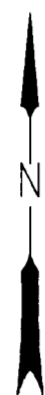


SHEET INDEX

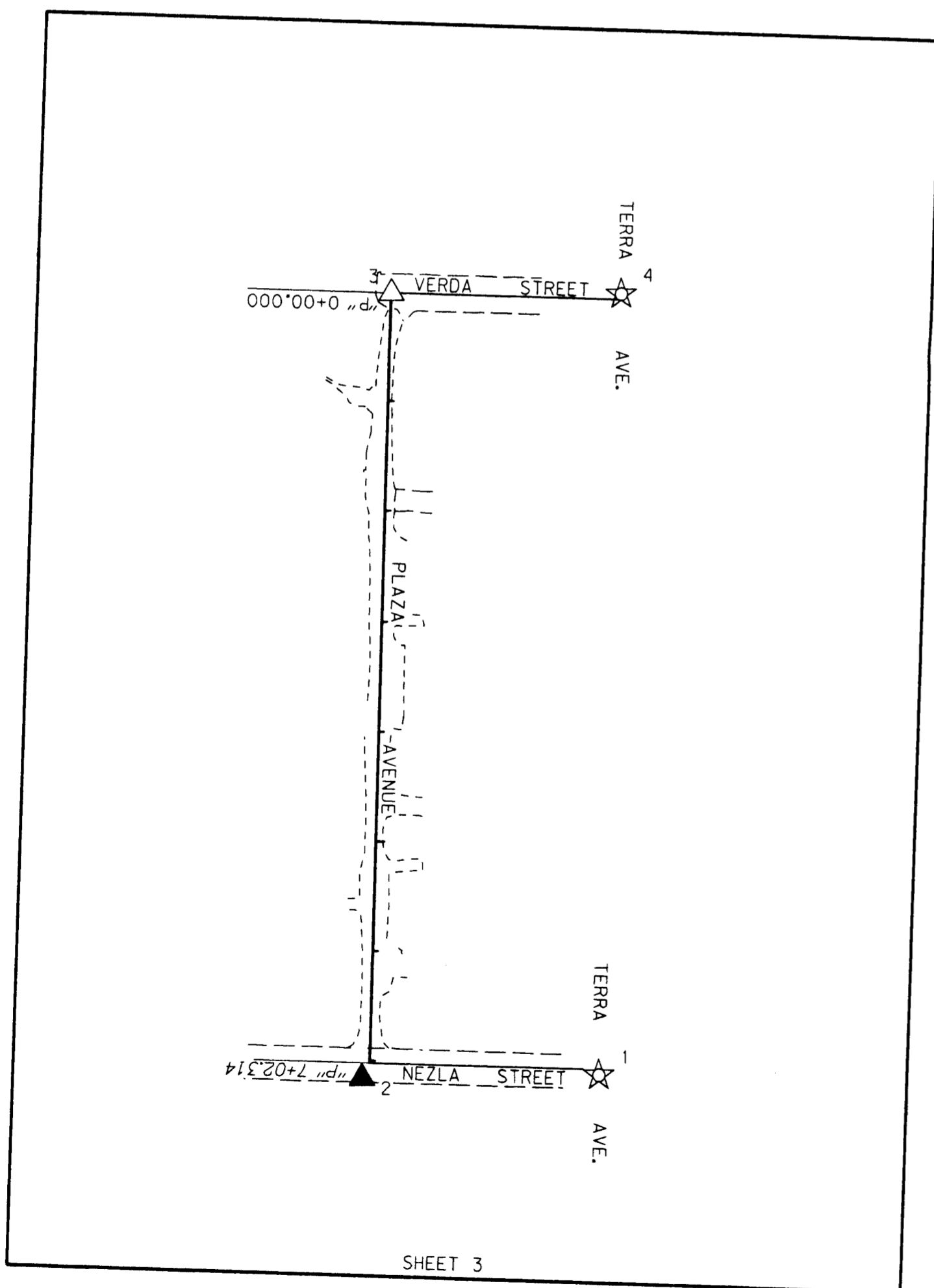
1. SHEET LAYOUT AND SHEET INDEX
2. CONTROL NETWORK AND BASIS OF BEARING
3. SURVEY

NE 1/4 SEC 15 T39S R1E WM
SE 1/4 SEC 15 T39S R1E WM

** RECEIVED **
DATE 12-2-11 BY *JB*
This survey consists of:
3 sheet(s) Map
0 page(s) Narrative
JACKSON COUNTY
SURVEYOR



SHEET LAYOUT DIAGRAM
NOT TO SCALE



NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO RESOLVE THE FIELD LOCATION OF THE EXISTING RIGHT-OF-WAY FOR PLAZA AVENUE. THIS SURVEY WAS ALSO PERFORMED TO PERPETUATE THE POSITIONS OF ANY EXISTING SURVEY MONUMENTS OF RECORD THAT LIE NEAR THE PROJECT AREA BY TYING THE MONUMENTS TO THE PROJECT CONTROL NETWORK. THIS SURVEY WAS MADE AT THE REQUEST OF THE CITY OF ASHLAND AND THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT) FOR AN UPCOMING ROADWAY IMPROVEMENT PROJECT. THIS SURVEY MEETS THE REQUIREMENTS FOR A RECOVERY SURVEY AS OUTLINED IN THE OREGON REVISED STATUTES, CHAPTER 209.155(1)(a)(b).

THIS SURVEY WAS PERFORMED IN NOVEMBER OF 2009. THE SURVEY EQUIPMENT CONSISTED OF TWO TRIMBLE R8 GPS RECEIVERS, ONE TRIMBLE S6 ROBOTIC TOTAL STATION, TWO TRIMBLE TSC2 DATA COLLECTORS, AND ONE SOKKIA SDL30 DIGITAL LEVEL

PLAZA AVENUE ("P" LINE)

THE RESOLUTION OF THE RIGHT-OF-WAY OF PLAZA AVENUE WAS COMPLETED BY UTILIZING THE FOUND SURVEY MONUMENTS AS SHOWN AND RECORD SURVEYS AND PLATS FILED IN THE JACKSON COUNTY SURVEYOR'S OFFICE. THE RIGHT-OF-WAY CENTERLINE BETWEEN STATIONS "P" 0+00.000 AND "P" 7+02.314 WAS RESOLVED BY HOLDING THE FOUND CENTERLINE MONUMENTS SHOWN AS BEING SET IN COUNTY SURVEY NO. 4571 AND TIED AS POINT NUMBERS 3 AND 1014. A TOTAL RIGHT-OF-WAY WIDTH OF 45.00 FEET WAS DEDICATED ON THE PLAT OF TERRA LINDA SUBDIVISION TO THE PUBLIC. THE RIGHT-OF-WAY LINES WERE THEN OFFSET 22.50 FEET PARALLEL ON BOTH SIDES OF SAID CENTERLINE AS SHOWN. CENTERLINE STATIONING USED FOR PLAZA AVENUE, "P" LINE, IS PROJECT SPECIFIC.

VERDA STREET AND NEZLA STREET

THE RESOLUTION OF THE RIGHTS-OF-WAY OF A PORTION OF VERDA STREET AND NEZLA STREET WERE COMPLETED BY UTILIZING THE FOUND CENTERLINE MONUMENTS SHOWN AS BEING SET IN COUNTY SURVEY NO. 4571 AND TIED A POINT NUMBERS 1, 3, 4, 1000, 1014, AND 1017. THE CENTERLINE OF VERDA STREET IS BASED ON A STRAIGHT LINE BETWEEN THE FOUND MONUMENT TIED AS POINT NO. 3 AND THE MID-POINT OF A STRAIGHT LINE BETWEEN THE FOUND MONUMENTS TIED AS POINT NO.'S 4 AND 1000. THE RECORD RIGHT-OF-WAY WIDTH OF 45.00 FEET PER THE PLAT OF TERRA LINDA SUBDIVISION WAS HELD. THE RIGHT-OF-WAY LINES WERE HELD AT THE RECORD OFFSET OF 22.50 FEET PARALLEL TO THE RESOLVED CENTERLINE. THE CENTERLINE OF NEZLA STREET IS BASED ON A STRAIGHT LINE BETWEEN THE FOUND MONUMENT TIED AS POINT NO. 1014 AND THE MID-POINT OF A STRAIGHT LINE BETWEEN THE FOUND MONUMENTS TIED AS POINT NO.'S 1 AND 1017. THE RECORD RIGHT-OF-WAY WIDTH OF 45.00 FEET PER THE PLAT OF TERRA LINDA SUBDIVISION WAS HELD. THE RIGHT-OF-WAY LINES WERE HELD AT THE RECORD OFFSET OF 22.50 FEET PARALLEL TO THE RESOLVED CENTERLINE.

REFERENCES AND DOCUMENTS USED

ALL RECORDS LISTED IN THE RECOVERED MONUMENTS TABLE ON SHEET 3 AND ALL DOCUMENTS SHOWN ON THE FACE OF THE SURVEY ON SHEET 3 BEING RECORDED IN THE OFFICIAL RECORDS OF JACKSON COUNTY, OREGON.

LEGEND	
☆	FOUND MONUMENT USED AS GPS NETWORK POINT
△	FOUND MONUMENT USED AS NETWORK POINT
▲	SET NETWORK POINT

REGISTERED
PROFESSIONAL
LAND SURVEYOR

A E
OREGON
JULY 12, 2005
ARON J. CUTSFORTH
65696
RENEWAL: DEC. 31, 2011

J. COLTON	OBEC	DESIGNED: A. CUTSFORTH	PROJ. NO. 019-084.40
APPROVED BY:	GROUP MANAGER	DRAWN: A. CUTSFORTH	CHK'D: J. COLTON

FILE NAME: 15694ret.dgn

OBEC CONSULTING ENGINEERS
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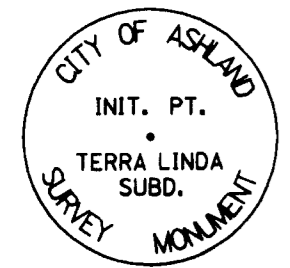
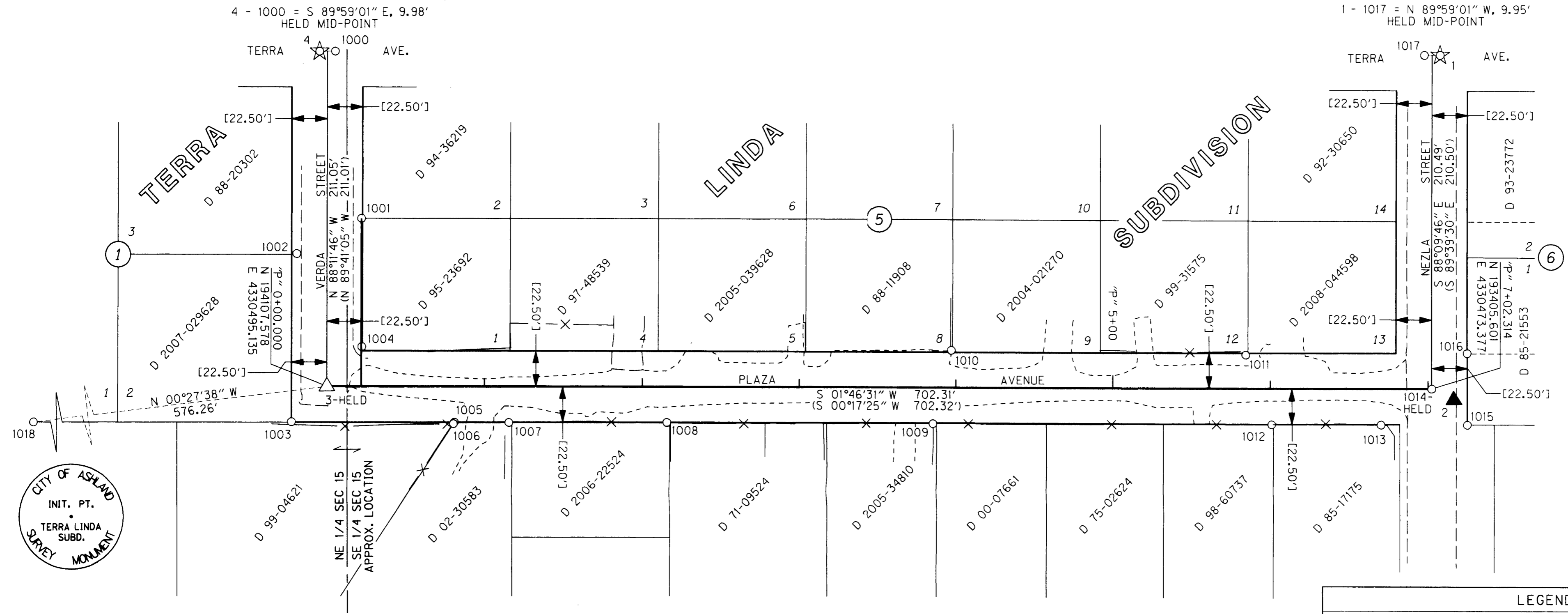
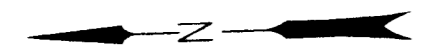
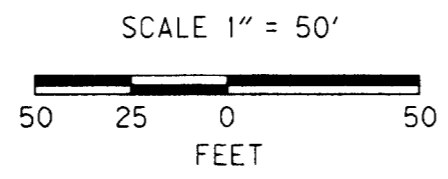
Corporate Office: 920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089, 541-683-6090
2235 MISSION STREET SE, SUITE 100 SALEM, OREGON 97302-1295, 503-589-4100
831 O'HARE PARKWAY MEDFORD, OREGON 97504-4005, 541-774-5590
5005 SW MEADOWS ROAD, SUITE 120 LAKE OSWEGO, OREGON 97035, 503-620-6103

OREGON DEPARTMENT OF TRANSPORTATION
HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT SURVEY
PLAZA AVE: NEZLA STREET TO VERDA STREET
CITY OF ASHLAND
JACKSON COUNTY

ODOT REGION 3
100 ANTELOPE ROAD
WHITE CITY, OR 97503
DECEMBER 2009
NO SCALE
SHEET 1 OF 3
KEY NO. 15694

NE 1/4 SEC 15 T39S R1E WM
SE 1/4 SEC 15 T39S R1E WM

**** RECEIVED ****
DATE 12-2-03 BY bb
This survey consists of:
3 sheet(s) Map
2 page(s) Narrative
JACKSON COUNTY
SURVEYOR



REGISTERED
PROFESSIONAL
LAND SURVEYOR
[Signature]
OREGON
JULY 12, 2005
ARON J. CUTSFORTH
65696
RENEWAL: DEC. 31, 2011

CS = COUNTY SURVEY
I.D. = INSIDE DIAMETER
O.D. = OUTSIDE DIAMETER
YPC = YELLOW PLASTIC CAP
ALL FOUND MONUMENTS ARE ASSUMED TO BE IN GOOD CONDITION UNLESS STATED OTHERWISE

RECOVERED MONUMENT LIST

PT ID	LDP NORTHING	LDP EASTING	STATION	OFFSET	DATE	DESCRIPTION & REFERENCE DOCUMENTS
1000	194095.95	4330705.92	N/A	N/A	11/12/09	FD 2-1/2" BRONZE DISK STAMPED "CITY OF ASHLAND" W/ PUNCH MARK, DOWN 0.8' IN MONUMENT CASE, PER CS 4571
1001	194082.46	4330600.01	N/A	N/A	11/12/09	FD 5/8" IRON ROD, DOWN 0.7', UNDER CONC. DRIVEWAY, NO RECORD
1002	194124.24	4330579.19	N/A	N/A	11/12/09	FD 1" I.D. PIPE, UP 0.5', PER PLAT OF TERRA LINDA SUBDIVISION
1003	194130.73	4330473.60	"P" -0+22.48	22.24' RT	11/12/09	FD 1" O.D. PIPE W/ PINCHED TOP, DOWN 0.5', PER PLAT OF TERRA LINDA SUBDIVISION
1004	194084.71	4330519.58	"P" 0+22.10	25.15' LT	11/12/09	FD 1-1/2" I.D. PIPE, DOWN 0.2', NO RECORD
1005	194027.29	4330470.13	"P" 0+81.02	22.51' RT	11/12/09	FD 5/8" IRON ROD W/ YPC STAMPED "L.J. FRIAR & ASSOC.", DOWN 0.2', PER CS 15536
1006	194027.92	4330469.25	"P" 0+80.42	23.41' RT	11/12/09	FD 5/8" IRON ROD W/ YPC STAMPED "L.J. FRIAR & ASSOC.", DOWN 0.1', PER CS 14712
1007	193992.71	4330468.88	"P" 1+15.63	22.69' RT	11/12/09	FD 3/4" I.D. PIPE, DOWN 1.3', SHOWN PER CS 4571
1008	193892.66	4330465.98	"P" 2+15.72	22.48' RT	11/12/09	FD 3/4" I.D. PIPE, DOWN 0.7', SHOWN PER CS 4571
1009	193723.03	4330460.39	"P" 3+85.44	22.81' RT	11/12/09	FD 1" O.D. PIPE W/ PINCHED TOP, DOWN 0.6', SHOWN PER CS 4571
1010	193709.88	4330506.52	"P" 3+97.16	23.70' LT	11/12/09	FD 1/2" I.D. PIPE, UP 1.3', PER PLAT OF TERRA LINDA SUBDIVISION
1011	193522.71	4330498.30	"P" 5+84.49	21.29' LT	11/12/09	FD 1/2" I.D. PIPE, DOWN 0.6', PER PLAT OF TERRA LINDA SUBDIVISION
1012	193507.78	4330453.80	"P" 6+00.79	22.73' RT	11/12/09	FD 1" O.D. PIPE W/ PINCHED TOP, FLUSH, SHOWN PER CS 4571
1013	193438.40	4330451.61	"P" 6+70.20	22.77' RT	11/12/09	FD 3/4" I.D. PIPE, DOWN 0.1', NO RECORD
1014	193405.60	4330473.38	"P" 7+02.31	0.00'	11/12/09	FD 2-1/2" BRONZE DISK STAMPED "CITY OF ASHLAND" W/ PUNCH MARK, DOWN 0.8' IN MONUMENT CASE, PER CS 4571
1015	193383.81	4330450.01	N/A	N/A	11/12/09	FD 1" I.D. PIPE, DOWN 0.5', PER PLAT OF TERRA LINDA SUBDIVISION
1016	193382.51	4330495.32	N/A	N/A	11/12/09	FD 1" O.D. PIPE W/ PINCHED TOP, DOWN 0.9', PER PLAT OF TERRA LINDA SUBDIVISION
1017	193403.83	4330683.91	N/A	N/A	11/12/09	FD 2-1/2" BRONZE DISK STAMPED "CITY OF ASHLAND" W/ PUNCH MARK, DOWN 0.9' IN MONUMENT CASE, PER CS 4571
1018	194683.82	4330490.50	N/A	N/A	11/18/09	FD 2-1/2" I.D. PIPE W/ 3" BRASS CAP STAMPED "CITY OF ASHLAND, INIT. PT., TERRA LINDA SUBD., SURVEY MONUMENT", DOWN 0.3', PER CS 4033

LEGEND

- FOUND MONUMENT NOTED IN TABLE
- ☆ FOUND MONUMENT USED AS GPS NETWORK POINT NOTED IN TABLE
- △ FOUND MONUMENT USED AS NETWORK POINT, NOTED IN TABLE
- ▲ SET NETWORK POINT
- () RECORD DATA PER CS 4571
- [] RECORD DATA PER PLAT OF TERRA LINDA SUBDIVISION
- RIGHT-OF-WAY
- PROPERTY LINE
- X- EXISTING FENCE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL

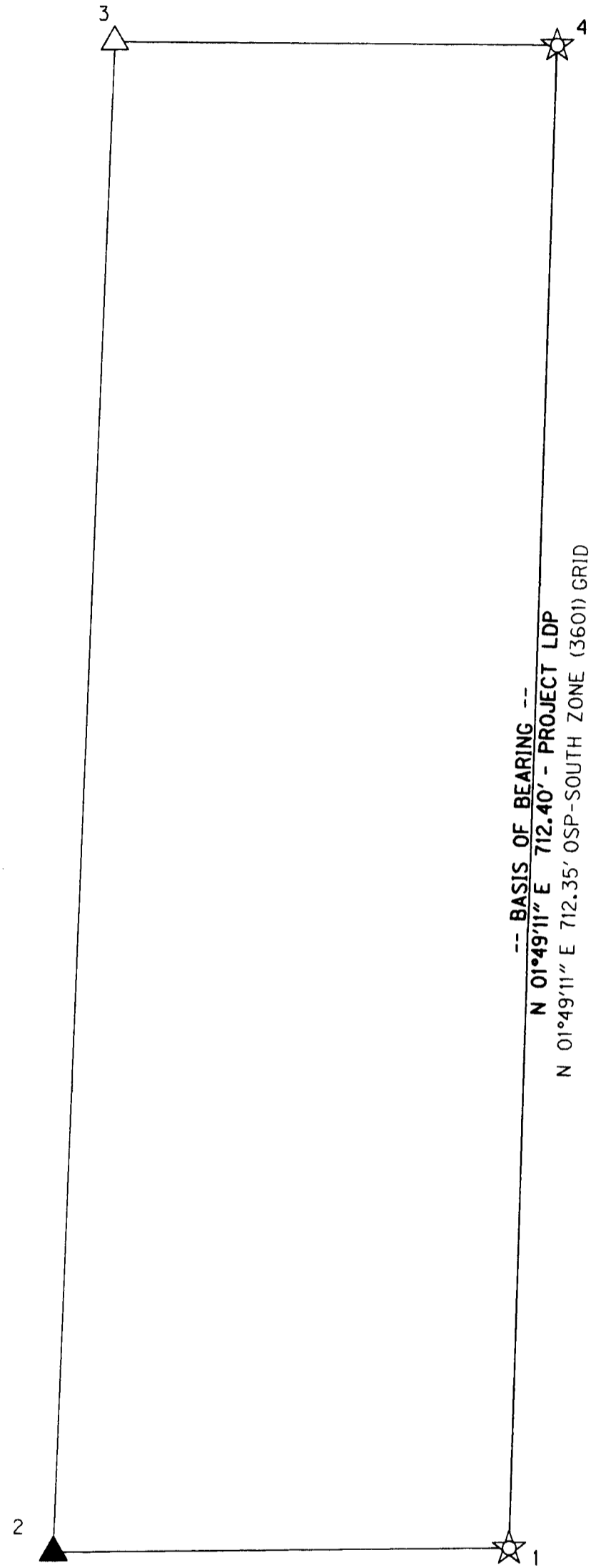
FILE NAME: 15694ret.dgn

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2235 MISSION STREET SE, SUITE 100 SALEM, OREGON 97302-1295, 503-589-4100
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5005 SW MEADOWS ROAD, SUITE 120 LAKE OSWEGO, OREGON 97035, 503-620-6103
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OREGON DEPARTMENT OF TRANSPORTATION
HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT SURVEY
PLAZA AVE: NEZLA STREET TO VERDA STREET
CITY OF ASHLAND
JACKSON COUNTY
ODOT REGION 3
100 ANTELOPE ROAD
WHITE CITY, OR 97503
DESIGNED: A. CUTSFORTH
DRAWN: A. CUTSFORTH
DECEMBER 2009
SCALE 1" = 50'
KEY NO. 15694
SHEET 3 OF 3
PROJ. NO. 019-084.40
CHK'D: J. COLTON

NE 1/4 SEC 15 T39S R1E WM
SE 1/4 SEC 15 T39S R1E WM

4
FD 2-1/2" BRONZE DISK
"CITY OF ASHLAND"
(11/04/09)
LDP PROJECT VALUES
N 194105.92
E 4330706.23
OREGON STATE PLANE
SOUTH ZONE (3602)
N 194094.47
E 4330450.67



1
FD 2-1/2" BRONZE DISK
"CITY OF ASHLAND"
(11/04/09)
LDP PROJECT VALUES
N 193393.88
E 4330683.61
OREGON STATE PLANE
SOUTH ZONE (3602)
N 193382.47
E 4330428.06

RESIDUALS FOR DISTANCES

BETWEEN	DISTANCE**	DISTANCE RESIDUAL
1 2	217.43'	0.00'
2 3	716.27'	-0.01'
3 4	211.08'	0.00'

** CALCULATED HORIZONTAL GRID DISTANCES IN FEET DERIVED FROM THE MEASURED SLOPE GRID DISTANCES

RESIDUALS FOR ANGLES

BACKSIGHT STATION	OCCUPIED STATION	FORESIGHT STATION	RESIDUAL
4	1	2	-0°00'12.9"
1	2	3	0°00'09.2"
2	3	4	0°00'11.6"
3	4	1	-0°00'11.1"

1.96 SIGMA (95%) CONFIDENCE LEVEL LIMITS

POINT NO	SEMI MAJOR	SEMI MINOR	ORIENTATION*
2	0.02 INT FT	0.02 INT FT	67.6°
3	0.03 INT FT	0.02 INT FT	102.4°

* NORTH AZIMUTH
FIXED POINTS NOT SUBJECT TO LEAST SQUARES ADJUSTMENT OR CONFIDENCE LEVEL ANALYSIS: POINTS 1 AND 4

CONTROL NETWORK SCHEMATIC & BASIS OF BEARING

NOT TO SCALE



OPUS-RS NOTES

OREGON STATE PLANE SOUTH ZONE (3602) COORDINATE VALUES WERE DERIVED ON CONTROL POINT NUMBERS 1 AND 4 USING AN NGS OPUS-RS SOLUTION WITH THE FOLLOWING CORS STATIONS BEING HELD: PTSG, CABL, DDSN, P341, YBHB, ORK5, ORK6, DCSO, AND MDMT.

CONTROL NARRATIVE

PROJECT: PLAZA AVE: NEZLA STREET TO VERDA STREET
LOCATION: JACKSON COUNTY
ODOT KEY NUMBER: 15694
OBEC PROJECT: 019-084.40
SURVEY DATUM:
HORIZONTAL - NAD 83(CORS 96) EPOCH 2002 (INTERNATIONAL FEET)
VERTICAL - NAVD 88 (INTERNATIONAL FEET)

HORIZONTAL CONTROL SURVEY

THE PRIMARY HORIZONTAL CONTROL WAS BROUGHT INTO THE PROJECT BY USING AN OPUS-RS SOLUTION FROM CORS STATIONS "PTSG, CABL, DDSN, P341, YBHB, ORK5, ORK6, DCSO, AND MDMT" TO ESTABLISH POSITIONS ON POINTS 1 AND 4. A SUBSEQUENT CONVENTIONAL TRAVERSE WAS PERFORMED TO ESTABLISH POSITIONS FOR POINTS 2 AND 3. THE COORDINATE SYSTEM WAS HELD AT OREGON STATE PLANE - SOUTH ZONE (3602), UNTIL ALL GPS CONTROL SURVEYING AND ADJUSTMENTS WERE COMPLETE. ALL POINTS WERE THEN MOVED TO GROUND, UTILIZING A LOCAL DATUM PLANE COORDINATE SYSTEM (LDP). TO CONVERT THE PROJECT LDP COORDINATES TO THE OREGON STATE PLANE COORDINATE SYSTEM - SOUTH ZONE NAD 83(CORS96) EPOCH 2002, MULTIPLY THE COORDINATE VALUES BY A COMBINED FACTOR OF 0.99994099. THE BASIS OF BEARING FOR THIS SURVEY IS BASED ON A STRAIGHT LINE BETWEEN CONTROL POINTS 1 AND 4.

CONTROL POINTS FOR THIS SURVEY WERE NOT SET ON AND DO NOT REPRESENT PROPERTY LINES OR RIGHT-OF-WAY LINES AND ARE INTENDED FOR USE SOLELY BY THE CITY OF ASHLAND, THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT), AND OBEC CONSULTING ENGINEERS IN SUPPORT OF FUTURE PROJECTS. IT IS NOT THE INTENT OF THE CITY OF ASHLAND, ODOT, OR OBEC CONSULTING ENGINEERS TO PERPETUATE THESE CONTROL POINTS AS MONUMENTS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 12, 2005
ARON J. CUTSFORTH
65696
RENEWAL: DEC. 31, 2011

LEGEND	
	FOUND MONUMENT USED AS GPS NETWORK POINT
	FOUND MONUMENT USED AS NETWORK POINT
	SET NETWORK POINT
	LINE OF OBSERVATION (INTERVISIBLE)

FILE NAME: 15694ret.dgn

OBEC CONSULTING ENGINEERS
Corporate Office: 920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089, 541-683-6090
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OREGON DEPARTMENT OF TRANSPORTATION
HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT SURVEY
PLAZA AVE: NEZLA STREET TO VERDA STREET
CITY OF ASHLAND
JACKSON COUNTY

ODOT REGION 3 DECEMBER 2009
100 ANTELOPE ROAD NO SCALE
WHITE CITY, OR 97503 KEY NO. 15694 SHEET 2 OF 3

DESIGNED: A. CUTSFORTH PROJ. NO. 019-084.40
DRAWN: A. CUTSFORTH CHK'D: J. COLTON

NETWORK POINT COORDINATE TABLE

CS = COUNTY SURVEY

PT ID	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
1	193393.88	4330683.61	11/04/09	FD 2-1/2" BRONZE DISK STAMPED "CITY OF ASHLAND" W/ PUNCH MARK IN MONUMENT CASE, PER CS 4571
2	193391.82	4330466.16	11/04/09	SET MAGNAIL & WASHER STAMPED "OBEC CONTROL"
3	194107.58	4330495.13	11/04/09	FD 2-1/2" BRONZE DISK STAMPED "CITY OF ASHLAND" W/ PUNCH MARK IN MONUMENT CASE, PER CS 4571
4	194105.92	4330706.23	11/04/09	FD 2-1/2" BRONZE DISK STAMPED "CITY OF ASHLAND" W/ PUNCH MARK IN MONUMENT CASE, PER CS 4571