

CONFIDENCE LEVEL LIMITS

POINT ID	SEMI MAJOR	SEMI MINOR	ORIENTATION*
100	0.011	0.001	56°16'10"
101	0.014	0.001	60°09'23"
102	0.011	0.002	60°43'38"
103	0.026	0.001	57°23'37"
104	0.021	0.001	56°30'26"
105	0.021	0.001	59°23'05"
106	0.039	0.002	55°23'33"
107	0.036	0.001	57°41'15"
W610R	0.017	0.001	56°15'29"

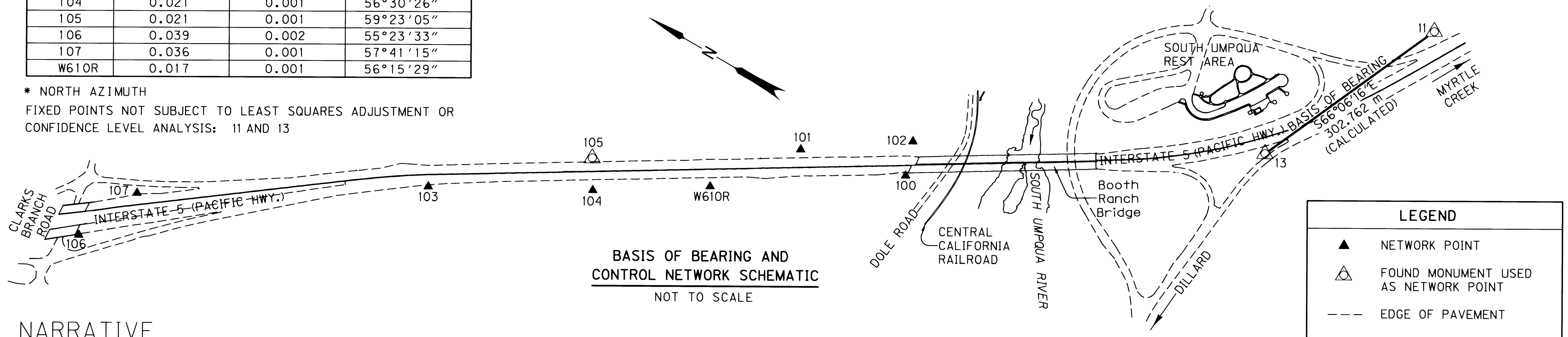
\* NORTH AZIMUTH

FIXED POINTS NOT SUBJECT TO LEAST SQUARES ADJUSTMENT OR CONFIDENCE LEVEL ANALYSIS: 11 AND 13

SW 1/4 & SE 1/4 SEC. 1, AND NE 1/4 & SE 1/4 SEC. 12, T29S, R6W, W.M.,  
AND NW 1/4 & SW 1/4 SEC. 7, T29S, R5W, W.M.

FILED  
Date: 1/18/2002 By: JP  
This survey consists of: 2 Pgs.  
Map: ST. HWY. 15-012A  
Narrative:  
Corner Rpt: \_\_\_\_\_

DOUGLAS COUNTY  
SURVEYOR



BASIS OF BEARING AND CONTROL NETWORK SCHEMATIC  
NOT TO SCALE

NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO ESTABLISH CONTROL FOR AN OREGON DEPARTMENT OF TRANSPORTATION PROJECT CALLED "NORTHBOUND BOOTH RANCH BRIDGE REPLACEMENT", WHICH IS INCLUDED IN A LARGER PROJECT CALLED "VETS BRIDGE - MYRTLE CREEK". THE NETWORK AND MONUMENT TIES WERE DONE FROM NOVEMBER 20 TO NOVEMBER 27, 2001. THE ORIGINAL FIELD NOTES ARE ARCHIVED IN SALEM AS BOOK # 3786.

THE BASIS OF BEARING WAS DEVELOPED FROM TWO FOUND STATE HIGHWAY MONUMENTS WHICH WERE PREVIOUSLY TIED AND NETWORKED ON SURVEY M135-11 (DOUGLAS COUNTY SURVEYOR'S OFFICE) FOR A PROJECT CALLED "DILLARD JCT.-MYRTLE CREEK". THE COORDINATES ON POINTS 11 AND 13 ON SURVEY M135-11 WERE HELD FOR THIS SURVEY NETWORK. THIS SURVEY USES LOCAL DATUM PLANE COORDINATES THAT WERE DERIVED FROM 1927 DATUM, SOUTH ZONE. TO CONVERT METRIC COORDINATES TO ENGLISH DIVIDE BY 0.30480061 (1 METER = 3937/1200).

A LEICA TCA 1800 TOTAL STATION THEODOLITE (SERIAL #418939) WAS USED TO MAKE ALL OBSERVATIONS. THIS INSTRUMENT HAS THE FOLLOWING PRECISION: STANDARD ANGULAR ERROR OF +/- 1 SECOND, STANDARD DISTANCE ERROR OF +/- 2 mm, +/- 2 PPM.

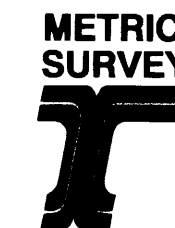
THE LEAST SQUARES ADJUSTMENT PROGRAM WAS USED TO CALCULATE COORDINATES FOR ALL SET AND FOUND MONUMENTS, EXCEPT FOR POINTS 11 AND 13 WHICH WERE HELD. THIS PROGRAM PRODUCES: ANGULAR RESIDUALS (THE AMOUNT THE FIELD ANGLE IS ADJUSTED), 100% WHICH WERE WITHIN 3 SECONDS; AND DISTANCE RESIDUALS (THE AMOUNT THE FIELD DISTANCE WAS ADJUSTED), 100% WERE WITHIN 4 mm. THESE RESIDUALS ARE WELL WITHIN ODOT STANDARDS. THERE IS A 95% PROBABILITY THAT THE FINAL POSITIONS OF THE NETWORK POINTS ARE WITHIN THE ERROR ELLIPSES AS SHOWN ON THE "CONFIDENCE LEVEL LIMITS" TABLE SHOWN ON THIS SHEET.

NETWORK OBSERVATIONS

AT	TO
13	11, 100, 101, 104, W610R
100	13, 101, W610R
101	13, 100, 102, 103, 104, 107, W610R
102	101, W610R
103	101, 104, 105, 106, 107
104	13, 101, 103, 105, 107
105	103, 104, 106, 107, W610R
106	103, 105
107	101, 103, 104, 105
W610R	13, 100, 101, 102, 105

NETWORK POINT COORDINATE TABLE

PT. NO.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
11	158747.976	378223.647	11-20-01	FND. 2 3/4" BRASS DISK IN CONC. STAMPED "STATE HIGHWAY DEPARTMENT BM NO. ELEVATION PT RP 3187+26.33 117.14 FEET", FLUSH W/SURFACE, GOOD CONDITION, METAL WITNESS POST NEARBY MARKED "SHRP POT LN 3187+25.73 103.14"
13	158870.616	377946.836	11-20-01	FND. 2 3/4" BRASS DISK IN CONC. STAMPED "STATE HIGHWAY DEPARTMENT BM NO. ELEVATION LN PI FEET", FLUSH W/SURFACE, GOOD CONDITION, METAL WITNESS POST NEARBY MARKED "SHRP POST LN 3177+69.71"
100	159303.952	377656.410	11-20-01	SET 16 mm X 762 mm IRON REBAR W/38 mm BRASS CAP STAMPED "ODOT CONTROL 100" STABILIZED WITH CONCRETE APPROX. 300 mm WIDE X 300 mm DEEP
101	159454.012	377612.567	11-20-01	SET 16 mm X 762 mm IRON REBAR W/38 mm BRASS CAP STAMPED "ODOT CONTROL 101"
102	159319.825	377704.468	11-20-01	SET 16 mm X 762 mm IRON REBAR W/38 mm ALUM. CAP STAMPED "ODOT HORIZ. CONTROL 102"
103	159892.591	377293.978	11-20-01	SET 16 mm X 762 mm IRON REBAR W/38 mm BRASS CAP STAMPED "ODOT CONTROL 103"
104	159684.010	377409.530	11-20-01	SET 30 mm BRASS PLUG IN ROCK OUTCROP STAMPED "ODOT CONTROL 104"
105	159708.469	377449.361	11-20-01	FND. 2 3/4" BRASS DISK SET IN CONC. STAMPED "STATE HIGHWAY DEPARTMENT BM NO. FEET ELEVATION EQ 40.63", FLUSH W/SURFACE, GOOD CONDITION, METAL WITNESS POST NEARBY MARKED "EQ SHRP POT LN 3144+72.04, POT LS 3145+68.90, POT L 3145+73.45, 40.63" (ODOT DRG. NO. 8B-29-3)
106	160294.221	376978.191	11-20-01	SET 16 mm X 762 mm IRON REBAR W/38 mm BRASS CAP STAMPED "ODOT CONTROL 106"
107	160252.281	377073.461	11-20-01	SET 16 mm X 762 mm IRON REBAR W/38 mm BRASS CAP STAMPED "ODOT CONTROL 107" STABILIZED IN CONCRETE APPROX. 300 mm WIDE X 300 mm DEEP
W610R	159540.097	377500.104	11-20-01	SET 76 mm BRASS DISK IN ROCK OUTCROP STAMPED "OREGON STATE HIGHWAY DIVISION BENCH MARK W610 RESET 2001 DO NOT DISTURB"



REGISTERED PROFESSIONAL LAND SURVEYOR  
*Christine V. Blevins*  
OREGON  
JULY 19, 1994  
CHRISTINE V. BLEVINS  
LS2669  
EXPIRES 12/31/03

OREGON DEPARTMENT OF TRANSPORTATION

HORIZONTAL CONTROL AND RECOVERY MAP  
BOOTH RANCH BRIDGE (VETS BR.-MYRTLE CREEK)  
PACIFIC HIGHWAY (INTERSTATE 5)  
DOUGLAS COUNTY  
JANUARY 17, 2002 FOR ODOT REGION 3  
3500 NW STEWART PKWY., ROSEBURG, OR 97470