NARRATIVE:

THIS SURVEY IS BY THE REQUEST OF OREGON DEPARTMENT OF TRANSPORTATION (ODOT) FOR PROPOSED ROADWAY IMPROVEMENTS. THE PURPOSE OF THIS SURVEY IS AS FOLLOWS:

1. RESOLVE EXISTING RIGHT-OF-WAY AND CENTERLINES OF PACIFIC HIGHWAY (OR.99) FROM 400 METERS NORTH OF COLVER ROAD INTERSECTION TO 300 METERS SOUTH OF RAPP ROAD INTERSECTION.

2. RESOLVE EXISTING RIGHT-OF-WAY AND CENTERLINE OF COLVER ROAD FROM INTERSECTION OF PACIFIC HIGHWAY WEST FOR 150 METERS.

3. RESOLVE EXISTING RIGHT-OF-WAY AND CENTERLINE OF SUNCREST ROAD FROM INTERSECTION OF PACIFIC HIGHWAY EAST FOR 150 METERS.

4. RESOLVE EXISTING RIGHT-OF-WAY AND CENTERLINE OF TALENT AVENUE FROM INTERSECTION WITH PACIFIC HIGHWAY SOUTH FOR 150 METERS.

5. RESOLVE EXISTING RIGHT-OF-WAY AND CENTERLINE OF NEW STREET FROM INTERSECTION OF PACIFIC HIGHWAY TO TALENT AVENUE.

6. RESOLVE EXISTING RIGHT-OF-WAY AND CENTERLINE OF WEST VALLEY VIEW ROAD FROM INTERSECTION OF PACIFIC HIGHWAY EAST AND WEST FOR 150 METERS.

7. RESOLVE EXISTING RIGHT-OF-WAY AND CENTERLINE OF RAPP ROAD FROM INTERSECTION OF PACIFIC HIGHWAY WEST FOR 150 METERS.

8. ESTABLISH A HORIZONTAL AND VERTICAL CONTROL NETWORK FOR FUTURE CONSTRUCTION.
9. PERPETUATE THE LOCATION OF EXISTING PROPERTY MONUMENTS, WHICH MAY BE DISTURBED OR DESTROYED DURING FUTURE CONSTRUCTION.

COORDINATES ARE REPORTED HERE IN METERS (TO CONVERT TO INTERNATIONAL FEET MULTIPLY BY 0.3048 EXACTLY) AND ARE BASED ON A LOCAL DATUM PLANE (L.D.P.). THIS WAS ESTABLISHED FROM THE OREGON COORDINATE SYSTEM OF 1983/91 NORTH ZONE SUPER-NET ADJUSTMENT BY APPLYING AN AVERAGE COMBINED SCALE FACTOR OF 0.99994213 FOR THE PROJECT SO THAT THE COORDINATES CLOSELY MATCHED MEASURED DISTANCES. BEARINGS SHOWN ARE STATE PLANE GRID BEARINGS, WITH TRUE NORTH BEING CLOCKWISE FROM GRID NORTH, CONVERGENCE ANGLES FOR PRIMARY CONTROL POINTS ARE SHOWN ON SHEET 2.

GPS CONTROL NETWORK:

FOR THE GLOBAL POSITIONING SYSTEM (GPS) SURVEY WE MEASURED A NETWORK OF FAST STATIC BASELINES. THIS NETWORK INCORPORATED NATIONAL GEODETIC SURVEY (NGS) GPS CONTROL POINTS ASH (PID NZ1326), JUSTICE (PID NZ1325) AND NEW DEA PROJECT POINTS 105, 115 AND 122. GPS BASELINES WERE OBSERVED USING DUAL FREQUENCY TRIMBLE 4800 RECEIVERS. THE BASELINES WERE PROCESSED AND ADJUSTED WITH TRIMBLE GEOMATIC OFFICE (TGO) VERSION 1.5 SOFTWARE. NGS RECORD ELLIPSOID HEIGHTS WERE HELD AT POINTS ASH AND JUSTICE. PROJECT ORTHOMETRIC ELEVATIONS WERE HELD AT 105, 115, AND 112 (DETERMINED BY DIFFERENTIAL LEVEL MEASUREMENTS AT 105 AND BY TERRESTRIAL TRAVERSING AT 155 AND 122). A CHECK TO NGS GPS STATION TALENT (PID NZ1087) WAS ALSO MEASURED AND THE GPS-DERIVED POSITION IS SHOWN HERE.

VERTICAL CONTROL:

ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). DIFFERENCES IN ELEVATION WERE MEASURED USING A WILD NA-2000 RECORDING LEVEL WITH BAR CODE RODS. AT LEAST THREE READINGS WERE TAKEN AND RECORDED TO ONE MILLIMETER FOR EACH ROD OBSERVATION. ALL DIFFERENTIAL LEVELS WERE DOUBLE RUN. ADJUSTMENT WERE MADE BY HOLDING 24 PREMARK STATIONS (P-K NAILS) THAT ODOT ESTABLISHED FOR AN AERIAL MAPPING PROJECT (NOT RECORDED) BY DIFFERENTIAL LEVELS FROM NGS BENCHMARK Z548. THE UNCONSTRAINED NETWORK PASSED THE CHI-SQUARE STATISTICS TEST USING A STANDARD DEVIATION (95% CONFIDENCE) OF 0.001 METER PER TURN, EACH TURN CONSISTING OF A MEAN BACKSIGHT AND A MEAN FORESIGHT OBSERVATION. ASSUMING NO ERROR AT THE HELD ODOT PREMARK STATIONS, THE NEW DEA STATION ELEVATION STANDARD DEVIATIONS WERE ALL 0.002 METERS OR LESS.

HORIZONTAL CONTROL NETWORK:

THE TERRESTRIAL HORIZONTAL CONTROL NETWORK WAS ESTABLISHED BY HOLDING GPS POINTS 105, 115, 122 AND PARTIALLY HOLDING 16 OF THE SAID PREMARK STATIONS WHICH WERE ESTABLISHED BY ODOT UTILIZING A RTK (REAL TIME KINEMATIC) GPS METHOD. THE TERRESTRIAL DATA WAS COLLECTED UTILIZING A LEICA TCA 1800 THEOMAT (ADJUSTED WITHIN MANUFACTURER'S SPECIFICATIONS AND CALIBRATED TO THE NGS HILLSBORO BASELINE). TWO SETS OF HORIZONTAL AND VERTICAL ANGLES WERE TURNED FORWARD AND BACK AT EACH STATION. A STANDARD PART PER MILLION (PPM) ADJUSTMENTS WAS APPLIED TO EACH MEASURED DISTANCE TO CORRECT FOR TEMPERATURE AND BAROMETRIC PRESSURE. HOLDING THE ESTABLISHED GPS CONTROL FIXED FOR HORIZONTAL HE RTK PREMARKS PARTIALLY FIXED WITH ESTIMATED STANDARD ERRORS OF 0.020 METERS EACH IN NORTHINGS AND EASTINGS AND ALL CONTROL MONUMENT ELEVATIONS FIXED PER THE VERTICAL CONTROL NETWORK, ALL MEASUREMENTS WERE ADJUSTED SIMULTANEOUSLY USING STAR-NET, A 3D LEAST SQUARES ADJUSTMENT PROGRAM. WITH ESTIMATED ACCURACY OF 2 SECONDS IN HORIZONTAL ANGLES, 8 SECONDS IN VERTICAL ANGLES, 0.003 METERS PLUS 8 PPM IN DISTANCES AND 0.0015 METERS INSTRUMENT AND TARGET CENTERING, THE NETWORK ADJUSTED WITH VERY SMALL RESIDUALS, ALL ERROR ELLIPSES REFLECTED TWO STANDARD DEVIATIONS (95% CONFIDENCE) FOR EACH POINT LESS THAN 0.023 METERS IN ANY DIRECTION, RELATIVE TO THE HELD GPS CONTROL

PROPERTY MONUMENTS WERE TIED FROM THE CONTROL NETWORK USING SETS OF ANGLES FROM TWO DIFFERENT BACKSIGHTS. ERROR ELLIPSES FOR TIED MONUMENTS SHOWED THAT THEIR POSITIONS ARE KNOWN WITHIN 0.013 METERS (95% CONFIDENCE), RELATIVE TO THE CONTROL NETWORK.

SHEET INDEX:

SHEET 1 NARRATIVE, CONTROL AND SHEET LAYOUT

SHEET 2 G.P.S. SURVEY AND GEODETIC/STATE PLANE COORDINATE LIST

SHEETS 3-7 MAPPING AND MONUMENT TABLES

SHEET 8 DETAIL SHEET OF TALENT AVENUE/COLVER ROAD

PACIFIC HIGHWAY (OR 99):

THIS RESOLUTION COVERS A PORTION OF PACIFIC HIGHWAY FROM 400 METERS NORTHERLY OF THE INTERSECTION OF COLVER ROAD, SOUTHERLY TO 300 METERS SOUTH OF RAPP ROAD THROUGH THE CITY OF TALENT. I RETRACED OREGON STATE HIGHWAY DEPARTMENT MAP 5B-7-22 (TALENT-BEAR CREEK SEC. PACIFIC HIGHWAY 1937). I HELD POINT NUMBER 524 (ORIGINAL MONUMENT SET AT ODOT STATION 245+00 POT) AND POINT NUMBER 500 (ORIGINAL MONUMENT SET AT ODOT STATION 230+00 POT) AND 15.240 METERS (50.00 FEET) SOUTHWEST OF THIS LINE FOR THE CENTERLINE TANGENT NORTH OF THE INTERSECTION OF COLVER ROAD (BETWEEN STATIONS 6+726.688 AND 7+467.564). THIS SOLUTION MATCHES WITHIN 0.043 METERS (0.14 FEET) OF OTHER MONUMENTS FOUND ALONG THE RIGHT-OF-WAY LINES AT POINT NUMBERS 501, 502, 522 AND 523 AS SHOWN. I HELD POINT NUMBER 528 (ORIGINAL MONUMENT SET AT ODOT STATION 208+97.70 PS) AND POINT NUMBER 533 (ORIGINAL MONUMENT SET AT ODOT STATION 165+00 POT) AND 15.240 METERS WEST (50.00 FEET) OF THIS LINE FOR THE CENTERLINE TANGENT SOUTH OF INTERSECTION OF COLVER ROAD (BETWEEN STATIONS 4+573.022 AND 6+368.095). THIS SOLUTION MATCHED WITHIN 0.015 METERS (0.05 FEET) OF OTHER MONUMENTS FOUND ALONG THE CENTERLINE OR RIGHT-OF-WAY LINES AT POINT NUMBERS 520, 521, 532, 534, 536, 538, 540, 542 AND 552 AS SHOWN. THE CENTERLINE CURVE AT COLVER ROAD WAS THEN REESTABLISHED BY HOLDING REESTABLISHED TANGENTS AND RECORD DEGREE OF CURVE (2°) AND, RECORD SPIRAL LENGTHS. THIS SOLUTION MATCHED CLOSELY WITH RECORD TOTAL DELTA FOR THE CURVE (15° 31' 47" MEASURED, 15° 31' RECORD). THE STATIONING WAS ESTABLISHED BY HOLDING RECORD FEET STATIONING AT 208+92.7 AT THE CALCULATED POINT OF SPIRAL AND CONVERTING THIS TO METRIC (STATION 6+368.095). I HELD BASE RIGHT-OF-WAY WIDTH OF 15.240 METERS (50.00 FEET) EACH SIDE OF CENTERLINE PER DEDICATION DEEDS AND ODOT MAP NO. 5B-7-22. ADDITIONAL RIGHT-OF-WAY WIDTH ARE PER DEED AS SHOWN.

COLVER ROAD:

THE PORTION OF COLVER ROAD BETWEEN STATIONS 1+000 AND 1+416.724 WAS RE-ESTABLISHED BY HOLDING MONUMENTS 504 AND 516 ON THE NORTHERLY RIGHT-OF-WAY LINE PER CS 14898. THE CENTERLINE WAS ESTABLISHED 9.754 METERS (32.00 FEET) SOUTH PER SAID CS 14898 AND LEGALIZATION DOCUMENT NO. 92-01263. THE SOUTH RIGHT-OF-WAY LINE WAS RE-ESTABLISHED AT RECORD STATION AND OFFSET POSITIONS. THE CENTERLINE STATIONING IS ASSUMED AT 1+000 AT THE INTERSECTION OF PACIFIC HIGHWAY (OR 99).

SUNCREST ROAD:

THE PORTION OF SUNCREST ROAD BETWEEN STATIONS 1+000 AND 1+259.234 WAS RE-ESTABLISHED BY HOLDING THE D.L.C. LINE BETWEEN MONUMENTS 575 AND 519 FOR THE SOUTH RIGHT-OF-WAY LINE. THE CENTERLINE WAS RE-ESTABLISHED 4.572 METERS (15.00 FEET) NORTH AS SHOWN ON CS 15974 AND THE PLAT OF AUTUMN RIDGE SUBDIVISION. THE NORTHERLY RIGHT-OF-WAY LINE WAS RE-ESTABLISHED 7.620 METERS (25.00 FEET) AND 10.668 METERS (35.00 FEET) NORTH OF THE CENTERLINE PER THE PLAT OF AUTUMN RIDGE SUBDIVISION AND DOCUMENT NO. 99-44116A. THE CENTERLINE STATIONING IS ASSUMED AT 1+000 AT THE INTERSECTION OF PACIFIC HIGHWAY (OR 99).

TALENT AVENUE:

THE PORTION OF TALENT AVENUE BETWEEN 6+435.639 AND 7+051.381 WAS RE-ESTABLISHED BY RETRACING ODOT DRG NO. 5B-7-22, CS 13555 AND CS 15974. TO BEGIN I NEEDED TO RETRACE THE CENTERLINE OF COLVER ROAD AS SHOWN ON ODOT'S DRG. NO. 5B-7-22. THE SURVEY PERFORMED BY STEWART LAND SURVEYS IN CS 15974 SHOWS STRONG EVIDENCE THAT ODOT USED A DIFFERENT RETRACEMENT OF THE D.L.C. LINE FOR THE CENTERLINE OF COLVER ROAD IN DRG. NO. 5B-7-22, DATED MARCH 1937. AS SHOWN ON SHEET 8, I CALCULATED THIS PRIOR D.L.C. LINE PER CS 15974 BY HOLDING MONUMENT NO. 575 AND RECORD ANGLE RELATIONSHIP FROM THE EXISTING D.L.C. LINE BETWEEN MONUMENT NOS. 575 AND 519. I THEN HELD MONUMENTS 116 AND 555 FOR THE TANGENT BETWEEN STATIONS 6+435.639 AND 6+931.522 WHICH WAS ESTABLISHED IN CS 13555 AND RE-ESTABLISHED IN CS 15807. I THEN EXTENDED THIS TANGENT TO INTERSECT SAID PRIOR D.L.C. LINE. I HELD RECORD CALCULATED DISTANCE SOUTHEASTERLY (79.405 METERS) TO RE-ESTABLISH THE P.I. POSITION. I HELD RECORD DEFLECTION (19° 20' 00") AND RECORD RADIUS PER SAID ODOT DRG NO. 5B-7-22 AND CIRCUIT COURT FINAL JUDGEMENT CASE NO. 53-96-1, DATED JULY 15, 1953 AS SHOWN. THE WESTERLY RIGHT-OF-WAY LINE WAS HELD RECORD (7.620 METERS-25.00 FEET) FROM THE RE-ESTABLISHED CENTERLINE PER SAID CIRCUIT COURT CASE. THE REMAINING RIGHT-OF-WAY WAS RECORD (9.144 METERS-30.00 FEET EACH SIDE OF CENTERLINE) AS SHOWN ON ODOT DRG. NO. 4B-6-2, DATED OCTOBER 1925. THE CENTERLINE STATIONING IS BASED ON ODOT DRG. NO. 4B-6-2 BY HOLDING THE P.T. STATION AT 6+435.639 (211+14.3) NEAR MONUMENT 555 (SEE SHEET 5). SHEET 5 ALSO SHOWS THE RETRACEMENT OF THE CENTERLINE FROM 5+796.533 TO 6+435.639 P.T., HOLDING MONUMENTS 118 AND 555 AND RECORD DEGREE OF CURVE (14°) PER ODOT DRG. 4B-6-2.

METRIC SURVEY

MONUMENT RECOVERY, RETRACEMENT AND CONTROL SURVEY

PREPARED BY

DAVID EVANS AND ASSOCIATES, INC

OREGON DEPT. OF TRANSPORTATION PROJECT: PACIFIC HIGHWAY (OR 99)

SITUATED IN THE NW 1/4, SW 1/4 & SE 1/4
OF SECTION 23 & NW 1/4 OF SECTION 25 &
NE 1/4 OF SECTION 26 IN TOWNSHIP 38 SOUTH
AND RANGE 1 WEST OF THE WILLAMETTE MERIDIAN,

JACKSON COUNTY, OREGON

O.D.O.T. KEY NO. 12380 JUNE 27, 2003

SHEET 1 OF 8

NEW STREET:

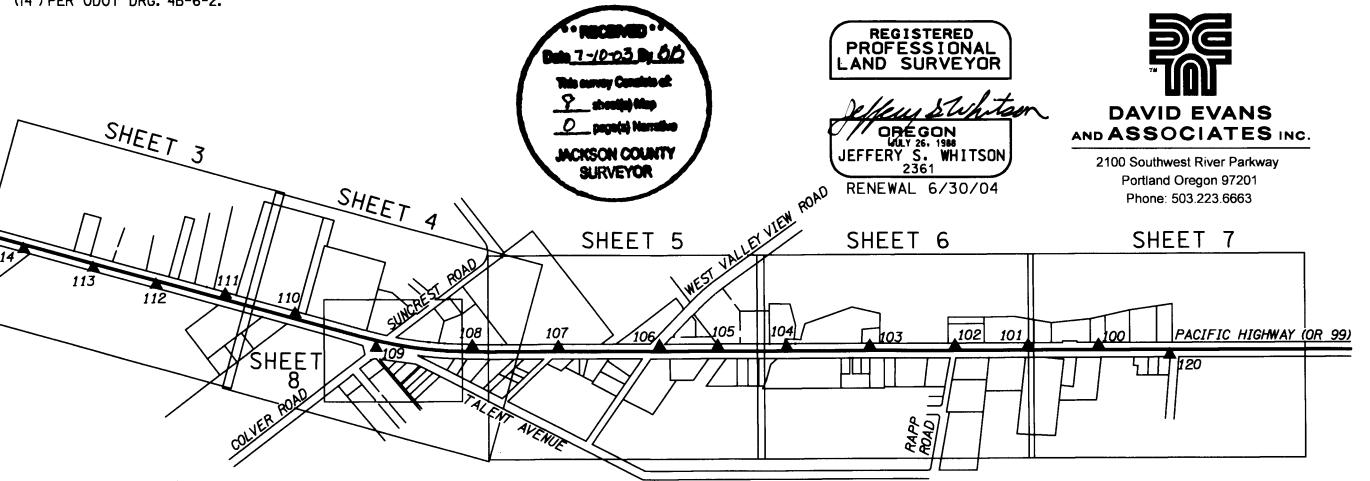
I RETRACED CS 13555 FOR THE CENTERLINE OF NEW STREET. I HELD MONUMENT NO. 521 FOR THE CENTERLINE OF NEW STREET AT THE INTERSECTION WITH PACIFIC HIGHWAY AND RECORD DISTANCE (40.92 FEET) SOUTHEAST OF MONUMENT NO. 116 PER CS 13555 FOR THE CENTERLINE INTERSECTION OF NEW STREET AND TALENT AVENUE AS SHOWN. I DID NOT FIND ANY DEDICATION DOCUMENT FOR THIS ROADWAY. I HELD THE RIGHT-OF-WAY WIDTH AT 6.096 METERS (20.00 FEET) EACH SIDE OF CENTERLINE AS SHOWN ON CS 5883, 8291, 13555 AND 15096. THE CENTERLINE STATIONING IS ASSUMED 1+000 AT THE INTERSECTION OF PACIFIC HIGHWAY (OR 99).

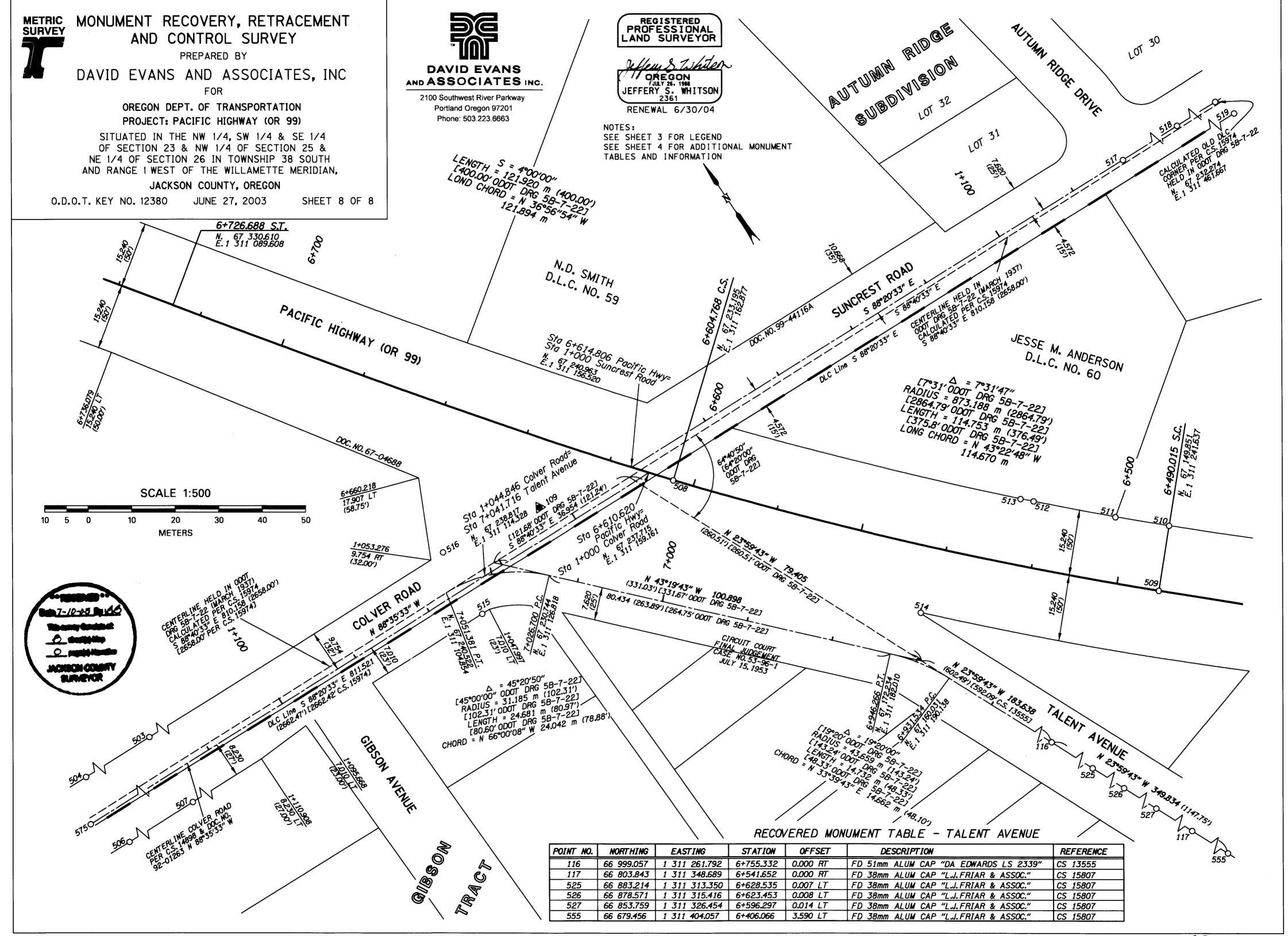
WEST VALLEY VIEW ROAD:

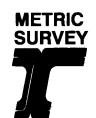
I RETRACED CS 13267, 13555 AND 14907 FOR THE CENTERLINE OF WEST VALLEY VIEW ROAD. I HELD MONUMENT NO. 117 AT THE INTERSECTION OF WEST VALLEY VIEW ROAD AND TALENT AVENUE AND MONUMENT NO. 544 AT THE ANGLE POINT FOR THE TANGENT WEST OF PACIFIC HIGHWAY PER CS 13555. I HELD MONUMENT NOS. 544 AND 546 FOR THE TANGENT EAST OF PACIFIC HIGHWAY AND WEST OF THE POINT OF CURVE AT STATION 4+508.632. I THEN HELD MONUMENT NOS. 547 AND 548 PER CS 14907 FOR THE TANGENT EAST OF POINT OF TANGENT AND RECORD RADIUS FOR THE CURVE. THE DELTA MATCHED WITHIN 20 SECONDS PER CS 14907 AS SHOWN. THE RIGHT-OF-WAY WIDTH WAS HELD AT 7.620 METERS (25.00 FEET) FOR BOTH SIDES OF THE CENTERLINE FOR THE PORTION OF WEST VALLEY VIEW ROAD BETWEEN TALENT AVENUE AND PACIFIC HIGHWAY AS SHOWN ON CS 13267. THE RIGHT-OF-WAY WIDTH VARIES ON THE EAST SIDE OF PACIFIC HIGHWAY AND IS HELD PER RIGHT-OF-WAY DEDICATION DOCUMENTS AS SHOWN. THE CENTERLINE STATIONING IS BASED ON CS 13267 BY HOLDING STATION 4+638.721 (152+18.9) AT THE ANGLE POINT AT MONUMENT NO. 544.

RAPP ROAD:

I RETRACED CS 516, CS 13555 AND THE PLAT OF PACIFIC ESTATES-UNIT NO. 1 FOR THE CENTERLINE OF RAPP ROAD. I HELD 0.216 METER (0.71 FEET) SOUTHEAST OF MONUMENT NO. 118 AS SHOWN ON CS 13555 AND PACIFIC ESTATES-UNIT NO. 1 AND 6.096 METERS (20 FEET) SOUTHEAST OF MONUMENT NO. 561 TO REESTABLISH THE CENTERLINE AS SHOWN. THESE SOLUTIONS MATCH WELL WITH CENTERLINE ANGLE RELATIONSHIPS BETWEEN RAPP ROAD AND TALENT AVENUE AND BETWEEN RAPP ROAD AND PACIFIC HIGHWAY PER CS 516 AND PACIFIC ESTATE-UNIT NO. 1 AS SHOWN. THE RIGHT-OF-WAY WAS HELD AT 6.096 METERS (20.00 FEET) EACH SIDE OF CENTERLINE AS SHOWN ON SAID CS 516 AND PACIFIC ESTATES- UNIT NO. 1. THE CENTERLINE STATIONING IS ASSUMED 1+000 AT THE INTERSECTION OF PACIFIC HIGHWAY (OR 99).







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JACKSON COUNTY, OREGON

O.D.O.T. KEY NO. 12380 JUNE 27, 2003

SHEET 7 OF 8

RECOVERED MONUMENT TABLE - PACIFIC HIGHWAY (OR 99)

100

101

66 286.930

66 380.259

66 176.469

1 312 324.019

1 312 208.009

1 312 428.120

491.794

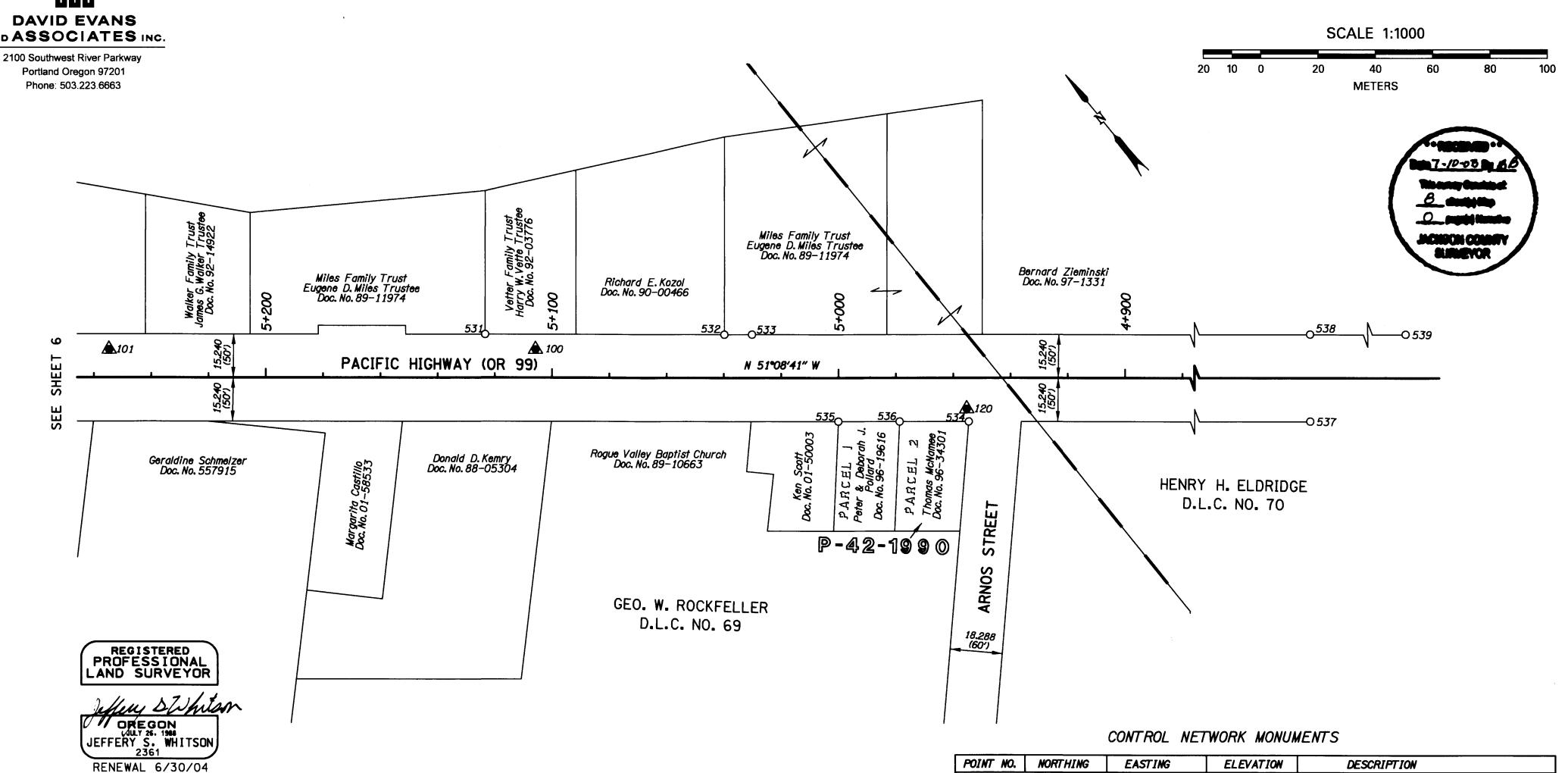
490.347

493.334

POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION	REFERENCE
531	66 302.159	1 312 313.668	5+123.326	15.253 RT	FD 16mm IRON ROD	CS 2961
532	66 249.750	1 312 378.701	5+039.803	15.239 RT	FD 19mm IRON ROD	CS 2961
533	66 243.725	1 312 386.181	5+030.198	15.240 RT	FD 19mm IRON ROD	ODOT DWG 5B-7-22
534	66 172.608	1 312 425.887	4+954.662	15.232 LT	FD 16mm IRON ROD W/YPC "VERLYN THOMAS LS 505"	CS 11250
535	66 201.147	1 312 390.499	5+000.124	15.208 LT	FD 16mm IRON ROD W/YPC "VERLYN THOMAS LS 505"	CS 11250
536	66 187.741	1 312 407.112	4+978.777	15.225 LT	FD 16mm IRON ROD W/YPC "VERLYN THOMAS LS 505"	CS 11250
537	66 069.138	1 312 554.344	4+789.716	15.219 LT	FD 19mm IRON ROD	ODOT DWG 5B-7-22
538	66 091.555	1 312 575.060	4+787.647	15.234 RT	FD 16mm IRON ROD	CS 13164
539	65 956.863	1 312 742.160	4+573.022	15.176 RT	FD 19mm IRON ROD	ODOT DWG 5B-7-22



NOTE: SEE SHEET 3 FOR LEGEND



SET 13mm IRON ROD W/RPC "DEA CONTROL"

SET 13mm IRON ROD W/RPC "DEA CONTROL"

SET 13mm IRON ROD W/RPC "DEA CONTROL"

METRIC SURVEY

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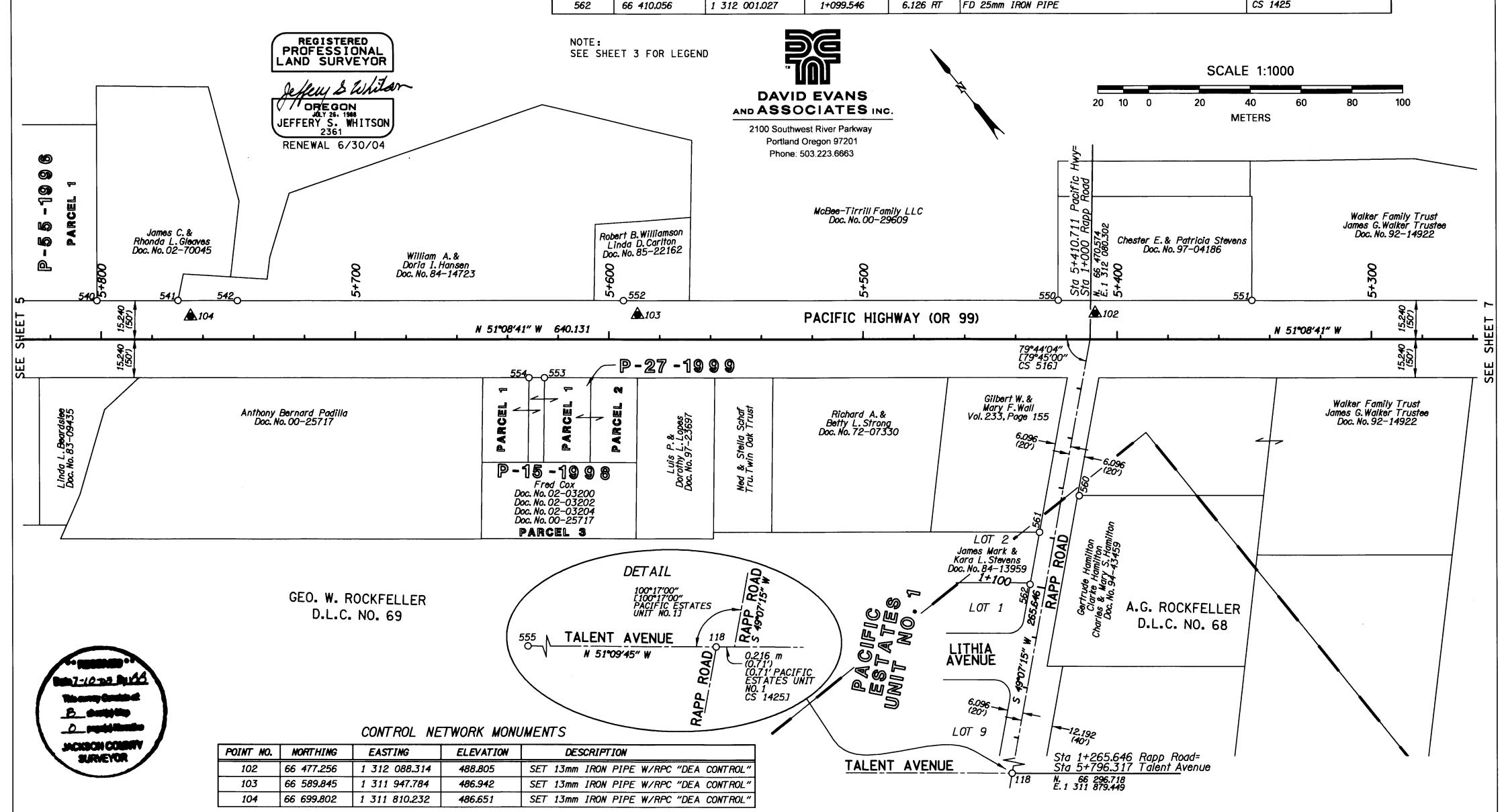
SHEET 6 OF 8

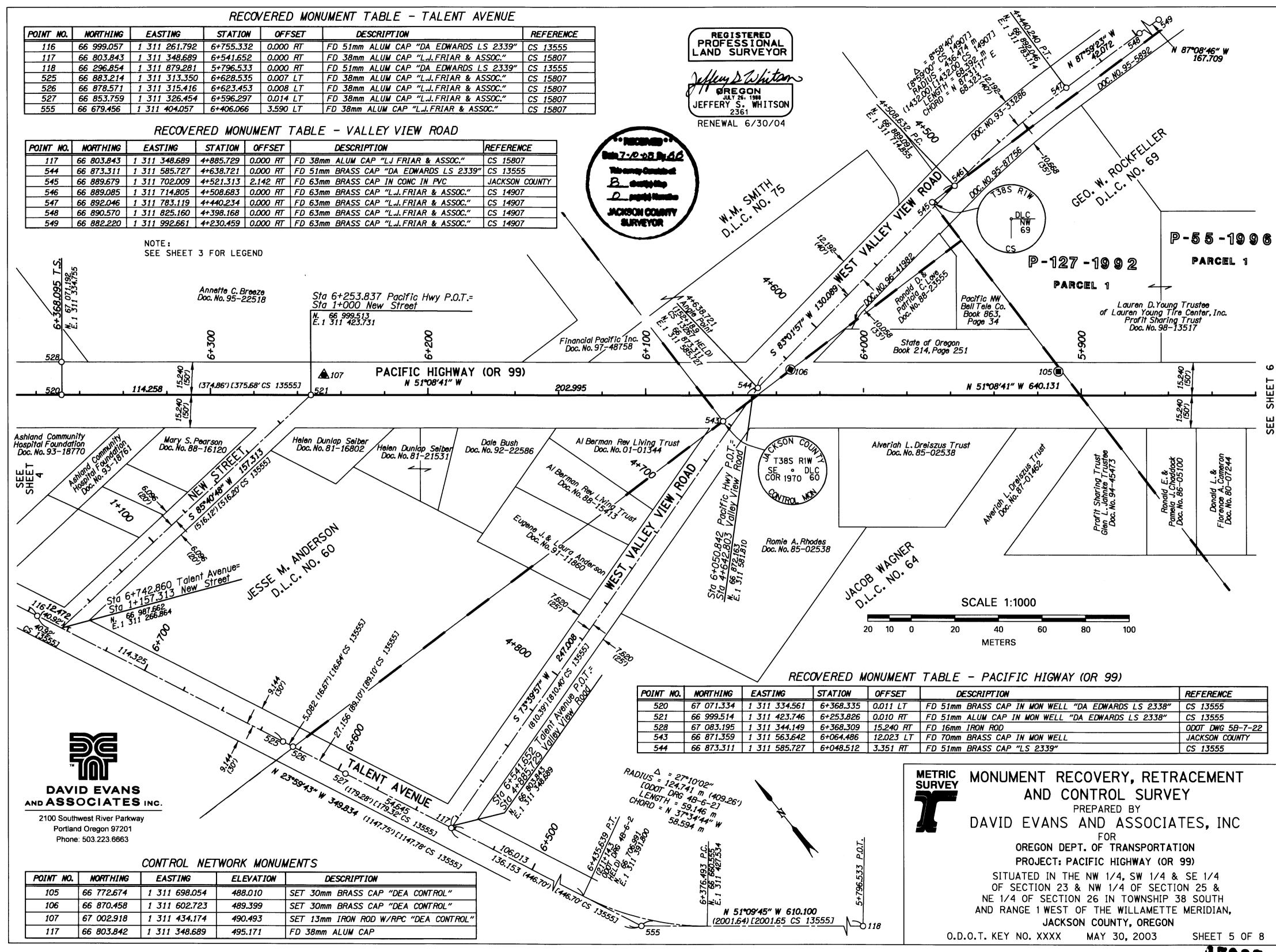
RECOVERED MONUMENT TABLE - PACIFIC HIGHWAY (OR 99)

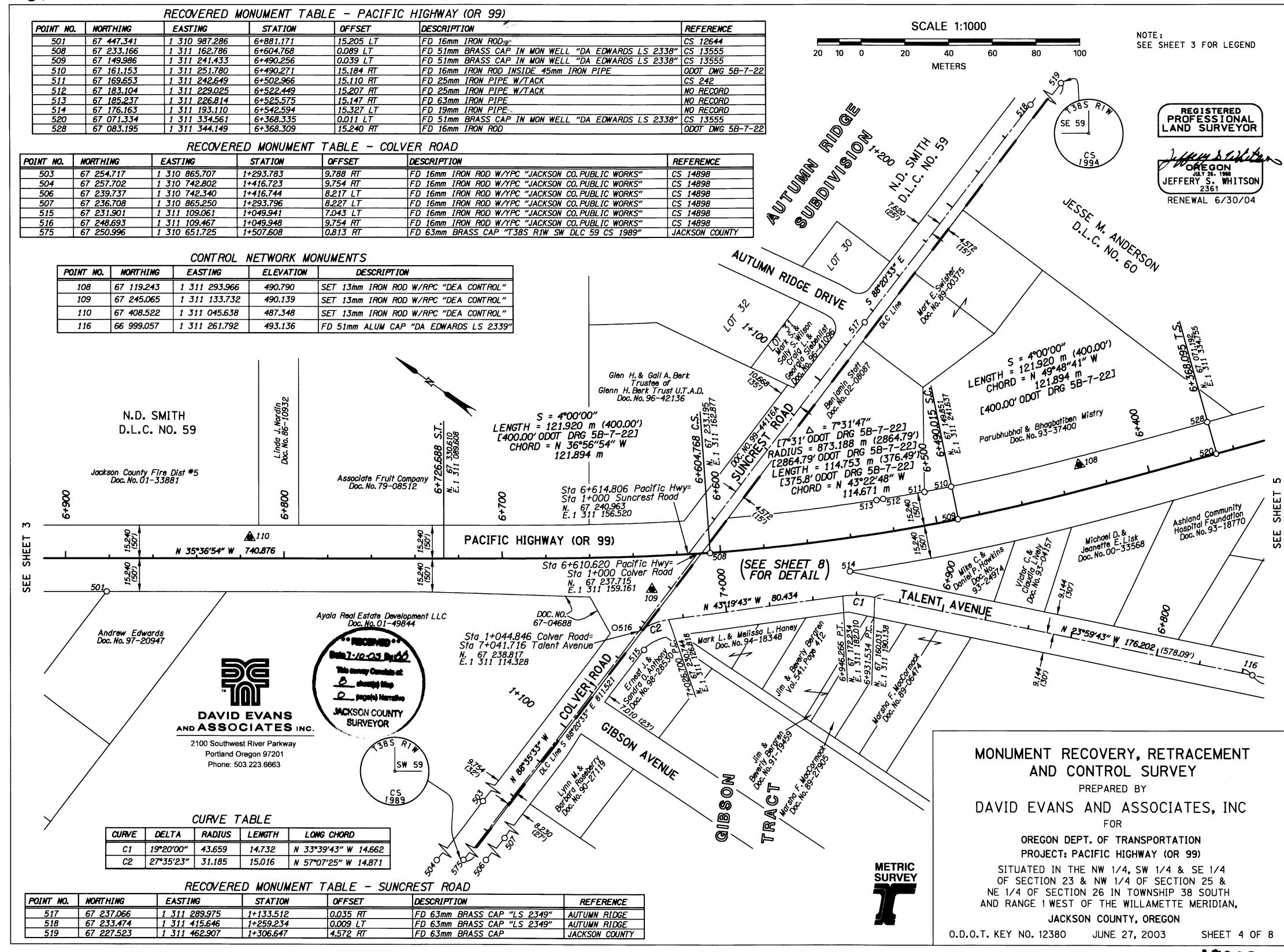
POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION	REFERENCE
5 4 0	66 727.679	1 311 785.434	5+801.630	15.230 RT	FD 16mm IRON ROD	CS 13267
541	66 707.728	1 311 810.323	5+769.732	15.308 RT	FD 19mm IRON PIPE	CS 1701
542	66 693.029	1 311 828.461	5+746.387	15.240 RT	FD 19mm IRON PIPE	ODOT DRG 5B-7-22
550	66 490.368	1 312 080.230	5+423.185	15.369 RT	FD 16mm IRON ROD W/YPC "R.BATH LS 1069"	CS 12372
551	66 442.518	1 312 139.498	5+347.012	15.289 RT	FD 16mm IRON ROD	CS 2961
552	66 597.603	1 311 946.912	5+594.278	15.240 RT	FD 25mm IRON PIPE	XXX
553	66 593.401	1 311 903.511	5+625.441	15.261 LT	FD 16mm IRON ROD W/YPC "L.J. FRIAR & ASSOC."	CS 15681
<i>554</i>	66 597.214	1 311 898.770	5+631.525	15.265 LT	FD 16mm IRON ROD W/YPC "L.J. FRIAR & ASSOC."	CS 15681

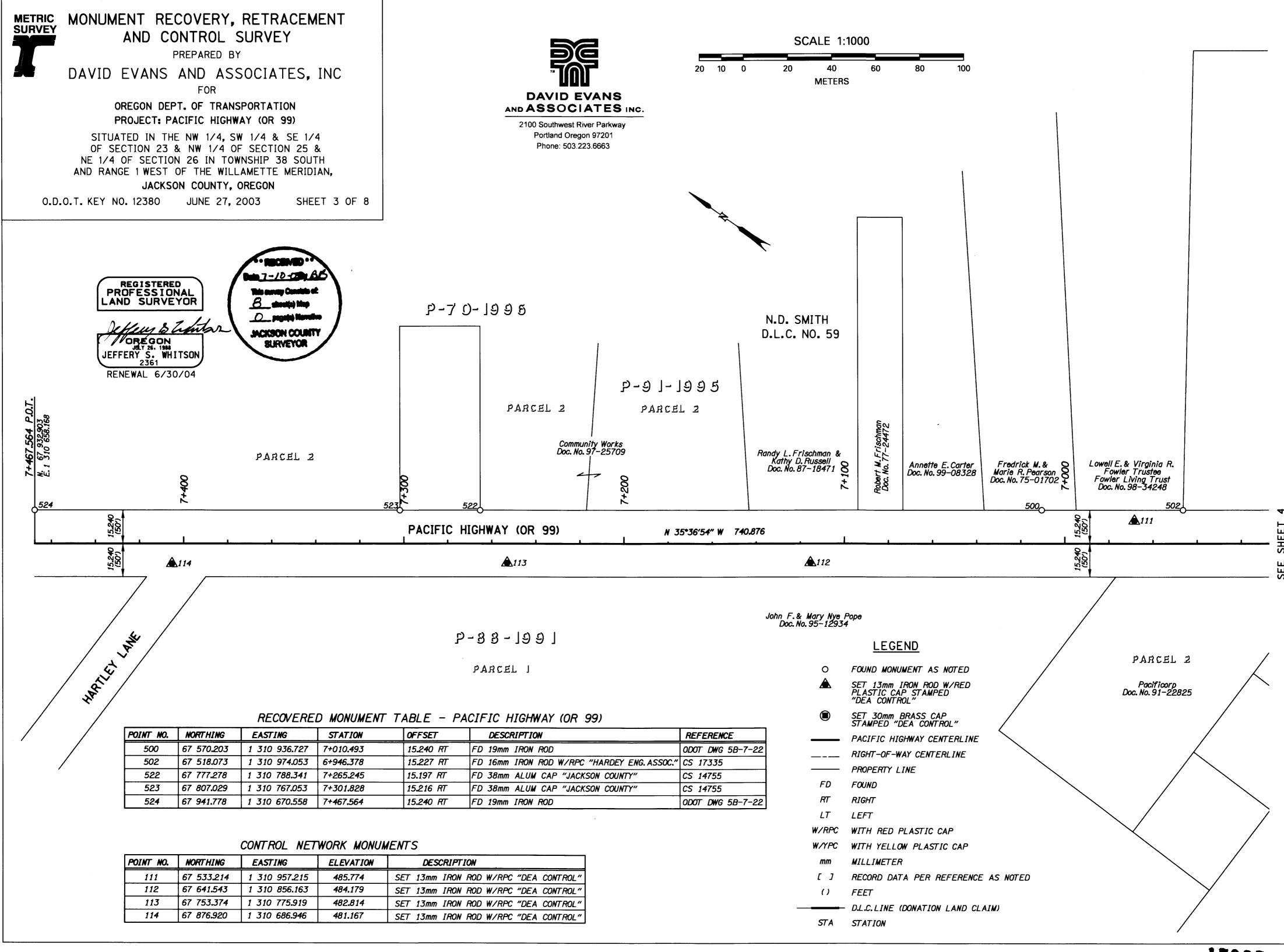
RECOVERED MONUMENT TABLE - RAPP ROAD

POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION	REFERENCE
118	66 296.854	1 311 879.281	1+265.684	0.213 RT	FD 51mm ALUM CAP "DA EDWARDS LS 2339"	CS 13555
560	66 425.160	1 312 038.091	1+061.637	6.712 LT	FD 25mm IRON PIPE	CS 516
561	66 423.771	1 312 016.920	1+078.553	6.096 RT	FD 16mm IRON ROD	PACIFIC ESTATES UNIT NO. 1
562	66 410.056	1 312 001.027	1+099.546	6.126 RT	FD 25mm IRON PIPE	CS 1425











MONUMENT RECOVERY, RETRACEMENT AND CONTROL SURVEY

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O.D.O.T. KEY NO. 12380

JUNE 27, 2003

SHEET 2 OF 8

LEGEND

FOUND GPS STATION

FOUND MONUMENT USED AS NETWORK STATION

SET NETWORK STATION AS NOTED

FD FOUND

GPS GLOBAL POSITIONING SYSTEM

NAD NORTH AMERICAN DATUM

NAVD NORTH AMERICAN VERTICAL DATUM

NGS NATIONAL GEODETIC SURVEY

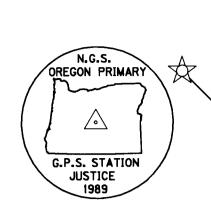
PID POINT IDENTIFICATION

PT POINT

RPC RED PLASTIC CAP

RTK REAL-TIME KINEMATIC

() NATIONAL GEODETIC SURVEY RECORD DATA



T38S, R1W, W.M.

IT IS ALSO ABOUT 8 M SOUTHEAST OF CENTER OF

1.46 M SOUTHWEST OF HIGHWAY FOG LINE, AND

HIGHWAY EDGE PAVEMENT. IN N.E.1/4. SEC 22.

1.52 M SOUTHERLY OF EDGE DRIVEWAY APRON AT

ASPHALT DRIVEWAY TO ADDRESS #5446,

STATION "JUSTICE"
NGS PID NZ1325
FD 10 CM BRASS CAP LOCATED
IN MEDFORD, OR IN THE CONCRETE
WALKWAY OF A PLAZA BOUNDED ON
THE EAST BY SOUTH OAKDALE AVE. AND
ON THE NORTH BY WEST 8TH ST.
STATION IS 0.82 M EAST OF EAST FOUNTAIN
WALL AND 2.38 M SOUTH OF NORTH FOUNTAIN
WALL IN S.E.1/4, SEC 25, T375, R2W, W.M.





2100 Southwest River Parkway Portland Oregon 97201 Phone: 503.223.6663

NOT TO SCALE

TALENT

0

1968

105 = SET 30 MM BRASS CAP STAMPED
"D.E.A. CONTROL". LOCATED ON THE NORTHEAST
SIDE OF HIGHWAY 99 AT TALENT, OR AT
MILEPOST 14.2. IT IS IN CENTER OF TOP
CURB 30 CM SOUTHEAST OF NORTHEAST END
OF CURB, A "SPEED 40" SIGN POST IS ABOUT 21 M TO
NORTHWEST, AND THE WEST END OF A BILLBOARD IS
ABOUT 6 M TO NORTHEAST. IN S.E.1/4, SEC 23, T38S,
R1W, W.M.

STATION "TALENT"

122 = SET 13 MM IRON ROD WITH
RPC MARKED "D.E.A. CONTROL".
LOCATED ON SOUTHWEST SIDE OF HIGHWAY 99
AT TALENT, OR NEAR MILEPOST 15.05.
IT IS ABOUT 88 M SOUTHEAST OF MILEPOST "15"
SIGN POST, ABOUT 9 M SOUTHEAST OF CENTER OF
ASPHALT DRIVEWAY TO SOUTH VALLEY
MINI STORAGE, 1.83 M SOUTHWEST OF HIGHWAY
FOG LINE, AND 6.86 M NORTHEAST OF POWER POLE
TAGGED "PPL D12330" AND "1004". IN N.W.1/4
SEC 25, T38S, R1W, W.M.

STATION "TALENT" NGS PID NZ1087 FD 7.5 CM BRASS CAP IN 30 CM DIAMETER MOUND OF CONCRETE, UP 5 CM. TO REACH: FROM TALENT.OR GO SOUTHEAST ON HIGHWAY 99 TO MILEPOST 16.2 AND TALENT AVE. ON THE RIGHT. GO WESTERLY ON TALENT AVE. 0.3 KM TO A GRAVEL DRIVEWAY ON THE LEFT (AT MAILBOXES 2310, 2316 AND 2320). FOLLOW DRIVEWAY (CROSSING RR TRACKS) UPHILL IN A SOUTHERLY DIRECTION 0.7 KM TO A RIDGE AND A TRACK ROAD ON THE LEFT. FOLLOW TRACK ROAD ABOUT 75 M NORTHERLY TO THE STATION. AN ORANGE CARSONITE POST IS 60 CM TO NORTH AND 16 MM IRON ROD IS 1.92 M SOUTHWEST IN N.W.1/4 SEC 31, T38S, R1E, W.M. STATION "ASH"

N.G.S.

OREGON PRIMARY

G.P.S. STATION

NGS PID NZ1326

FD 10 CM BRASS CAP IN 15 CM x 15 CM

CONCRETE. FLUSH WITH GROUND.

LOCATED AT ASHLAND, OR.

FROM THE EASTERLY SIDE OF THE MOUNTAIN

AVE OVERPASS AT INTERSTATE 5, GO

NORTHWESTERLY AND THEN NORTHERLY 0.5 KM

ON NORTH MOUNTAIN AVE. STAY ON PAVED ROAD

WHICH BECOMES EAGLE MILL ROAD

AND GO NORTHWESTERLY 0.5 KM TO A MICROWAVE/
COMMUNICATIONS BUILDING ON THE LEFT.

STATION IS ABOUT 15 M SOUTH OF BUILDING ON
SOUTHWEST SIDE OF RIGHT-OF-WAY FENCE.

STATION IS ABOUT 15 M SOUTH OF BUILDING ON SOUTHWEST SIDE OF RIGHT-OF-WAY FENCE.

"ASH" IS ON THE NORTHEAST SIDE OF NORTH BOUND INTERSTATE 5, 1.83 M SOUTHWEST OF AN ORANGE CARSONITE POST AND 2.90 M SOUTHWEST OF A FENCE CORNER. IN S.E.1/4 SEC 33, T38S, R1E, W.M.

GEODETIC / STATE PLANE COORDINATE LIST

DEA PROJECT PT	NGS PID	Latitude	Longitude	Northing (M)	95% N Error +/-	Easting (M)	95% E Error +/-	Orthometric Elevation (M)	95% El Error +/-	Ellipsoid Height (M)	Combined Factor	Convergence
105		N 42° 14′ 41.24581″	W 122° 46′ 57.71555″	66788.809	0.01	1311622.146	0.01	488.01	HELD	4 64.12	0.99995064	-1° 33′ 42.12841″
115		N 42° 15′ 21.06447″	W 122° 47′ 48.76446″	68048.976	0.01	1310485.917	0.01	479.14	HELD	455.20	0.99994897	-1° 34′ 17.05339″
122		N 42° 14′ 14.40413″	W 122° 46′ 11.76819″	65932.265	0.01	1312652.711	0.01	497.22	HELD	473.37	0.99995128	-1° 33′ 10.69363″
ASH	NZ1326	N 42° 12′ 56.39242″ (N 42° 12′ 56.39242″)	W 122° 42′ 25.16768″ (W 122° 42′ 25.16768″)	63387.130 (63387.130)	HELD	1317783.144 (1317783.144)	HELD	557.80 (557.74)	0.01	534.06 (534.06)	0.99994792	-1° 30′ 35.66550″
JUSTICE	NZ1325	N 42° 19′ 21.42830″ (N 42° 19′ 21.42830″)	W 122° 52′ 36.72874″ (W 122° 52′ 36.72874″)	75646.722 (75646.722)	HELD	1304098.191 (1304098.191)	HELD	424.93 (424.85)	0.01	400.79 (400.79)	0.99993979	-1° 37′ 34.06338″
TALENT	NZ1087	N 42° 13′ 30.97603″ (N 42° 13′ 30.97273″)	W 122° 45′ 09.67879″ (W 122° 45′ 09.67479″)	64554.306 (64554.202)	0.01	1314039.798 (1314039.887)	0.01	588.68 (588.6)	0.02	564.88	0.99994033	-1° 32′ 28.21534″

GEODETIC/STATE PLANE COORDINATE LIST.
DATUMS: NAD 83(91) AND NAVD 88.
OREGON STATE PLANE, SOUTH ZONE, COORDINATES.
HORIZONTAL UNITS: METERS. VERTICAL UNITS: METERS.

NOTES

1. GPS MEASUREMENTS WERE MADE WITH TRIMBLE DUAL-FREQUENCY RECEIVERS.

2. BASELINES WERE PROCESSED AND ADJUSTED WITH TRIMBLE GEOMATICS OFFICE, VERSION 1.5 SOFTWARE. WGS84 AND GEOID99 WERE USED AS THE ADJUSTMENT ELLIPSOID AND GEOID MODELS.
3. A MINIMALLY CONSTRAINED ADJUSTMENT, HOLDING POINT "ASH", MISSED THE RECORD HORIZONTAL POSITION OF "JUSTICE" BY 5 MM NORTHING AND 2 MM EASTING.

4. IN THE FINAL ADJUSTMENT THE NGS RECORD LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS AT POINTS "ASH" AND "JUSTICE" WERE HELD TO DUPLICATE RTK/GPS MEASUREMENTS DONE BY ODOT IN MAY 2001.

5. THE ELEVATIONS AT POINTS 105, 115 AND 122 WERE HELD. THE ELEVATION OF POINT 105 WAS DETERMINED BY DIFFERENTIAL LEVELS. THE ELEVATIONS OF POINTS 115 AND 122 WERE MEASURED WITH TERRESTRIAL TRAVERSING.

6. POINT "TALENT" IS AN NGS TRIANGULATION STATION. ITS RECORD HORIZONTAL AND VERTICAL POSITIONS WERE DETERMINED BY TRIANGULATION AND VERTICAL ANGLES.

REGISTERED PROFESSIONAL LAND SURVEYOR

DREGON

JEFFERY S. WHITSON

2361

RENEWAL 6/30/04