

SECTIONS 1, 2 & 3 T22S, R11W, WM SECTION 6 & 7 T22S, R10W, WM

FILED
 Date: 12-18-2019 By: *Ro*
 This survey consist of:
 Map: *M176-33 A-E*
 Narrative: *ST. HWY 38-025 A-E*
 Corner Rpt: _____
 DOUGLAS COUNTY
 SURVEYOR

MAP FILE M176-33A

PURPOSE
 THE PURPOSE OF THIS SURVEY IS TO ESTABLISH CONTROL, RECOVER MONUMENTS, RESOLVE THE EXISTING RIGHT OF WAY, AND MONUMENT NEWLY ACQUIRED RIGHT OF WAY FOR A PROJECT NAMED "OR38: HOAGLAND CR AND UNNAMED CR CULVERTS". ODOT'S SALEM SURVEY CREW AND ROSEBURG SURVEY CREW COMPLETED FIELD WORK BETWEEN MARCH 2015 AND NOVEMBER 2019.

COORDINATES & BASIS OF BEARING
 THE BEARINGS & COORDINATES ARE BASED ON THE OREGON COORDINATE REFERENCE SYSTEM (OCRS), OREGON COAST PROJECTION, 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 4 POINTS AND USED AS PRIMARY CONTROL FOR THE PROJECT. THE GPS POINTS WERE NAMED 1, 2, 3, AND "UMPQUA"; ALL OF WHICH WERE DOUBLE OCCUPIED FOR MINIMUM OF 2 HOURS PER OCCUPATION. COORDINATES WERE CALCULATED ON THESE CONTROL POINTS BY HOLDING OREGON REAL TIME NETWORK (ORGN) STATIONS OBEC, LFLO, AND P365 USING RINEX FILES DOWNLOADED FROM THESE STATIONS. ADDITIONAL CONTROL POINTS 4 THRU 17 AND 100 THRU 107 WERE SET AND A TERRESTRIAL NETWORK WAS COMPLETED HOLDING 1, 2, 3, AND "UMPQUA".

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.

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
 CONTROL POINT 1 HELD ITS GPS DERIVED HEIGHT USING GEOID 12A TO ESTABLISH AN NAVD 88 ORTHOMETRIC ELEVATION. THE ELEVATION OF POINT 1 WAS HELD ON LEVEL CIRCUITS THAT WERE RUN TO ESTABLISH ELEVATIONS ON THE REMAINING PROJECT 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 ODOT RIGHT OF WAY DRAWING (DRG.) 4B-21-23 & 4B-16-4. THE RECORD CENTER LINE DESIGNATED "RW" FROM DRG. 4B-21-23 WAS ROTATED INTO PLACE HOLDING THE RECORD OFFSET AND STATION FROM POINT 1101 AND ROTATING TO THE RECORD OFFSET FROM 1001. THIS CENTER LINE FITS THE RECOVERED MONUMENTS AND FALLS ON THE ROAD AS EXPECTED. THE "AS STAKED" CENTER LINE FROM BUREAU OF PUBLIC ROADS PROJECT 8-B2 (PLAN NO. 8FV-1 OR FILE FV008_1.PDF) AND 8-A3,B3 (PLAN NO. 8FV-4 OR FILE FV008_4.PDF) MATCH DRG. 4B-21-23 EXCEPT THAT CURVE INFORMATION AND STATIONING HASN'T BEEN ROUNDED TO THE NEAREST 0.1 FOOT. THE MORE PRECISE STATIONING AND CURVE INFORMATION FROM THE BUREAU OF PUBLIC ROAD PLANS HAS BEEN USED TO RESOLVE THE RECORD CENTER LINE. THE BUREAU OF PUBLIC ROAD PLANS ALSO SHOW THAT THE ROAD WAS NOT BUILT USING THE "AS STAKED" /RIGHT OF WAY CENTERLINE, BUT A SEPARATE CONSTRUCTION CENTER LINE.

THE RECORD CENTER LINE DESIGNATED "4B-16-4" FROM DRG. 4B-16-4 WAS ROTATED INTO PLACE HOLDING THE RECORD OFFSET AND STATION FROM POINT 1105 AND ROTATING TO THE RECORD OFFSET FROM 1103. THIS CENTER LINE FITS THE RECOVERED MONUMENTS AS EXPECTED. THE SOUTHERLY OFFSET OF 45 FEET (DEED 224-769) FROM DRG. 4B-21-23 SUPERCEDES THE SOUTHERLY OFFSET OF 40 FEET FROM DRG. 4B-16-4 WESTERLY OF "4B-16-4"227+00. THE SOUTHERLY OFFSET 75 FEET FROM DRG. 4B-21-23 SUPERCEDES THE SOUTHERLY OFFSET OF 110 FEET FROM DRG. 4B-16-4 EASTERLY OF "4B-16-4"237+50, THE PROPERTY SOUTHERLY OF 75 FEET WAS SOLD TO THE ADJOINING OWNER IN DEED 422-580.

NEW RIGHT OF WAY
 NEWLY ACQUIRED RIGHT OF WAY WAS MONUMENTED USING DRG. 11B-8-21. THE NEW RIGHT OF WAY CENTER LINE SHOWN ON SHEET 3 LYING NORTHERLY OF THE EXISTING RIGHT OF WAY CENTER LINE HAS NO CENTER LINE DESIGNATOR AND WAS RESOLVED IN ERROR HOLDING THE CENTER OF THE ROADWAY. IT WAS FOUND AFTER PROPERTY WAS ACQUIRED THAT THE ROADWAY WAS NOT BUILT CENTERED ON THE EXISTING RIGHT OF WAY CENTER LINE.

PLEASE NOTE:
 THE PROPERTY DESCRIBED IN INSTR. NO. 2015-009930 WAS LAYED OUT BY USING THE ORIGINAL BEARINGS AND DISTANCES FROM SAID DEED AND HOLDING MEANDER CORNER 1004. MONUMENT 5001 WAS SET AT A PROPERTY CORNER AND MONUMENTS 5000, 5006, AND 5007 WERE SET WHERE RIGHT OF WAY INTERSECTS SAID PROPERTY. A COMPREHENSIVE SEARCH WAS MADE FOR THE ORIGINAL PROPERTY CORNERS BUT NONE WERE FOUND. NO RELATIONSHIP WAS FOUND BETWEEN THE PROPERTY BEARINGS AND THE HIGHWAY CENTER LINE FOR BEARING ROTATION, BUT THE PROPERTY AS LAYED OUT BY THE ORIGINAL BEARINGS FITS DRG. 4B-21-23 AS EXPECTED.

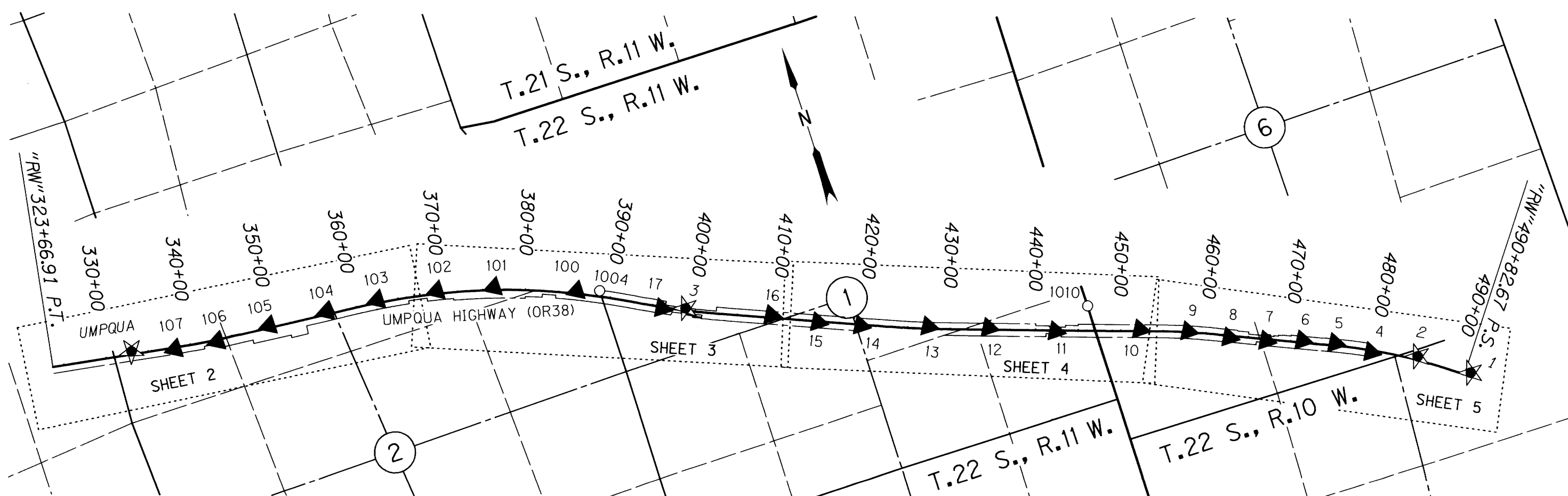
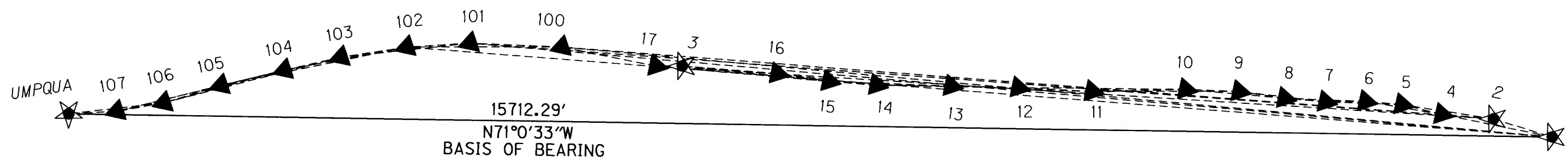
CONTROL MONUMENTS SHOWN ON THIS SURVEY DO NOT REPRESENT PROPERTY LINES OR RIGHT OF WAY LINES. THEY ARE INTENDED TO PERPETUATE THE ALIGNMENT AND RIGHT OF WAY DEVELOPED FOR THIS PROJECT IN CONFORMANCE WITH ORS 209, SECTION 155.

THE ORIGINAL FIELD NOTES HAVE BEEN SENT TO THE ODOT MAP AND PLAN CENTER IN SALEM, OREGON AND CAN BE FOUND IN FIELD BOOK RW9130FB.

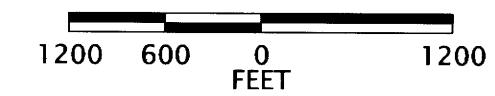
POINT LEGEND	
▲	SET NETWORK POINT
★	SET GPS STATION
○	FOUND GOVERNMENT CORNER
▲---▲	LINE OF OBSERVATION
SEE MONUMENT TABLES ON SHEETS 2 - 5	

BOUNDARY LINE LEGEND	
---	NEW HIGHWAY ACCESS CONTROL/RIGHT OF WAY
---	EXISTING HIGHWAY RIGHT OF WAY
---	ACCESS CONTROLLED / NOT CONTROLLED
---	EXISTING PROPERTY
---	TOWNSHIP
---	SECTION
---	1/4 SECTION
---	1/16 SECTION OR GOVERNMENT LOT

BASIS OF BEARING AND CONTROL NETWORK SCHEMATIC



REGISTERED PROFESSIONAL LAND SURVEYOR
Marshall R. Wagstaff
 OREGON
 JANUARY 9, 2001
 MARSHALL R. WAGSTAFF
 49476LS
 RENEWS: JUNE 30, 2020



OREGON DEPARTMENT OF TRANSPORTATION
 HORIZONTAL CONTROL, RECOVERY, RETRACEMENT & RIGHT OF WAY MONUMENTATION BOUNDARY MAP
 OR38: HOAGLAND CR AND UNNAMED CR CULVERTS
 UMPQUA HIGHWAY NO. 45 M.P. 6.1 - 9.2
 DOUGLAS COUNTY
 FILE: 19810RW.DGN :: RWM

ODOT REGION 3 TECH CENTER
 3500 NW STEWART PKWY.
 ROSEBURG, OR 97470

DECEMBER 17, 2019
 SCALE: 1" = 1200'
 SHEET 1 OF 5

MAP FILE M176-33A