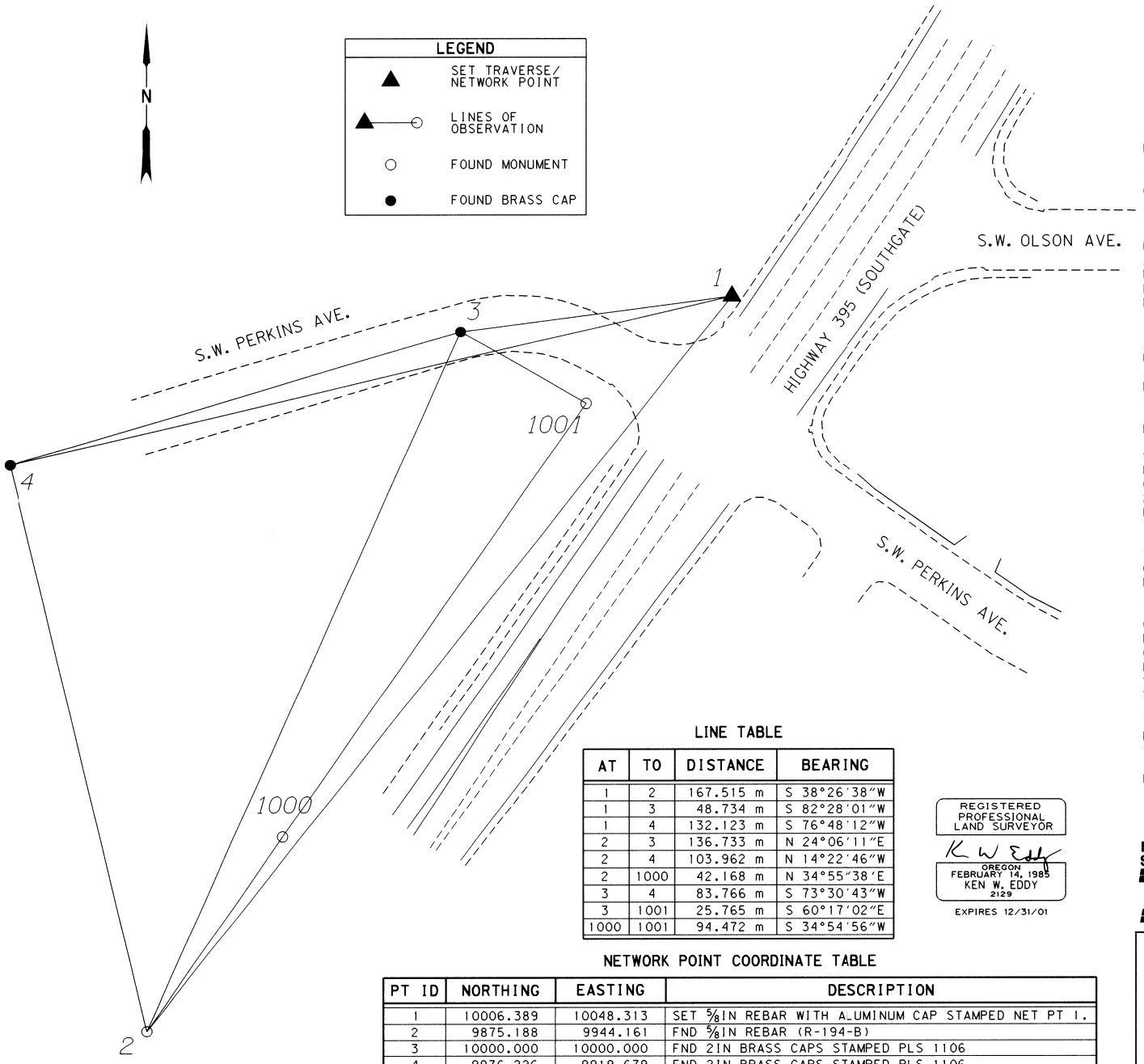
T. 2 N. R. 32 E. SEC. 16



NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO SET UP NETWORK AND MAPPING FOR THE HIGHWAY 395 AND PERKINS AVE SIGNAL INSTALLATION.

THE SURVEY CREW, CONSISTING OF BRENT REYNOLDS, JOEL ESTRADA, CARMEN DYER, AND AL OUARISA, STARTED WORK ON APRIL 22, 1999 AND COMPLETED WORK ON JULY 1, 1999. THIS SURVEY TOOK PLACE IN T. 2 N. R. 32 E. SECTION 16.

NETWORK POINT 1, SET FOR THIS SURVEY, IS 30" LONG 5/8" REBAR WITH AN ALUMINUM CAP STAMPED NET PT 1. NETWORK POINT 2 IS A 5/8" REBAR FOUND, (R-194-B) STATION 15+00 P.O.T. 75 FT RIGHT OF CENTER-LINE. NETWORK POINTS 3 & 4 ARE 2" BRASS CAPS STAMPED PLS 1106 FROM SURVEY 94-119B.

THIS SURVEY USED THE EXISTING MONUMENTS FOUND IN S. W. PERKINS AVE. SET DURING A 1994 SURVEY BY TOMKINS WELLS JOINT VENTURE, UMATILLA COUNTY SURVEY NUMBER 94-119B. NETWORK POINT 3 WAS ASSIGNED ASSUMED COORDINATES (NORTH 10000, EAST 10000) AND NETWORK POINT 4 WAS CALCULATED FROM THE BEARING GIVEN IN THE 1994 SURVEY S. 73 30' 43" W.

HORIZONTAL LEAST SQUARES ADJUSTMENT WAS CALCULATED IN LISCAD TO ESTABLISH COORDINATES FOR OTHER NETWORK POINTS. THE LEAST SQUARES ADJUSTMENT METHOD PRODUCED ANGULAR AND DISTANCE RESIDUALS (THE AMOUNT THE FIELD OBSERVED MEASUREMENTS WERE CHANGED DUE TO THE ADJUSTMENT). THE ANGULAR RESIDUALS AVERAGED 2 SECONDS, WITH THE GREATEST RESIDUAL BEING 5 SECONDS. THE DISTANCE RESIDUALS AVERAGED 0.8 MM THE GREATEST BEING 2 MM. THE NETWORK MEETS ODOT STANDARDS.

THE VERTICAL DATA FOR THIS PROJECT WAS OBTAINED FROM THE CITY OF PENDLETON BENCHMARK #117-61 (1175.02 FT.) AND CONVERTED TO METRIC (358.146M).

THE MONUMENTS FOUND IN THE CENTER OF PERKINS AVE. ARE THE BASIS OF BEARING FOR THIS PROJECT. THERE ARE TWO PUBLISHED BEARINGS FOR THIS LINE, BECAUSE DEED DESCRIPTIONS IN THIS AREA ARE BASED ON TWO SYSTEMS. THE BEARING FROM THE FIRST SURVEY WHERE THE MONUMENTS WERE SET, S, 73 30' 43" W. (94-119B) WAS USED FOR THIS SURVEY. BILL WELLS NOTES THE DIFFERENCE ON THE 1997 SURVEY, S. 73 03" 40" W. (97-86-B).

THE DATA WAS OBTAINED, THEN EDITED AND CONVERTED TO A TERRAIN MODEL BY LISCAD. THE EQUIPMENT USED ON THIS PROJECT WAS TCA 1800 (98-TS10) LIETZ LEVEL.

RECORD WIDTHS HELD UNLESS OTHERWISE NOTED.

LINE TABLE

AT	TO	DISTANCE	BEARING
1	2	167.515 m	S 38°26'38"W
1	3	48.734 m	S 82°28'01"W
1	4	132.123 m	S 76°48'12"W
2	3	136.733 m	N 24°06'11"E
2	4	103.962 m	N 14°22'46"W
2	1000	42.168 m	N 34°55"38'E
3	4	83.766 m	S 73°30'43"W
3	1001	25.765 m	S 60°17'02"E
1000	1001	94.472 m	S 34°54'56"W

REGISTERED PROFESSIONAL LAND SURVEYOR
K W Eddy
OREGON
FEBRUARY 14, 1985
KEN W. EDDY
2129
EXPIRES 12/31/01

Date 01-2000
Drawn KK
No. 00-12-B

METRIC SURVEY

SCALE 1:500

10 5 0 10 20 30 40 50
METERS

TO CONVERT METERS TO FEET DIVIDE BY 0.3048

NETWORK POINT COORDINATE TABLE

PT ID	NORTHING	EASTING	DESCRIPTION
1	10006.389	10048.313	SET 5/8IN REBAR WITH ALUMINUM CAP STAMPED NET PT 1.
2	9875.188	9944.161	FND 5/8IN REBAR (R-194-B)
3	10000.000	10000.000	FND 2IN BRASS CAPS STAMPED PLS 1106
4	9976.226	9919.679	FND 2IN BRASS CAPS STAMPED PLS 1106
1000	9909.761	9968.304	FND 5/8IN REBAR AT PROPERTY CORNER
1001	9987.228	10022.377	FND 5/8IN REBAR AT PROPERTY CORNER

OREGON DEPARTMENT OF TRANSPORTATION

CONTROL SURVEY

PERKINS AVENUE TRAFFIC SIGNAL

PENDLETON JOHN DAY HIGHWAY

UMATILLA COUNTY

FOR O.D.O.T. REGION 5 — 80788 KIK RD, HERMISTON, OR 97838

DECEMBER 13, 1999 — SHEET 1 OF 1