

LAMBERT COORDINATES

DESCRIPTION	NORTH	EAST
Control Station BUST	390527.330	1404021.530
Control Station EC-23	391032.800	1404338.870
Control Station EC-24	390058.300	1403723.770
Sec cor 4, 5, 8, 9	392802.084	1404747.710
Sec cor 6, 9, 15, 17	387591.753	1404337.979
Sec cor 7, 8, 17, 18	387672.796	1399145.804
Sec cor 17, 18, 19, 20	392360.020	1399058.615
Sec cor 7/18 only	392854.900	1402122.224
1/4 cor Sec 5/8	387302.154	1399898.989
1/4 cor Sec 8/17	387682.279	1401743.892
1/4 cor Sec 7/8	390320.765	1399516.949
1/4 cor Sec 8/9	390247.106	1404543.134
1/4 cor Sec 5/8	390285.344	1401933.916
E 1/16 Sec 5/8	392833.492	1403434.867
POB of descrip Tract 212	389280.848	1402546.315
POB of descrip Tract 205-2	387946.560	1402032.961

PROJECT BOUNDARY

B/17-01-R	N 28 20 00.0 E	196.878	387681.984	1401663.082
B-01-R	N 4 10 30.7 E	121.988	387855.276	1401756.520
B-02-R	N 4 10 30.7 E	204.269	387976.940	1401765.402
B-03-R	N 4 10 30.7 E	503.072	388180.667	1401780.274
B-04-R	N 4 10 30.7 E	129.456	388682.404	1401816.901
B-05-R	N 4 10 30.7 E	304.526	388811.517	1401826.326
B-06-R	N 4 10 30.7 E	389.115.235	389115.235	1401848.498
B-07-R	N 4 10 30.7 E	128.898	389243.790	1401857.882
B-08-R	N 4 10 30.7 E	326.582	389569.505	1401881.660
B-09-R	N 4 10 30.7 E	366.305	389934.838	1401908.329
B-10-R	N 4 10 30.7 E	268.564	390202.690	1401927.882
C 1/4 cor	N 89 09 37.4 E	82.875	390285.344	1401933.916
B-11-R	S 89 09 37.4 E	262.501	390281.498	1402196.388
B-12-R	S 89 09 37.4 E	152.796	390279.259	1402349.168
B-13-R	S 89 09 37.4 E	221.082	390276.019	1402570.226
B-14-R	N 12 58 00.0 E	88.814	390362.568	1402590.154
B-15-R	N 12 58 00.0 E	167.856	390526.144	1402627.818
Delta:	21 55 31.3		390526.144	1402627.818
Arc:	198.342		Radius:	518.310
Long Chord:	N 23 55 45.6 E	197.134	Tangent:	100.399
B-16-R	N 28 20 00.0 E	254.572	390705.333	1402707.778
Delta:	28 08 28.7		Radius:	518.310
Arc:	254.572		Tangent:	129.908
Long Chord:	N 48 57 45.6 E	252.021		
B-17-R	N 63 02 00.0 E	268.230	390871.798	1402897.873
B-18-R	N 43 31 00.0 W	203.150	390993.433	1403136.938
Delta:	106 33 00.0		Radius:	118.310
Arc:	220.015		Tangent:	158.591
Long Chord:	N 9 45 30.0 E	189.654		
B-19-R	N 43 31 00.0 W	203.150	391180.343	1403169.083
Delta:	34 26 58.9		Radius:	1403029.201
Arc:	311.639		Radius:	518.310
Long Chord:	N 26 17 30.6 W	306.966	Tangent:	160.690
B-21-R	N 27 45 01.1		391602.873	1402893.292
Delta:	27 45 01.1		Radius:	518.310
Arc:	251.035		Tangent:	128.030
Long Chord:	N 4 48 29.4 E	248.589		
B-22-R	N 18 41 00.0 E	405.240	391850.587	1402914.069
B-23-R	N 33 41 00.0		392234.472	1403043.883
Delta:	33 41 00.0		Radius:	181.972
Arc:	106.979		Tangent:	55.085
Long Chord:	N 1 50 30.0 E	105.445		
B-24-R	N 33 41 00.0		392339.862	1403047.271
Delta:	33 41 00.0		Radius:	181.972
Arc:	106.979		Tangent:	55.085
Long Chord:	N 31 50 30.0 W	105.445		
B-25-R	N 48 41 00.0 W	86.630	392429.438	1402991.642
B-26-R	N 20 00 00.0		392486.633	1402926.576
Delta:	20 00 00.0		Radius:	609.256
Arc:	212.670		Tangent:	107.428
Long Chord:	N 38 41 00.0 W	211.592		
B-27-R	N 19 49 39.1		392651.805	1402794.328
Delta:	19 49 39.1		Radius:	609.256
Arc:	210.836		Tangent:	106.483
Long Chord:	N 18 46 10.5 W	209.786		
05/08-01-R	N 88 37 45.9 W	287.187	392850.435	1402726.826
05/08-02-R	N 88 37 45.9 W	317.588	392857.304	1402439.722
1/4 cor Sec 5/8	N 88 37 45.9 W	317.588	392854.900	1402122.224

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROGUE RIVER BASIN
ELK CREEK LAKE
PROJECT BOUNDARY MONUMENTATION
SECTION 8, TOWNSHIP 33 SOUTH, RANGE 1 EAST, W.M.
JACKSON COUNTY, OREGON

SUPERVISED: <i>R.R.</i>	DRAWN: H-P CAM	Ref: Real Estate Segment Map 2 NPPEN-SY-86-50
DATE: AUGUST, 1988	SHEET: 1 of 3	PREPARED BY: HOFFBUHR & ASSOCIATES, INC. MEDFORD, OREGON

SURVEY NARRATIVE TO COMPLY WITH PARAGRAPH 209.250
OREGON REVISED STATUTES

LOCATION: Section 8, Township 33 South, Range 1 East of the
Willamette Meridian, Jackson County, Oregon.

PURPOSE: To monument the boundary corners and post line markers
along that portion of the Elk Creek Project Boundary being
in Section 8, as shown on Segment 2 of the Corps of
Engineers Elk Creek Lake Real Estate drawings. The survey
was performed during June 1987 through April 1988.

PROCEDURE: Establishing Lambert State Plane Coordinate control:

Second order control monument Station BUST, established
by the Corps of Engineers in 1964, was used as a basis of
Lambert State Plane Coordinates (South Zone). The 1974
adjusted coordinates were used. The line from Station BUST
to Station EC-23, also established in 1964, was used as a
basis of bearing. The USCE record bearing from BUST to EC-23
= North 31°56'30.7" East.

All bearings and distances shown are on State Plane
Coordinate grid. Coordinates and distances are shown to .xxx
feet and bearings to .x seconds for mathematical consistency
only and are not intended to imply accuracy of survey.

An average latitude and elevation were used to compute
a single grid factor for each individual survey traverse.
The grid factor at Station BUST is:

Scale factor (latitude N 42°42'58") = 0.9999256
Elevation factor (1700') = 0.9999187
Combined (grid) factor = 0.9998443

All horizontal control established by this survey meets
requirements of 3rd Order, Class 1, National Oceanic and
Atmospheric Administration specifications for geodetic
control.

Establishing section subdivision control:

The project boundary within Section 8 is dependent
upon both the subdivisional lines of the section and metes
and bounds descriptions. A series of traverses were run,
using an electronic "total station" 1 second theodolite and
distance meter, to locate the controlling section monuments
and establish coordinates.

Only the north and west quarter-section corners and the
northeast corner of Section 8 have been perpetuated from
original evidence.

The southwest corner of Section 8 was monumented at a
double proportionate position by the BLM in 1965, using the
west quarter-section corner and southeast corner of the
section, the section corner to the west common to Sections 7
and 18 only, and the corner common to Sections 17, 18, 19,
and 20. The southeast corner of Section 8 was monumented
by the BLM in 1965, using a 3-way fence intersection, 50
year old unrecorded bearing trees, and the fact that the
location had been used for many years as the corner.

The southwest corner of Section 17, which had been
perpetuated by the BLM from original evidence, falls in an
area which has been cleared for quarry operations in con-
junction with the dam construction. No evidence of the
monument or corner accessories remains. The coordinate
location was determined by references taken by Hoffbuhr &
Associates, Inc., shortly before the corner was obliterated.

The south quarter-section corner of Section 8 was
monumented by the BLM at single proportionate position. The
monument at the east quarter-section corner was evidently
set at proportionate position, origin unknown.

The positions of these monuments in relation to the
controlling corners used for the proportioning were checked
for accuracy. Also, a ground search was made for evidence
of the original survey. No additional evidence was found.

As shown on the map on sheet 1, the monuments found at
the south and center quarter-section corners, and the east
sixteenth-section corner on the north boundary of the
section were not used for this survey. They were considered
to be outside of the allowable "limits of closure" as out-
lined in the 1947 and 1973 editions of the Manual of
Surveying Instructions, using a ratio of 1/1280 for latitude
and departure independently. No monument was set at the
computed position of the east sixteenth-section corner on
the north boundary of the section.

The westerly boundaries of Tracts 205/2 and 212 were
both determined by metes and bounds as described in Instru-
ment Nos. 74-08008 and 74-08007 of the Official Records of
Jackson County, with each boundary being 200 feet westerly
of and parallel with a described line.

The westerly boundary of Tract 212 had been surveyed
and monumented during Filed Survey No. 9299 in 1982,
evidently just prior to the property to the west being
logged. The metes & bounds legal description commences at
the south quarter-section corner of Section 8. The BLM
monument position was used for that survey. Consequently,
this survey differs from Survey No. 9299, with the new
monuments being westerly of the existing monuments by
approximately 5 to 7.5 ft. The monuments found consist of
5/8" iron pins with yellow plastic cap, and were found at
each point of curve and point of tangency along the
westerly boundary, in addition to those shown as found on
the north boundary and east-west centerline of the section.
Using the section control determined as described
above, Section 8 was subdivided and monumented as shown on
the plat on sheet 1. The intermediate project boundary
monuments were positioned for intervisibility.

SECTION CONTROL - (Bearings oriented to true north)

FOUND:

Southeast corner of Section 8: Found, the BLM brass cap
set in 1965, on a 2" diameter pipe exposed 12", and the
following bearing trees:
15" black oak, blazed in 1965, bears N 73°11'E 76.1 ft.
16" fir with lower healed blaze of unknown origin,
bears S 51°36' E 111.6 ft.

Southwest corner of Section 8: Found, the BLM brass cap
set in 1965, on a 2" diameter pipe exposed 13", and the
following bearing trees:
10" fir snag with healed blazes bears N 10° E 23.7 ft.
8" fir, dead and down, scribing visible, bears S 52° E
27.2 ft. to the stump hole.
13" fir snag, with healed blazes, bears S 64° W 4.9 ft.
8" pine with healed blazes bears N 75° W 45.4 ft.

Northwest corner of Section 18: Found, the BLM brass cap
set in 1956, on a 2" diameter pipe exposed 14", with
notched stone alongside, and the following bearing
trees:
15" fir with healed blazes bears N 63°03' E 41.7 ft.
10" fir with healed blazes bears S 19°03' E 19.0 ft.
57" fir with ax marks, no scribing visible, bears S
28°34' E 39.6 ft.
The slab remains of a fir, with scribing visible, bears
S 8°42' E 31.8 ft.

Quarter-section corner common to Sections 7 and 8: Found,
the BLM brass cap set in 1965, on a 1" pipe, exposed
15", and the following bearing trees:
14" fir with healed blazes bears S 21°44' E 66.5 ft.
9" fir with healed blazes bears N 67°57' E 18.9 ft.

Quarter-section corner common to Sections 5 and 8: Found,
the BLM brass cap set in 1974, exposed 2", and the
following bearing trees:
12" fir marked by the BLM, with healed blazes, bears
N 19°54' E 46.4 ft.
30" madrone, an original bearing tree with scribing
visible, bears S 9°12' W 11.8 ft.

Northeast corner of Section 8: Found, the 2.5" diameter
BLM brass cap set in 1965, and the following original
bearing tree:
32" dia. fir stump with scribing visible bears S 35°37'
E 16.8 ft.
Trees marked by the BLM in 1956 were found as follows:
11" vine maple with healed blazes bears N 65°29' E
58.5 ft.
30" fir with healed blazes bears S 48°27' E 24.3 ft.
30" fir with healed blazes bears S 35°59' W 59.1 ft.
17" fir with healed blazes bears N 35°44' W 31.8 ft.

Quarter-section corner common to Sections 8 and 9: Found,
a 2.5" diameter lead-filled reducer on a 1.5" pipe,
exposed 12", stamped "1965 ...prop cor", evidently set
at proportionate position, origin unknown, from which
bear the following:
13" fir with healed blazes bears N 74° E 29.7 ft.
11" fir with healed blazes bears S 88° W 27.7 ft.

East sixteenth-section corner between Sections 5 and 8:
No monument found or set at the computed position. The
1974 BLM brass cap on a 2.5" pipe, intended to be set
at the corner position, bears N89°39' W 3.57 ft., from
which were found the following bearing trees:
26" fir with healed blazes bears S 6°08' E 26.7 ft.
34" fir with healed blazes bears N 36°21' W 26.1 ft.

SET:

Quarter-section corner common to Sections 8 and 17: Set a
30" long Berntsen aluminum monument with the aluminum
cap stamped as shown here. The 1965
BLM brass cap monument intended to
be set at the corner position bears T33S R1E
S 8
S 52°17' E 8.14 ft., from which 1/4 cor +
bears the following bearing tree: S 17
10" fir with healed blazes bears 1988
S 85°30' W 40.8 ft. LS 1656
It should be noted here that there is
evidence that the found monument may be in a location
different from where it was placed in 1965.
From the new monument the tree bears S76°34' W 35.2 ft.

Center quarter-section corner of Section 8: Set a 30" long
Berntsen aluminum monument, with the aluminum cap
stamped as shown here, from which bear the
following: 1988
The 1974 BLM brass cap monument C 1/4 + S 8
intended to mark the corner position LS 1656
bears N 59°15' E 4.50 ft.
9" fir with healed blazes bears N 78°41' W 68.0 ft.
11" oak with scribing visible bears S 38°02' W 33.1 ft.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

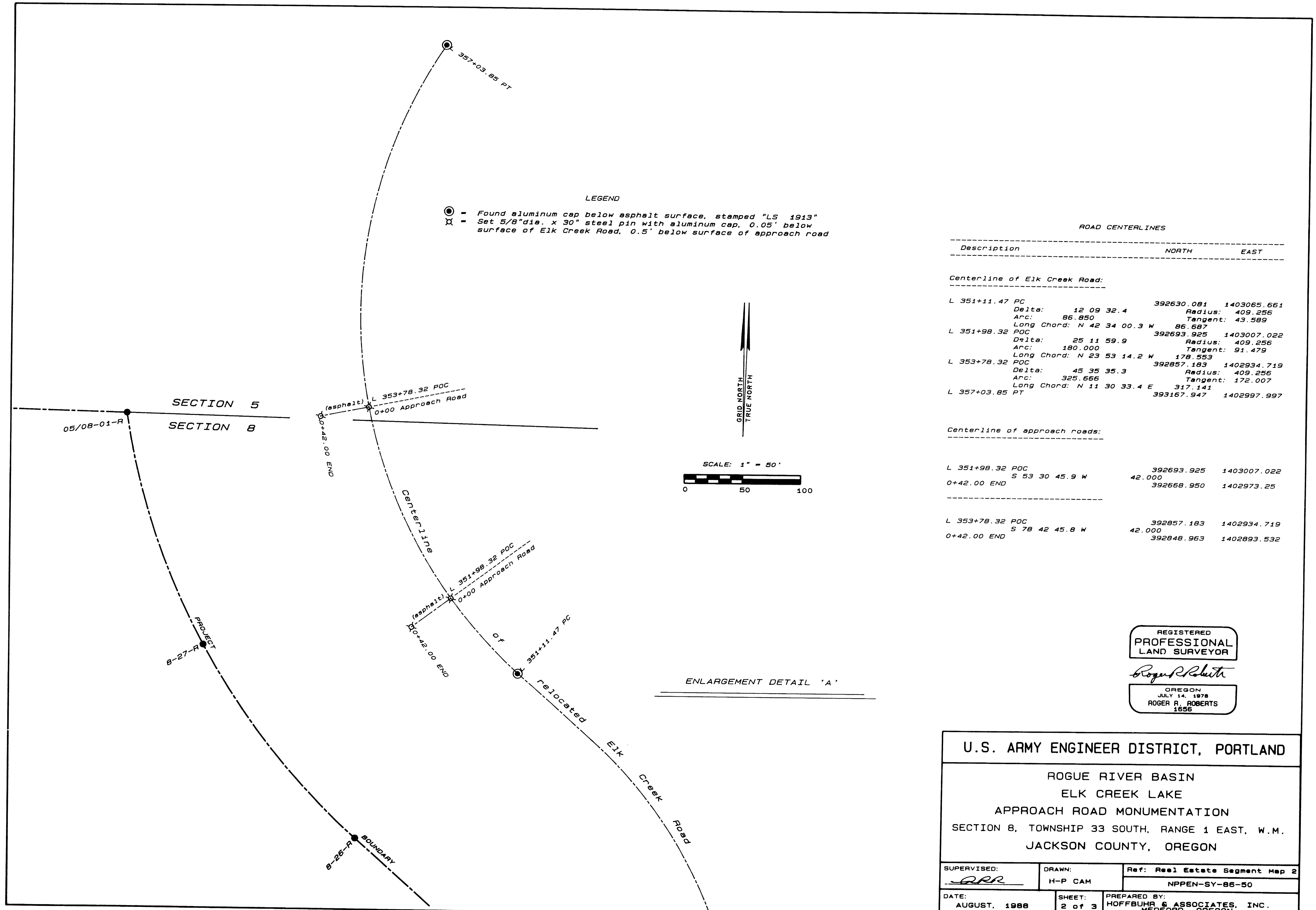
Roger R. Roberts

OREGON
JULY 14, 1978
ROGER R. ROBERTS
1656

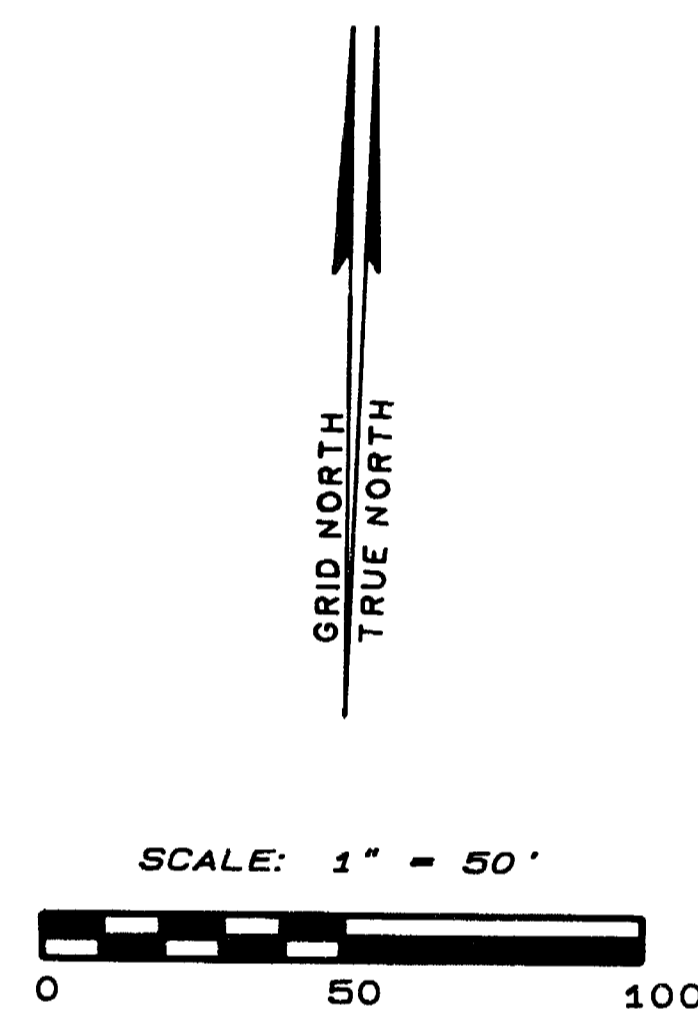
U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROGUE RIVER BASIN
ELK CREEK LAKE
PROJECT BOUNDARY MONUMENTATION
SECTION 8, TOWNSHIP 33 SOUTH, RANGE 1 EAST, W.M.
JACKSON COUNTY, OREGON

SUPERVISED: <i>RRR</i>	DRAWN: H-P CAM	Ref: Real Estate Segment Map 2 NPPEN-SY-86-50
DATE: AUGUST, 1988	SHEET: 3 of 3	PREPARED BY: HOFFBUHR & ASSOCIATES, INC. MEDFORD, OREGON



LEGEND
 (Symbol) = Found aluminum cap below asphalt surface, stamped "LS 1913"
 (Symbol) = Set 5/8" dia. x 30" steel pin with aluminum cap, 0.05' below surface of Elk Creek Road, 0.5' below surface of approach road



ROAD CENTERLINES		
Description	NORTH	EAST
Centerline of Elk Creek Road:		
L 351+11.47 PC	392630.081	1403065.661
Delta: 12 09 32.4	Radius: 409.256	
Arc: 86.850	Tangent: 43.589	
Long Chord: N 42 34 00.3 W	86.887	
L 351+98.32 POC	392693.925	1403007.022
Delta: 25 11 59.9	Radius: 409.256	
Arc: 180.000	Tangent: 91.479	
Long Chord: N 23 53 14.2 W	178.553	
L 353+78.32 POC	392857.183	1402934.719
Delta: 45 35 35.3	Radius: 409.256	
Arc: 325.666	Tangent: 172.007	
Long Chord: N 11 30 33.4 E	317.141	
L 357+03.85 PT	393167.947	1402997.997
Centerline of approach roads:		
L 351+98.32 POC	392693.925	1403007.022
S 53 30 45.9 W	42.000	
0+42.00 END	392668.950	1402973.25
L 353+78.32 POC	392857.183	1402934.719
S 78 42 45.8 W	42.000	
0+42.00 END	392848.963	1402893.532

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR
Roger R. Roberts
 OREGON
 JULY 14, 1978
 ROGER R. ROBERTS
 1556

ENLARGEMENT DETAIL 'A'

U.S. ARMY ENGINEER DISTRICT, PORTLAND		
ROGUE RIVER BASIN ELK CREEK LAKE APPROACH ROAD MONUMENTATION SECTION 8, TOWNSHIP 33 SOUTH, RANGE 1 EAST, W.M. JACKSON COUNTY, OREGON		
SUPERVISED: <i>ARR</i>	DRAWN: H-P CAM	Ref: Real Estate Segment Map 2 NPPEN-SY-86-50
DATE: AUGUST, 1988	SHEET: 2 of 3	PREPARED BY: HOFFBUHR & ASSOCIATES, INC. MEDFORD, OREGON