

BUTLER GRADE ROAD LEGALIZATION SURVEY

LEGEND

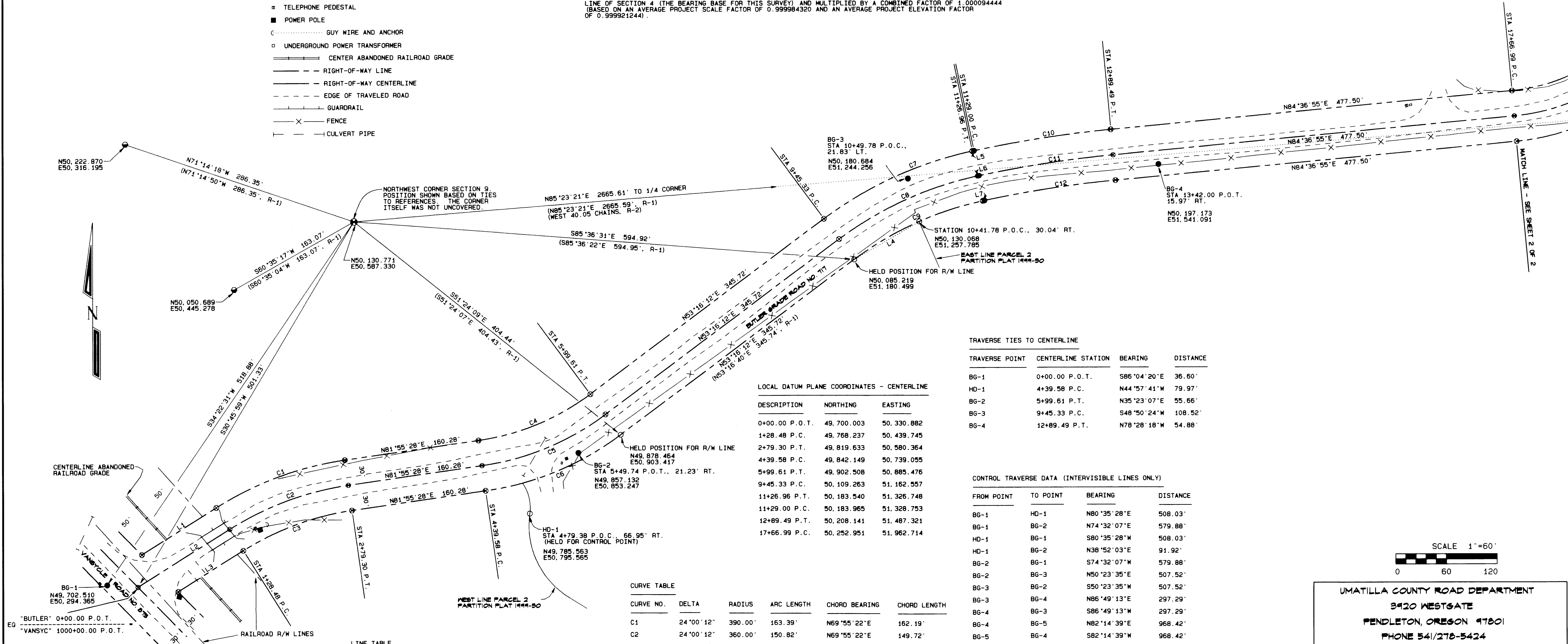
- FOUND 2 1/2" BRASS CAP ON GALVANIZED IRON PIPE UNLESS NOTED OTHERWISE. SET BY PLS 852, SURVEY R-1.
- FOUND 2" ALUMINUM CAP ON 5/8" IRON REBAR STAMPED "ORLS 852... WRLS 852" SET IN SURVEY R-1.
- FOUND 5/8" IRON REBAR WITH RED PLASTIC CAP MARKED "ORLS 852... WRLS 13922" SET IN SURVEY R-1.
- SET 5/8" X 30" IRON REBAR WITH YELLOW PLASTIC CAP MARKED "UCPMD... LS2627"
- ⊗ CALCULATED POINT ONLY; NOTHING FOUND OR SET
- TELEPHONE PEDESTAL
- POWER POLE
- GUY WIRE AND ANCHOR
- UNDERGROUND POWER TRANSFORMER
- CENTER ABANDONED RAILROAD GRADE
- - - RIGHT-OF-WAY LINE
- RIGHT-OF-WAY CENTERLINE
- - - EDGE OF TRAVELED ROAD
- GUARDRAIL
- FENCE
- CULVERT PIPE

SURVEY NARRATIVE

THIS SURVEY WAS PERFORMED AT THE REQUEST OF THE UMATILLA COUNTY BOARD OF COMMISSIONERS. THE PURPOSE OF THE SURVEY WAS TO MONUMENT A PORTION OF BUTLER GRADE ROAD, COUNTY ROAD NO. 717, FOR LEGALIZATION PURPOSES DUE TO THE FACT THAT ITS EXACT LOCATION COULD NOT BE DETERMINED FROM THE ORIGINAL ROAD NOTES (ROAD NO. 112, CIRCA 1881). THE BRIDGE NEAR VANSYCLE ROAD IS SCHEDULED TO BE REPLACED WITH EITHER HRRR OR OTIA FUNDS AND THE RIGHT-OF-WAY LOCATION NEEDS TO BE ESTABLISHED IN CASE EXTRA RIGHT-OF-WAY OR EASEMENTS NEED TO BE ACQUIRED.

DAVE HADDOCK DID A PARTITION FOR TIM SMITH IN THIS AREA IN 1999. IN THE PROCESS OF COMPLETING THAT SURVEY HE TIED IN THE ROAD BETWEEN VANSYCLE ROAD AND THE 1/4 CORNER COMMON TO SECTIONS 4 AND 9 AND PROVIDED AN ALIGNMENT ON HIS MAP. I USED THIS ALIGNMENT, AS IT FIT THE EXISTING ROAD WELL. I HELD THE TWO MONUMENTS ALONG THE TANGENT SECTION ON THE NORTH LINE OF PARCEL 2, AND THEN USED HIS RECORD RADII AND CENTRAL ANGLES TO PROJECT THE ALIGNMENT WEST AND EAST.

THIS SURVEY WAS PERFORMED USING A SOKKIA RADIANT GPS SYSTEM OPERATED IN RTK MODE USING STATE PLANE COORDINATES. I THEN ROTATED 1°15'32" CLOCKWISE TO MATCH HADDOCK'S BEARING ALONG THE NORTH LINE OF SECTION 4 (THE BEARING BASE FOR THIS SURVEY) AND MULTIPLIED BY A COMBINED FACTOR OF 1.000094444 (BASED ON AN AVERAGE PROJECT SCALE FACTOR OF 0.999994350 AND AN AVERAGE ELEVATION FACTOR OF 0.9999921244).



LOCAL DATUM PLANE COORDINATES - CENTERLINE

DESCRIPTION	NORTHING	EASTING
0+00.00 P.O.T.	49,700.003	50,330.882
1+28.48 P.C.	49,768.237	50,439.745
2+79.30 P.T.	49,819.633	50,580.364
4+39.58 P.C.	49,842.149	50,739.055
5+99.61 P.T.	49,902.508	50,885.476
9+45.33 P.C.	50,109.263	51,162.557
11+26.96 P.T.	50,183.540	51,326.748
11+29.00 P.C.	50,183.965	51,328.753
12+89.49 P.T.	50,208.141	51,487.321
17+66.99 P.C.	50,252.951	51,962.714

TRAVERSE TIES TO CENTERLINE

TRAVERSE POINT	CENTERLINE STATION	BEARING	DISTANCE
BG-1	0+00.00 P.O.T.	S86°04'20"E	36.60'
HD-1	4+39.58 P.C.	N44°57'41"W	79.97'
BG-2	5+99.61 P.T.	N35°23'07"E	55.66'
BG-3	9+45.33 P.C.	S48°50'24"W	108.52'
BG-4	12+89.49 P.T.	N78°28'18"W	54.88'

CONTROL TRAVERSE DATA (INTERVISIBLE LINES ONLY)

FROM POINT	TO POINT	BEARING	DISTANCE
BG-1	HD-1	N80°35'28"E	508.03'
BG-1	BG-2	N74°32'07"E	579.88'
HD-1	BG-1	S80°35'28"W	508.03'
HD-1	BG-2	N38°52'03"E	91.92'
BG-2	BG-1	S74°32'07"W	579.88'
BG-2	BG-3	N50°23'35"E	507.52'
BG-2	BG-2	S50°23'35"W	507.52'
BG-3	BG-4	N86°49'13"E	297.29'
BG-3	BG-4	S86°49'13"W	297.29'
BG-4	BG-5	N82°14'39"E	968.42'
BG-4	BG-6	S82°14'39"W	968.42'
BG-5	BG-6	N89°44'21"E	676.78'
BG-5	HD-2	N89°05'22"E	688.33'
BG-6	BG-5	S89°44'21"W	676.78'
BG-6	HD-2	N55°34'25"E	13.90'
BG-6	BG-7	N26°45'51"E	172.75'
HD-2	BG-5	S89°05'22"W	688.33'
HD-2	BG-6	S55°34'25"W	13.90'
BG-7	BG-6	N24°22'31"E	160.71'
BG-7	BG-6	S26°45'51"W	172.75'
BG-7	HD-2	S24°22'31"W	160.71'

CURVE TABLE

CURVE NO.	DELTA	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	24°00'12"	390.00'	163.39'	N69°55'22"E	162.19'
C2	24°00'12"	360.00'	150.82'	N69°55'22"E	149.72'
C3	24°00'12"	330.00'	138.25'	N69°55'22"E	137.24'
C4	28°39'16"	290.00'	145.03'	N67°35'50"E	143.53'
C5	28°39'16"	320.00'	160.04'	N67°35'50"E	158.37'
C6	28°39'16"	350.00'	175.04'	N67°35'50"E	173.22'
C7	24°46'36"	450.00'	194.60'	N65°39'30"E	193.09'
C8	24°46'36"	420.00'	181.62'	N65°39'30"E	180.21'
C9	24°46'36"	390.00'	168.64'	N65°39'30"E	167.33'
C10	06°34'05"	1430.00'	163.92'	N81°19'53"E	163.83'
C11	06°34'05"	1400.00'	160.49'	N81°19'53"E	160.40'
C12	06°34'05"	1370.00'	157.06'	N81°19'53"E	156.97'

LINE TABLE

LINE NO.	BEARING	DISTANCE
L1	N57°55'16"E	104.18'
L2	N57°55'16"E	128.48'
L3	N57°55'16"E	90.85'
L4	N59°52'24"E	89.36'
L5	N78°02'50"E	2.05'
L6	N78°02'50"E	2.05'
L6	N78°02'50"E	2.05'

SURVEY RECORDS

R-1 PARTITION PLAT 1999-30 BY PLS 852 (SURVEY NO. 99-114-B)

R-2 G.L.D. SURVEY BY ODELL AND LEWIS DATED FEBRUARY 7, 1865

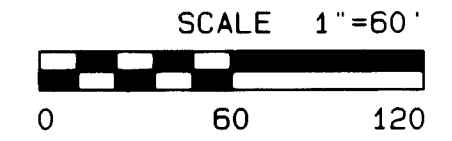
FIELD NOTES AND PLAT OF ROAD NO. 112 BY J. H. RALEY, COUNTY SURVEYOR, FILED SEPTEMBER 7, 1881.

PLAT SHOWING PROPOSED CHANGE IN HIGHWAY BETWEEN VANSYCLE AND SHELZ AND NORTHERN PACIFIC RAILWAY R/W DATED APRIL 16, 1929.

REGISTERED PROFESSIONAL LAND SURVEYOR

GARY R. ROBERTS

RENEWS 12/31/2004



UMATILLA COUNTY ROAD DEPARTMENT

3420 WESTGATE

FENDLETON, OREGON 97801

PHONE 541/278-5424

COUNTY ROAD NO. 717 LEGALIZATION SURVEY

BUTLER GRADE ROAD

LOCATED IN SECTIONS 4 AND 9

TOWNSHIP 5 NORTH, RANGE 33 E.W.M.

DATE OF SURVEY: MAY, 2004

SHEET 1 OF 2

RECEIVED BY

Umatilla County Surveyor

Date 5-04

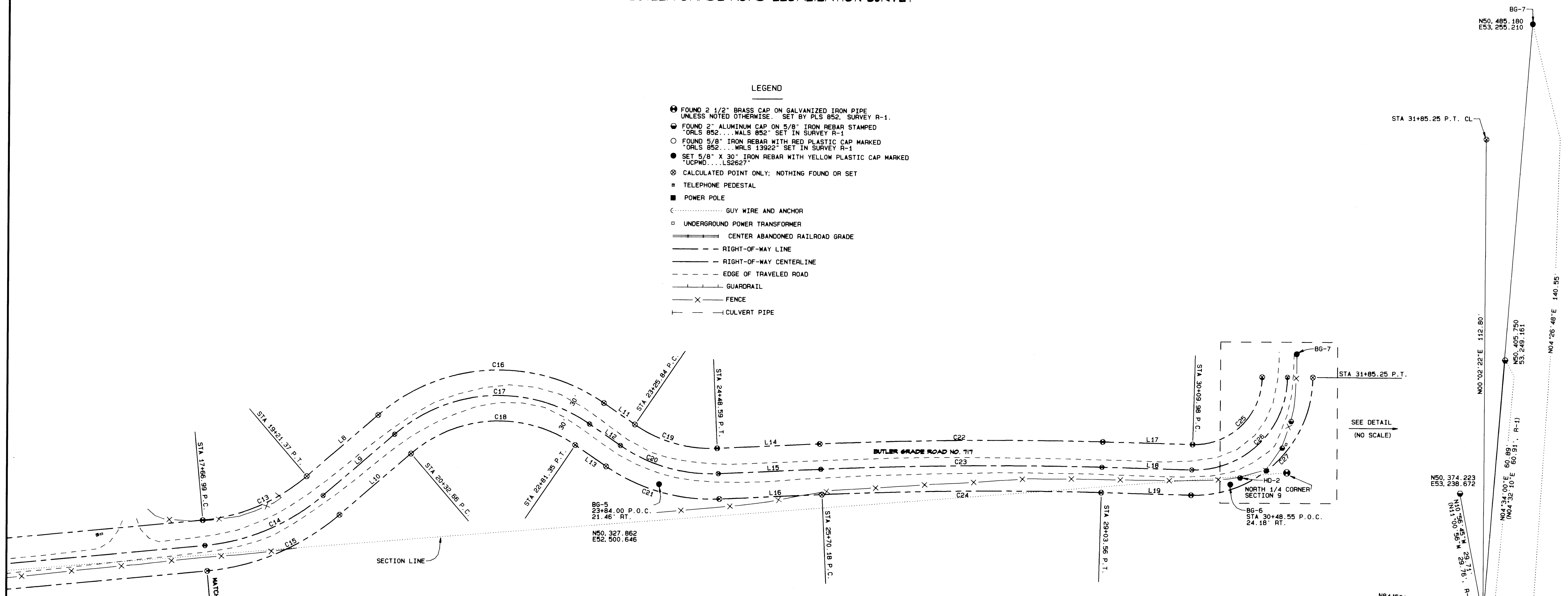
Rec'd by KR

No. 04-97-C

BUTLER GRADE ROAD LEGALIZATION SURVEY

LEGEND

- FOUND 2 1/2" BRASS CAP ON GALVANIZED IRON PIPE UNLESS NOTED OTHERWISE. SET BY PLS 852, SURVEY R-1.
- FOUND 2" ALUMINUM CAP ON 5/8" IRON REBAR STAMPED "ORLS 852...WALS 852" SET IN SURVEY R-1
- FOUND 5/8" IRON REBAR WITH RED PLASTIC CAP MARKED "ORLS 852...WALS 13922" SET IN SURVEY R-1
- SET 5/8" X 30" IRON REBAR WITH YELLOW PLASTIC CAP MARKED "UCPMD...LS2627"
- CALCULATED POINT ONLY; NOTHING FOUND OR SET
- TELEPHONE PEDESTAL
- POWER POLE
- GUY WIRE AND ANCHOR
- UNDERGROUND POWER TRANSFORMER
- CENTER ABANDONED RAILROAD GRADE
- - - RIGHT-OF-WAY LINE
- - - RIGHT-OF-WAY CENTERLINE
- - - EDGE OF TRAVELED ROAD
- GUARDRAIL
- FENCE
- CULVERT PIPE



LOCAL DATUM PLANE COORDINATES - CENTERLINE

DESCRIPTION	NORTHING	EASTING
17+66.99 P.C.	50,252.951	51,962.714
19+21.37 P.T.	50,312.498	52,102.492
20+32.66 P.C.	50,385.165	52,186.782
22+81.35 P.T.	50,398.350	52,417.721
23+25.84 P.C.	50,373.323	52,454.505
24+48.59 P.T.	50,340.638	52,570.620
25+70.18 P.C.	50,346.550	52,692.067
29+03.56 P.T.	50,350.632	53,025.346
30+09.98 P.C.	50,348.062	53,131.735
31+85.25 P.T.	50,457.859	53,244.391

TRAVERSE TIES TO CENTERLINE

TRAVERSE POINT	CENTERLINE STATION	BEARING
BG-5	23+25.84 P.C.	N45°25'30"W
BG-6	30+09.98 P.C.	N69°27'24"W
HD-2	30+09.98 P.C.	N80°47'42"W
BG-7	31+85.25 P.T.	S21°36'15"W

CURVE TABLE

CURVE NO.	DELTA	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
C13	35°22'48"	220.00'	135.85'	N66°55'31"E	133.70'
C14	35°22'48"	250.00'	154.37'	N66°55'31"E	151.93'
C15	35°22'48"	280.00'	172.90'	N66°55'31"E	170.17'
C16	74°59'40"	220.00'	287.96'	N86°43'57"E	267.84'
C17	74°59'40"	190.00'	248.69'	N86°43'57"E	231.32'
C18	74°59'40"	160.00'	209.42'	N86°43'57"E	194.79'
C19	37°01'00"	160.00'	103.37'	S74°16'43"E	101.58'
C20	37°01'00"	190.00'	122.75'	S74°16'43"E	120.63'
C21	37°01'00"	220.00'	142.13'	S74°16'43"E	139.68'
C22	04°10'14"	4610.00'	335.56'	N89°17'54"E	335.49'
C23	04°10'14"	4580.00'	333.38'	N89°17'54"E	333.30'
C24	04°10'14"	4550.00'	331.19'	N89°17'54"E	331.12'
C25	91°17'41"	80.00'	127.47'	N45°44'11"E	114.41'
C26	91°17'41"	110.00'	175.27'	N45°44'11"E	157.31'
C27	91°17'41"	140.00'	223.08'	N45°44'11"E	200.21'

LINE TABLE

LINE NO.	BEARING	DISTANCE
L8	N49°14'07"E	111.29'
L9	N49°14'07"E	111.29'
L10	N49°14'07"E	111.29'
L11	S55°46'13"E	44.49'
L12	S55°46'13"E	44.49'
L13	S55°46'13"E	44.49'
L14	N87°12'47"E	121.59'
L15	N87°12'47"E	121.59'
L16	N87°12'47"E	121.59'
L17	S88°36'59"E	106.42'
L18	S88°36'59"E	106.42'
L19	S88°36'59"E	106.42'

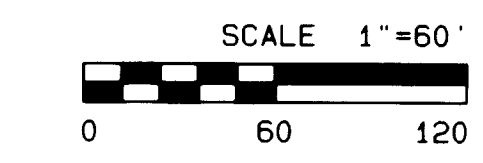
CONTROL TRAVERSE DATA (INTERVISIBLE LINES ONLY)

FROM POINT	TO POINT	BEARING	DISTANCE
BG-1	HD-1	N80°35'28"E	508.03'
BG-1	BG-2	N74°32'07"E	579.88'
BG-1	BG-1	S80°35'28"W	508.03'
HD-1	BG-2	N38°52'03"E	91.92'
BG-2	BG-1	S74°32'07"W	579.88'
BG-2	BG-3	N50°23'35"E	507.52'
BG-3	BG-2	S50°23'35"W	507.52'
BG-3	BG-4	N86°49'13"E	297.29'
BG-4	BG-3	S86°49'13"W	297.29'
BG-4	BG-5	N82°14'39"E	968.42'
BG-4	BG-4	S82°14'39"W	968.42'
BG-5	BG-6	N89°44'21"E	676.78'
BG-5	HD-2	N89°05'22"E	688.33'
BG-6	BG-5	S89°44'21"W	676.78'
BG-6	HD-2	N55°34'25"E	13.90'
BG-6	BG-7	N26°45'51"E	172.75'
HD-2	BG-5	S89°05'22"W	688.33'
HD-2	BG-6	S55°34'25"W	13.90'
HD-2	BG-7	N24°22'31"E	160.71'
BG-7	BG-6	S26°45'51"W	172.75'
BG-7	HD-2	S24°22'31"W	160.71'

SURVEY RECORDS

R-1 PARTITION PLAT 1999-30 BY PLS 852 (SURVEY NO. 99-114-B) DATED FEBRUARY 7, 1995
 R-2 G.L.O. SURVEY BY ODELL AND LEWIS DATED FEBRUARY 7, 1885
 FIELD NOTES AND PLAT OF ROAD NO. 112 BY J. H. RALEY, COUNTY SURVEYOR, FILED SEPTEMBER 7, 1881.
 PLAT SHOWING PROPOSED CHANGE IN HIGHWAY BETWEEN VANSYCLE AND SMELTZ AND NORTHERN PACIFIC RAILWAY R/W DATED APRIL 16, 1929.

REGISTERED PROFESSIONAL LAND SURVEYOR
 GARY R. ROBERTS
 OREGON
 RENEWS 12/31/2004



UMATILLA COUNTY ROAD DEPARTMENT
 3920 WESTGATE
 PENDELTON, OREGON 97801
 PHONE 541/278-5424

COUNTY ROAD NO. 717 LEGALIZATION SURVEY
 BUTLER GRADE ROAD

LOCATED IN SECTIONS 4 AND 9
 TOWNSHIP 5 NORTH, RANGE 33 E.W.M.

DATE OF SURVEY: MAY, 2004 SHEET 2 OF 2

RECEIVED BY
 Umatilla County Surveyor
 Date 5-24
 Rec'd by KR
 No. 04-97-C