

LOCAL DATUM PLANE COORDINATES			
POINT #	NORTHING	EASTING	DESCRIPTION
204	507095.9092	8867731.5564	WEST 1/4 CORNER SEC.22, ALUMINUM CAPPED, ALUMINUM PIPE CS#12-2001
301	503475.4284	8870435.0307	3" BRASS DISC, FLUSH WITH GROUND, MARKED "PI 1237.50"
304	512780.5800	8866627.0837	3 1/2" BRASS DISC IN CONCRETE MARKED "STATE HWY DIVISION PT 1136+82.19AH POT EB 1136-93.53 AH"
501	505786.6647	8868757.4037	5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP MARKED "BGB SURVEY MARKER" CS#023-1995
503	478507.6706	8865790.8599	COOPERATIVE BASE NETWORK STATION U 264, PID# QB0873
504	609033.4363	8830440.9358	COOPERATIVE BASE NETWORK STATION BLUE MOUNTAIN CBL O, PID# RB1490
505	506573.4125	8873002.9178	5/8 INCH IRON ROD WITH ALUMINUM CAP UNION COUNTY GPS CONTROL POINT "DITCH"
801	509722.0676	8867652.2886	2 1/2 INCH COPPER CLAD MONUMENT IN VALVE BOX, IN TRAVELED WAY OF COUGANOUR ROAD, THE NORTHWEST CORNER OF SECTION 22

SURVEY NARRATIVE

THIS SURVEY WAS PREPARED AND FILED ON BEHALF OF THE OREGON DEPARTMENT OF TRANSPORTATION AND QUINCY ENGINEERING INC. ITS PURPOSE IS TO DOCUMENT AND PERPETUATE THE GEODETIC CONTROL NETWORK BUILT TO CONTROL THE BASE MAPPING AND HIGHWAY CENTERLINE RESOLUTION NECESSARY FOR THE REPLACEMENT OF THE EASTBOUND I-84 BRIDGE OVER THE UNION PACIFIC RAILROAD MAINLINE TRACKS AT THE NORTH POWDER INTERCHANGE.

FIELD SURVEY ACTIVITIES WERE COMMENCED THE FIRST WEEK IN JUNE 2005 AND WERE SUBSTANTIALLY COMPLETE BY MID-JULY OF THE SAME YEAR. THE SURVEY WAS CONDUCTED USING TRIMBLE 5600 TOTAL STATIONS WITH A STANDARD DEVIATION OF 0"00'03" ANGULAR AND ± 0.01 + 3PPM IN DISTANCE AND TOPCON DUAL FREQUENCY G.P.S. RECEIVERS WITH A STANDARD DEVIATION OF 1CM + 1.0PPM WHEN OPERATING IN THE RTK MODE.




HORIZONTAL CONTROL WAS OBTAINED BY G.P.S. OBSERVATIONS FROM COOPERATIVE BASE NETWORK CONTROL STATION, (CBN), "BLUE MOUNTAIN CBL O", (PID RB1490) AND CBN U264, (PID QB0873). NETWORK OBSERVATIONS WERE PROCESSED USING TRIMBLE GEOMATICS OFFICE SOFTWARE AND BALANCED BY A LEAST SQUARES ADJUSTMENT. COORDINATES DERIVED ARE IN OREGON STATE PLANE, NORTH ZONE, NAD83(1998). THESE COORDINATES WERE THEN ADJUSTED TO A LOCAL DATUM PLANE, (LDP), USING A COMBINED SCALE FACTOR OF 1.00021488216. TO RETURN TO STATE PLANE GRID COORDINATES, MULTIPLY BOTH THE X AND Y COORDINATE BY THE INVERSE OF THAT NUMBER, (0.999785164). BEARINGS ARE GRID BEARINGS. ROTATE CLOCKWISE 1'49'16" AT THE WEST ONE-QUARTER CORNER OF SECTION 22 TO OBTAIN TRUE NORTH. DISTANCES ARE GROUND.

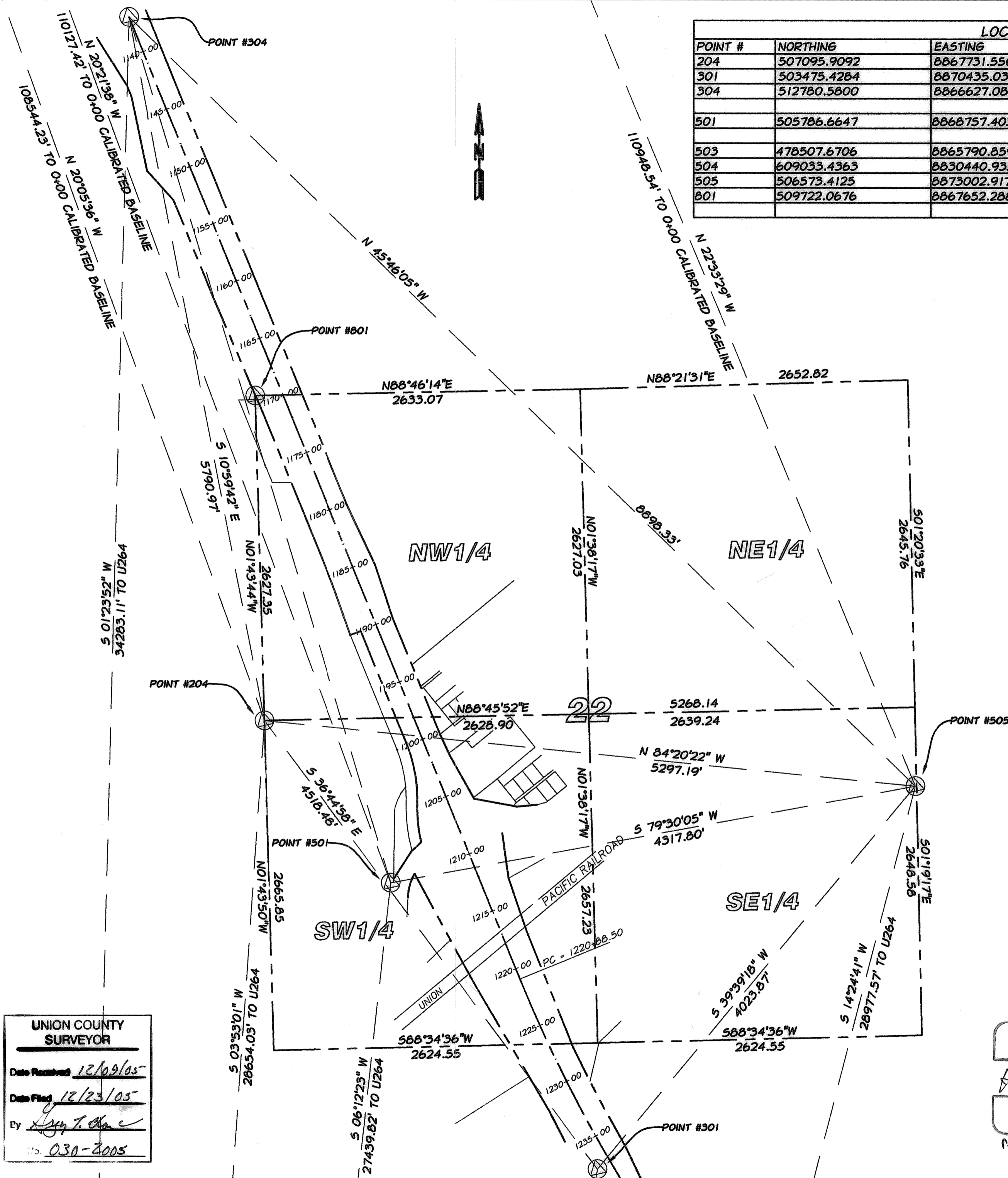
THE LOCATION FOR THE HIGHWAY CENTERLINE WAS RESOLVED USING FOUND CENTERLINE MONUMENTS FROM ODOT ROLL MAPS 9B-3-19 AND 9B-3-14. SPECIFICALLY THE MONUMENTS AT STATIONS P.O.T. 1136+93.53AH, THE PI STATION 1237+50.00 AND THE PC STATION 1260+64.52 WERE RECOVERED AND FOUND TO BE IN SUBSTANTIAL AGREEMENT WITH THE CENTERLINE GEOMETRY AS SHOWN ON THOSE MAPS. A VERIFICATION OF THE ALIGNMENT LOCATION WAS MADE BY RECOVERING SEVERAL ODOT MONUMENTS SET ALONG THE HIGHWAY RIGHT-OF-WAY ON BOTH THE EASTBOUND AND WESTBOUND SIDES FROM ONE END OF THE PROJECT TO THE OTHER AND COMPARING THEIR COMPUTED LOCATIONS WITH RECORD. ALL WERE FOUND TO BE IN AGREEMENT WITH RECORD WITHIN THE TOLERANCES TO BE EXPECTED FOR THE METHODS USED TO ESTABLISH THEIR LOCATION.

BASIS OF BEARINGS

OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83 (1998) AS DETERMINED FROM SATELLITE OBSERVATIONS FROM THE CONTROL MONUMENTS LISTED HEREON.

LEGEND

-  INDICATES SURVEY CONTROL MONUMENT, DESCRIBED HEREON.
-  INDICATES I-84 RIGHT-OF-WAY
-  INDICATES I-84 CONTROL LINE



UNION COUNTY
SURVEYOR


Date Received 12/19/05
Date Filed 12/23/05
By [Signature]
No. 030-2005

12/9/05
REGISTERED
PROFESSIONAL
LAND SURVEYOR

[Signature]

O R G O N
JAN. 21, 1992
HARMON E. McLENDON
2537

Revised 12/31/06

GEODETIC CONTROL NETWORK AND CENTERLINE RESOLUTION I-84 NORTH POWDER INTERCHANGE		
SECTION 22, T6S, R39E, W.M., UNION COUNTY, OREGON		
OREGON DEPARTMENT OF TRANSPORTATION		
SCALE: 1"=600'	 anderson perry Associates, inc. <small>ENGINEERING · SURVEYING · MATERIALS TESTING LA GRANDE, OR. WALLA WALLA, WA.</small>	SHEET 1/1
DATE: DEC. 2005		
JOB NO. 863-78		