

Date: 11-7-2018 By: 81
 This survey consist of:
 Map: St. Hwy 38-023 A-3
 Narrative:
 Corner Rpt: DOUGLAS COUNTY SURVEYOR

PURPOSE
 THE PURPOSE OF THIS SURVEY IS TO PROVIDE CONTROL, RECOVER MONUMENTS, AND RESOLVE THE RIGHT OF WAY FOR A PROJECT NAMED "OR38: UMPQUA RIVER (SCOTTSBURG) BRIDGE REPLACEMENT". ODOT'S ROSEBURG SURVEY CREW COMPLETED FIELD WORK BETWEEN FEBRUARY 2015 AND APRIL 2017. THE FIELD SURVEY NOTES, BOOK NUMBER 4698, ARE AVAILABLE FROM ODOT FILES IN SALEM, OREGON.

COORDINATES & BASIS OF BEARING
 THE BEARINGS ARE BASED ON THE OREGON COORDINATE REFERENCE SYSTEM (OCRS), OREGON COAST ZONE 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 THREE POINTS AND USED AS PRIMARY CONTROL FOR THE PROJECT. ONE POINT WAS SET AS A PART OF THIS PROJECT AND NAMED "BURG". THE OTHER TWO POINTS WERE FOUND PREVIOUSLY FROM A 2014 PROJECT NAMED "OR38: SCOTTSBURG WELLS CREEK CURVE REALIGNMENT" FILED SURVEY ST. HWY. 38-021. THESE MONUMENTS ARE NAMED "SW17"(PREVIOUSLY 17) AND "SWROCK" (PREVIOUSLY "ROCK") AND WERE RECOVERED FOR USE ON THIS PROJECT. ALL 3 POINTS 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 "REED" AND "YONC" AND USING RINEX FILES DOWNLOADED FROM THESE STATIONS. ADDITIONAL CONTROL POINTS WERE FOUND AND SET AND A TERRESTRIAL NETWORK WAS COMPLETED HOLDING "SWROCK" AND "BURG". ALL OTHER MONUMENTS SHOWN IN THIS SURVEY WERE DOUBLE TIED OR TIED BY 3 POINT RESECTION.

HORIZONTAL CONTROL EQUIPMENT
 A LEICA MS50 MULTI 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.

A LEICA GX1230 DUAL FREQUENCY GPS AND 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 DIFFERENTIAL RTK METHOD HORIZONTAL ERROR OF 10 MM + 1 PPM, AND A VERTICAL ERROR OF 20 MM, + 1 PPM.

VERTICAL CONTROL
 BENCH MARK C247 WITH ITS NAVD 88 ELEVATION WAS HELD FOR VERTICAL CONTROL. LEVEL CIRCUITS WERE RUN TO ESTABLISH ELEVATIONS ON CONTROL MONUMENTS.

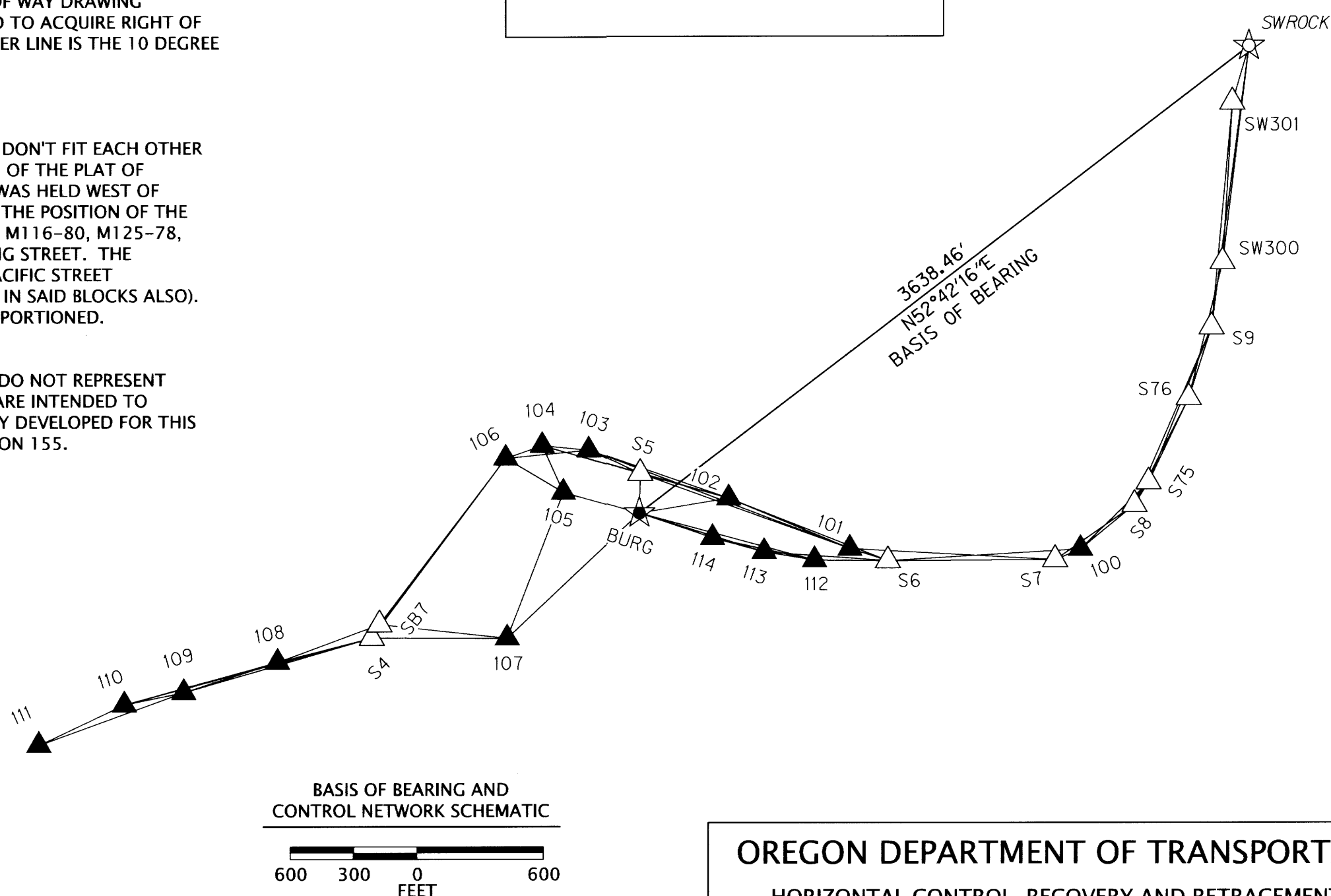
VERTICAL CONTROL EQUIPMENT
 A LEICA DNA10 DIGITAL LEVEL AND A LEICA GBNL4C ALUMINUM LEVEL ROD WAS USED TO COMPLETE THE LEVEL CIRCUITS. THIS INSTRUMENT HAS THE FOLLOWING STANDARD DEVIATION OF 1.5MM IN A 1 KILOMETER DOUBLE RUN LEVEL CIRCUIT.

RIGHT OF WAY RETRACEMENT
 UMPQUA HIGHWAY NUMBER 45 (OR38) RIGHT OF WAY WAS RESOLVED USING ODOT RIGHT OF WAY DRAWINGS 28-24-20, 2C-1-16, AND 48-21-24. ODOT RIGHT OF WAY DRAWING 48-21-24 IS CONFUSING IN THAT THE RELOCATED CENTER LINE SHOWN WAS NEVER USED TO PURCHASE RIGHT OF WAY AND THE EXISTING RIGHT OF WAY CENTER LINE IS SHOWN LIGHTLY IN THE BACKGROUND AND DOES NOT COMPLETELY MATCH THE ACQUISITION DEED IN BOOK 95, PAGE 236; WHERE DISCREPANCIES EXISTED THE DEED WAS HELD. THE FIRST TANGENT HELD THE PROPORTIONATE RECORD DISTANCE BETWEEN MONUMENTS 1084 AND 1089 AND THE RECORD DISTANCE FROM MONUMENT 1001. THE NEXT TANGENT HELD THE RECORD DISTANCE FROM MONUMENTS 1005 AND 1012. THE NEXT TANGENT HELD THE SPLIT BETWEEN MONUMENTS 1007 AND 1008 AND WAS HELD TANGENT TO AN ARC WITH THE RECORD DEGREE OF CURVE HELD AT THE RECORD DISTANCE FROM MONUMENTS 1013 AND 1027. THE NEXT TANGENT HELD THE RECORD DISTANCE FROM MONUMENT 1027 AND THE SPLIT BETWEEN MONUMENTS 1038 AND 1042. THE NEXT TANGENT HELD THE RECORD DISTANCE FROM MONUMENTS 1090 AND 1093. THE LAST TANGENT WAS MOVED (ROTATION WAS NOT NECESSARY) IN FROM AN OLDER ODOT PROJECT NAMED "OR38: SCOTTSBURG WELLS CREEK CURVE REALIGNMENT" FILED SURVEY ST. HWY. 38-021. THE OLD PROJECT HAD A DIFFERENT DATUM REALIZATION AND WAS MOVED TO THIS PROJECTS DATUM BY HOLDING THE NEW POSITION OF MONUMENT "SWROCK". THE POSITION OF "SW17" WHEN CHECKED WAS WITHIN 0.03 FEET. RECORD DEGREE OF CURVE WAS HELD ON ALL CURVES. STATIONING WAS HELD AT THE PROPORTIONATE CENTER LINE STATION 730+19.50 P.T. BETWEEN MONUMENTS 1084 AND 1089. STATIONING WAS HELD AT THE CENTER LINE SPLIT STATION 29+52.30 P.C. BETWEEN MONUMENTS 1038 AND 1042. AN EQUATION WAS PLACED AT 749+98.20 P.O.C. BACK EQUALS 0+00.00 P.O.C. AHEAD AND THE NEGATIVE STATIONING BETWEEN -0+36.7 P.C. AND 0+00 ON RIGHT OF WAY DRAWING 2C-1-16 WAS ELIMINATED. AN EQUATION WAS ALSO PLACED AT 45+00.96 P.T. BACK EQUALS 45+08.50 P.O.T. AHEAD HOLDING THE NEW POSITION OF STATION 45+08.62 P.C. DERIVED FROM FILED SURVEY ST. HWY. 38-021. THERE 2 DIFFERENT DEGREES OF CURVE FOR THE RIGHT OF WAY CENTER LINE AT CHISM STREET. ODOT RIGHT OF WAY DRAWING 28-24-20 HAS A 9 DEGREE CURVE AND WAS USED TO ACQUIRE RIGHT OF WAY EASTERLY OF CHISM STREET. ODOT RIGHT OF WAY DRAWING 2C-1-16 HAS A 10 DEGREE CURVE AND WAS USED TO ACQUIRE RIGHT OF WAY WESTERLY OF CHISM STREET. THE "CO" CENTER LINE IS THE 10 DEGREE CURVE.

PLAT OF SCOTTSBURGH
 RM4-17 AND THE OTHER SURVEYS LISTED BELOW DON'T FIT EACH OTHER POSITIONALLY OR ROTATIONALLY. THE POSITION OF THE PLAT OF SCOTTSBURGH AS RESOLVED IN SURVEY RM4-17 WAS HELD WEST OF SPRING STREET AND FOR SPRING STREET IT SELF. THE POSITION OF THE PLAT OF SCOTTSBURGH AS RESOLVED IN SURVEYS M116-80, M125-78, M127-25, AND M152-2 WAS HELD EAST OF SPRING STREET. THE DIFFERENT EAST WEST RIGHT OF WAY LINES OF PACIFIC STREET INTERSECTED ALONG BLOCKS 27 AND 28 (ALLEYS IN SAID BLOCKS ALSO). BLOCKS 27, 28, 31, 32, 33, AND 34 WERE RE-PROPORTIONED.

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

BOUNDARY LINE LEGEND	
EXISTING HIGHWAY RIGHT OF WAY	—————
EXISTING STREET RIGHT OF WAY	—————
EXISTING PROPERTY	—————
EXISTING SUBDIVISION	- - - - -
DONATION LAND CLAIM (THIS SIDE)	—————
DONATION LAND CLAIM (BOTH SIDES)	—————
TOWNSHIP	—————
SECTION	—————
1/4 SECTION	- - - - -
1/16 SECTION OR GOVERNMENT LOT	—————



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

LEGEND	
▲	SET NETWORK POINT
△	FOUND NETWORK POINT
★	SET GPS STATION
☆	FOUND GPS STATION
▲—▲	LINES OF OBSERVATION

MONUMENTS FROM SHEET 1 NOT SHOWN ON INDIVIDUAL SHEETS					FD. = FOUND	REFERENCE
PT. NO.	OCRS NORTHING	OCRS EASTING	DATE	DESCRIPTION		
107	811223.15	501946.60	2/20/2015	SET 5/8" X 30" IRON REBAR WITH 1 1/2" BRASS CAP STAMPED "ODOT CONTROL 107"		-
S9	812352.57	505179.60	2/19/2015	FD. 5/8" IRON REBAR WITH 1 1/2" ALUMINUM CAP STAMPED "OREGON STATE HWY. DIV. < PT. 9" 0.40 FT. BELOW SURFACE FOOD CONDITION		ST. HWY. 38-009
S76	812688.43	505288.94	2/19/2015	FD. 5/8" IRON ROD WITH 1 1/2" ALUMINUM CAP STAMPED "OSHD HORIZ. CONTROL 76" FLUSH WITH SURFACE GOOD CONDITION		ST. HWY. 38-009
SW17	819426.43	509139.13	2/17/2015	FD. RAIL ROAD SPIKE STAMPED " < PT 17" IN PAVEMENT PARKING LOT WELLS CR. MARKET GOOD CONDITION		ST. HWY. 38-009
SW300	812995.21	505342.49	2/19/2015	FD. 5/8" IRON REBAR WITH 1 1/2" BRASS CAP STAMPED "ODOT CONTROL 300" FLUSH WITH SURFACE GOOD CONDITION		ST. HWY. 38-021
SW301	813749.04	505389.53	2/19/2015	FD. 5/8" IRON REBAR WITH 1 1/2" BRASS CAP STAMPED "ODOT CONTROL 301" FLUSH WITH SURFACE GOOD CONDITION		ST. HWY. 38-021
SWROCK	814016.13	505468.73	2/17/2015	FD. 5/8" IRON REBAR WITH 1 1/2" BRASS CAP STAMPED "ODOT CONTROL ROCK" STABILIZED IN CONCRETE GOOD CONDITION		ST. HWY. 38-021
1094	815580.00	506898.76	11/13/2017	FD. 5/8" IRON REBAR WITH 1 1/2" ALUMINUM CAP STAMPED "DOUGLAS CO. SURVEYOR 7, 8, 17, 18" 0.5 FT. ABOVE SURFACE GOOD CONDITION WITNESS POST NEARBY		CS 67/31-11

OREGON DEPARTMENT OF TRANSPORTATION
 HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP
 OR38: UMPQUA RIVER (SCOTTSBURG) BRIDGE REPLACEMENT
 UMPQUA HIGHWAY MP. 15.9 - 17.1
 DOUGLAS COUNTY
 FILE: S_K18578_CRR_01.DGN :: CRR

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



NOVEMBER 2, 2018
 SCALE: 1" = 600'
 SHEET 2 OF 10