

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
NOVEMBER 10, 2011
MICKEY D. CALVERT
75099

RENEWS: 12-31-2019

FILED
Date: 8-21-2019 By: [Signature]
This survey consist of:
Map: St. Hwy 38-024 A-C
Narrative:
Corner Rpt: DOUGLAS COUNTY SURVEYOR

PURPOSE

THE PURPOSE OF THIS SURVEY IS SET CONTROL, RECOVER MONUMENTS, RESOLVE THE RIGHT OF WAY, AND SET NEW RIGHT OF WAY MONUMENTS FOR A PROJECT NAMED "OR38/US101: SMALL AND LARGE CULVERT UPGRADES" ON HIGHWAY OR38 AT MILE POINT 41.98 (GREEN CREEK). ODOT'S SALEM SURVEY CREW COMPLETED CONTROL AND RECOVERY FIELD WORK IN MARCH OF 2015. ODOT'S ROSEBURG SURVEY CREW VERIFIED EXISTING CONTROL AND MONUMENTS AND SET NEW RIGHT OF WAY MONUMENTS USING ODOT RIGHT OF WAY DRAWING (DRG.) 11B-8-21 AND INSTRUMENT NUMBER 2017-009187 OFFICIAL RECORDS OF DOUGLAS COUNTY IN AUGUST OF 2019.

COORDINATES & BASIS OF BEARING

THE BEARINGS ARE BASED ON THE OREGON COORDINATE REFERENCE SYSTEM (OCRS), COTTAGE GROVE - CANYONVILLE ZONE, NAD83 (2011) EPOCH 2010. THE OCRS COORDINATES ARE EQUAL TO OR CLOSE TO TRUE GROUND DISTANCES. ALL COORDINATES ARE IN INTERNATIONAL FEET.

HORIZONTAL CONTROL

A STATIC GPS NETWORK WAS COMPLETED ON TWO POINTS AND USED AS PRIMARY CONTROL FOR THE PROJECT. ONE POINT WAS SET AS A PART OF THIS PROJECT AND NAMED "6". THE OTHER POINT WAS PREVIOUSLY SET BY "US COAST AND GEODETIC SURVEY" WITH THE DESIGNATION OF "H246". BOTH POINTS WERE DOUBLE OCCUPIED FOR A MINIMUM OF 2 HOURS PER OCCUPATION. COORDINATES WERE CALCULATED ON THESE CONTROL POINTS BY HOLDING OREGON REAL TIME NETWORK (ORGN) STATIONS REED, YONC, AND RSBG. USING RINEX FILES DOWNLOADED FROM THESE STATIONS. ADDITIONAL CONTROL POINTS "1" THRU "5" WERE SET AND A TERRESTRIAL NETWORK WAS COMPLETED HOLDING "H246" AND "6".

HORIZONTAL CONTROL EQUIPMENT

A LEICA TS15 TOTAL STATION WAS USED FOR GATHERING TOPOGRAPHIC DATA AND RUNNING THE CONTROL NETWORK. IT HAS THE FOLLOWING ACCURACY: STANDARD ANGULAR ERROR OF +/- 1 SECOND, STANDARD DISTANCE ERROR OF +/- 1 MM, + 1.5 PPM.

TWO LEICA GS14 DUAL FREQUENCY GPS RECEIVERS WERE USED FOR GPS OBSERVATIONS. THEY HAVE THE FOLLOWING ACCURACY: PHASED DIFFERENTIAL STATIC METHOD HORIZONTAL ERROR OF 5 MM + 0.5 PPM, AND A VERTICAL ERROR OF 10 MM, + 0.5 PPM; PHASED

VERTICAL CONTROL

BENCH MARK "H246" WITH ITS NAVD 88 ELEVATION WAS HELD FOR VERTICAL CONTROL. LEVEL CIRCUITS WERE RUN TO ESTABLISH ELEVATIONS ON CONTROL MONUMENTS.

VERTICAL CONTROL EQUIPMENT

A LEICA DNA10 DIGITAL LEVEL AND A LEICA GBNL4C ALUMINUM LEVEL ROD WAS USED TO COMPLETE THE LEVEL CIRCUITS. THIS INSTRUMENT HAS THE FOLLOWING STANDARD DEVIATION OF 1.5MM IN A 1 KILOMETER DOUBLE RUN LEVEL CIRCUIT.

RIGHT OF WAY RETRACEMENT

THE RIGHT OF WAY FOR THIS PROJECT WAS RESOLVED USING DRG. NO. 1B-20-15. THE RECORD HIGHWAY CENTER LINE WHICH HAS NO DESIGNATOR WAS ROTATED INTO PLACE HOLDING THE RECORD OFFSET AND STATION FROM POINT 1004 AND ROTATING TO THE RECORD OFFSET FROM 1000. THE RECORD ABANDONED RAILROAD CENTER LINE WHICH WAS DESIGNATED "RR" WAS RESOLVED BY HOLDING THE RECORD RADIAL TIE FROM SAID DRG. FROM HIGHWAY CENTER LINE STATION 1317+31.3 P.T. TO THE RAILROAD CENTER LINE AND THE RECORD BEARINGS AND CURVE INFORMATION WERE RUN EASTERLY TO "RR" 473+34.53 P.C.C. BACK EQUALS "RR" 473+37.78 P.C.C. AHEAD. THE RECORD RADIAL TIE FROM SAID DRG. WAS HELD FROM HIGHWAY CENTER LINE STATION 1383+00.6 P.T. TO THE RAILROAD CENTER LINE AND THE RECORD BEARINGS AND CURVE INFORMATION WERE RUN WESTERLY TO "RR" 473+34.53 P.C.C. BACK EQUALS "RR" 473+37.78 P.C.C. AHEAD. THE RAILROAD CENTER LINE RUN EASTERLY AND WESTERLY FROM THE RADIAL TIES DIDN'T MATCH SO THE TANGENTS WERE INTERSECTED AT "RR" 474+57.60 P.I. AND THE DEGREE OF CURVE WAS ADJUSTED BETWEEN "RR" 459+28.22 P.S. AND "RR" 473+34.53 P.C.C. BACK EQUALS "RR" 473+37.78 P.C.C. AHEAD. THE RECORD ABANDONED RAILROAD CENTER LINE WAS ROTATED INTO PLACE HOLDING ITS GEOMETRIC RELATIONSHIP WITH THE HIGHWAY CENTER LINE. THE ABANDONED RAILROAD RIGHT OF WAY WAS TRANSFERRED FROM DOUGLAS COUNTY TO THE STATE OF OREGON IN THE 1930'S BECOMING PART OF THE CURRENT HIGHWAY RIGHT OF WAY. WHERE THE HIGHWAY AND ABANDONED RAILROAD RIGHT OF WAY LINES OVERLAP THE FARTHEST ONE OUT HOLDS.

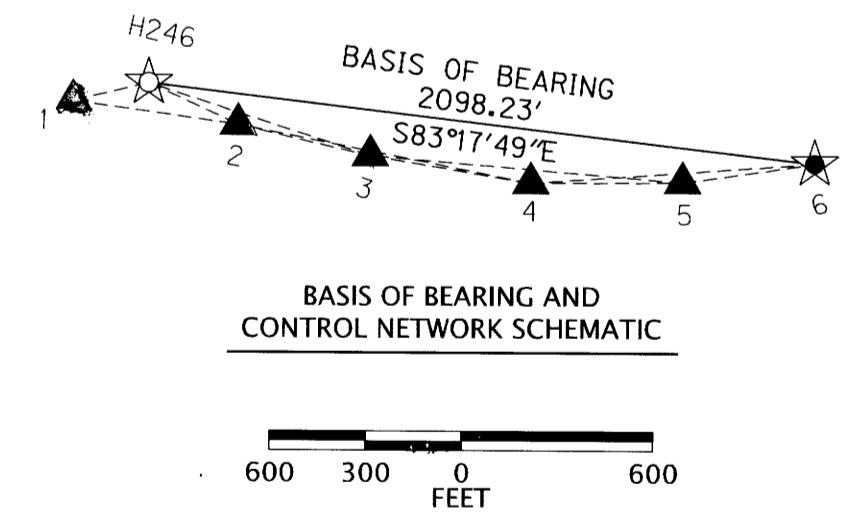
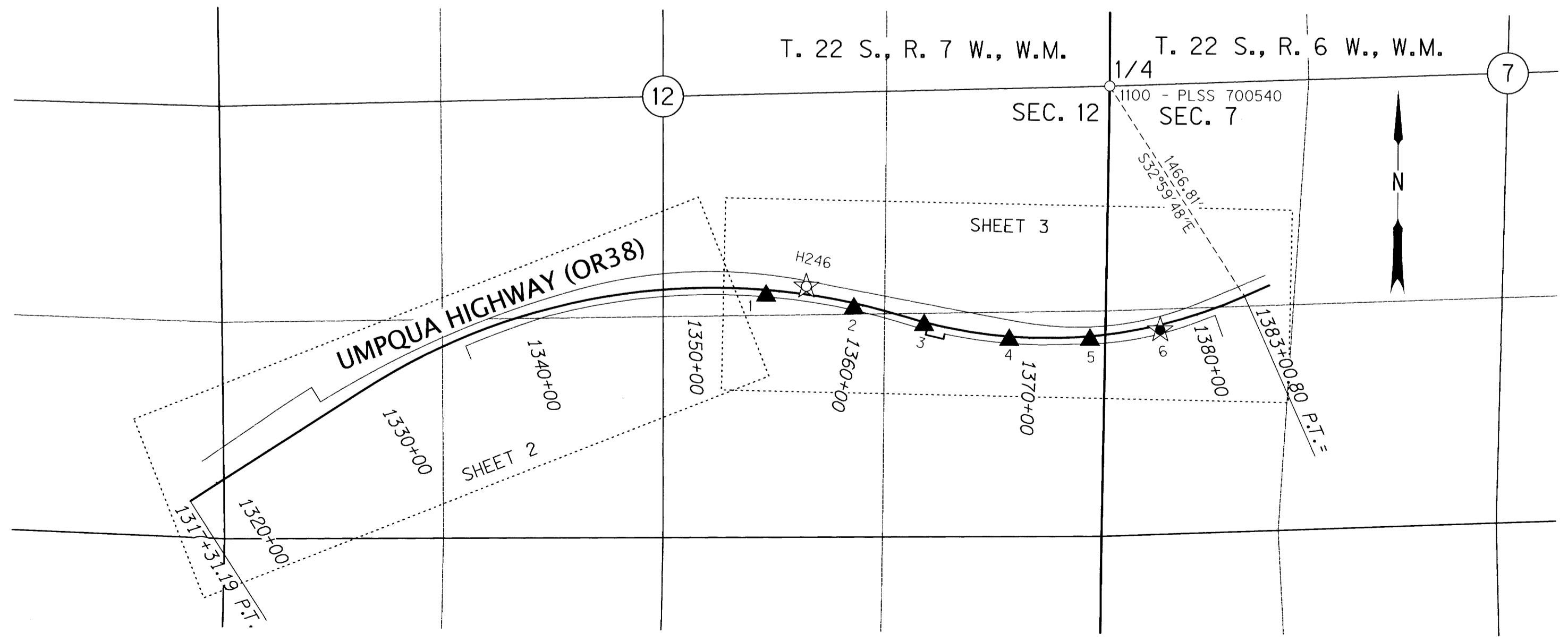
PLEASE NOTE:

CONTROL MONUMENTS SHOWN ON THIS SURVEY DO NOT REPRESENT PROPERTY LINES OR RIGHT OF WAY LINES. THEY ARE INTENDED TO PERPETUATE THE ALIGNMENT AND RIGHT OF WAY DEVELOPED FOR THIS PROJECT IN CONFORMANCE WITH ORS 209, SECTION 155.

THE ORIGINAL FIELD NOTES HAVE BEEN SENT TO THE ODOT MAP AND PLAN CENTER IN SALEM, OREGON AND CAN BE FOUND IN FIELD BOOK 4756.

BOUNDARY LINE LEGEND	
	NEW HIGHWAY RIGHT OF WAY
	EXISTING HIGHWAY RIGHT OF WAY
	EXISTING HIGHWAY/ABANDONED RAILROAD RIGHT OF WAY
	EXISTING PROPERTY
	TOWNSHIP
	SECTION
	1/4 SECTION
	1/16 SECTION OR GOVERNMENT LOT

POINT LEGEND	
	FOUND 1/4 CORNER
	SET NETWORK POINT
	SET GPS STATION
	FOUND GPS STATION
	LINES OF OBSERVATION
SEE MONUMENT TABLE SHEET 3	



OREGON DEPARTMENT OF TRANSPORTATION
CONTROL, RECOVERY, RETRACEMENT & RIGHT-OF-WAY BOUNDARY MONUMENTATION MAP
OR38/US101: SMALL AND LARGE CULVERT UPGRADES
UMPQUA HIGHWAY NO. 45 M.P. 41.98 (GREEN CREEK)
DOUGLAS COUNTY
FILE: 19737RW.DGN :: RWM

ODOT REGION 3 TECH CENTER
3500 NW STEWART PKWY.
ROSEBURG, OR 97470 KEY No. 19737

AUGUST 20, 2019
SCALE: 1" = 600'
SHEET 1 OF 3

ST. HWY. 38-024 A