

**Narrative of Survey**

This Survey is for the establishment of horizontal control for the Flagstaff Hill project located on the Baker - Copperfield Highway (S.W. No. 12.), beginning at M.P. 2.40 and ending at M.P. 7.60.

The Basis of Bearing was determined by using established Triangulation Stations "Baldock" and "Airport" which were located in the area. Triangulation Station "Airport" is also a G.P.S. Station that has been incorporated in the "Oregon High Precision Network" G.P.S. coordinates for station Airport were used to calculate the coordinate positions of this survey.

The Traverse began at Station Airport, backsighting Baldock, and commenced through three section corners and one Triangulation Station, "Palmer", and returned to Station Airport with Station Baldock as a foresight on the closing angle (Linear Misclosure 1:54,466 and Angular Misclosure .00-00-11.1).

Section corners that were traversed through:  
A 5/8" Iron Rod with a yellow cap, "Hanley", visible, was found at the E/L of the highway as described by plat filed at Baker County Surveyor's office, Survey No. 9-40-8 filed June 24, 1971 and Survey No. 9-40-322 filed August 29, 1990. T. 9. S.,

R. 40. E., Sections 3/4/9/10.

A Railroad Spike at E/L of the highway of possible bearing and distance from previous section corner and as described by the County Surveyor was accepted as possible section corner of unknown origin. T. 9. S., R. 40. E., Sections 2/3/10/11.

A 3 1/2" Brass Disc stamped "T. 9. S., R. 41. E., S. 1980., 35., 36., 37., 38." Triangulation Station Palmer was traversed through but was not used to control closure as the precision of the position was questionable. This was a 3" Brass Disc, Oregon State Highway Division, stamped only with "T.S."

Coordinates for these positions were calculated by using State Plane coordinates and then converted to Local Datum. The L.P.D. factor of 0.99973085186 was used to determine the L.P.D. coordinates (1983 Datum).

The Traverse was adjusted by using the Compass Rule Adjustment method and coordinates listed are adjusted.

The R/W monumentation and property pin locations were tied by double line from the control traverse.

The equipment used was a Wild T-2000 Theodolite with a DT-5 EDM, and RB-3 data collector.

Survey For

**OREGON STATE HIGHWAY DIVISION**

Baker-Copperfield Highway #12

Baker County

**FLAGSTAFF HILL**

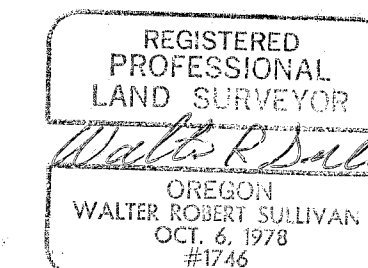
Key I.D. No. 01314  
Date of Survey January 15, 1992

Sheet No.

1

Total Sheets

1



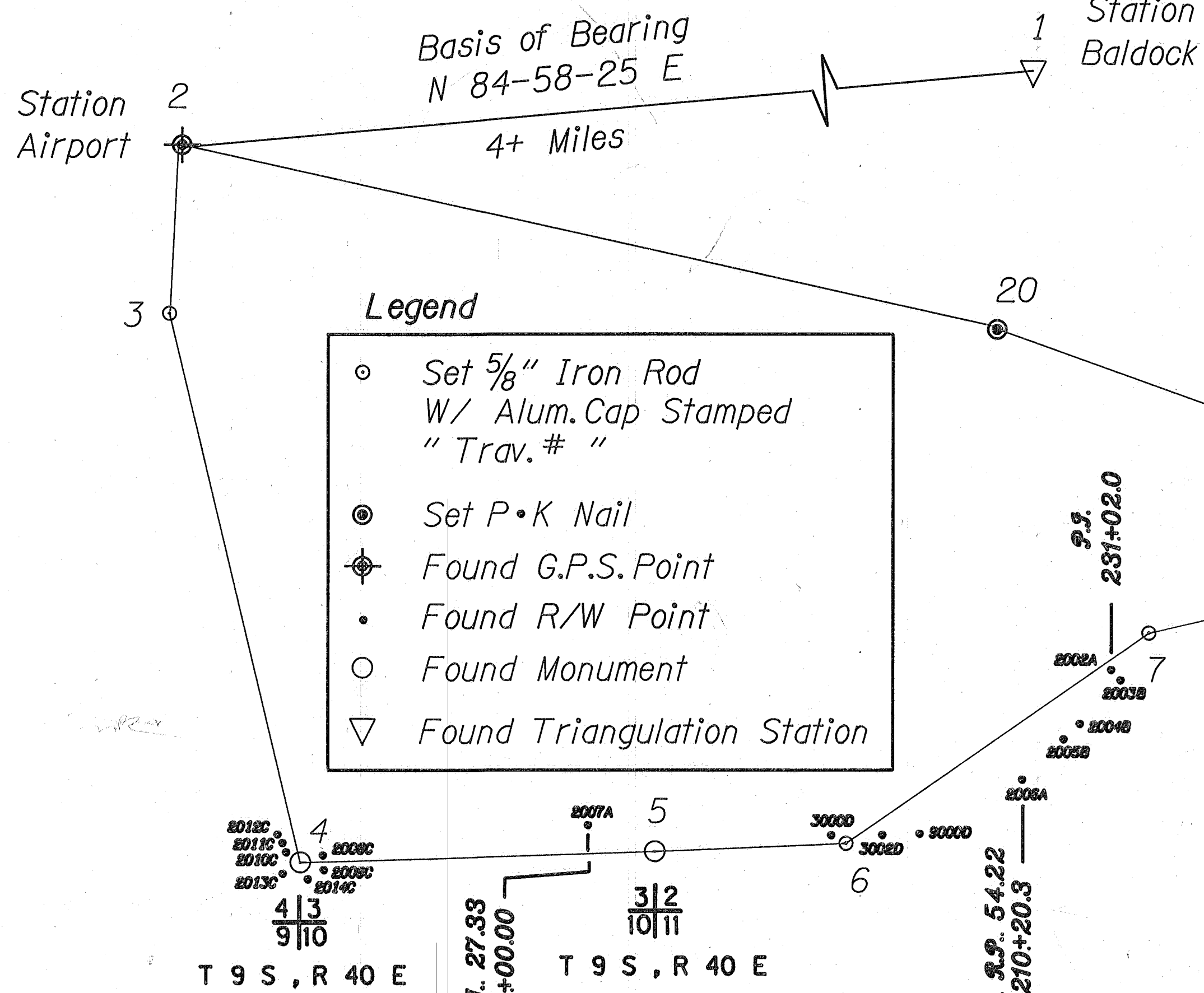
Walt Sullivan  
3012 Island Ave.  
LaGrande, Oregon 97850

**LDC - Coordinate Table**

Trav. Pt.	Northing	Easting	Bearing	Distance	Trav. Pt.	Northing	Easting	Bearing	Distance	Trav. Pt.	Northing	Easting	Bearing	Distance
2	436,800.845	8,900,849.436	S 02-48-48.3 W	2,496.81	9	429,493.131	8,920,121.000	S 67-57-39.6 E	2,521.88	16	430,036.051	8,939,161.934	N 54-45-47.6 E	5,612.75
3	434,307.043	8,900,726.884	S 13-27-17.5 E	8,395.35	10	428,546.827	8,922,458.601	S 42-59-01.9 E	2,266.89	17	433,447.452	8,943,991.319	S 66-17-52.8 W	6,517.24
4	426,142.114	8,902,680.308	N 88-14-45.5 E	5,288.47	11	426,888.490	8,924,004.152	N 32-44-34.7 E	2,101.65	18	430,827.653	8,938,023.820	S 88-17-46.1 W	14,660.53
5	426,303.988	8,907,966.304	N 87-32-12.9 E	2,845.64	12	428,656.197	8,925,140.872	N 87-51-36.1 E	3,926.96	19	430,391.744	8,923,369.777	N 70-22-36.7 W	10,943.90
6	426,426.281	8,910,809.320	N 55-15-07.9 E	5,484.82	13	428,002.833	8,929,065.097	N 86-24-35.0 E	3,950.32	20	434,067.054	8,913,061.478	N 77-22-54.4 W	12,514.29
7	429,552.440	8,915,316.030	N 76-38-02.7 E	2,287.36	14	429,050.207	8,933,007.668	N 85-20-55.7 E	5,209.89	2	436,800.845	8,900,849.436	N 84-58-24 E	22,068.59
8	430,081.206	8,917,541.431	S 77-09-27.0 E	2,645.75	15	429,472.675	8,938,200.405	N 59-37-59.6 E	1,114.42	1	438,734.447	8,922,833.152		
9	429,493.131	8,920,121.000			16	430,036.051	8,939,161.934							

**R/W Monument Coordinate Table**

Pt. #	Northing	Easting	Bearing	Dist.	Pt. #	Northing	Easting	Bearing	Dist.	Pt. #	Northing	Easting	Bearing	Dist.
10	428,546.827	8,922,458.601			6	426,426.281	8,910,809.320			4	426,142.114	8,902,680.308	N 34-56-07 W	270.11
2000	428,446.493	8,922,831.900	S 74-57-21 E	386.55	2006	426,878.898	8,913,552.978	N 80-37-57 E	2780.74	2012	426,363.550	8,902,525.629	S 64-42-32 W	159.06
9	429,493.131	8,920,121.000	N 84-53-29 W	1351.47	5	426,303.988	8,907,966.304	S 86-53-31 W	1204.01	4	426,142.114	8,902,680.308	S 26-24-42 E	69.84
2001	429,613.473	8,918,774.895			2007	426,238.709	8,906,764.061			2013	426,074.159	8,902,536.490	N 77-53-05 W	193.71
6	426,426.281	8,910,809.320	N 61-45-19 E	1498.46	4	426,142.114	8,902,680.308	N 82-46-39 E	330.61	4	426,142.114	8,902,680.308	N 81-50-21 E	549.13
2002	428,555.130	8,914,772.165			2008	426,183.679	8,903,008.296	S 86-48-49 E	330.38	6	426,426.281	8,910,809.320	N 82-10-03 E	1124.13
6	426,426.281	8,910,809.320	N 62-13-17 E	4535.93	4	426,142.114	8,902,680.308			3000	426,467.927	8,910,620.143		
2003	428,540.292	8,914,822.506			2009	426,123.750	8,903,010.180	N 61-01-27 W	134.88	6	426,426.281	8,910,809.320		
6	426,426.281	8,910,809.320	N 70-20-38 E	3782.22	4	426,142.114	8,902,680.308			3002	426,504.230	8,911,352.889		
2004	427,698.518	8,914,371.143			4	426,207.456	8,902,562.311	N 43-31-55 W	185.71	6	426,426.281	8,910,809.320		
6	426,426.281	8,910,809.320	N 72-26-48 E	3556.88	4	426,142.114	8,902,680.308			9000	426,579.475	8,911,922.962		
2005	427,499.009	8,914,200.578			2011	426,276.755	8,902,552.396							



Scale 1" = 1600'