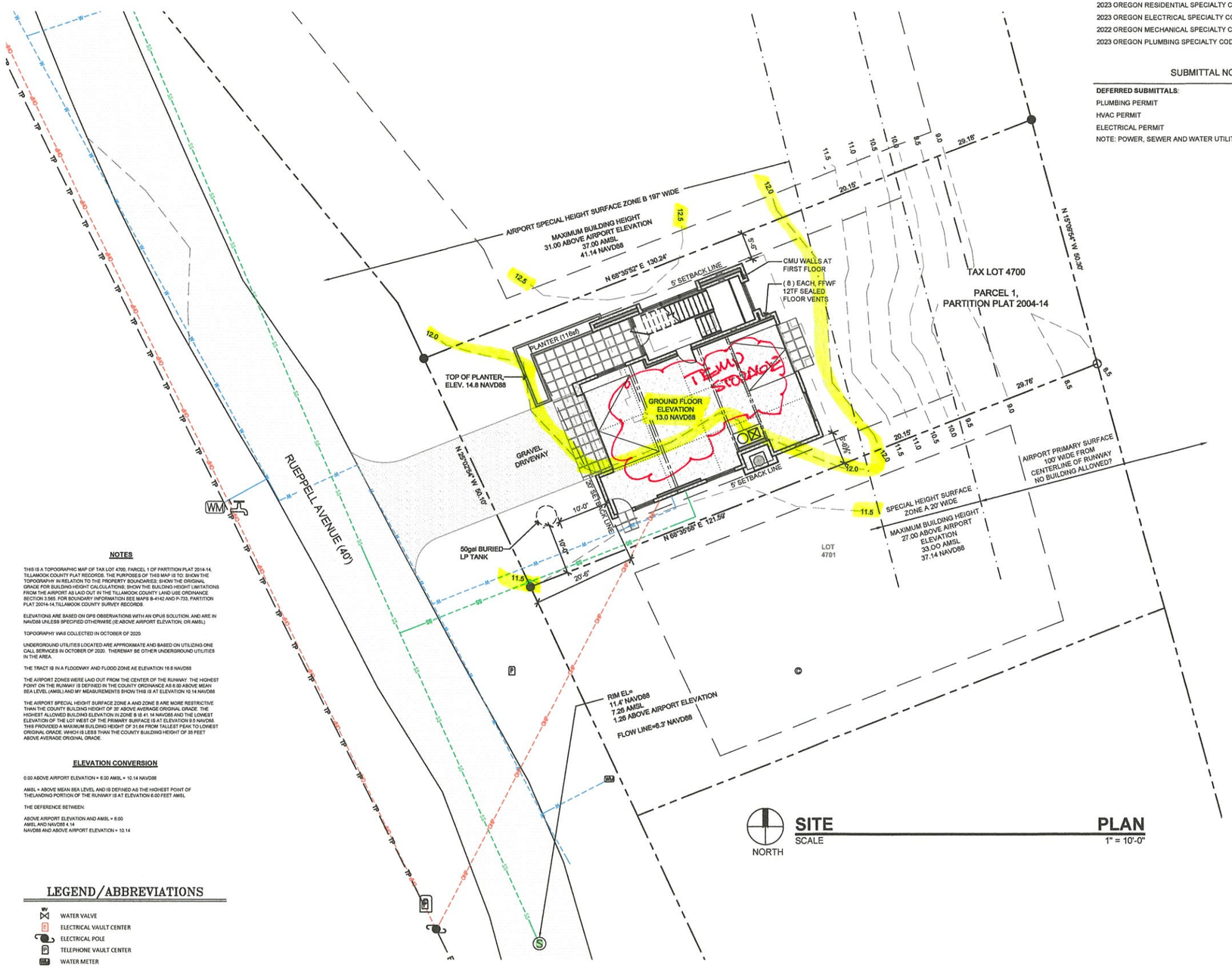
Estimated Net Import/Exported Materials: 0 YD3

Elevations:

Existing elevation at proposed building footprint 12.0 NAVD88.

Proposed elevation at building footprint first floor 13.0NAVD88.

Proposed grade at new building exterior at the perimeter 12.5NAVD88.



NOTES

THIS IS A TOPOGRAPHIC MAP OF TAX LOT 4700, PARCEL 1 OF PARTITION PLAT 2014-14, TILLAMOOK COUNTY PLAT RECORDS. THE PURPOSE OF THIS MAP IS TO: SHOW THE TOPOGRAPHY IN RELATION TO THE PROPERTY BOUNDARIES; SHOW THE ORIGINAL GRADE FOR BUILDING HEIGHT CALCULATIONS; SHOW THE BUILDING HEIGHT LIMITATIONS FROM THE AIRPORT AS LAID OUT IN THE TILLAMOOK COUNTY LAND USE ORDINANCE SECTION 3.565. FOR BOUNDARY INFORMATION SEE MAPS B-4142 AND P-733, PARTITION PLAT 2001-14,TILLAMOOK COUNTY SURVEY RECORDS.

ELEVATIONS ARE BASED ON GPS OBSERVATIONS WITH AN OPUS SOLUTION, AND ARE IN NAVD88 UNLESS SPECIFIED OTHERWISE (IE:ABOVE AIRPORT ELEVATION, OR AMSL)

TOPOGRAPHY WAS COLLECTED IN OCTOBER OF 2020.

UNDERGROUND UTILITIES LOCATED ARE APPROXIMATE AND BASED ON UTILIZING ONE CALL SERVICES IN OCTOBER OF 2020. THEREMAY BE OTHER UNDERGROUND UTILITIES IN THE AREA.

THE TRACT IS IN A FLOODWAY AND FLOOD ZONE AE ELEVATION 16.6 NAVD88

THE AIRPORT ZONES WERE LAID OUT FROM THE CENTER OF THE RUNWAY. THE HIGHEST POINT ON THE RUNWAY IS DEFINED IN THE COUNTY ORDINANCE AS 6.00 ABOVE MEAN SEA LEVEL (AMSL) AND MY MEASUREMENTS SHOW THIS IS AT ELEVATION 10.14 NAVD88

THE AIRPORT SPECIAL HEIGHT SURFACE ZONE A AND ZONE B ARE MORE RESTRICTIVE THAN THE COUNTY BUILDING HEIGHT OF 35' ABOVE AVERAGE ORIGINAL GRADE. THE HIGHEST ALLOWED BUILDING ELEVATION IN ZONE B IS 41.14 NAVD88 AND THE LOWEST ELEVATION OF THE LOT WEST OF THE PRIMARY SURFACE IS AT ELEVATION 9.5 NAVD88. THIS PROVIDED A MAXIMUM BUILDING HEIGHT OF 31.64 FROM TALLEST PEAK TO LOWEST ORIGINAL GRADE. WHICH IS LESS THAN THE COUNTY BUILDING HEIGHT OF 35 FEET ABOVE AVERAGE ORIGINAL GRADE.

ELEVATION CONVERSION

0.00 ABOVE AIRPORT ELEVATION = 6.00 AMSL = 10.14 NAVD88

AMSL = ABOVE MEAN SEA LEVEL AND IS DEFINED AS THE HIGHEST POINT OF THELANDING PORTION OF THE RUNWAY IS AT ELEVATION 6.00 FEET AMSL

THE DEFERENCE BETWEEN:

ABOVE AIRPORT ELEVATION AND AMSL = 6.00
AMSL AND NAVD88 4.14
NAVD88 AND ABOVE AIRPORT ELEVATION = 10.14

LEGEND/ABBREVIATIONS

- WV — WATER VALVE
- E — ELECTRICAL VAULT CENTER
- ELECTRICAL POLE
- P — TELEPHONE VAULT CENTER
- WM — WATER METER
- S — SANITARY SEWER MANHOLE
- LOT BOUNDARY
- MSL SETBACK
- BUILDING SETBACK
- ASPHALT EDGE
- OHP — OVERHEAD ELECTRICAL LINE
- P — UNDERGROUND ELECTRICAL
- SS — SANITARY SEWER LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- W — UNDERGROUND WATER LINE
- TP — TP — UNDERGROUND TELEPHONE LINE

APPLICABLE CODES

2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC)
2023 OREGON RESIDENTIAL SPECIALTY CODE (ORSC)
2023 OREGON ELECTRICAL SPECIALTY CODE (OESC)
2022 OREGON MECHANICAL SPECIALTY CODE (OMSC)
2023 OREGON PLUMBING SPECIALTY CODE (OPSC)

SUBMITTAL NOTES

DEFERRED SUBMITTALS:
PLUMBING PERMIT
HVAC PERMIT
ELECTRICAL PERMIT
NOTE: POWER, SEWER AND WATER UTILITIES ARE EXISTING.

SHEET SCHEDULE

SITE DATA

SITE ADDRESS:	TBD RUEPPELL AVE PACIFIC CITY, OREGON 97135
PARCEL #:	4S1030BD04700
LOT AREA:	6,296 S.F. / 0.14 ACRES

TILLAMOOK COUNTY ZONING DATA

JURISDICTION:	TILLAMOOK COUNTY
ZONING:	PCW-AP
USE:	VACANT, H & B USE RESIDENTIAL
FRONT YARD BSL:	20' SETBACK FROM PL
SIDE YARD BSL:	5' SETBACK FROM PL
REAR YARD BSL:	20' SETBACK FROM PL
HEIGHT LIMIT:	35' & AIRPORT OVERLAY HEIGHT RESTRICTIONS

OREGON STATE RESIDENTIAL ENERGY CODE COMPLIANCE SUMMARY

BALANCED WHOLE HOUSE VENTILATION SYSTEMS:
- LOCAL EXHAUST OR SUPPLY FANS MAY SERVE AS PART OF SUCH A SYSTEM. A SUPPLY FAN DUCTED TO THE RETURN SIDE OF AN AIR HANDLER CAN SERVE AS THE SUPPLY VENTILATION FOR THE BALANCE OF THE SYSTEM.
- ALL EXHAUST FANS ARE ENERGY STAR® RATED.
- TIMER, DE-HUMIDISTAT, OR EQUAL AUTOMATIC CONTROLS ON ALL EXHAUST FANS INCLUDING THE HALF-BATH.
- MAKEUP AIR DAMPERS ARE TO BE GRAVITY OR ELECTRICALLY OPERATED TO OPEN WHEN THE EXHAUST SYSTEM OPERATES
- FOLLOW ASHRAE STANDARD 62.2, WITH FLOOR AREA BETWEEN 1,501 to 3,000 S.F.
- WITH ONE BEDROOM, 45 CFM IS REQUIRED. TABLE 4.1z AND IS THE SAME AS IMC TABLE.
- M1507.3.3(1), CHAPTER 15

PRIMARY HEAT SOURCE:
- WARMBOARD RADIANT HEAT (DEFERRED SUBMITTAL DESIGN BY THE MFG.) 40% ON AVERAGE MORE EFFICIENT COMPARED TO FORCED AIR, PLUS ENHANCED AIR QUALITY

HVAC SYSTEMS DUCTS LOCATED IN CONDITIONED SPACE:
- R-8 INSULATED DUCTS MAY BE BURIED UNDER A MINIMUM OF R-19 INSULATION.
- TAPES SHALL NOT BE USED TO SEAL METAL DUCTS. MASTIC IS REQUIRED -
- WATER SUPPLY LINES TO BE INSULATED TO R-3 FOR 8 FT. IN AND 8 FT. OUT OF WATER HEATING SYSTEMS.

HIGH EFFICIENCY HVAC SYSTEMS OPTIONS:
A. AIR SOURCE HEAT PUMP HSPF 10.0/14.0 SEER COOLING, OR
B. ELECTRIC HEAT PUMP WATER HEATER WITH MINIMUM 2.0 COP, OR
C. CENTRAL FURNACES TO HAVE ELECTRICALLY COMMUTATED MOTORS.

COMPONENTS WILL MEET THE FOLLOWING:	COMPONENTS PROPOSED:
• FENESTRATION: U-0.27 or LOWER	- FENESTRATION: U-0.27
• SKYLIGHT: U-0.50 N/A	- SKYLIGHT: U-.55
• CEILING: R-49	- CEILING: R-59.1
• 6" WOOD FRAME WALL: R-21	- 6" WOOD WALL: R-21
• FLOOR: R-30	- FLOOR: R-30
• BELOW GRADE WALL R-VALUE: 10/15/21 INT + TB	- B.G. WALL: R-10
• SLAB EDGE PERIMETER: R-15, 24" VERT or HORIZ.	- SLAB: R-15

WINDOW AND DOOR HEADERS SHALL BE INSULATED TO A MINIMUM OF R-10

AIR BARRIER CRITERIA:
- (TABLE 1104.8)* OR DEMONSTRATE AIR LEAKAGE OF NOT MORE THAN 4.0
- ACH50 WITH A BLOWER DOOR TEST.
- SEAL BETWEEN THE TOP PLATE AND INTERIOR WALL COVERING WHERE THE WALL CONTACTS WITH ROOF.

VICINITY MAP

MMBI MADISON MASTER BUILDERS INC
DISTINCTIVE ENVIRONMENTS

CORRESPONDENCE
PO Box 28993
Seattle, WA 98118
info@madisonmbi.com
425.417.7772

NEW RESIDENCE FOR:
DAVE and PATTI COULTER
TAX LOT 4700
PACIFIC CITY, TILLAMOOK COUNTY, OREGON

GRADING PLAN
PAGE 2 of 2

Project No: XXXX
Drawn: MEC
Checked By: TEC
Date: April 04, 2025
REV. 1:
REV. 2:

A-0.1
PERMIT SET

Tillamook County

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

1510 – B Third Street
Tillamook, Oregon 97141
www.tillamookcounty.gov
503.842.3408

Land of Cheese, Trees and Ocean Breeze

December 23, 2024
Re-Submitted: April 17, 2025

Mellissa Jenck
Senior Planner
Tillamook County

TIM COULTER
PO BOX 28993
SEATTLE, WA 98118

DAVID COULTER
35400 SALAL LANE
PACIFIC CITY, OR 97135

RE: Incomplete application for Floodplain Development Permit review 851-24-000641-PLNG
Re-Submitted 04.17.2025 with notes in green below, along with; updated drawings dated April 4 2025, EC prepared and stamped by Dallas Esplin dated 02.25.2025, and Grading Plan dated 04.12.2025.

To Whom It May Concern:

In reviewing the above-listed Floodplain Development Permit application, we have determined the application to be incomplete and identified the following as information required in order to deem your application complete or as information requested to supplement your application and/or clarify your proposal:

- Completed Floodplain Development permit, including:
  - Provide fill volumes in both added and removed, rather than just indicating net 0.
    - Site plan, neither no-rise analysis, concludes any values of fill volume. Unsure what is or isn't being added/removed.
    - See attached Grading Plan dated 04.12.2025.
  - Dimensions or square footage of proposed dwelling should be contained in 'Dwelling' category.
  - This information is on sheet A-1.1
- Site plan depicting location of proposed development.
  - Locations of existing trees/vegetation (indicate removal, if applicable), location and description of materials to be stored onsite during and/or after development, location and quantity of fill, grade and excavation activities.
  - No significant trees or vegetation on this property, just grass in the developed footprint and some scotch broom in non-disturbed areas. See grading plan dated 04.12.2025 for fill and excavation activities.
- Structural/architectural plan details, as applicable.
  - Foundation plan/floor plan/elevation(s), as applicable for proposed development.
  - Provided with re-submitted drawings dated April 4th 2025
    - Depict location of Base Flood Elevation (BFE) and freeboard upon elevation profiles. Include mean sea level in relation to proposed structure(s).
    - Provided with re-submitted drawings dated April 4th 2025. See sheets See sheets A-0.1, A2.1, A-3.1, and A-3.2

- There are mean sea level numbers, but not 'Base Flood Elevation' and 'Freeboard', which is prudent to decipher for Inspectors during onsite review during construction.
  Provided with re-submitted drawings dated April 4th 2025. See sheets See sheets A-0.1, A2.1, A-3.1, and A-3.2

- Lights, switches and outlets depicted on bottom floor. Must confirm they are elevated appropriately, or are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding.
- See general note #8 on sheets A1.1, A1.2, and Electrical notes on E-1.1
  - Showing location and sizes of all flood openings, if required. Must depict location of flood openings relative to finished grade.
  - See on re-Submitted drawings, sheet A1.1, A2.0, A2.1, and A3.1
    - Sheet S1.1dated 11/25/2024 does not show location of flood vents within foundation plan.
  - Depict location of all utilities, machinery/equipment and tanks to service the structure, including propane tanks, electrical meters, outlets, etc.
  - See on re-Submitted drawings dated April 4th 2025 sheets A.01, A1.1, A2.0, and A2.1
  - If fencing is proposed, must have materials and details for fencing – to confirm allows for flow of floodwaters and of flood resistant materials.
  - No fencing is proposed or planed on this property.
- Depiction/information identifying flood resistant materials to be used.
  - Including garage door, doors, stairs and windows located below freeboard.
  - Provided on re-submitted drawings dated 04.04.2025, see the Wall Legends and General Notes #8, #9, and #10

- Elevation Certificate must be provided for any proposed enclosed area.
  - Pre-Construction Elevation Certificate signed by an Oregon Registered Professional Surveyor.
  - Provided with attached EC dated 02.25.2025
  - EC must be generated for the proposed plans submitted as part of the development project. An EC that does not match plans provided to this Department will not be accepted.
  - Provided on attached EC dated 02.25.2025
  - Materials as required by the EC, such as engineered flood opening details, must be attached to the EC.
  - Provided on attached EC dated 02.25.2025
- Grading Plan, as applicable for any fill/removal and/or grading performed on site for development.
  - Illustrate existing and proposed site elevations in plan and profile views, as necessary to describe activities.
  - See attached Grading Plan dated 04.12.2025, also see re-submitted drawings dated April 4th 2025 for illustrated elevations.
    - Pre and post grade must be identified.
    - Indicated on sheet A0.1
  - Specify location and quantity of fill and excavation, source of fill materials & onsite disposal location(s).
  - See attached grading plan dated 04.12.2025
- Development within the Floodway, that includes an increase in fill within floodway.
  - Confirm report adjusted for volumes of fill to be graded/added/removed from the property.
  - See previously submitted "Tax Lot 4700 Rueppell Avenue Hydraulic Analysis Report" dated November 19th 2024, including page 4, Results and Conclusions.

Please read and complete the enclosed acknowledgement form and indicate whether or not you intend to provide more information to complete the application or that you consider the application complete. Please return the form to Department of Community Development by the date indicated on the form. An incomplete application cannot receive an extension of time. If no response is received by the 181st day, from application submittal, this request will be deemed null and void.

Please provide all requested materials and information in a consolidated package, providing all updates at one time. This will assist staff with review of completeness items.

If you have any questions regarding these issues, please email melissa.jenck@tillamookcounty.gov or call us at 503-842-3408 x 3412.

Respectfully,
Tillamook County Department of Community Development

Melissa Jenck, Senior Planner, CFM

Cc'd: Sarah Absher – Director

Enclosed: Incomplete Application Response, FEMA FIRM

Date: December 23, 2024

RE: Incomplete application for Floodplain Development Permit review 851-24-000641-PLNG

To Whom It May Concern:

As indicated in the attached correspondence, your application has been deemed to be **incomplete**.

Please acknowledge, in writing, your intent to provide the material required to complete the application, as identified in the attached correspondence.

Tillamook County Department of Community Development
Attn: Melissa Jenck – Senior Planner
1510 B Third Street
Tillamook, OR 97141

If you indicate your intent to complete the application, you will have 180 days from the date the application was originally submitted **(November 27, 2024)** to submit the required material. If you fail to submit the material within 180 days, your application will be deemed void. The case file regarding the application will then be closed.

If you do not return this acknowledgment, by the above date, such action will be considered to be a refusal to complete the application under the meaning accorded in ORS 215.428. Your application will then be processed based upon the

information you have previously submitted. Note that failure to submit sufficient evidence or material to demonstrate compliance with the applicable criteria is grounds for denial of the application.

ACKNOWLEDGMENT

[X] I intend to provide the additional material identified in the attached correspondence from the Department of Community Development.

[ ] I refuse to provide the additional material identified in the attached correspondence from the Department of Community Development.

TEC
Signed and Acknowledged (Applicant)

01.01.2025
Date

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

RECEIVED
APR 17 2025
BY:

OMB Control No. 1660-0008
Expiration Date: 06/30/2026

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

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

Policy Number:

Company NAIC Number:

A1. Building Owner's Name: DAVID COULTER

A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: N/A

City: PACIFIC CITY State: OR ZIP Code: 97112

A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number: TAX MAP 4S-10-30-BD TAX LOT 04700

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

A5. Latitude/Longitude: Lat. 45°11'53.4895" Long. -123°57'43.4236" Horiz. Datum: ☐ NAD 1927 ☒ NAD 1983 ☐ WGS 84

A6. Attach at least two and when possible four clear color photographs (one for each side) of the building (see Form pages 7 and 8).

A7. Building Diagram Number: 7

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

a) Square footage of crawlspace or enclosure(s): 1477.5 sq. ft.

b) Is there at least one permanent flood opening on two different sides of each enclosed area? ☒ Yes ☐ No ☐ N/A

c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade:
Non-engineered flood openings: 0 Engineered flood openings: 8

d) Total net open area of non-engineered flood openings in A8.c: 0 sq. in.

e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): 1600 sq. ft.

f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): 1600 sq. ft.

A9. For a building with an attached garage:

a) Square footage of attached garage: 0 sq. ft.

b) Is there at least one permanent flood opening on two different sides of the attached garage? ☐ Yes ☐ No ☒ N/A

c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade:
Non-engineered flood openings: 0 Engineered flood openings: 0

d) Total net open area of non-engineered flood openings in A9.c: 0 sq. in.

e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): 0 sq. ft.

f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): 0 sq. ft.

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1.a. NFIP Community Name: TILLAMOOK COUNTY B1.b. NFIP Community Identification Number: 410196

B2. County Name: TILLAMOOK B3. State: OR B4. Map/Panel No.: 41057C0855 B5. Suffix: F

B6. FIRM Index Date: 09/28/2018 B7. FIRM Panel Effective/Revised Date: 09/28/2018

B8. Flood Zone(s): AE B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth): 16.6

B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9:
☒ FIS ☐ FIRM ☐ Community Determined ☐ Other:

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

B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? ☐ Yes ☒ No

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

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

City: PACIFIC CITY State: OR ZIP Code: 97112

FOR INSURANCE COMPANY USE

Policy Number:

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, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters.
Benchmark Utilized: GPS WITH AN OPUS SOLUTION Vertical Datum: NAVD 1988

Indicate elevation datum used for the elevations in items a) through h) below.
☐ NGVD 1929 ☒ NAVD 1988 ☐ Other:

Datum used for building elevations must be the same as that used for the BFE. Conversion factor used? ☐ Yes ☒ No
If Yes, describe the source of the conversion factor in the Section D Comments area.

		Check the measurement used:
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):	13.0	☒ feet ☐ meters
b) Top of the next higher floor (see Instructions):	25.7	☒ feet ☐ meters
c) Bottom of the lowest horizontal structural member (see Instructions):	N/A	☒ feet ☐ meters
d) Attached garage (top of slab):	N/A	☒ feet ☐ meters
e) Lowest elevation of Machinery and Equipment (M&E) servicing the building (describe type of M&E and location in Section D Comments area):	17.6	☒ feet ☐ meters
f) Lowest Adjacent Grade (LAG) next to building: ☒ Natural ☐ Finished	12.0	☒ feet ☐ meters
g) Highest Adjacent Grade (HAG) next to building: ☒ Natural ☐ Finished	12.2	☒ feet ☐ meters
h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:	N/A	☒ feet ☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by state 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 and describe in the Comments area.

Certifier's Name: DALLAS ESPLIN License Number: LS 83627

Title: MANAGER

Company Name: BAYSIDE SURVEYING LLC

Address: 6723 SOUTH PRAIRIE RD

City: TILLAMOOK State: OR ZIP Code: 97141

Telephone: (503) 842-5551 Ext.: Email: BAYSIDESURVEYING@GMAIL.COM

Signature: Dallas Esplin Date: 02/25/2025

REGISTERED
PROFESSIONAL
LAND SURVEYOR
Dallas Esplin
OREGON
DECEMBER 3, 2014
DALLAS W. ESPLIN
83627
RENEWS: DECEMBER 31, 2025
Place Seal Here

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

Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments):
THIS IS A PRE-CERTIFICATE. THERE IS A SEWER MANHOLE ONE LOT SOUTHERLY, THE RIM ELEVATION IS 11.4' NAVD88. ENGINEERED VENTS 1540-520, SEE ATTACHED SPECIFICATION SHEET.

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

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

City: PACIFIC CITY State: OR ZIP Code: 97112

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

SECTION E – BUILDING MEASUREMENT INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO, ZONE AR/AO, AND ZONE A (WITHOUT BFE)

For Zones AO, AR/AO, and A (without BFE), complete Items E1–E5. For Items E1–E4, use natural grade, if available. If the Certificate is intended to support a Letter of Map Change request, complete Sections A, B, and C. Check the measurement used. In Puerto Rico only, enter meters.

Building measurements are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction

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

E1. Provide measurements (C.2.a in applicable Building Diagram) for the following and check the appropriate boxes to show whether the measurement is above or below the natural HAG and the LAG.

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

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

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

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

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

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

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

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

☐ Check here if attachments and describe in the Comments area.

Property Owner or Owner's Authorized Representative Name: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ Email: _____

Signature: _____ Date: _____

Comments:

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

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

City: PACIFIC CITY State: OR ZIP Code: 97112

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

SECTION G – COMMUNITY INFORMATION (RECOMMENDED FOR COMMUNITY OFFICIAL COMPLETION)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Section A, B, C, E, G, or H of this Elevation Certificate. Complete the applicable item(s) and sign below when:

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

G2.a. ☐ A local official completed Section E for a building located in Zone A (without a BFE), Zone AO, or Zone AR/AO, or when item E5 is completed for a building located in Zone AO.

G2.b. ☐ A local official completed Section H for insurance purposes.

G3. ☐ In the Comments area of Section G, the local official describes specific corrections to the information in Sections A, B, E and H.

G4. ☐ The following information (Items G5–G11) is provided for community floodplain management purposes.

G5. Permit Number: _____ G6. Date Permit Issued: _____

G7. Date Certificate of Compliance/Occupancy Issued: _____

G8. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement

G9.a. Elevation of as-built lowest floor (including basement) of the building: _____ ☐ feet ☐ meters Datum: _____

G9.b. Elevation of bottom of as-built lowest horizontal structural member: _____ ☐ feet ☐ meters Datum: _____

G10.a. BFE (or depth in Zone AO) of flooding at the building site: _____ ☐ feet ☐ meters Datum: _____

G10.b. Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural member: _____ ☐ feet ☐ meters Datum: _____

G11. Variance issued? ☐ Yes ☐ No If yes, attach documentation and describe in the Comments area.

The local official who provides information in Section G must sign here. *I have completed the information in Section G and certify that it is correct to the best of my knowledge. If applicable, I have also provided specific corrections in the Comments area of this section.*

Local Official's Name: _____ Title: _____

NFIP Community Name: _____

Telephone: _____ Ext.: _____ Email: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Signature: _____ Date: _____

Comments (including type of equipment and location, per C2.e; description of any attachments; and corrections to specific information in Sections A, B, D, E, or H):

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

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

City: PACIFIC CITY State: OR ZIP Code: 97112

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

SECTION H – BUILDING'S FIRST FLOOR HEIGHT INFORMATION FOR ALL ZONES (SURVEY NOT REQUIRED) (FOR INSURANCE PURPOSES ONLY)

The property owner, owner's authorized representative, or local floodplain management official may complete Section H for all flood zones to determine the building's first floor height for insurance purposes. Sections A, B, and I must also be completed. Enter heights to the nearest tenth of a foot (nearest tenth of a meter in Puerto Rico). ***Reference the Foundation Type Diagrams (at the end of Section H Instructions) and the appropriate Building Diagrams (at the end of Section I Instructions) to complete this section.***

H1. Provide the height of the top of the floor (as indicated in Foundation Type Diagrams) above the Lowest Adjacent Grade (LAG):

a) **For Building Diagrams 1A, 1B, 3, and 5–8.** Top of bottom floor (include above-grade floors only for buildings with crawlspaces or enclosure floors) is: _____ ☐ feet ☐ meters ☐ above the LAG

b) **For Building Diagrams 2A, 2B, 4, and 6–9.** Top of next higher floor (i.e., the floor above basement, crawlspace, or enclosure floor) is: _____ ☐ feet ☐ meters ☐ above the LAG

H2. Is **all** Machinery and Equipment servicing the building (as listed in Item H2 instructions) elevated to or above the floor indicated by the H2 arrow (shown in the Foundation Type Diagrams at end of Section H instructions) for the appropriate Building Diagram?

☐ Yes ☐ No

SECTION I – PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and H must sign here. *The statements in Sections A, B, and H are correct to the best of my knowledge.* **Note:** If the local floodplain management official completed Section H, they should indicate in Item G2.b and sign Section G.

☐ Check here if attachments are provided (including required photos) and describe each attachment in the Comments area.

Property Owner or Owner's Authorized Representative Name: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ Email: _____

Signature: _____ Date: _____

Comments:

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

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

City: PACIFIC CITY State: OR ZIP Code: 97112

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

Instructions: Insert below at least two and when possible four photographs showing each side of the building (for example, may only be able to take front and back pictures of townhouses/rowhouses). Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." Photographs must show the foundation. When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.

Photo One

Photo One Caption:

Clear Photo One

Photo Two

Photo Two Caption:

Clear Photo Two

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON INSTRUCTION PAGES 1-11

BUILDING PHOTOGRAPHS

Continuation Page

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

City: PACIFIC CITY State: OR ZIP Code: 97112

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

Insert the third and fourth photographs below. Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.

Photo Three

Photo Three Caption:

Clear Photo Three

Photo Four

Photo Four Caption:

Clear Photo Four

ICC EVALUATION SERVICE

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ICC-ES Evaluation Report

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ESR-2074

Reissued 02/2023

This report is subject to renewal 02/2025.

DIVISION: 08 00 00—OPENINGS

SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526

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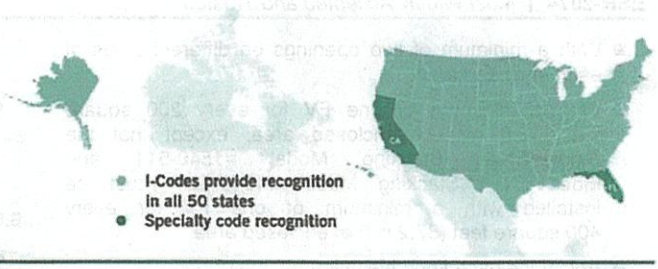


ICC-ES Evaluation Report

ESR-2074

Reissued February 2023

This report is subject to renewal February 2025.

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514
FLOOD VENT SEALING KIT #1540-526

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012, 2009 and 2006 *International Building Code®* (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 *International Residential Code®* (IRC)
- 2021 and 2018 *International Energy Conservation Code®* (IECC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Physical operation
- Water flow

2.0 USES

The Smart Vent® units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

3.0 DESCRIPTION

3.1 General:

When subjected to rising water, the Smart Vent® FVs internal floats are activated, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The FV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to unlatch, allowing the door to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is fabricated from stainless steel. Smart Vent® Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 units each contain two vertically arranged openings per unit.

3.2 Engineered Opening:

The FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)] for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent FVs must be installed in accordance with Section 4.0.

3.3 Ventilation:

The SmartVENT® Model #1540-510 and SmartVENT® Overhead Door Model #1540-514 both have screen covers with $^1/_4$-inch-by-$^1/_4$-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm^2) of net free area to supply natural ventilation. The SmartVENT® Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm^2) of net free area to supply natural ventilation. Other FVs described in this report do not offer natural ventilation.

3.4 Flood Vent Sealing Kit:

The Flood Vent Sealing Kit Model #1540-526 is used with SmartVENT® Model #1540-520. It is a Homasote 440 Sound Barrier® (ESR-1374) insert with 21 – 2-inch-by-2-inch (51 mm x 51 mm) squares cut in it. See Figure 4.

4.0 DESIGN AND INSTALLATION

4.1 SmartVENT® and FloodVENT®:

SmartVENT® and FloodVENT® are designed to be installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. Installation clips allow mounting in masonry and concrete walls of any thickness. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Smart Vent® FVs must be installed as follows:

- With a minimum of two openings on different sides of each enclosed area.
- With a minimum of one FV for every 200 square feet (18.6 m^2) of enclosed area, except that the SmartVENT® Stacking Model #1540-511 and FloodVENT® Stacking Model #1540-521 must be installed with a minimum of one FV for every 400 square feet (37.2 m^2) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final grade or floor and finished exterior grade immediately under each opening.

4.2 Flood Vent Sealing Kit

The Flood Vent Sealing Kit Model 1540-526 is used in conjunction with FloodVENT® Model #1540-520. When installed and tested in accordance with ASTM E283, the FV and Flood Vent Sealing Kit assembly have an air leakage rate of less than 0.2 cubic feet per minute per lineal foot (18.56 l/min per lineal meter) at a pressure differential of 1 pound per square foot (50 Pa) based on 12.58 lineal feet (3.8 lineal meters) contained by the Flood Vent Sealing Kit.

5.0 CONDITIONS OF USE

The Smart Vent® FVs described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The Smart Vent® FVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern.

5.2 The Smart Vent® FVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised February 2021).

6.2 Test report on air infiltration in accordance with ASTM E283.

7.0 IDENTIFICATION

7.1 The Smart VENT® models and the Flood Vent Sealing Kit described in this report must be identified by a label bearing the manufacturer's name (Smartvent Products, Inc.), the model number, and the evaluation report number (ESR-2074).

7.2 The report holder's contact information is the following:

SMART VENT PRODUCTS, INC.
19 MANTUA ROAD
MOUNT ROYAL, NEW JERSEY 08061
(877) 441-8368
www.smartvent.com
info@smartvent.com

TABLE 1—MODEL SIZES

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)
FloodVENT®	1540-520	15 3/4" X 7 3/4"	200
SmartVENT®	1540-510	15 3/4" X 7 3/4"	200
FloodVENT® Overhead Door	1540-524	15 3/4" X 7 3/4"	200
SmartVENT® Overhead Door	1540-514	15 3/4" X 7 3/4"	200
Wood Wall FloodVENT®	1540-570	14" X 8 3/4"	200
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 3/4"	200
SmartVENT® Stacker	1540-511	16" X 16"	400
FloodVent® Stacker	1540-521	16" X 16"	400

For **SI:** 1 inch = 25.4 mm; 1 square foot = m^2

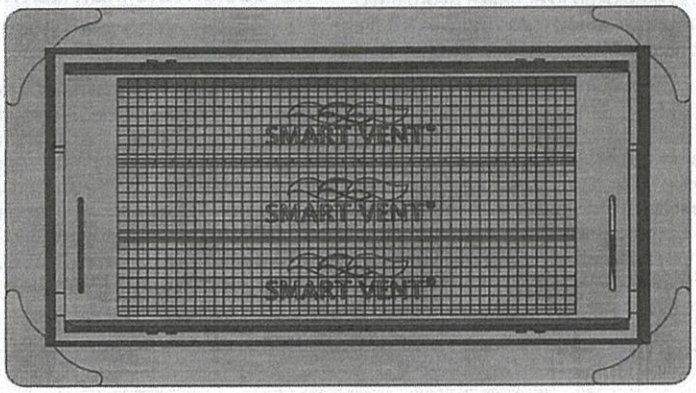


FIGURE 1—SMART VENT: MODEL 1540-510

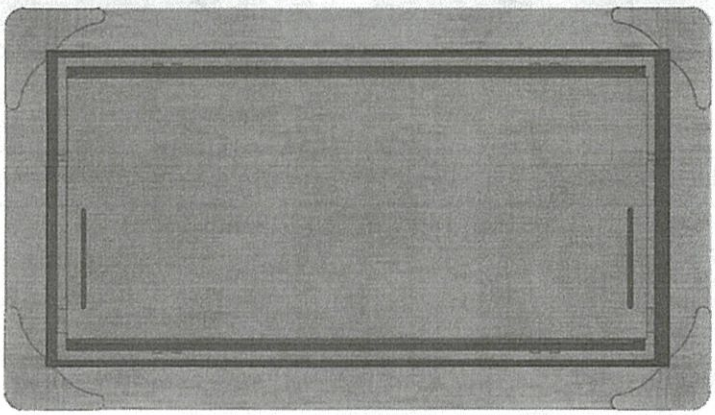


FIGURE 2—SMART VENT MODEL 1540-520

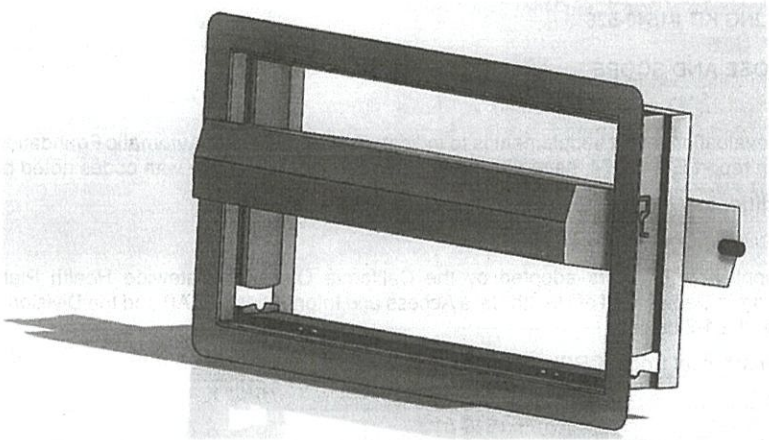


FIGURE 3—SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

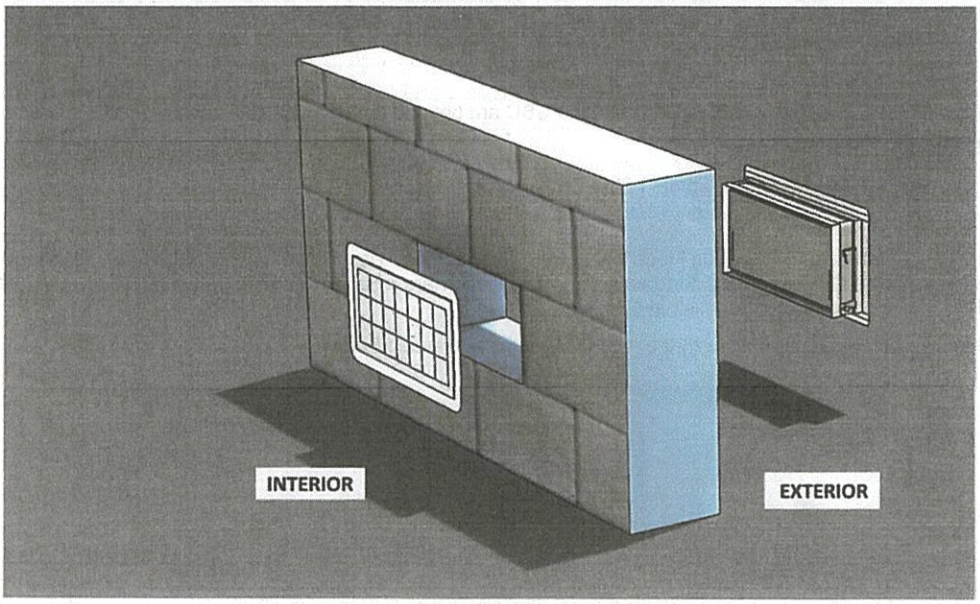


FIGURE 4—FLOOD VENT SEALING KIT

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514
FLOOD VENT SEALING KIT #1540-526

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, have also been evaluated for compliance with codes noted below.

Applicable code editions:

■ 2019 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

■ 2019 *California Residential Code* (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with 2019 CBC Chapter 12, provided the design and installation are in accordance with the 2018 *International Building Code®* (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 12 and 16 , as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the 2019 CRC, provided the design and installation are in accordance with the 2018 *International Residential Code®* (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued February 2023.

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

SMART VENT PRODUCTS, INC.

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514
FLOOD VENT SEALING KIT #1540-526

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Smart Vent® Automatic Foundation Flood Vents, described in ICC-ES evaluation report ESR-2074, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2020 *Florida Building Code—Building*
- 2020 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Smart Vent® Automatic Foundation Flood Vents, described in Sections 2.0 through 7.0 of the evaluation report ESR-2074, comply with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design requirements are determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential,* as applicable. The installation requirements noted in ICC-ES evaluation report ESR-2074 for 2018 *International Building Code®* meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential,* as applicable.

Use of the Smart Vent® Automatic Foundation Flood Vents has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and the *Florida Building Code—Residential.*

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the evaluation report, reissued February 2023.

Tax Lot 4700 Rueppell Avenue
Hydraulic Analysis Report

prepared for

David M. Coulter

prepared by

Jake Hofeld, P.E.

Jake Hofeld Digitally signed by Jake Hofeld
Date: 2024.11.19 16:56:16
-08'00'

WATERWAYS CONSULTING, INC.

November 19, 2024

Contents

List of Figures

List of Attachments

INTRODUCTION

Waterways Consulting Inc. (Waterways) has been retained by David M. Coulter to evaluate the hydraulic effects on the Nestucca River during a 100-year base flood discharge from building a residential structure on a vacant property. The project is located on the east (left) bank floodplain of the Nestucca River at Tax Lot 4700 on Rueppell Avenue in Pacific City, OR (**Figure 1**). The existing property currently does not contain any structures. The proposed residential building will include a 1477 square foot footprint house centered equally on the property in the north-south direction and set back 20 feet from the edge of the property along Rueppell Avenue. The new structure includes an outdoor patio with planters and an entry on the north side of the house, which is a two story building. 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 . 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 6.4.1. 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. Four additional cross sections were added to the provided model in the vicinity of the project area (property). 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 4** 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. Bathymetry for the additional cross sections were interpolated from upstream and downstream cross sections of the LOMR model. **Figure 3** shows the existing conditions on the property survey, and also includes the proposed house location.

The downstream model boundary extends approximately 1.1 miles downstream of the project area and the upstream model boundary extends approximately 2.1 miles upstream of the project area (**Figure 4**). The bridge crossing geometry at Ferry Street and at Pacific Avenue upstream 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 condition terrain was updated with the proposed residential structure footprint provided by design drawings supplied by the client (**Figure 3**). 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 blocked obstruction is limited to the footprint of the structure at ground level. The proposed conditions model did not update the existing topography of the site surrounding the proposed structure.

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 change in building footprint 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 6.4.1 Davis, California. June 2023.

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

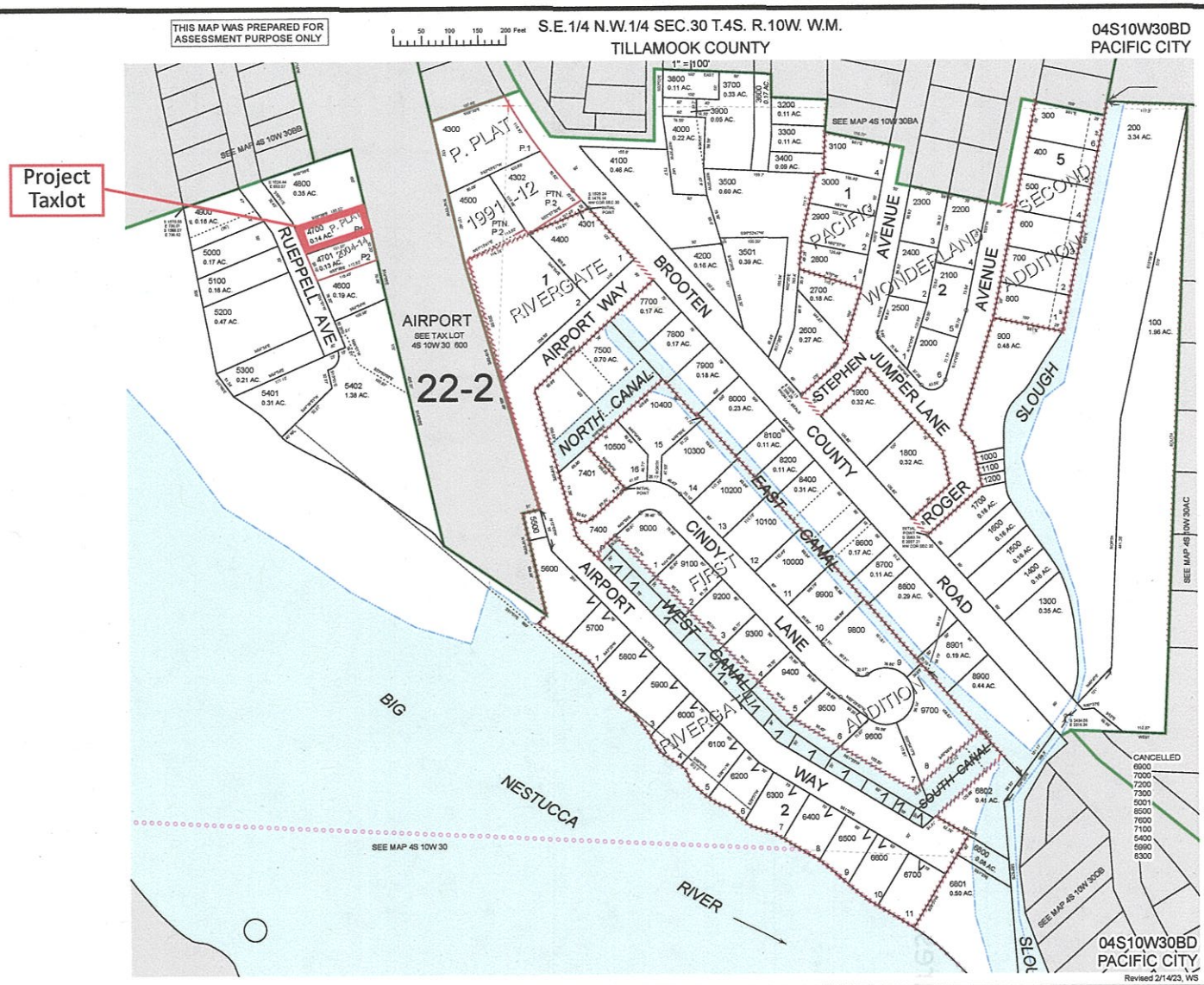


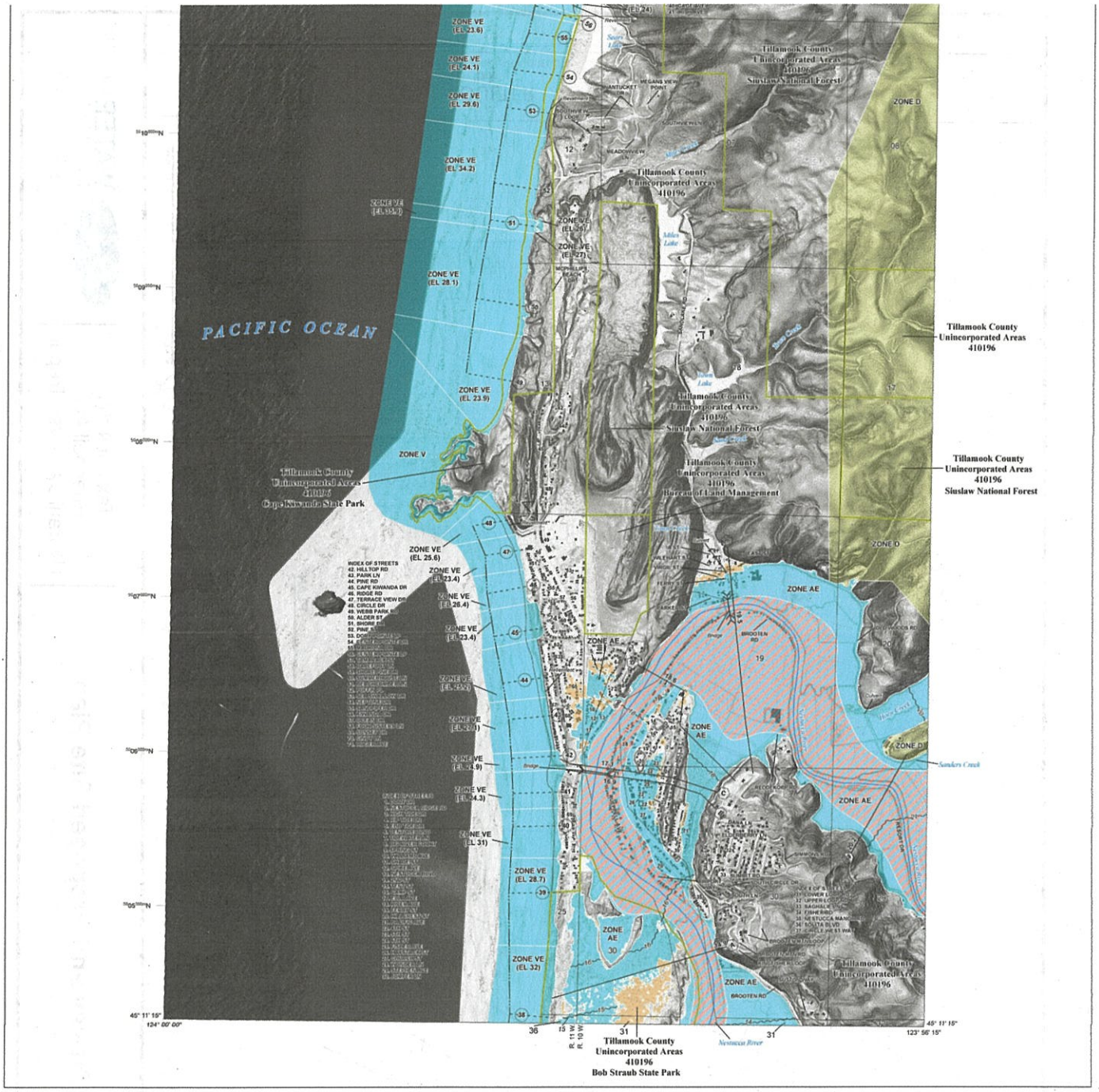
FIGURE 1

Tax Lot Location

(Map Sourced from Tillamook County Assessment and Taxation Website)

Tax Lot 4700
Rueppell Ave
Hydraulic Analysis Report

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



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
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X
	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 this FIRM including historic versions of this 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 this FIRM revision is derived from aerial lidar surveys conducted between 2007 and 2011. Orthophotography acquired in 2009 was used where lidar coverage was unavailable for portions of Tillamook County.

SCALE

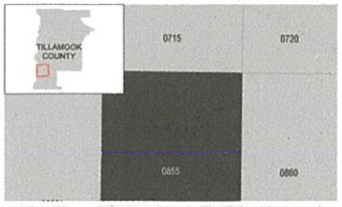
Map Projection:
Universal Transverse Mercator Zone 10N; North American Datum 1983
Western Hemisphere; Vertical Datum: NAVD 88

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

0 1,000 2,000 4,000 Feet

0 255 510 1,020 Meters

PANEL LOCATOR



National Flood Insurance Program

FEMA

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

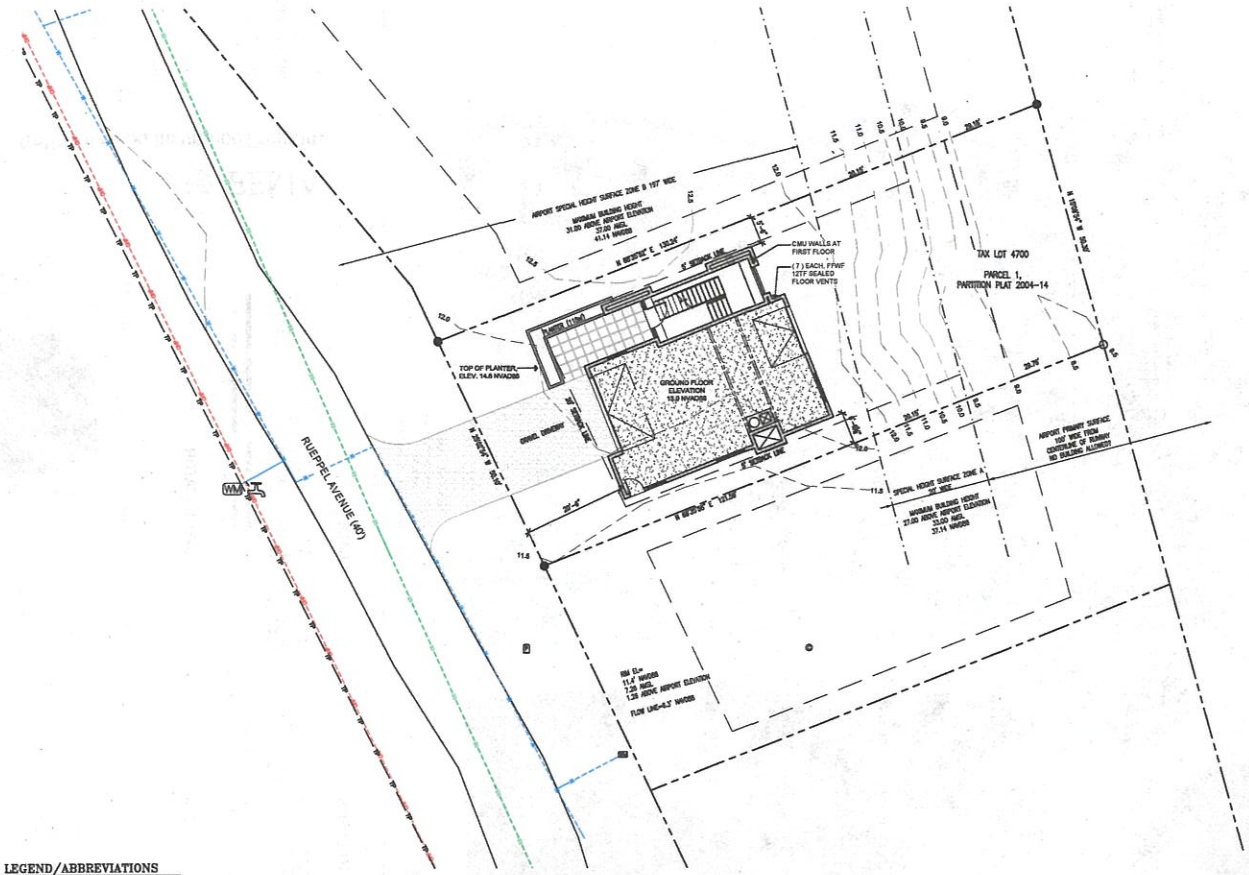
TILLAMOOK COUNTY, OREGON
And Incorporated Areas

PANEL 855 OF 1075

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
TILLAMOOK COUNTY	410196	0855	F



NORTH

SITE PLAN
SCALE 1" = 10'-0"

NORTH

VICINITY MAP
SCALE NONE

LEGEND/ABBREVIATIONS

- WATER VALVE
- ELECTRICAL VAULT CENTER
- ELECTRICAL POLE
- TELEPHONE VAULT CENTER
- WATER METER
- SANITARY SEWER MANHOLE
- LOT BOUNDARY
- MSL SETBACK
- BUILDING SETBACK
- ASPHALT EDGE
- OVERHEAD ELECTRICAL LINE
- UNDERGROUND ELECTRICAL
- SANITARY SEWER LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- UNDERGROUND WATER LINE
- UNDERGROUND TELEPHONE LINE

NEW RESIDENCE FOR:
DAVE COULTER
TAX LOT 4700
PACIFIC CITY, TILLAMOOK COUNTY, OREGON

Project No: XXXX
Drawn: MEC
Checked By: RSC
Date: Nov. 08, 2024
REV. 1:
REV. 2:

A-0.1

FIGURE
3

Property Survey and Proposed Site Plan

Tax Lot 4700
Rueppell Ave
Hydraulic Analysis Report

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

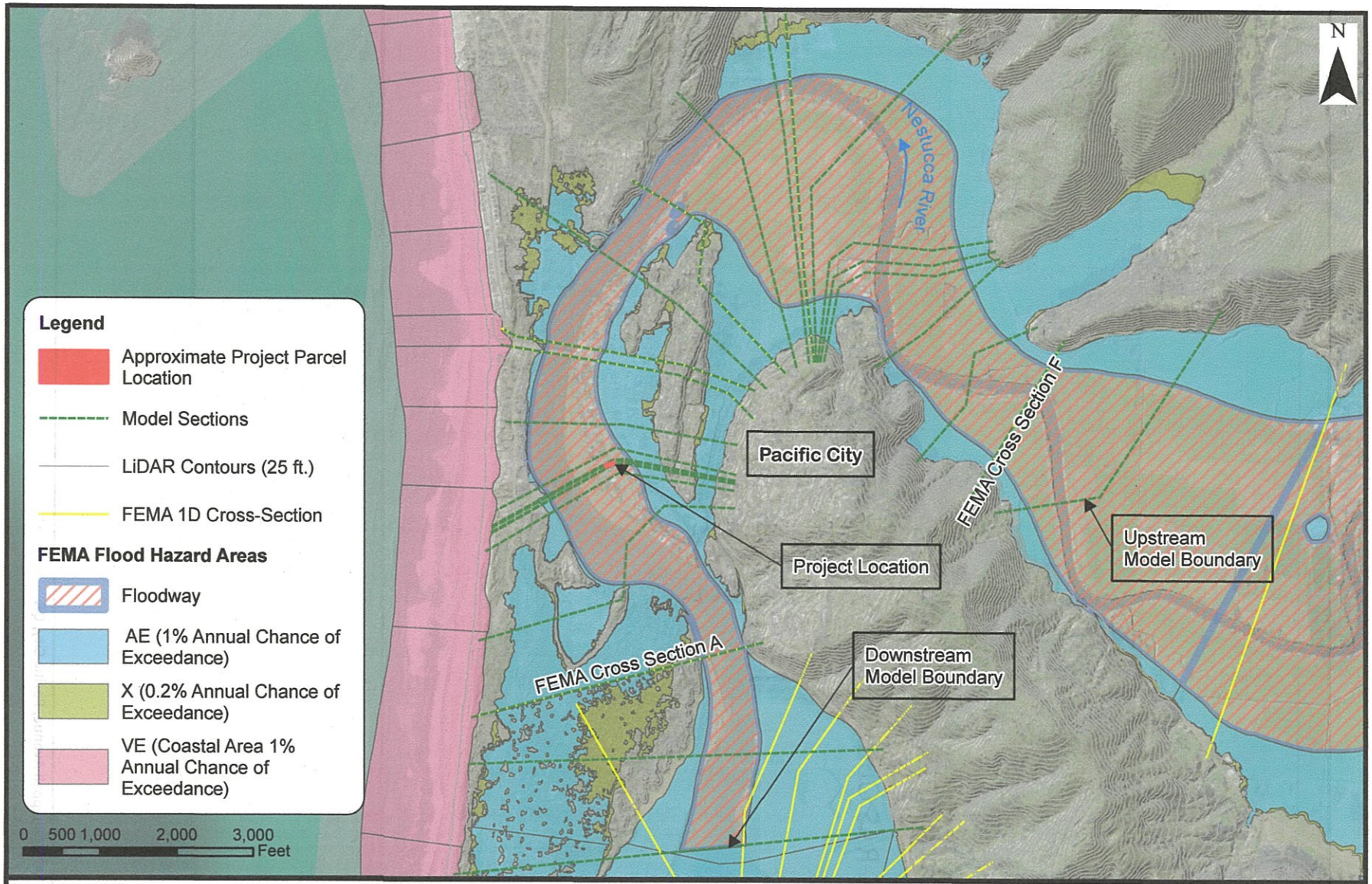


FIGURE 4

Hydraulic Analysis Overview Map of Proposed Project

Tax Lot 4700
Rueppell Ave
Hydraulic Analysis Report

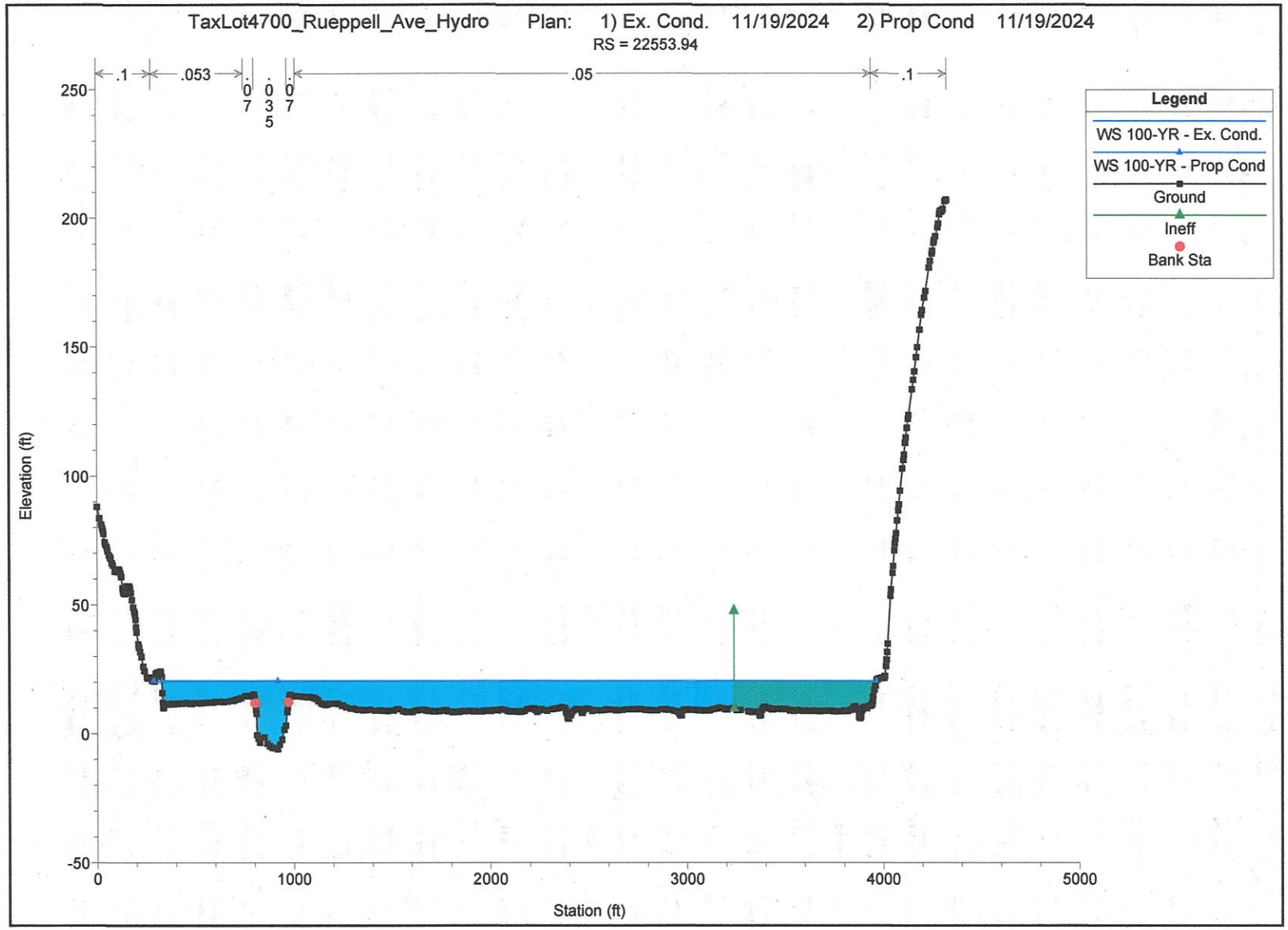
WATERWAYS CONSULTING, INC.
Santa Cruz, CA | watways.com | Portland, OR

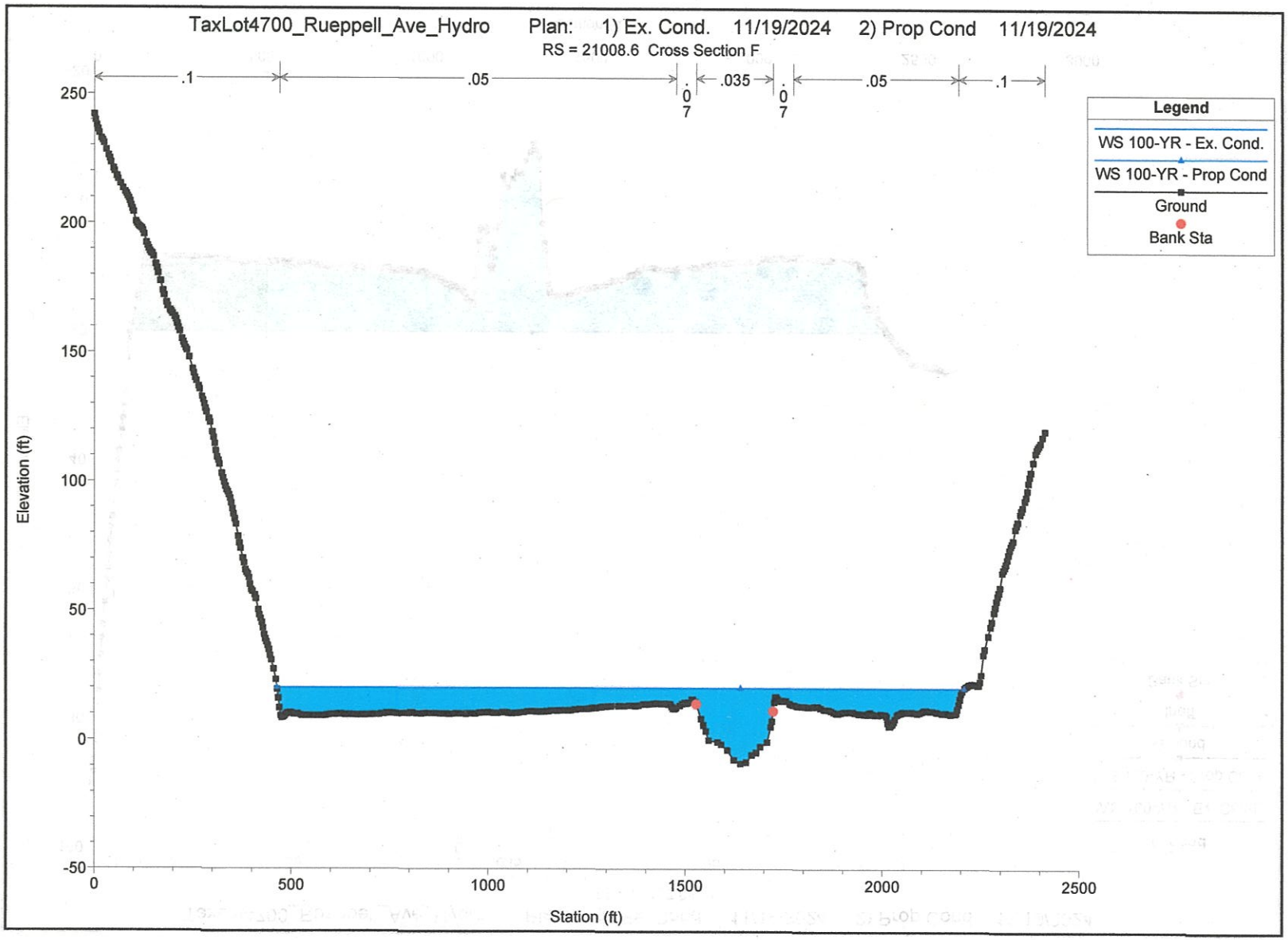
Attachment A

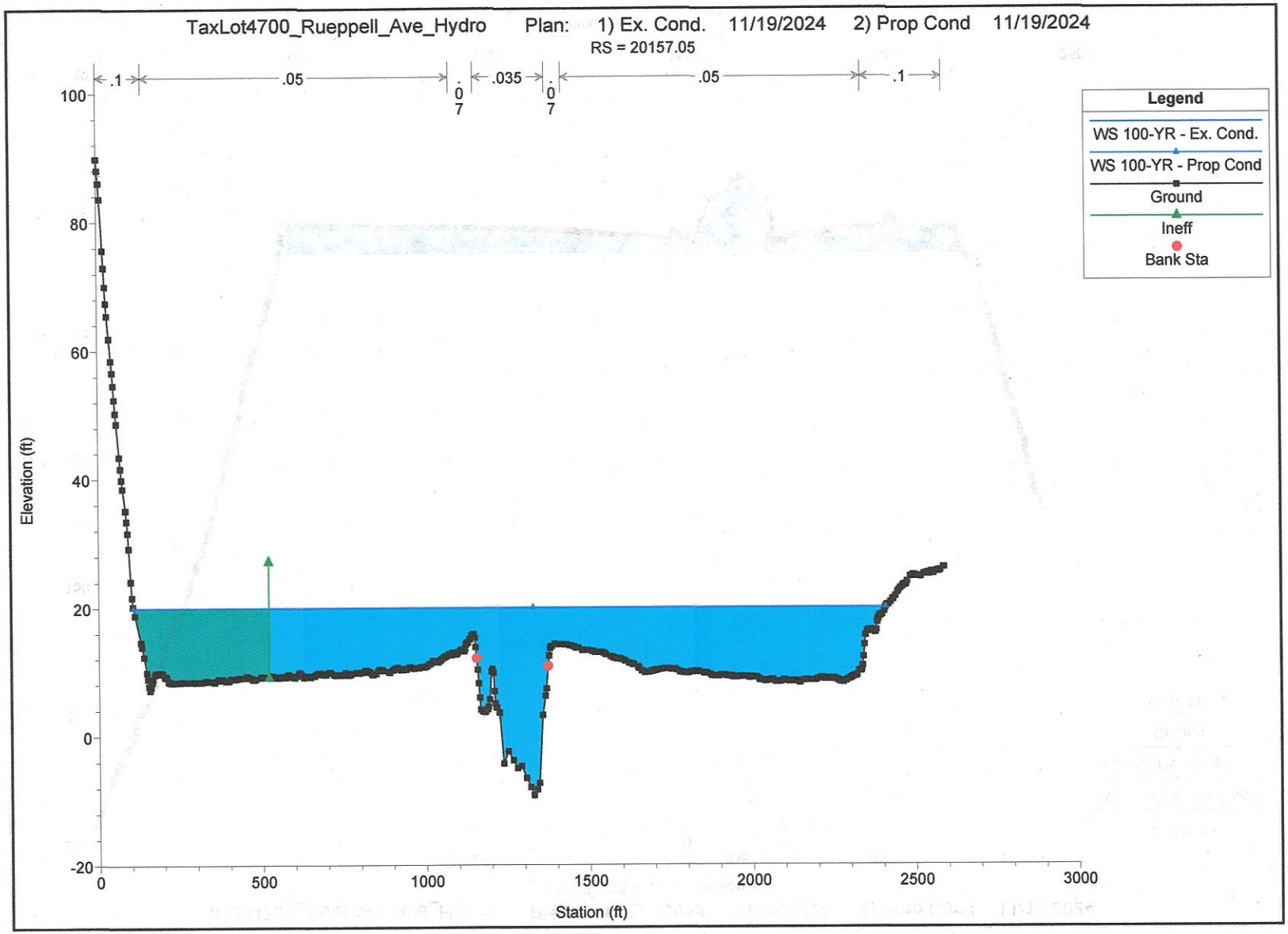
HEC-RAS Output Files

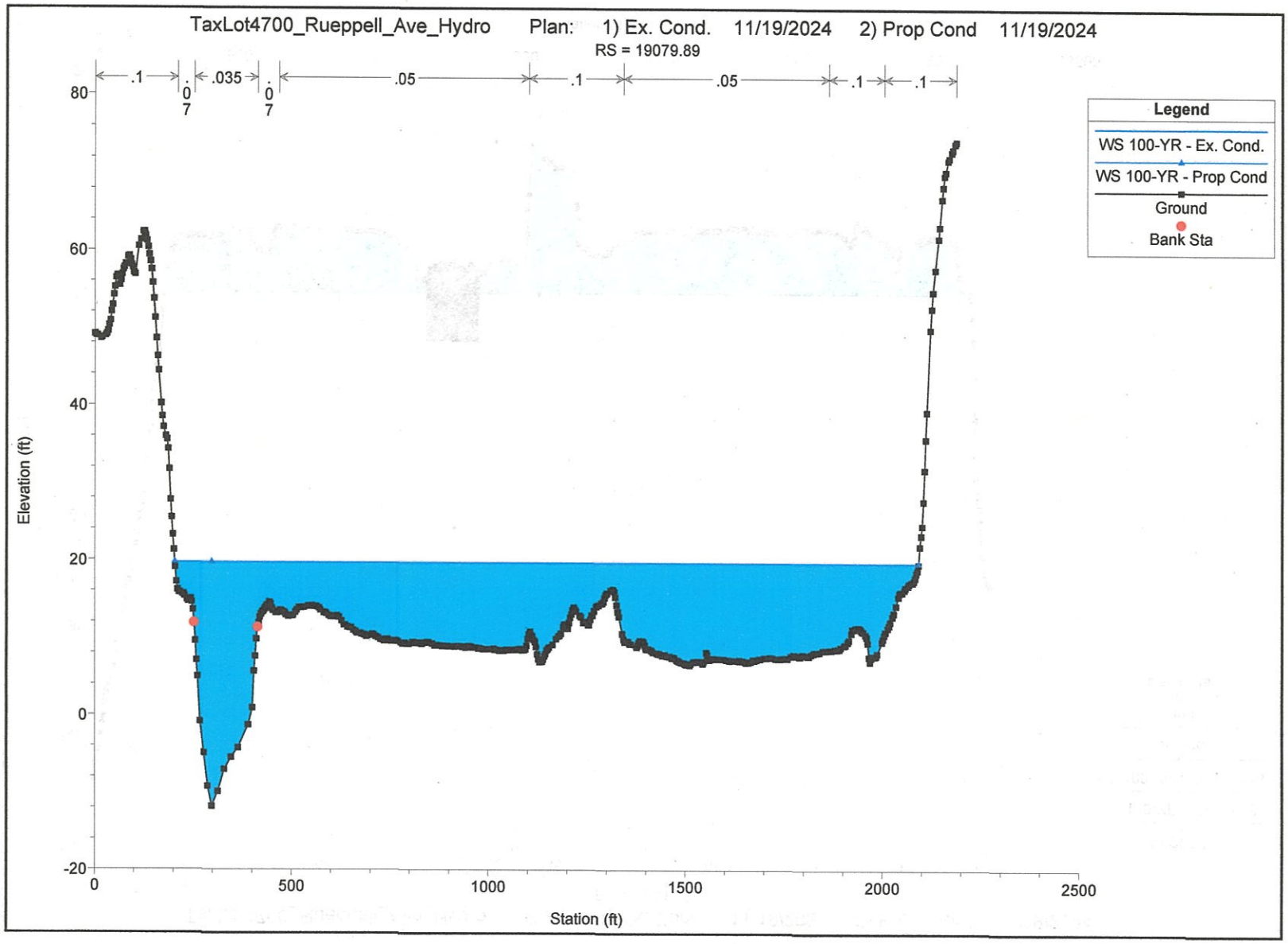
HEC-RAS River: Nestucca River Reach: Lower Profile: 100-YR

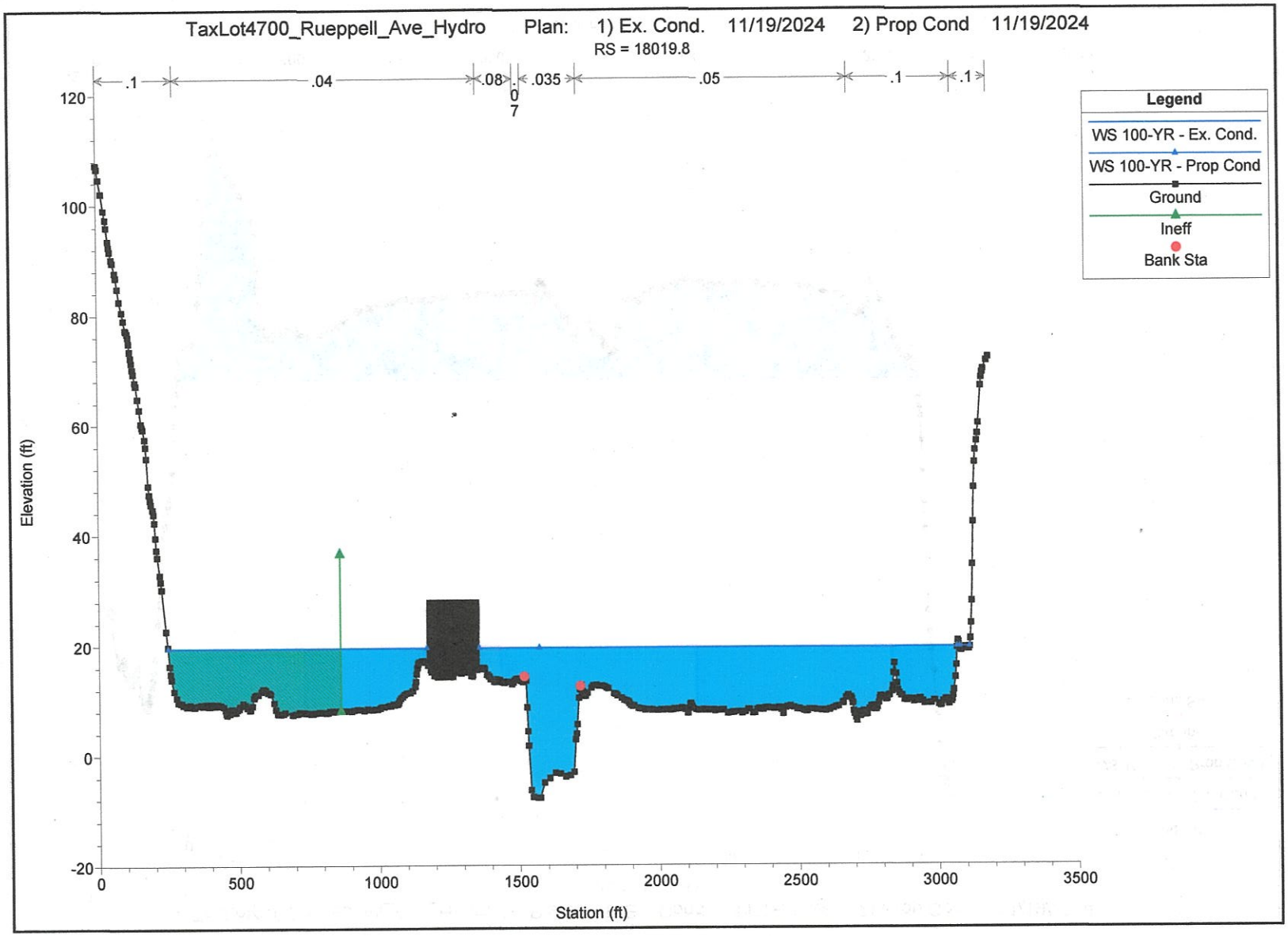
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Lower	22553.94	100-YR	Ex. Cond.	49700.00	-5.99	20.50	12.22	20.55	0.000090	3.06	32242.73	3644.58	0.11
Lower	22553.94	100-YR	Prop Cond	49700.00	-5.99	20.50	12.22	20.55	0.000090	3.06	32241.22	3644.53	0.11
Lower	21008.6	100-YR	Ex. Cond.	49700.00	-8.92	20.09		20.31	0.000259	5.18	17862.67	1743.76	0.20
Lower	21008.6	100-YR	Prop Cond	49700.00	-8.92	20.09		20.31	0.000259	5.19	17861.66	1743.76	0.20
Lower	20157.05	100-YR	Ex. Cond.	49700.00	-9.15	19.94	12.36	20.10	0.000212	4.43	20011.35	2302.26	0.17
Lower	20157.05	100-YR	Prop Cond	49700.00	-9.15	19.94	12.36	20.10	0.000212	4.43	20010.22	2302.26	0.17
Lower	19079.89	100-YR	Ex. Cond.	49700.00	-11.85	19.70		19.89	0.000229	5.03	20292.05	1668.75	0.18
Lower	19079.89	100-YR	Prop Cond	49700.00	-11.85	19.70		19.89	0.000229	5.03	20290.84	1668.75	0.18
Lower	18019.8	100-YR	Ex. Cond.	49700.00	-7.69	19.54	11.35	19.68	0.000186	4.32	22186.38	2668.23	0.16
Lower	18019.8	100-YR	Prop Cond	49700.00	-7.69	19.54	11.35	19.68	0.000187	4.32	22185.01	2668.22	0.16
Lower	17875.97	100-YR	Ex. Cond.	49700.00	-7.60	19.52	11.05	19.65	0.000168	4.13	23060.67	2677.02	0.16
Lower	17875.97	100-YR	Prop Cond	49700.00	-7.60	19.52	11.05	19.65	0.000168	4.13	23059.24	2677.02	0.16
Lower	17653.2	100-YR	Ex. Cond.	49700.00	-4.67	19.54	11.28	19.60	0.000095	3.22	29278.81	3181.64	0.12
Lower	17653.2	100-YR	Prop Cond	49700.00	-4.67	19.54	11.28	19.60	0.000095	3.22	29275.02	3181.63	0.12
Lower	15949.74	100-YR	Ex. Cond.	49700.00	-7.67	19.49	9.86	19.51	0.000032	1.90	46740.28	4377.64	0.07
Lower	15949.74	100-YR	Prop Cond	49700.00	-7.67	19.49	9.86	19.51	0.000032	1.91	46737.63	4377.64	0.07
Lower	14728.64	100-YR	Ex. Cond.	49700.00	-9.90	19.44	10.23	19.48	0.000043	2.46	37323.92	3855.74	0.09
Lower	14728.64	100-YR	Prop Cond	49700.00	-9.90	19.44	10.23	19.48	0.000043	2.46	37321.56	3855.73	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	36908.18	3871.08	0.10
Lower	14544.91	100-YR	Prop Cond	49700.00	-8.62	19.42	10.32	19.46	0.000045	2.54	36905.81	3871.07	0.10
Lower	13541.26	100-YR	Ex. Cond.	49700.00	-7.81	19.37	10.21	19.42	0.000052	2.60	32790.70	3280.38	0.10
Lower	13541.26	100-YR	Prop Cond	49700.00	-7.81	19.37	10.21	19.42	0.000052	2.60	32788.79	3280.38	0.10
Lower	12396	100-YR	Ex. Cond.	49700.00	-3.59	18.51		19.22	0.000462	7.06	9097.24	2050.16	0.30
Lower	12396	100-YR	Prop Cond	49700.00	-3.59	18.51		19.22	0.000462	7.06	9096.65	2050.11	0.30
Lower	11367.2	100-YR	Ex. Cond.	49700.00	-3.05	17.74	9.51	18.65	0.000620	7.83	7537.51	2018.83	0.34
Lower	11367.2	100-YR	Prop Cond	49700.00	-3.05	17.74	9.51	18.65	0.000620	7.83	7536.81	2018.81	0.34
Lower	10048.77	100-YR	Ex. Cond.	49700.00	-3.49	16.98	9.18	17.81	0.000617	7.53	8685.25	2063.21	0.34
Lower	10048.77	100-YR	Prop Cond	49700.00	-3.49	16.98	9.18	17.81	0.000618	7.53	8683.88	2063.07	0.34
Lower	9942.323			Bridge									
Lower	9804.361	100-YR	Ex. Cond.	49700.00	-5.44	16.83	8.05	17.52	0.000540	6.93	10035.71	2094.17	0.31
Lower	9804.361	100-YR	Prop Cond	49700.00	-5.44	16.83	8.05	17.52	0.000540	6.93	10034.18	2094.16	0.31
Lower	8988.11	100-YR	Ex. Cond.	49700.00	-4.80	16.62	8.14	16.98	0.000328	5.35	12967.10	1987.49	0.24
Lower	8988.11	100-YR	Prop Cond	49700.00	-4.80	16.62	8.14	16.97	0.000329	5.35	12964.76	1987.37	0.24
Lower	8192.259	100-YR	Ex. Cond.	49700.00	-18.19	16.36	6.30	16.73	0.000307	5.46	12941.69	2042.03	0.23
Lower	8192.259	100-YR	Prop Cond	49700.00	-18.19	16.36	6.30	16.73	0.000307	5.46	12939.08	2042.00	0.23
Lower	8060.26	100-YR	Ex. Cond.	49700.00	-13.99	16.33	6.43	16.69	0.000300	5.32	12652.10	1863.66	0.23
Lower	8060.26	100-YR	Prop Cond	49700.00	-13.99	16.32	6.43	16.69	0.000300	5.32	12649.66	1863.57	0.23
Lower	8042.26	100-YR	Ex. Cond.	49700.00	-13.42	16.31	6.44	16.68	0.000311	5.38	12449.58	1871.44	0.24
Lower	8042.26	100-YR	Prop Cond	49700.00	-13.42	16.30	6.44	16.68	0.000314	5.40	12243.84	1822.13	0.24
Lower	8000.26	100-YR	Ex. Cond.	49700.00	-12.08	16.32	6.48	16.66	0.000316	5.15	12454.82	1826.78	0.23
Lower	8000.26	100-YR	Prop Cond	49700.00	-12.08	16.30	6.48	16.66	0.000324	5.21	12232.06	1781.83	0.23
Lower	7990.26	100-YR	Ex. Cond.	49700.00	-11.76	16.30	6.48	16.66	0.000313	5.21	12388.74	1794.44	0.23
Lower	7990.26	100-YR	Prop Cond	49700.00	-11.76	16.30	6.48	16.66	0.000313	5.21	12388.74	1794.44	0.23
Lower	7839.108	100-YR	Ex. Cond.	49700.00	-6.96	16.25	6.76	16.61	0.000310	5.18	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	5.18	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

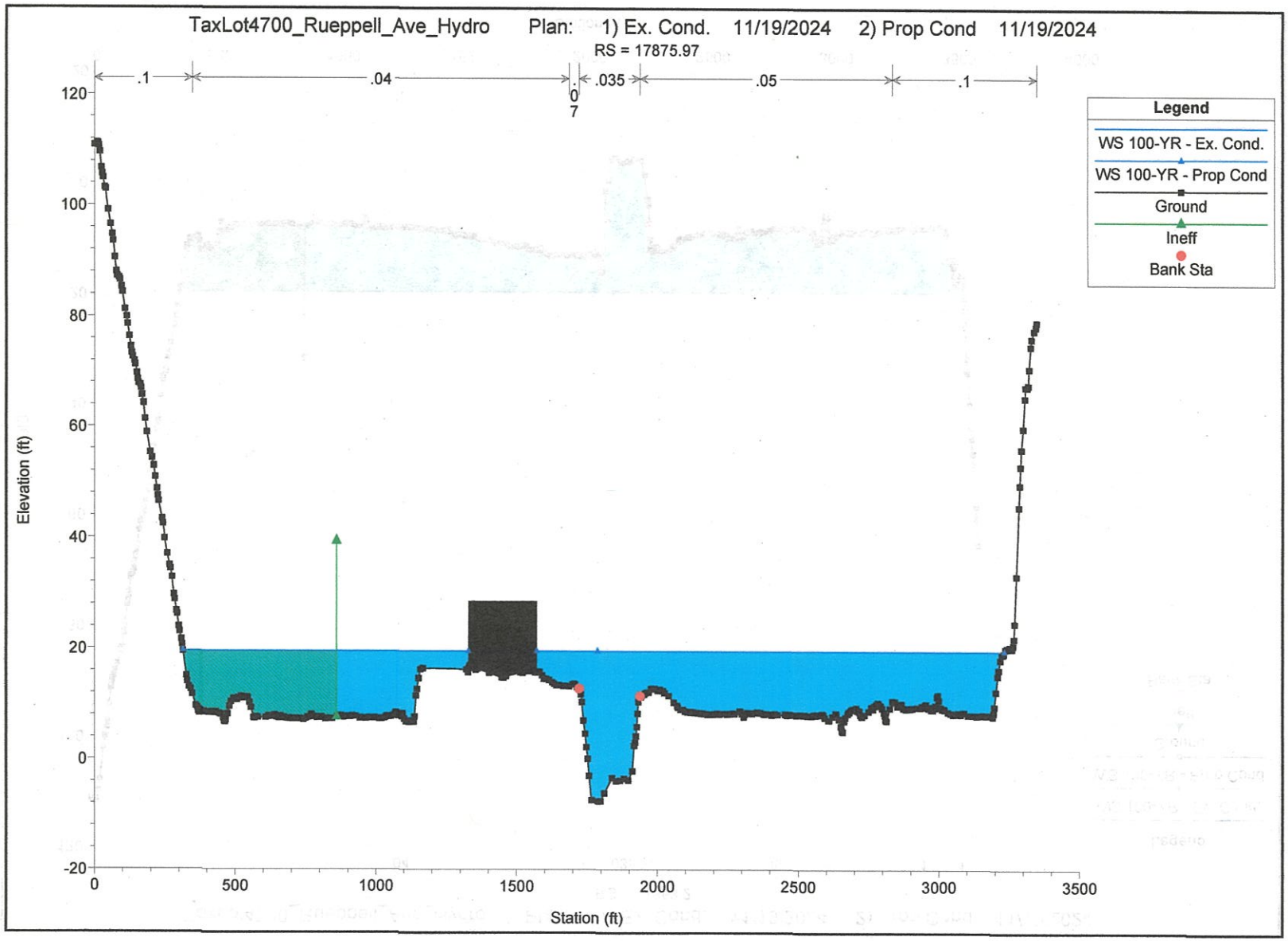

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 22553.94
.1
.053
.07
.035
.07
.05
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
250
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
Station (ft)

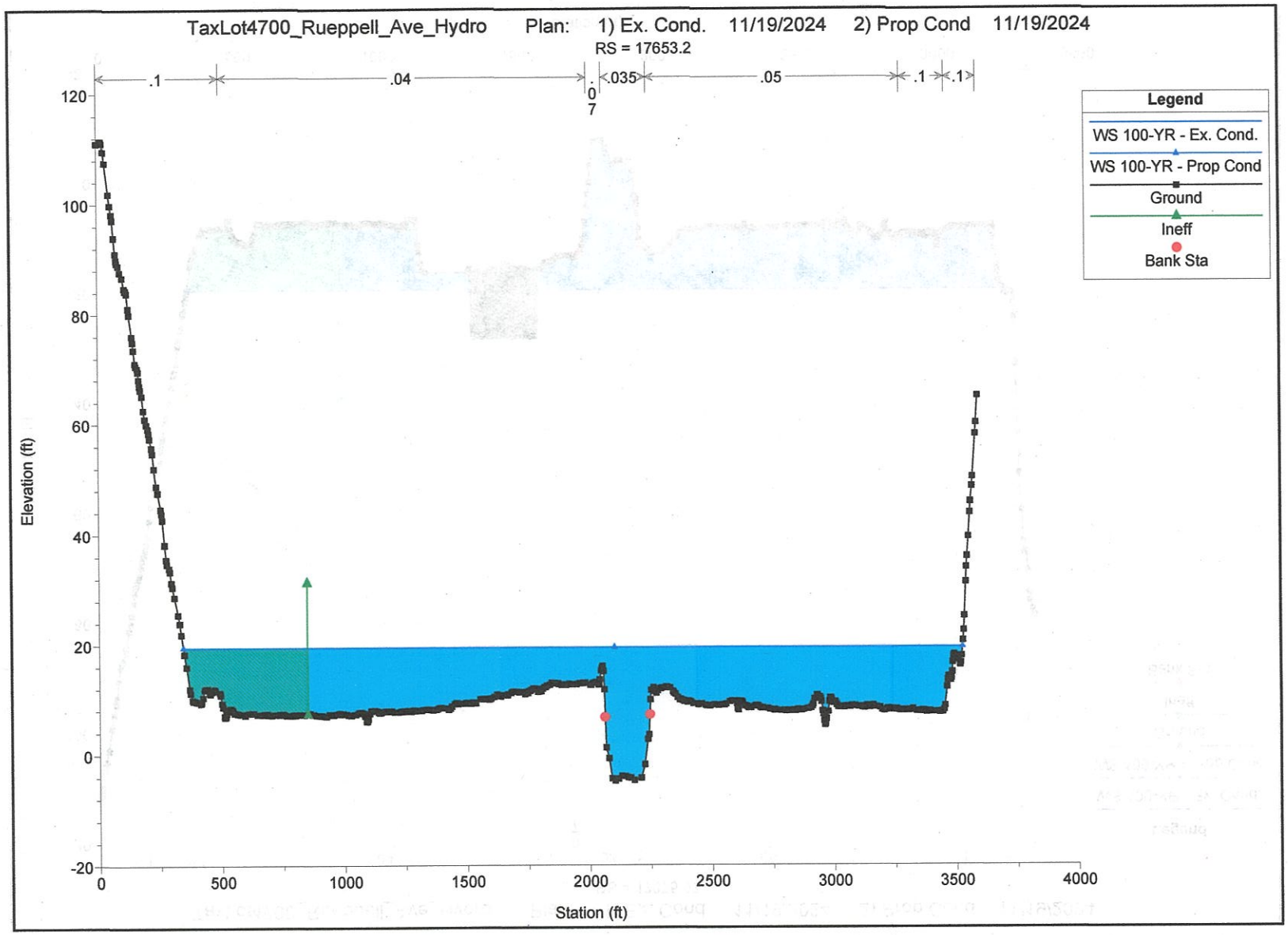

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 21008.6 Cross Section F
.1
.05
.07
.035
.07
.05
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Bank Sta
Elevation (ft)
250
200
150
100
50
0
-50
0
500
1000
1500
2000
2500
Station (ft)

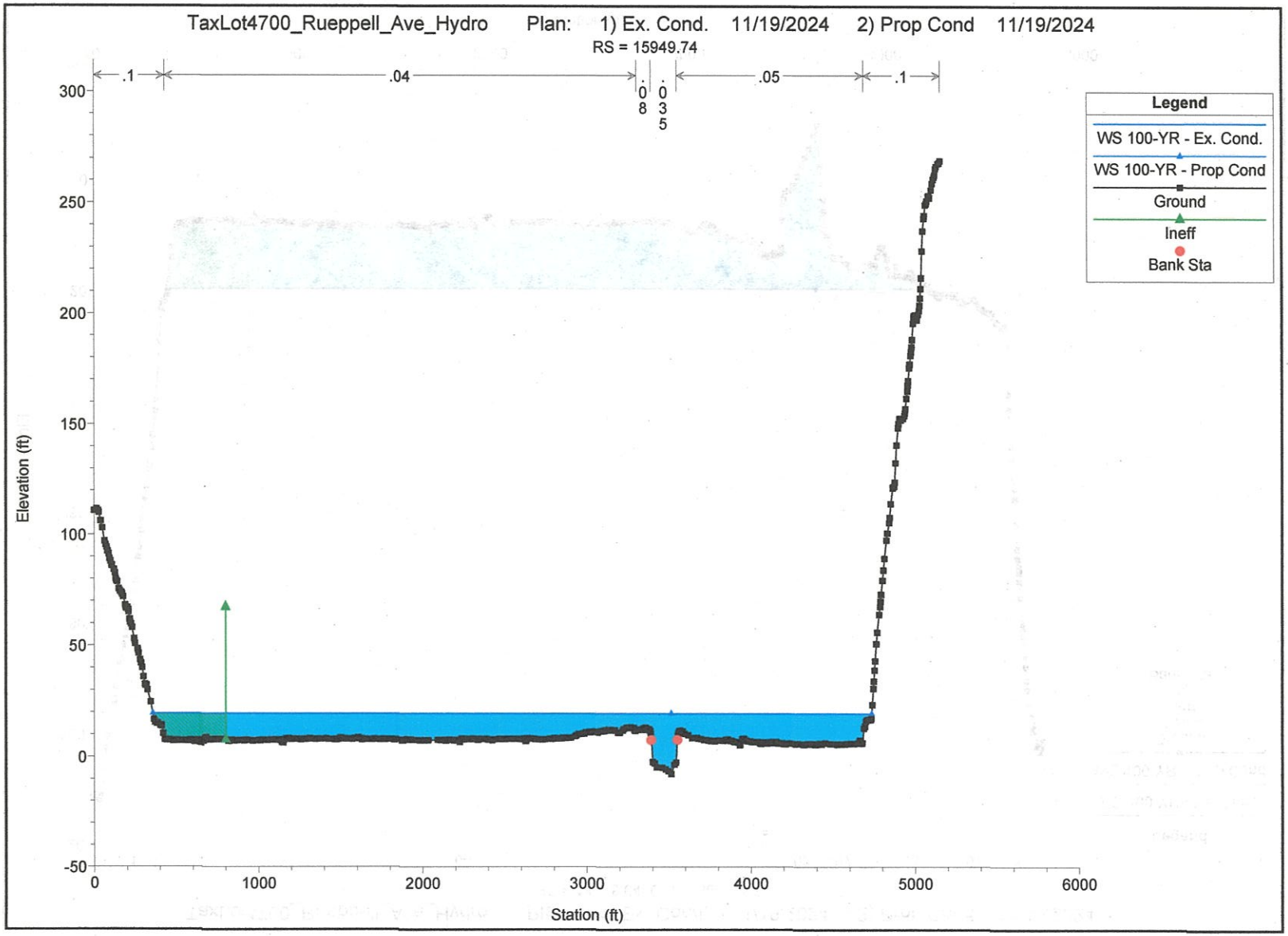

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 20157.05
.1
.05
.07
.035
.07
.05
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
Station (ft)

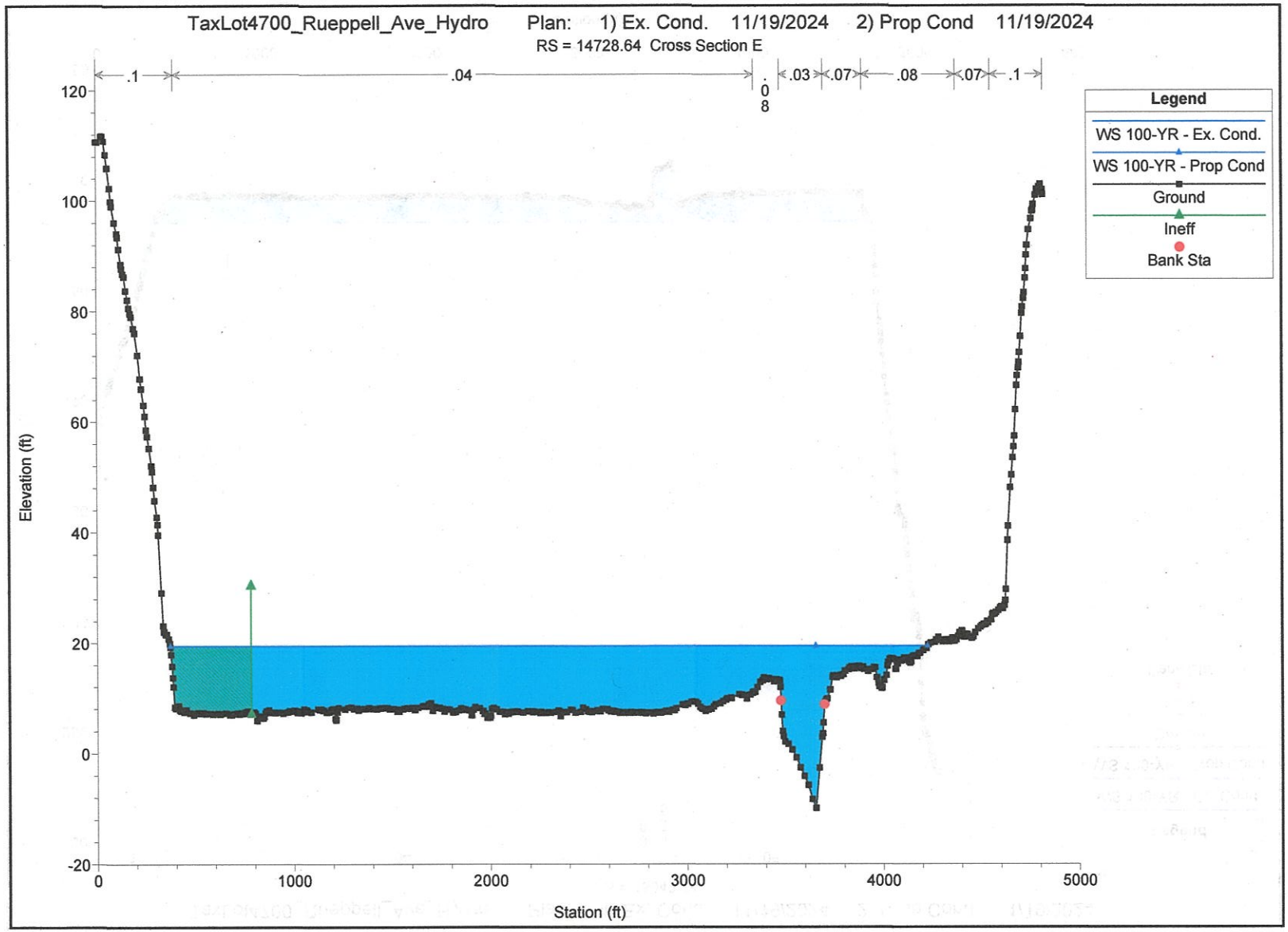

TaxLot4700_Rueppell_Ave_Hydro
Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 19079.89
.1
.07
.035
.07
.05
.1
.05
.1
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
Station (ft)

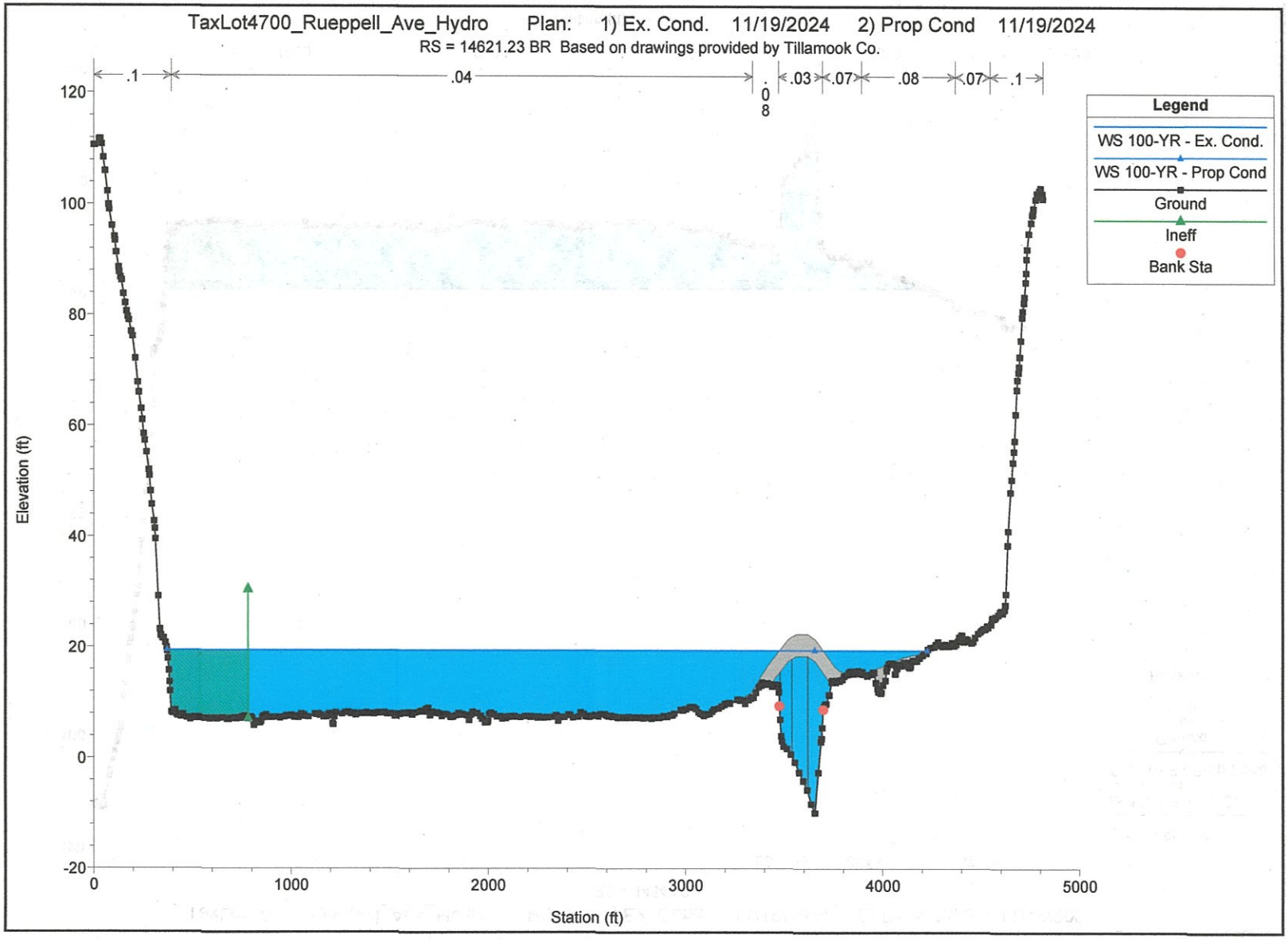

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 18019.8
.1
.04
.08
.035
.05
.1
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

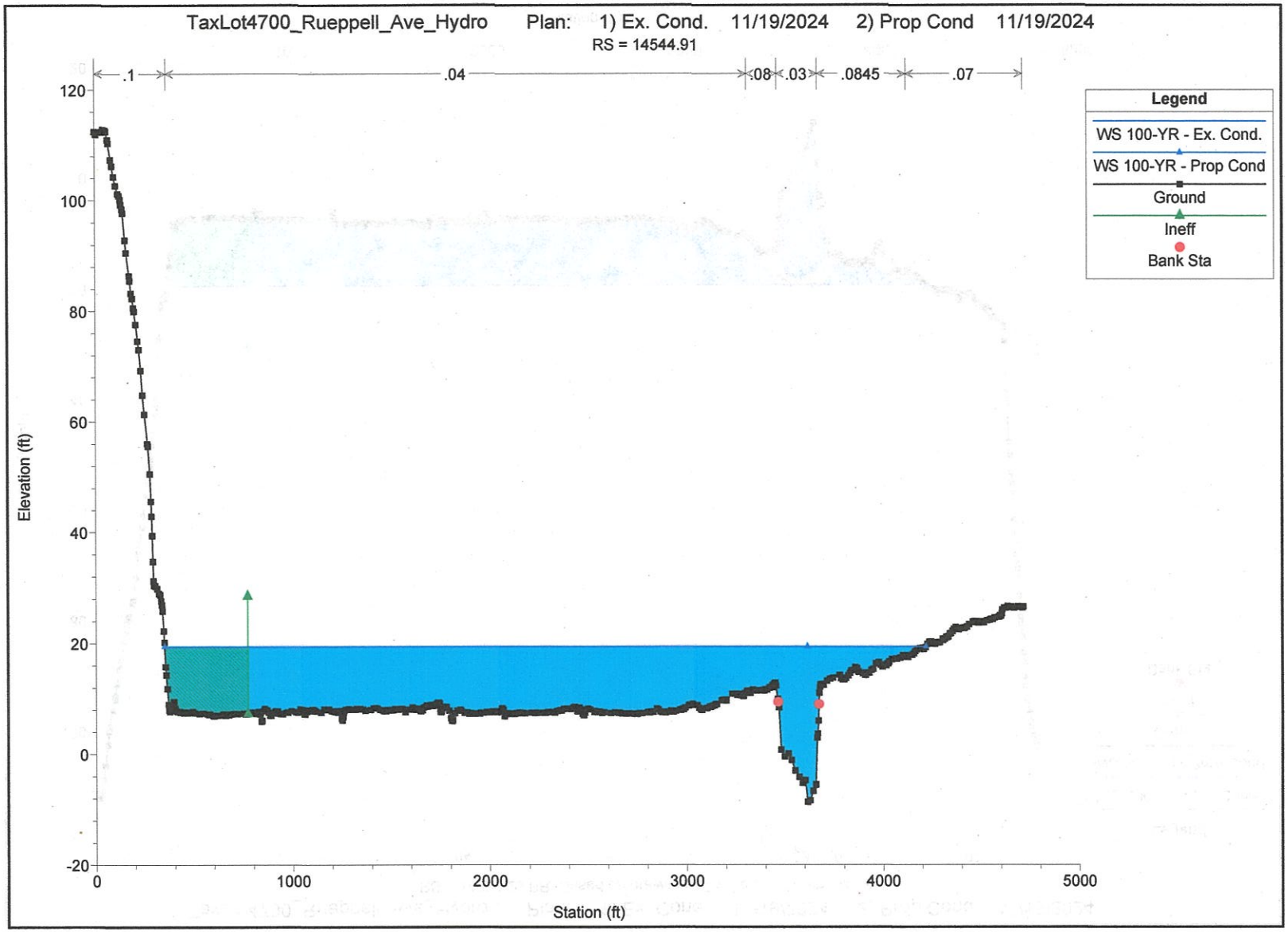

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 17875.97
.1
.04
.07
.035
.05
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

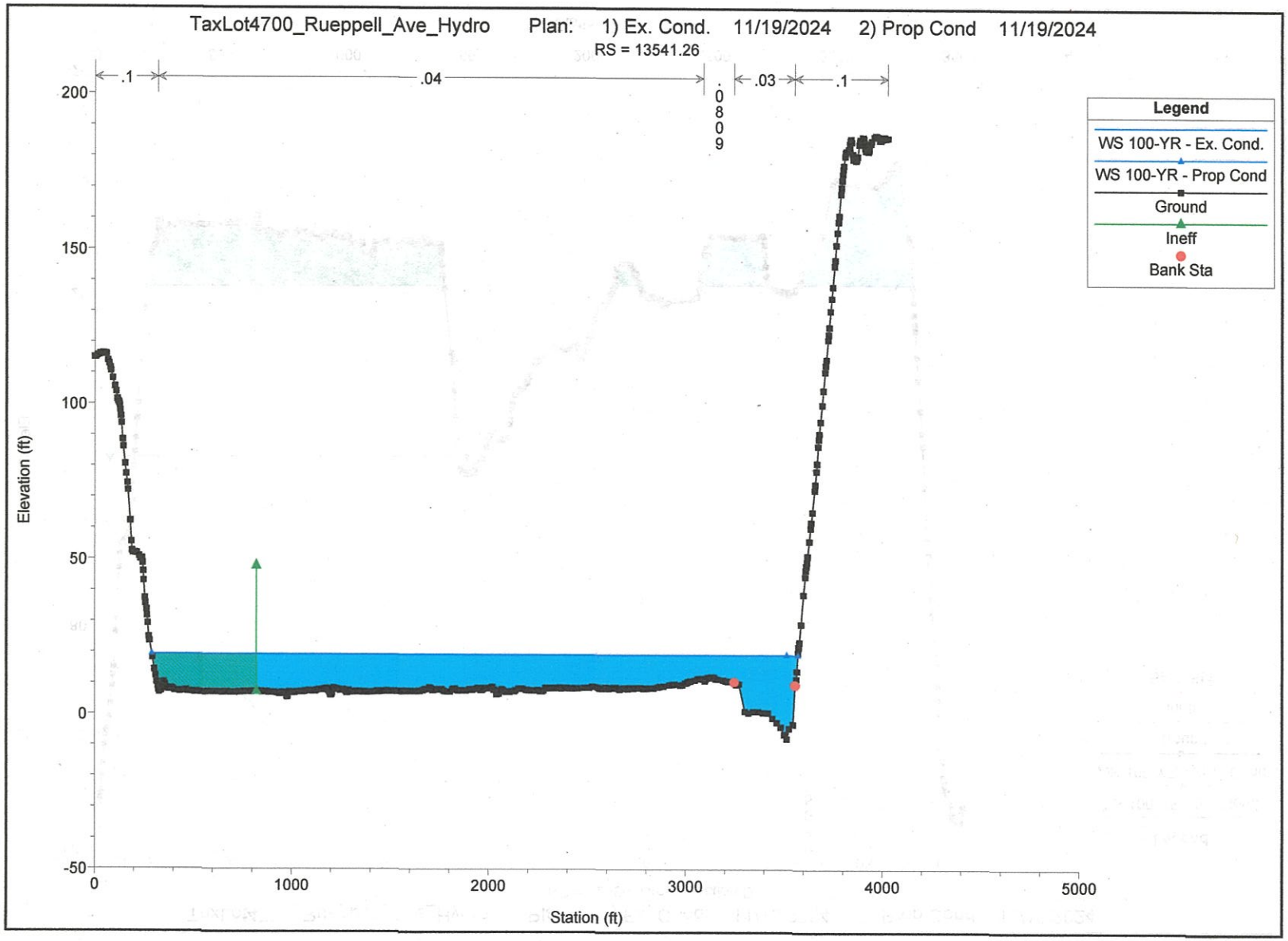

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 17653.2
.1
.04
.035
.05
.1
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

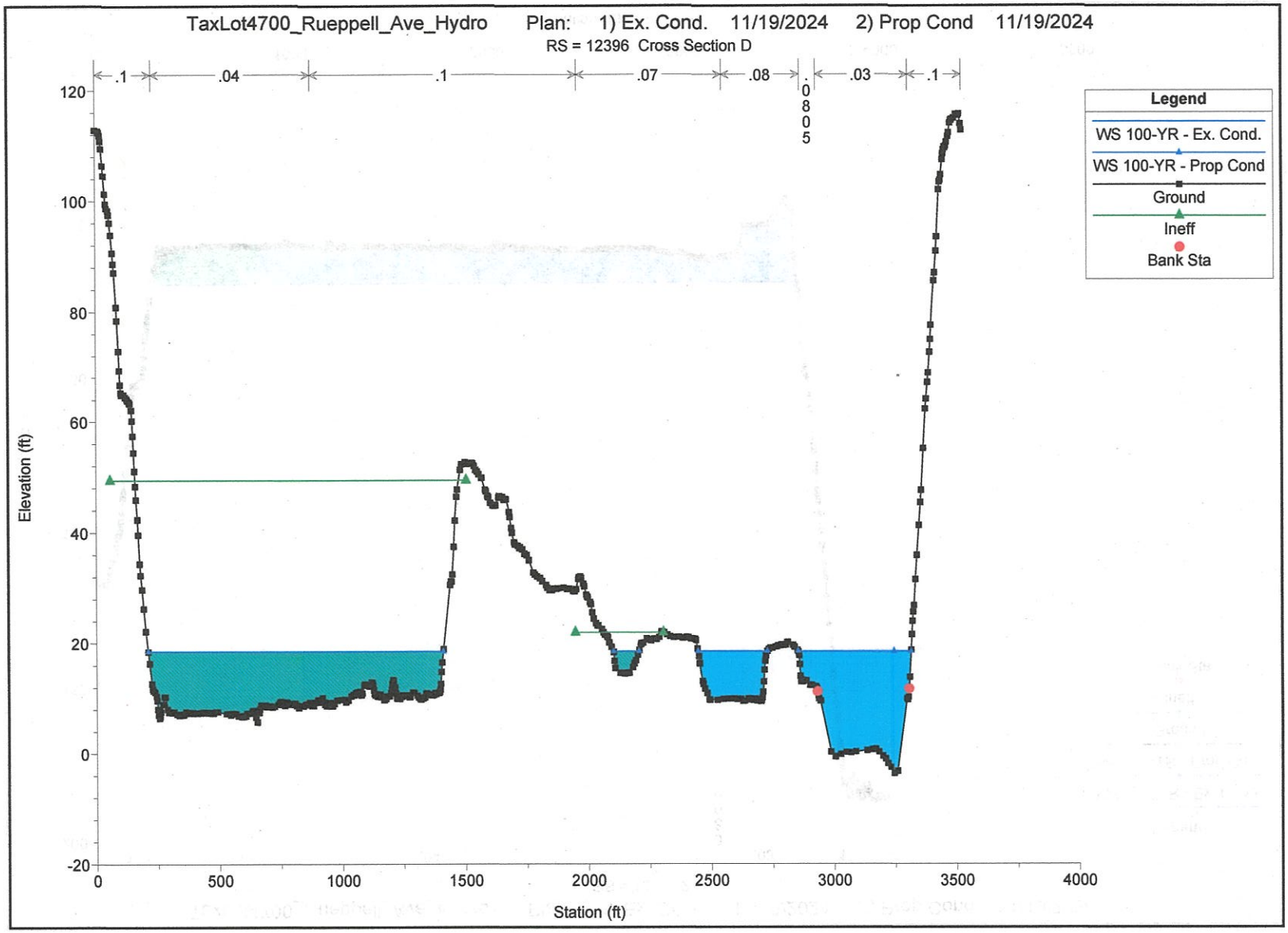

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 15949.74
.1
.04
.08
.035
.05
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
300
250
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
6000
Station (ft)

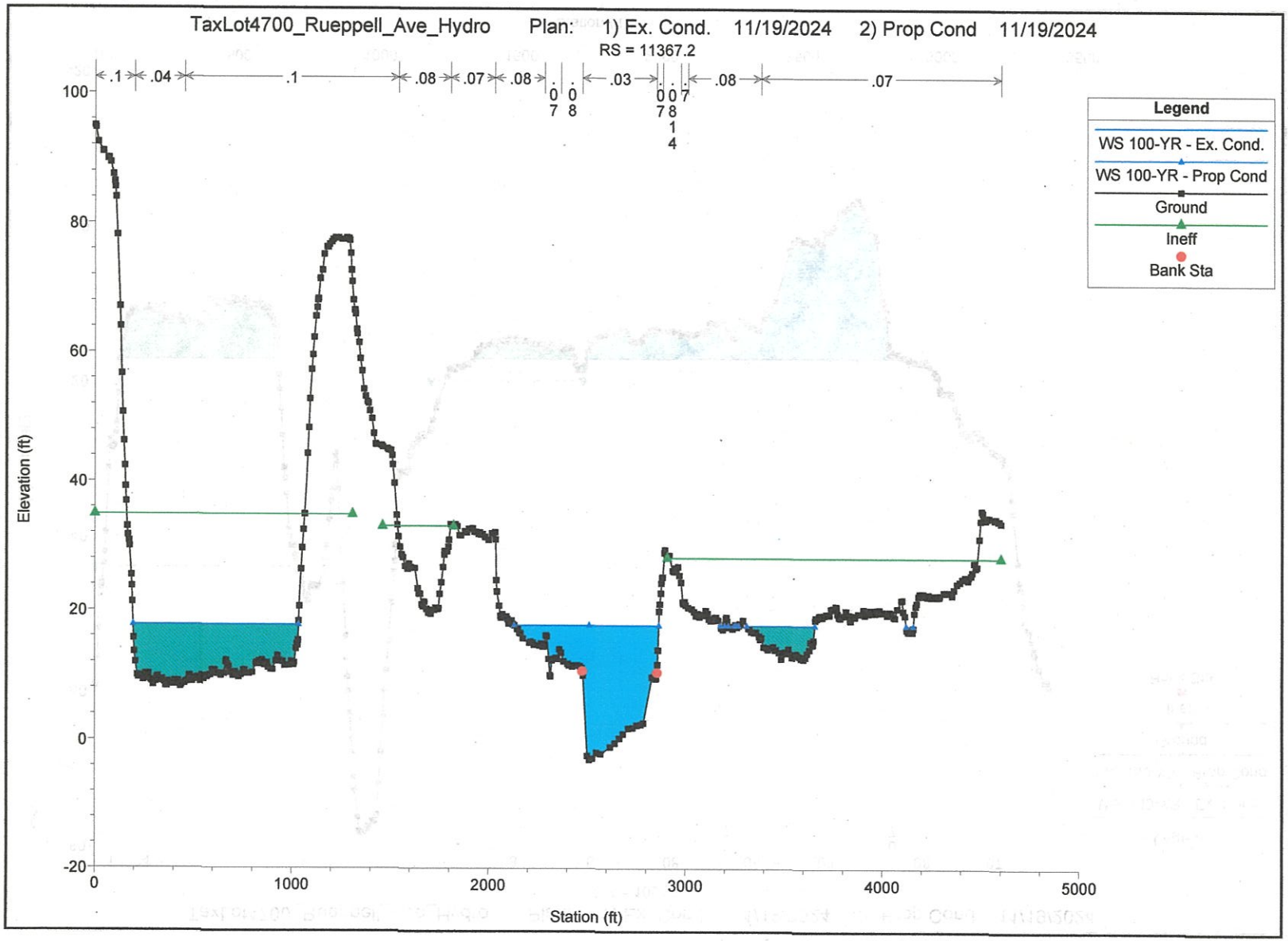

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 14728.64 Cross Section E
.1
.04
.08
.03
.07
.08
.07
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

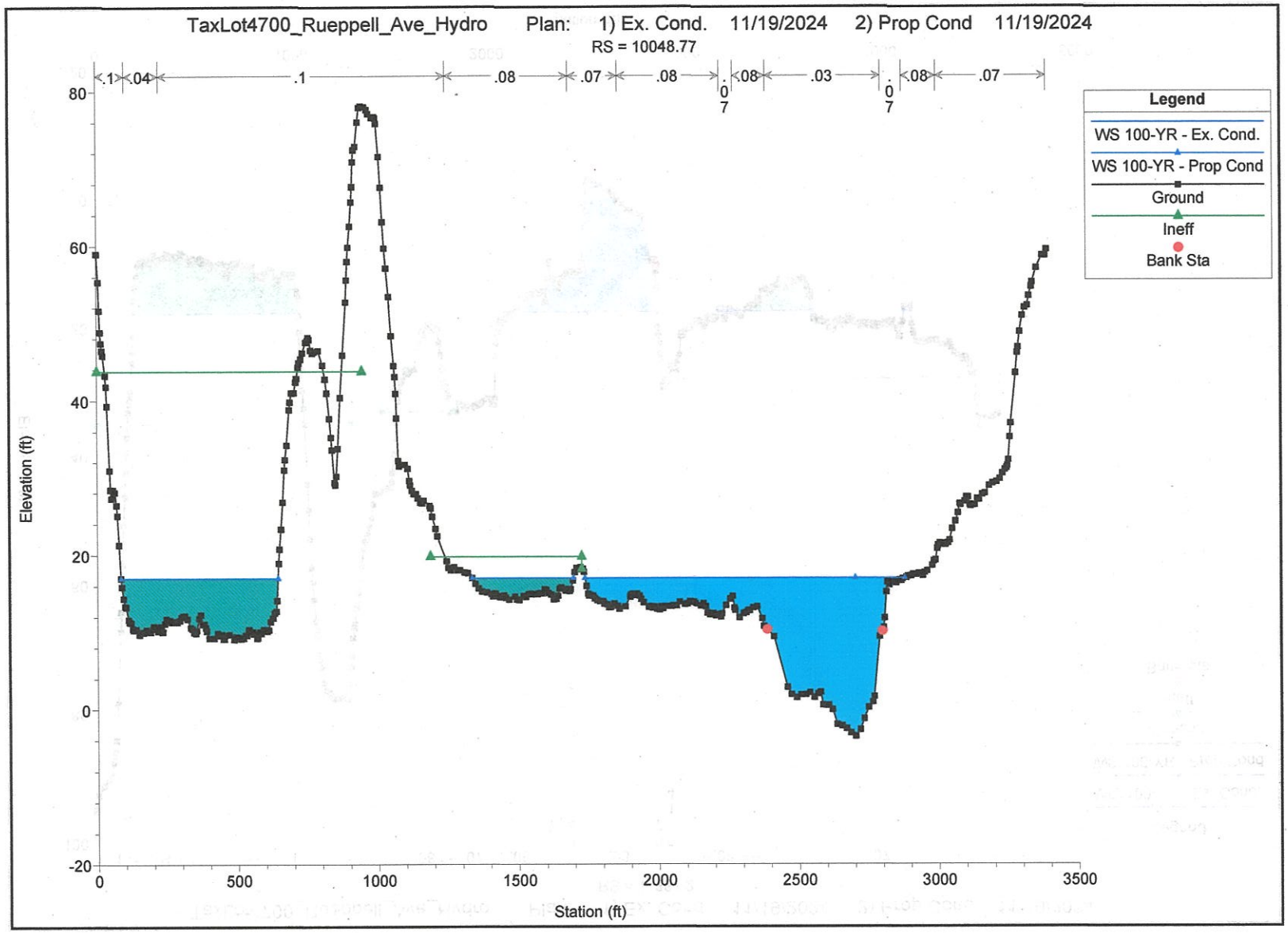

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 14621.23 BR Based on drawings provided by Tillamook Co.
.1
.04
.08
.03
.07
.08
.07
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

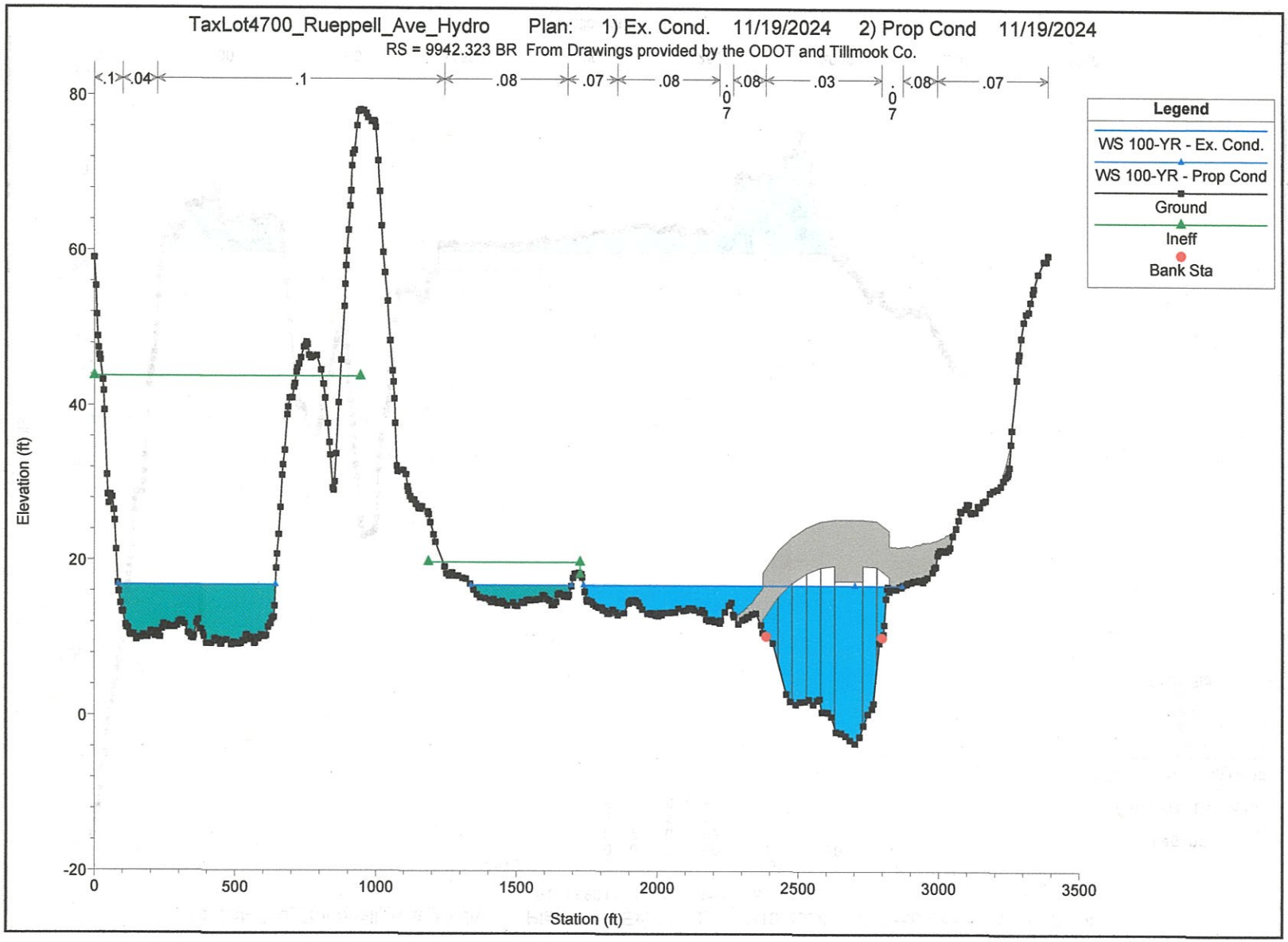

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 14544.91
.1
.04
.08
.03
.0845
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

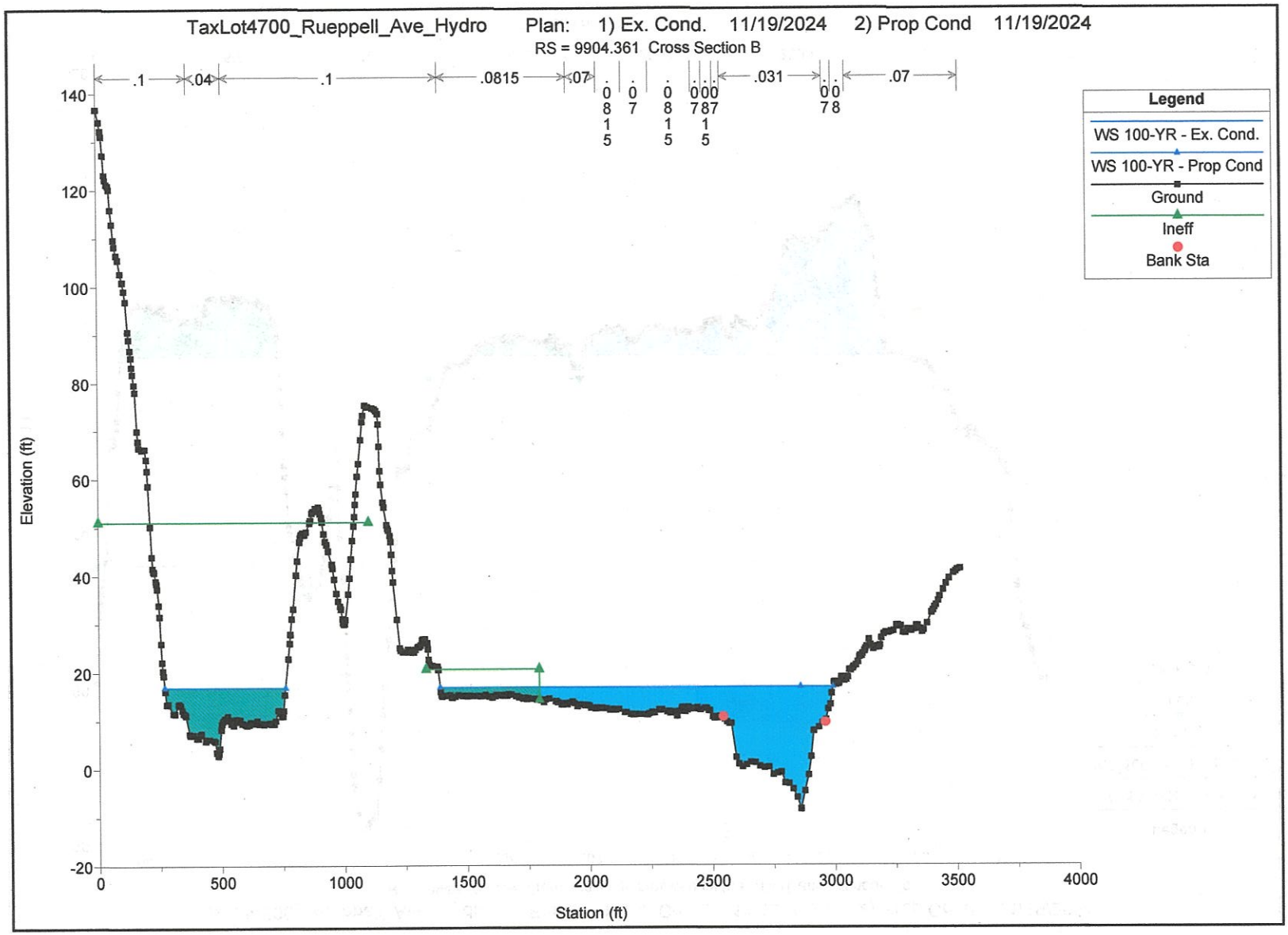

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 13541.26
.1
.04
.0809
.03
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
200
150
100
50
0
-50
0
1000
2000
3000
4000
5000
Station (ft)

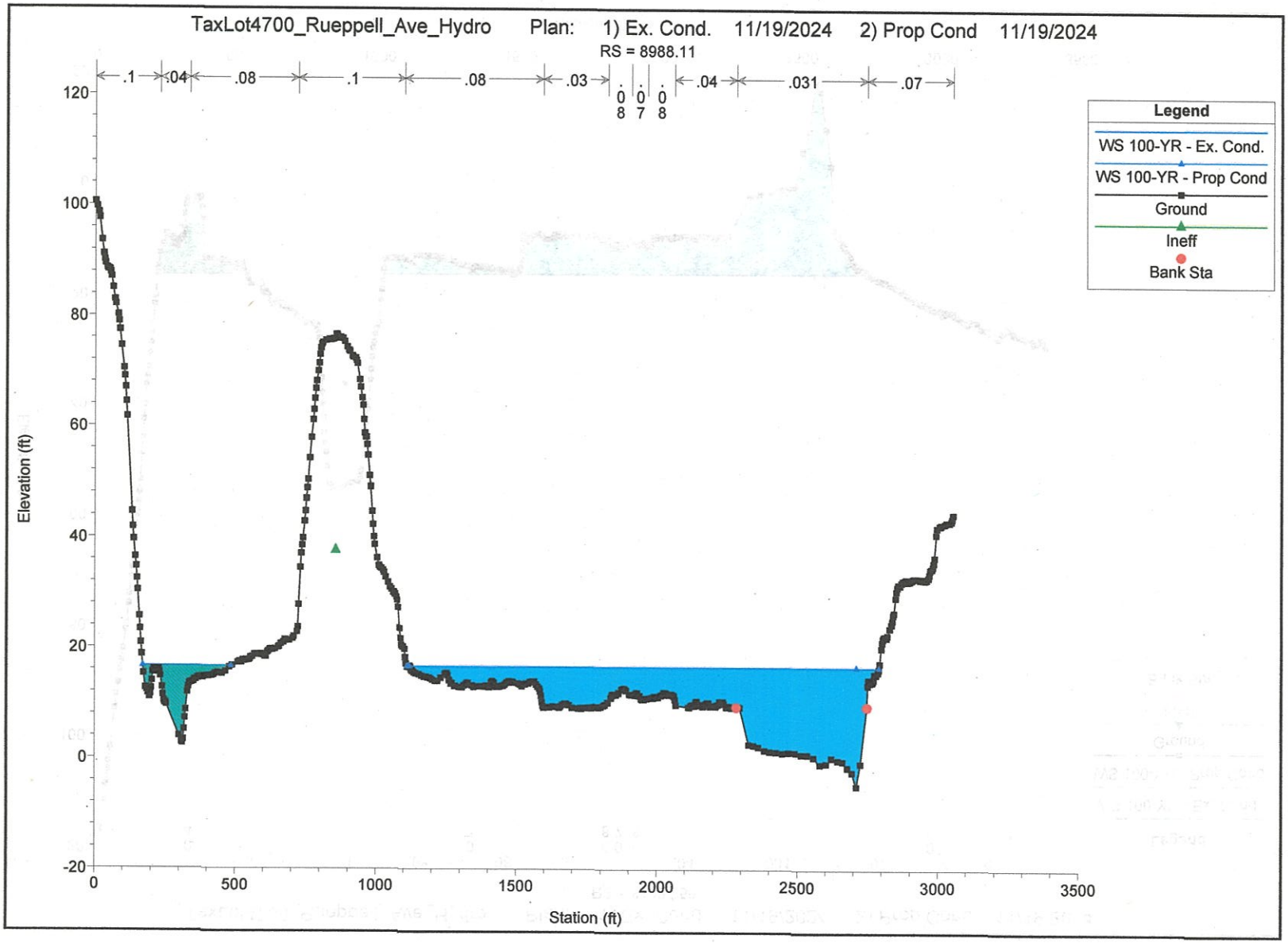

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 12396 Cross Section D
.1
.04
.1
.07
.08
.0805
.03
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)

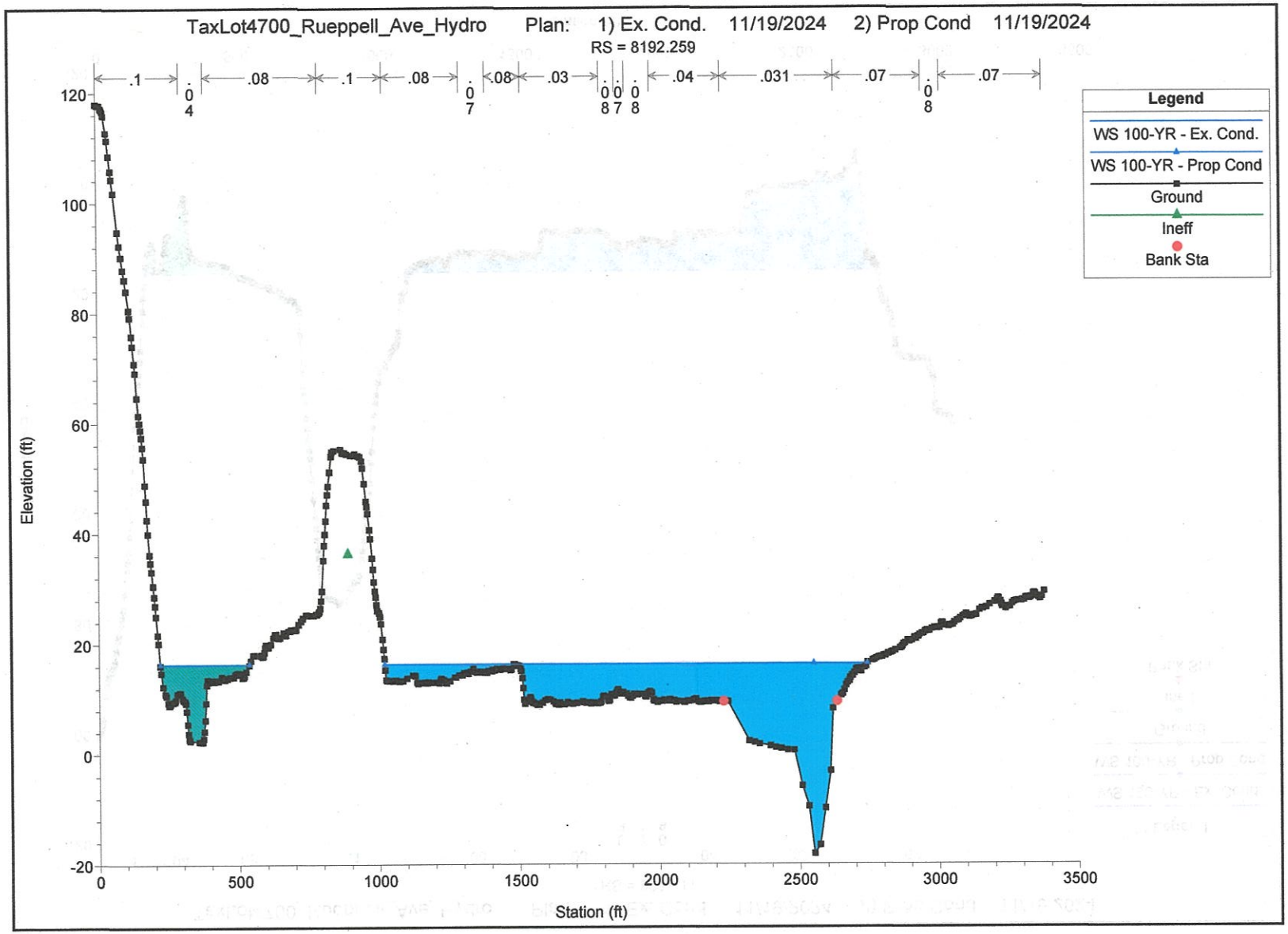

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 11367.2
.1
.04
.1
.08
.07
.08
.07
.08
.03
.07
.08
.07
.08
.07
.14
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)

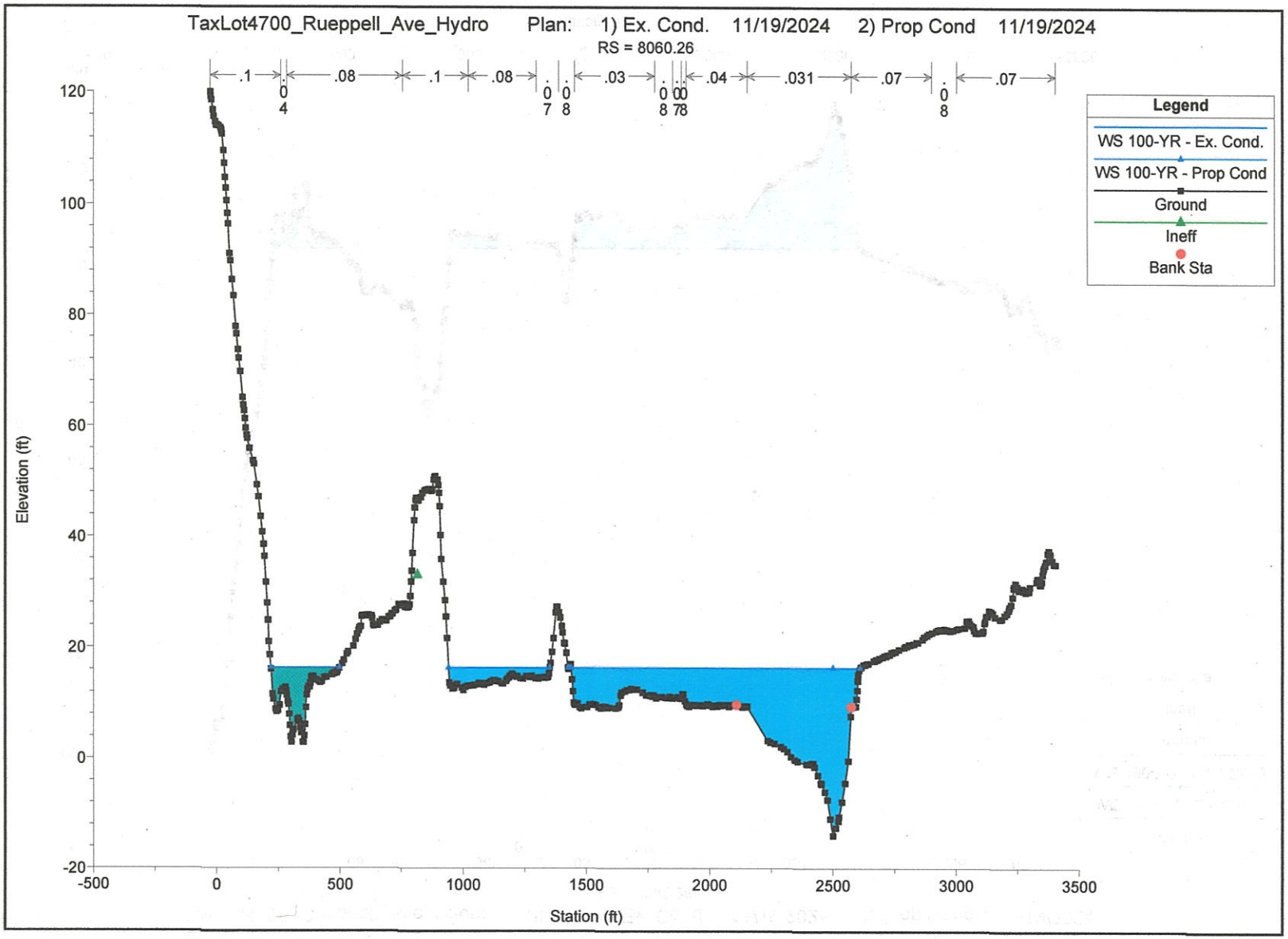

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 10048.77
.1
.04
.1
.08
.07
.08
.08
.03
.08
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

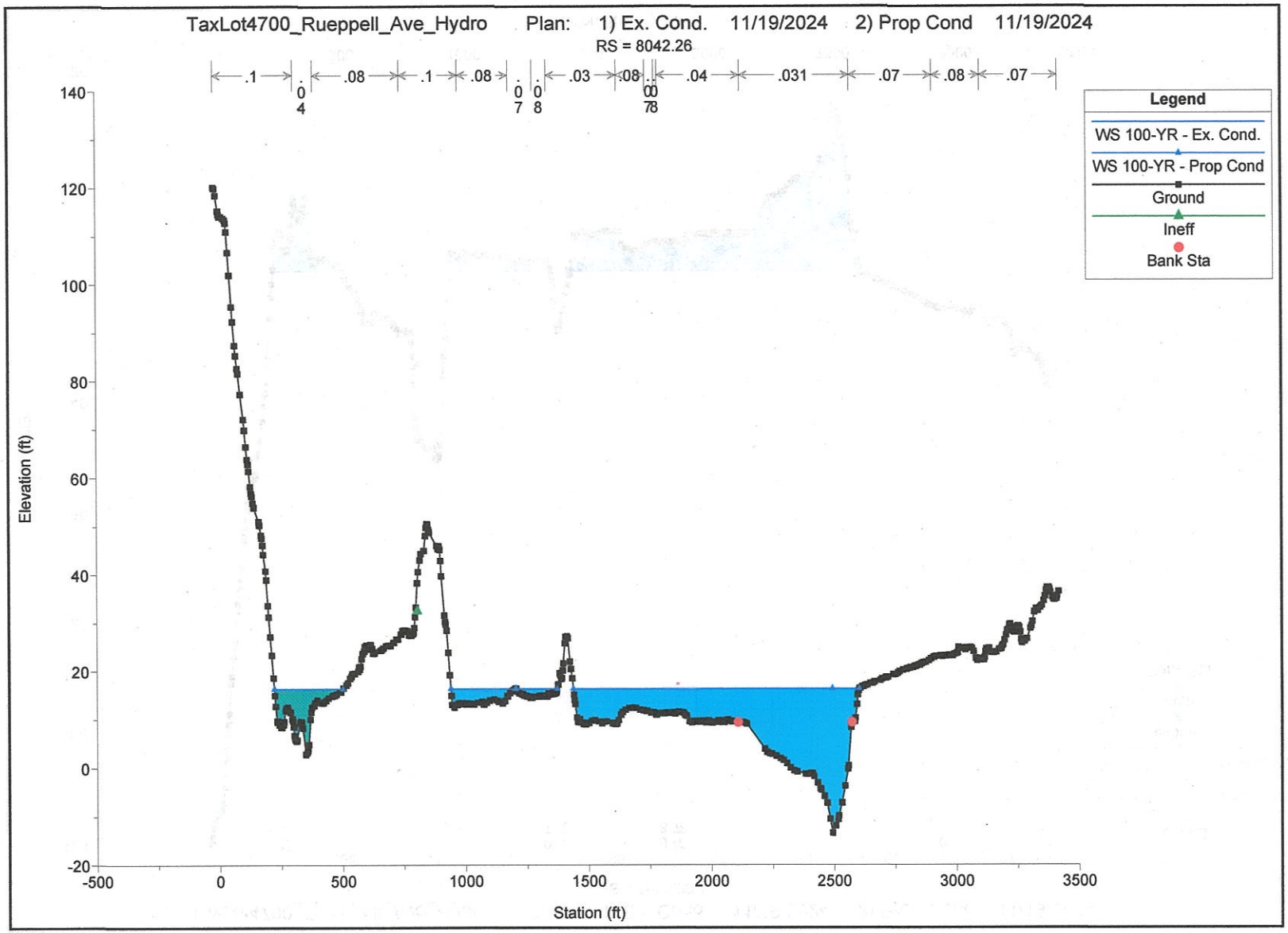

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 9942.323 BR From Drawings provided by the ODOT and Tillmook Co.
.1
.04
.1
.08
.07
.08
.08
.03
.08
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

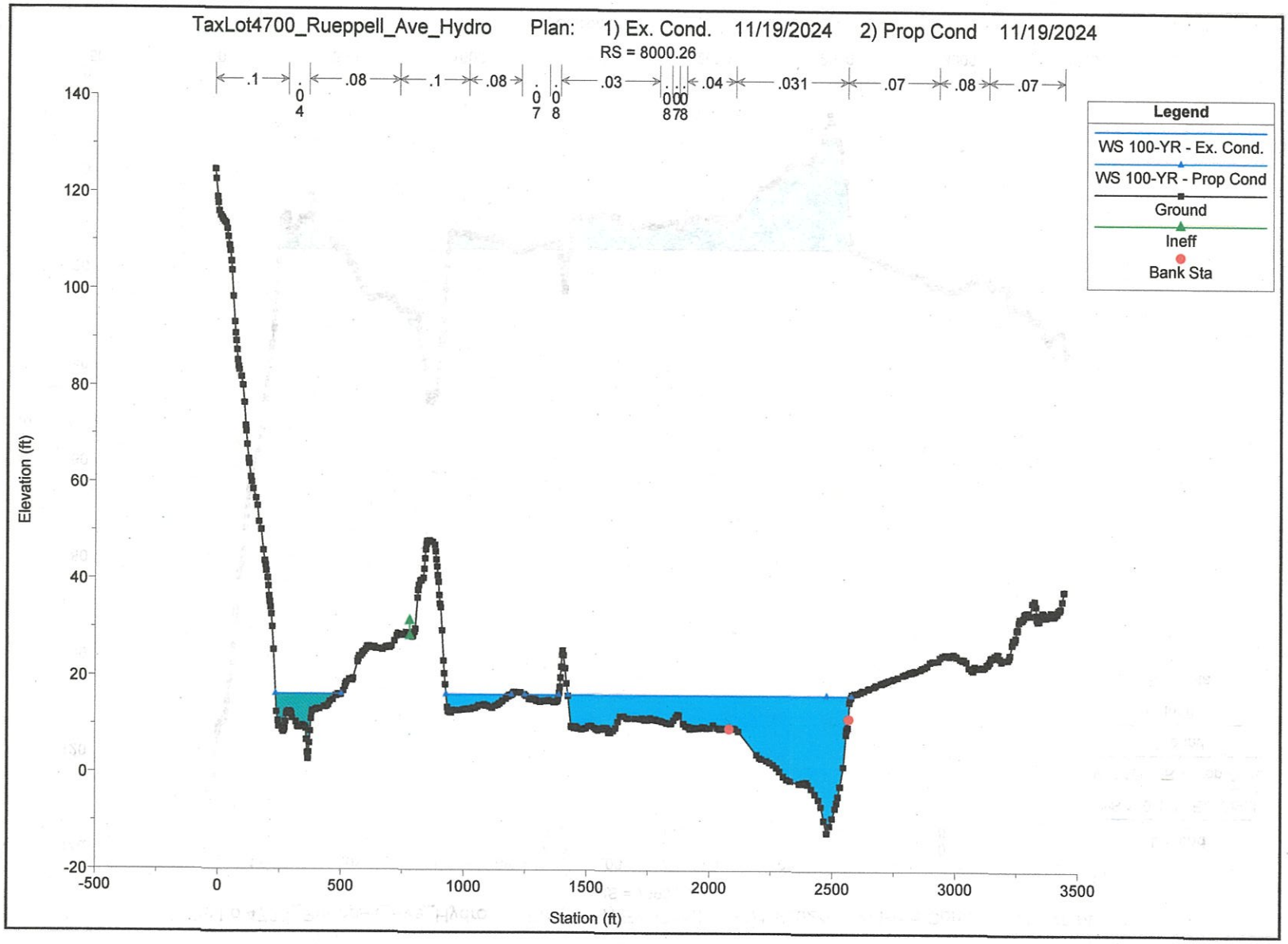

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 9904.361 Cross Section B
.1
.04
.1
.0815
.07
.031
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
140
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000

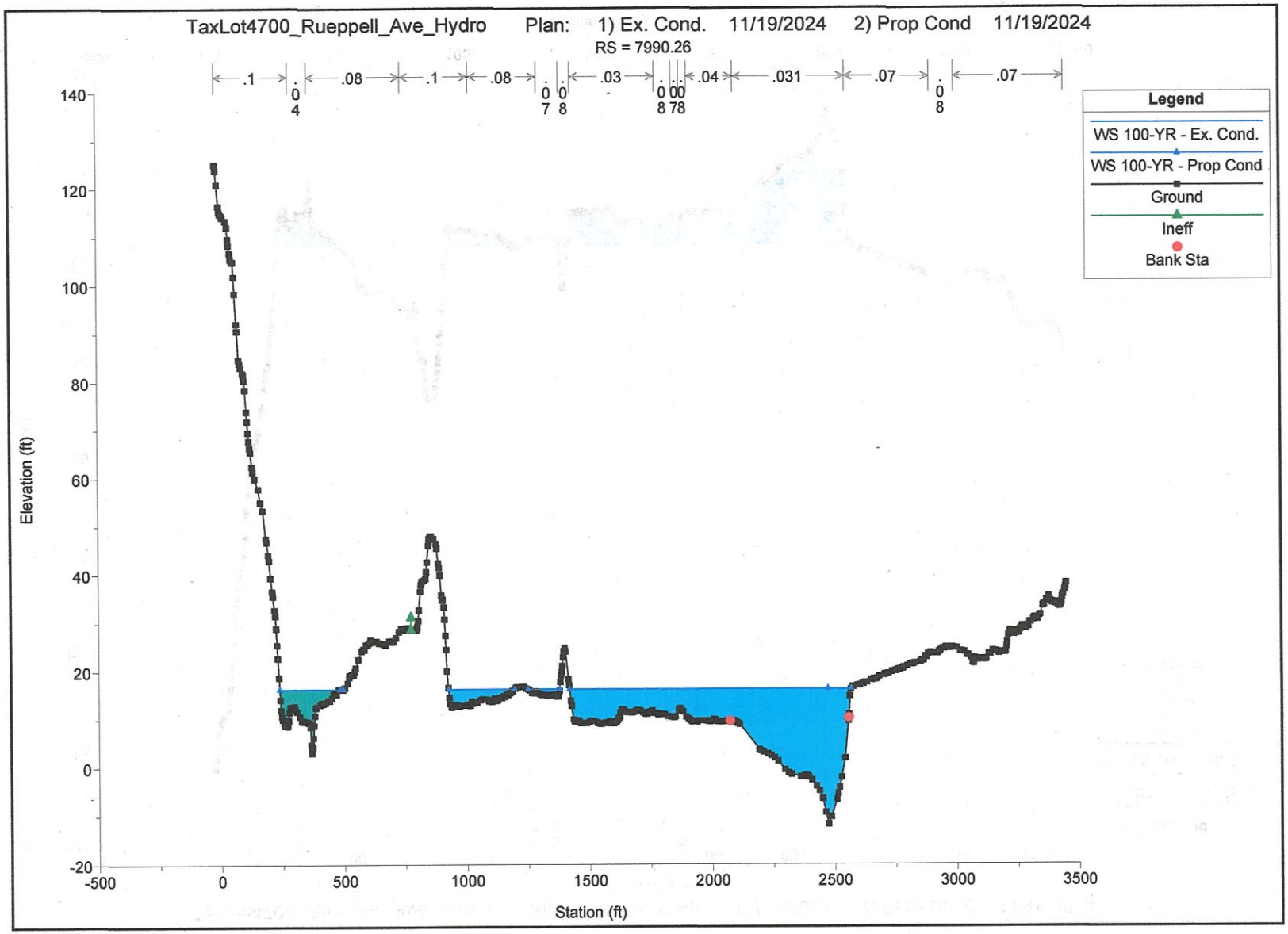

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 8988.11
.1
.04
.08
.1
.08
.03
.08
.07
.08
.04
.031
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

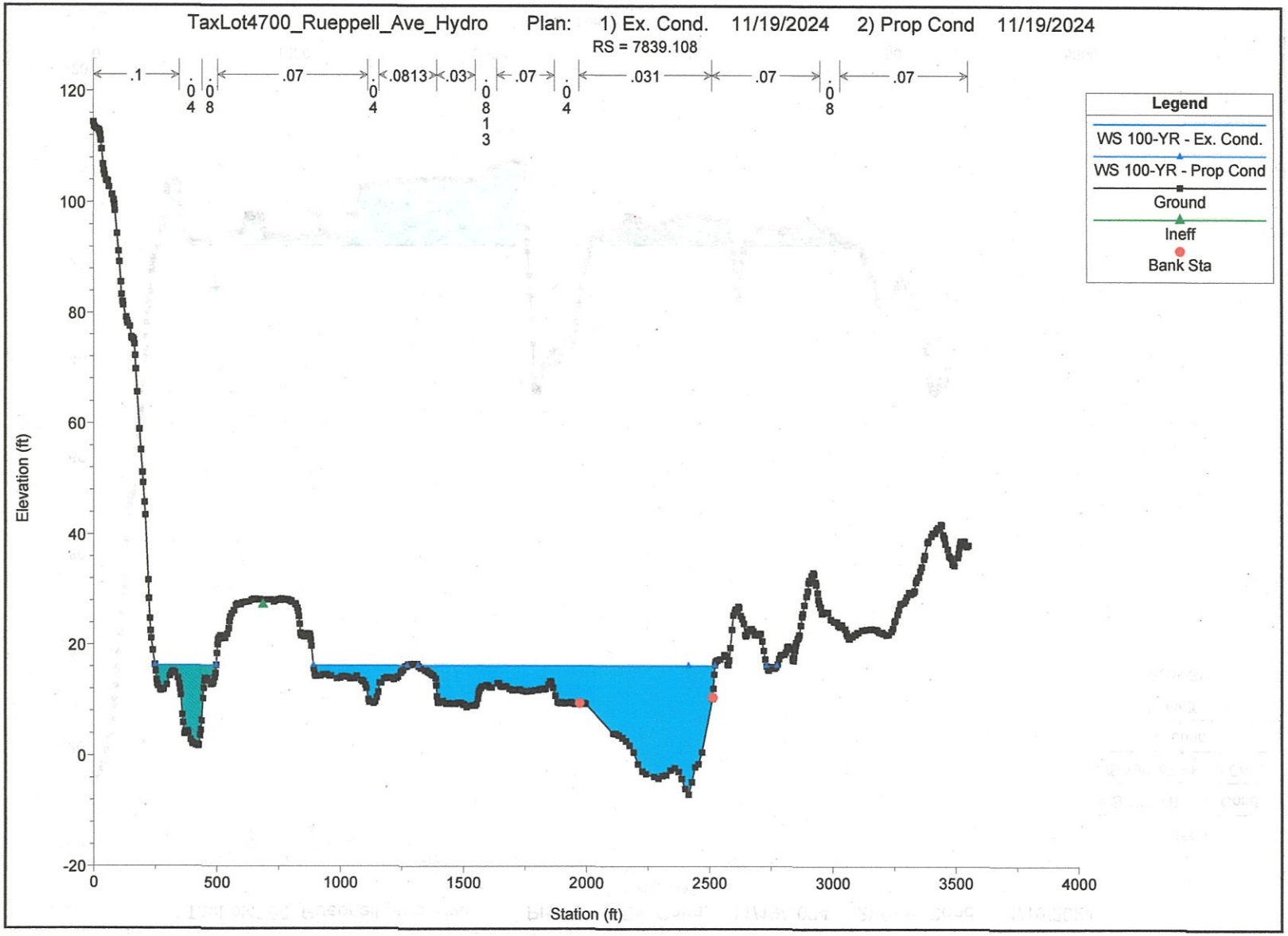

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 8192.259
.1
.04
.08
.1
.08
.07
.08
.03
.08
.07
.08
.04
.031
.07
.08
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

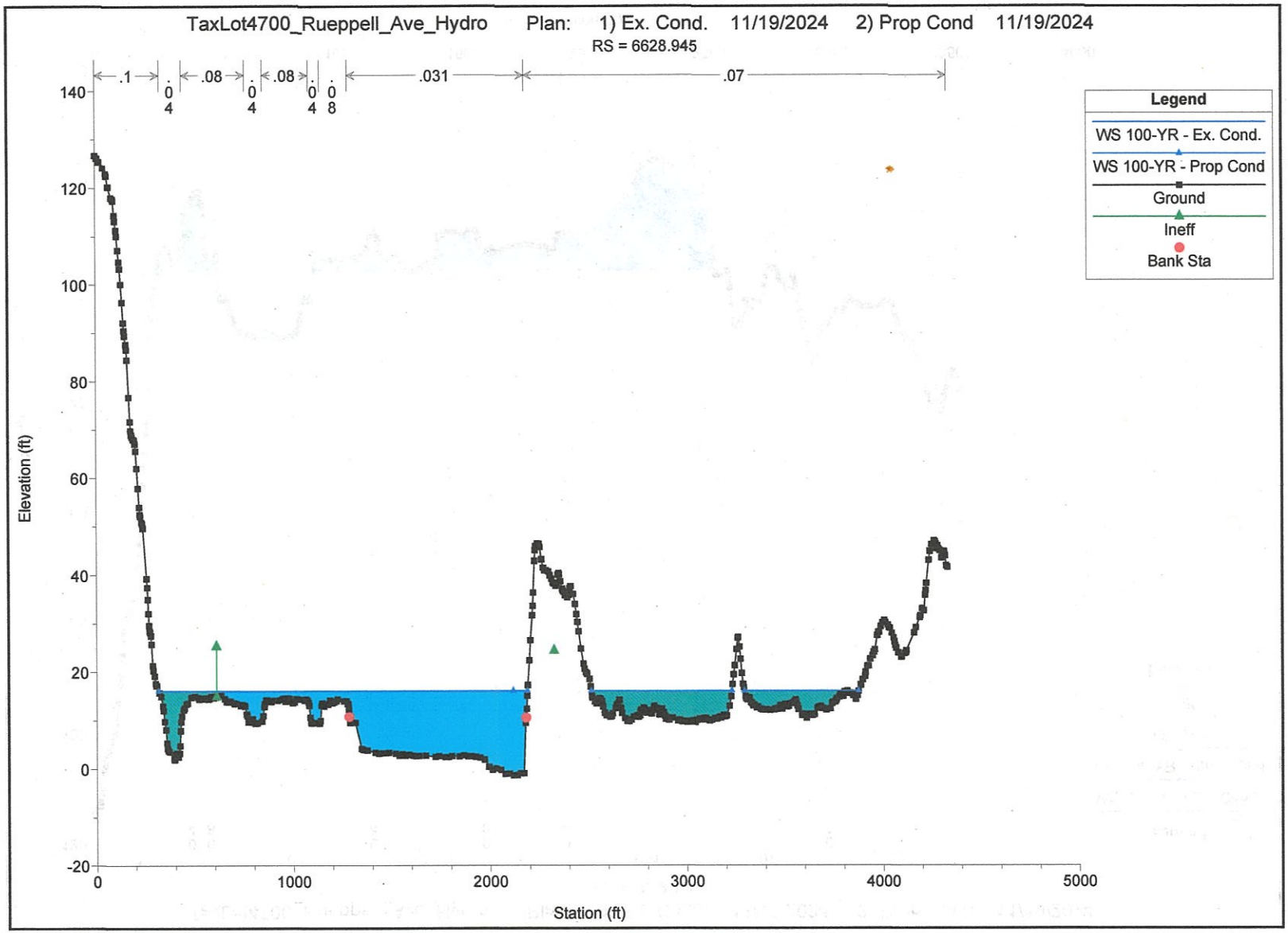

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 8060.26
.1
.08
.1
.08
.03
.04
.031
.07
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
120
100
80
60
40
20
0
-20
-500
0
500
1000
1500
2000
2500
3000
3500

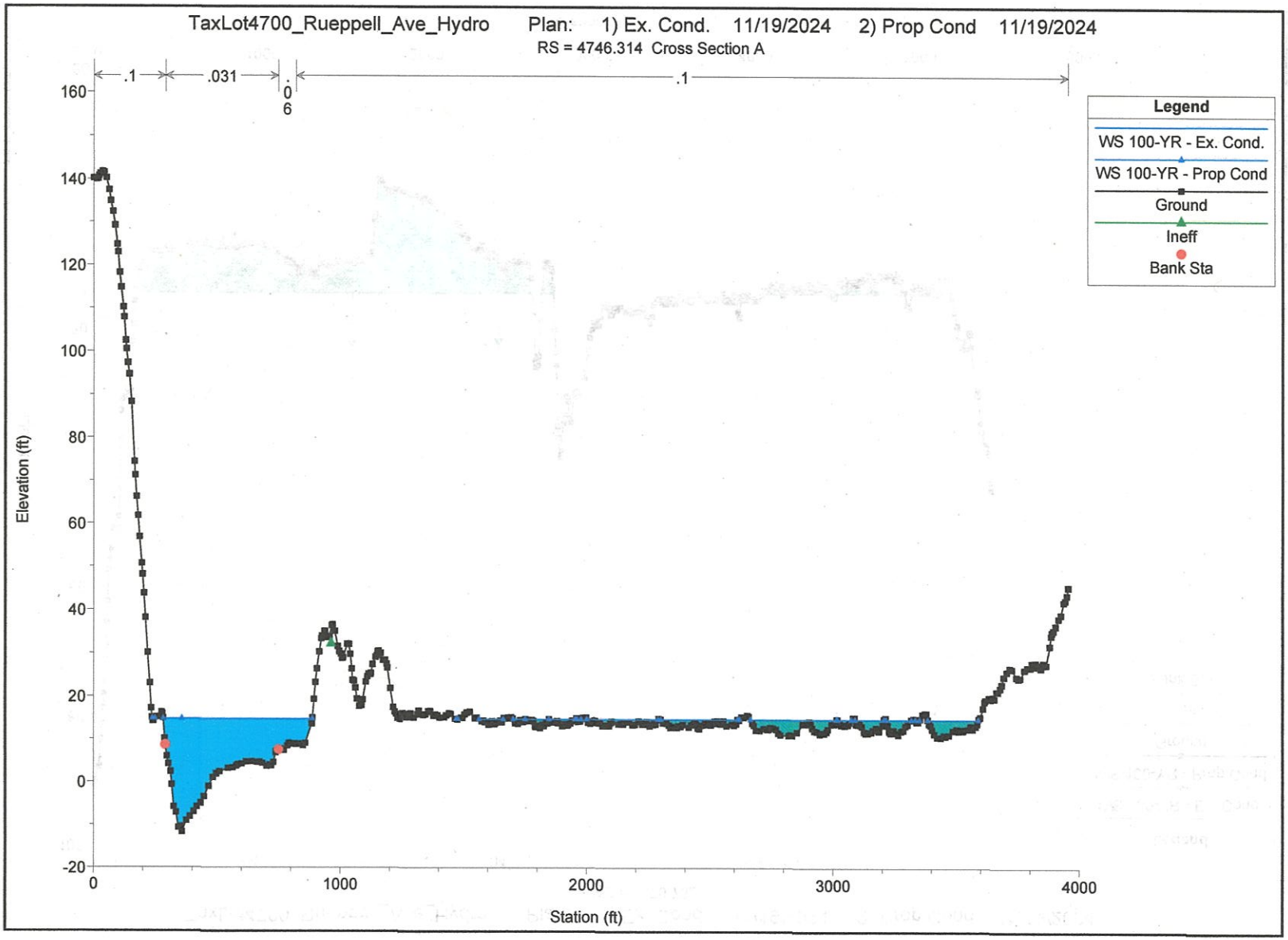

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 8042.26
.1
.08
.1
.08
.03
.08
.04
.031
.07
.08
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
140
120
100
80
60
40
20
0
-20
-500
0
500
1000
1500
2000
2500
3000
3500
Station (ft)

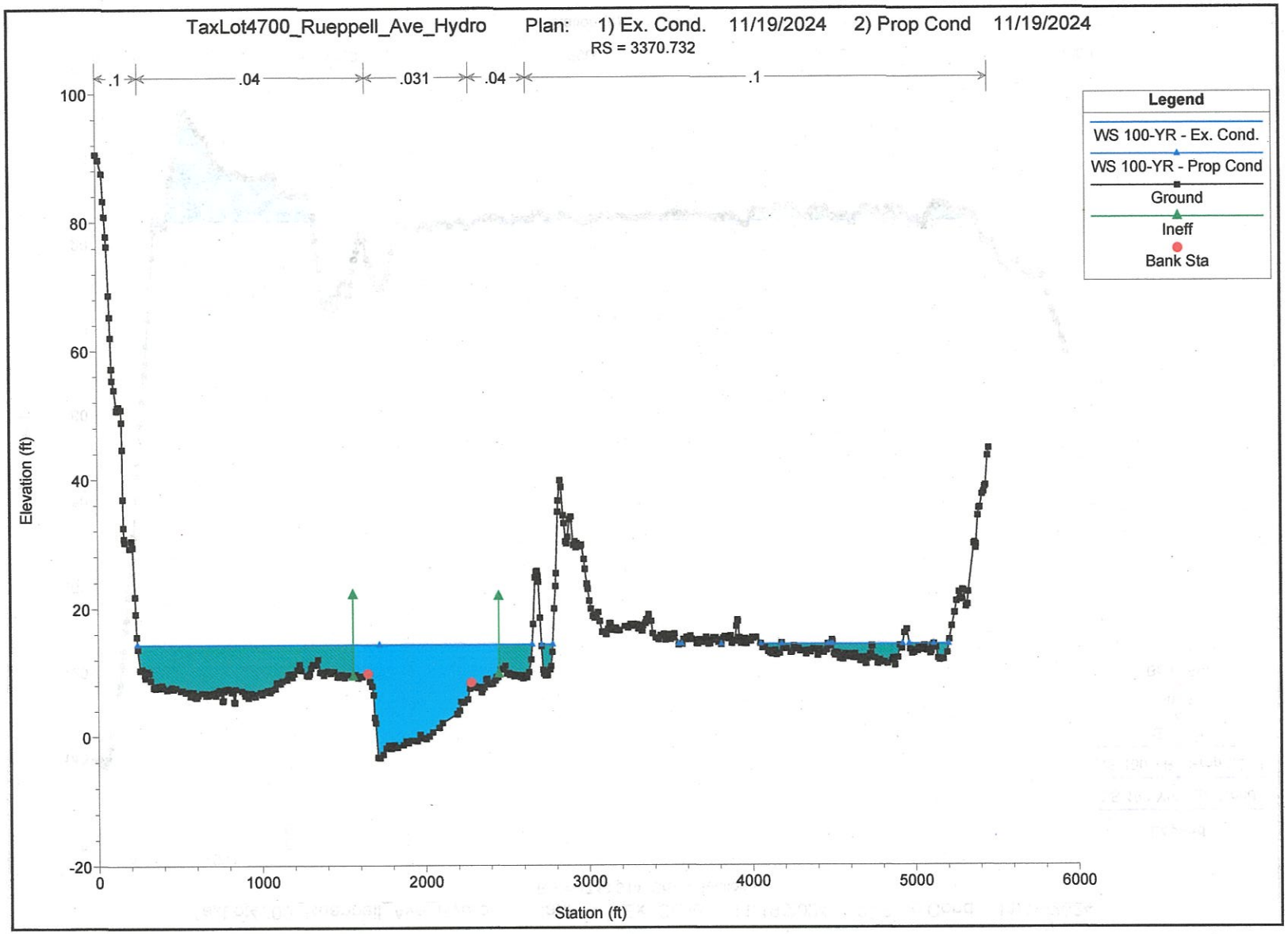

TaxLot4700_Rueppell_Ave_Hydro
Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 8000.26
.1
.08
.1
.08
.03
.04
.031
.07
.08
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
140
120
100
80
60
40
20
0
-20
-500
0
500
1000
1500
2000
2500
3000
3500

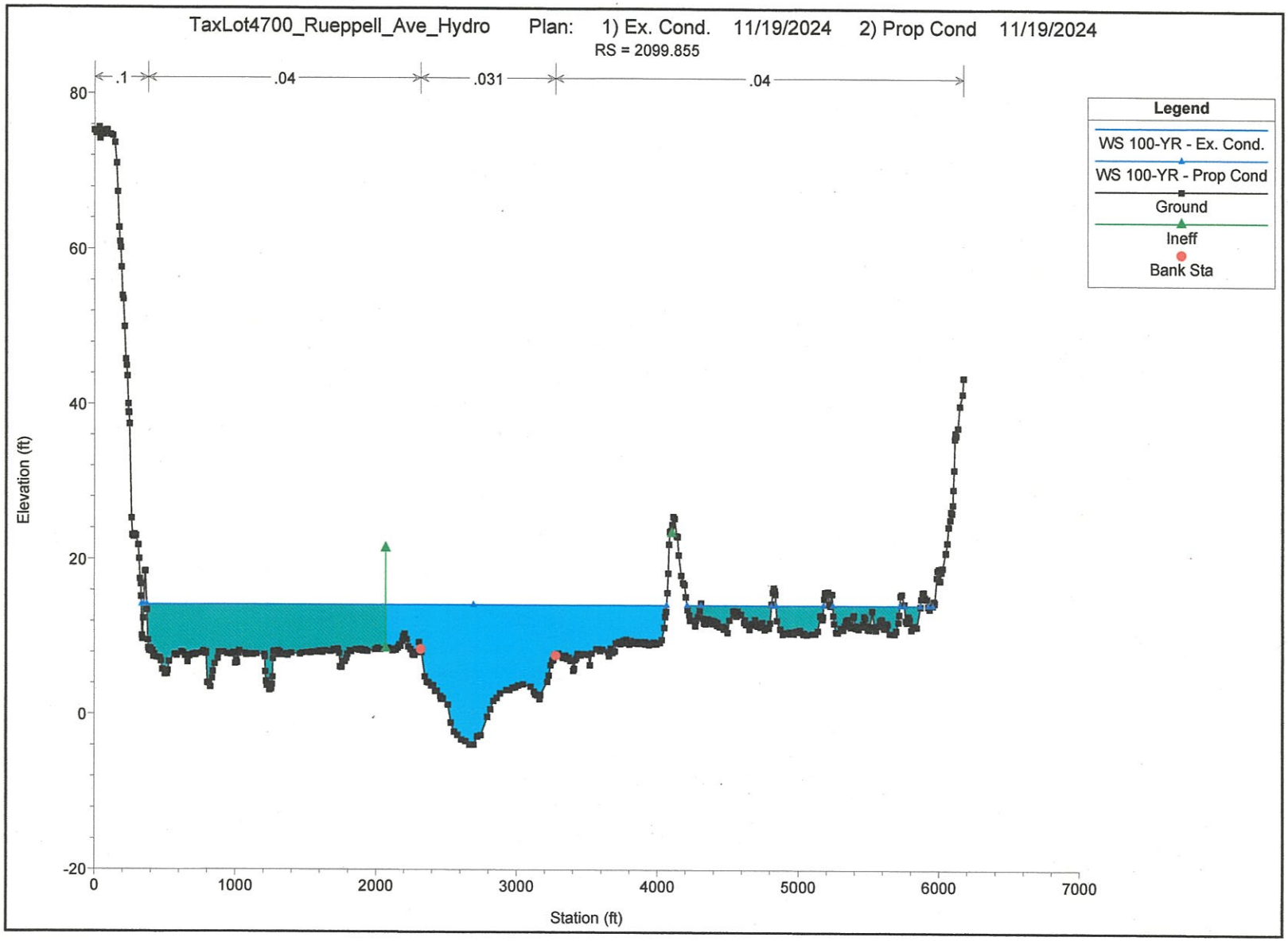

TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 7990.26
.1
.04
.08
.1
.08
.07
.08
.03
.08
.04
.031
.07
.08
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
140
120
100
80
60
40
20
0
-20
-500
0
500
1000
1500
2000
2500
3000
3500
Station (ft)


TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 7839.108
.1
.04
.08
.07
.04
.0813
.03
.0813
.07
.04
.031
.07
.08
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
2500
3000
3500
4000
Station (ft)


TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 6628.945
.1
.04
.08
.04
.08
.04
.08
.031
.07
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
Station (ft)


TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 4746.314 Cross Section A
.1
.031
.06
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
160
140
120
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
Station (ft)


TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 3370.732
.1
.04
.031
.04
.1
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
100
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
6000
Station (ft)


TaxLot4700_Rueppell_Ave_Hydro Plan: 1) Ex. Cond. 11/19/2024 2) Prop Cond 11/19/2024
RS = 2099.855
.1
.04
.031
.04
Legend
WS 100-YR - Ex. Cond.
WS 100-YR - Prop Cond
Ground
Ineff
Bank Sta
Elevation (ft)
80
60
40
20
0
-20
0
1000
2000
3000
4000
5000
6000
7000
Station (ft)