

NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO PERFORM A BOUNDARY RESOLUTION, HORIZONTAL CONTROL AND RECOVERY SURVEY, FOR THE TRAIL QUARRY SITE NEAR TRAIL, OREGON. THE PROJECT IS LOCATED IN THE N.W. 1/4 OF SECTION 3, TOWNSHIP 34 SOUTH, RANGE 1 WEST. THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT) HAS PLANS TO UTILIZE THE EXISTING TRAIL QUARRY SITE FOR FUTURE CONSTRUCTION PROJECTS.

THIS SURVEY WAS PERFORMED IN INTERNATIONAL FEET UNITS.

THIS SURVEY UTILIZED A LOCAL DATUM PLANE (LDP) COORDINATE SYSTEM, WHICH IS RELATIVE TO THE OREGON STATE PLANE COORDINATE SYSTEM SOUTH ZONE, NAD83(CORS 96) EPOCH 2002. TO CONVERT THE LDP COORDINATES TO THE OREGON STATE PLANE COORDINATE SYSTEM - SOUTH ZONE, NAD 83(CORS 96) EPOCH 2002, MULTIPLY THE COORDINATE VALUES BY A COMBINED FACTOR OF 0.999870178. THIS SURVEY WAS PERFORMED IN JANUARY OF 2005.

THE INITIAL CONTROL NETWORK MONUMENTATION WAS SET AND A LEAST SQUARES ADJUSTMENT WAS PERFORMED ON THE PRIMARY GPS POINTS. THE TWO POSITIONS THAT WERE HELD FIXED FOR THIS NETWORK (POINTS 1 & 2) WERE ESTABLISHED USING STATIC GPS OBSERVATIONS FROM CORS STATIONS "DDSN", "CABL" AND "YBHB." A TRAVERSE WAS THEN COMPLETED THROUGH THE NETWORK POINTS AND INCLUDED IN A SUBSEQUENT ADJUSTMENT. THE SURVEY EQUIPMENT CONSISTED OF TWO TRIMBLE 4700 GPS RECEIVERS, ONE TRIMBLE 4400 GPS RECEIVER, ONE TRIMBLE 5600 ROBOTIC TOTAL STATION, ONE NIKON DTM 520 TOTAL STATION, AND THREE TRIMBLE TSC1 DATA COLLECTORS.

REFERENCE DOCUMENTS USED WERE: CS 4865, CS 7811, CS 13613, CS 13675, CS 15128, CS 15511, CS 15755, CS 17763, ODOT DRG. NO. 5B-22-13, AND ODOT DRG. NO. IR-2-834.

BOUNDARY RESOLUTION

THE NORTH BOUNDARY OF SECTION 3, AS DESCRIBED IN VOL. 223, PAGE 242, WAS HELD TO RETRACE THE BOUNDARY OF THE TRAIL QUARRY PROPERTY. THE POINT OF BEGINNING FOR THIS DESCRIPTION CALLS THE N.E. CORNER OF THE WEST 1/2 OF THE N.W. 1/4 OF SECTION 3, (OR WEST 1/16TH CORNER). A 1-1/2" (INSIDE DIAMETER) GAS PIPE WAS SET IN 1928 BY THE JACKSON COUNTY SURVEYOR AS THE ORIGINAL MONUMENT. THIS MONUMENT WAS NOT SET AS PART OF THE ORIGINAL PUBLIC LAND SURVEY, BUT THE POSITION HAS BEEN ACCEPTED TO CONTROL THE 1/16TH LINE AS SHOWN ON FILED SURVEYS 1834, 13613, 15511 AND 17763. A 1" (INSIDE DIAMETER) GALVANIZED IRON PIPE (ORIGIN UNKNOWN) WAS ALSO FOUND N80°52'20"E, 0.84 FEET FROM THE ACCEPTED CORNER, BUT NOT USED AS EVIDENCE IN THIS RESOLUTION. RECORD ANGLES AND DISTANCES WERE HELD ALONG THE NORTHERLY, WESTERLY, SOUTHERLY AND EASTERLY INTERIOR LINES, PER VOL.223, PAGE 242. THIS CLOSELY AGREED WITH THE MONUMENTS SET AND SHOWN IN FILED SURVEY 15755. ADJOINING PARCEL DOCUMENTS, PER INSTR. NO'S. 2004-026553, 97-44458 AND 89-03028, CALL TO THE SENIOR LINE IN VOL. 223, PAGE 242. THE 280.00 FT DISTANCE CALL ALONG THE SOUTHERLY INTERIOR LINE IS 1.53 FEET SHORT OF THE DISTANCE NEEDED TO CLOSE ON THE 1/16TH LINE AND ORIGINAL DESCRIPTION ASSUMES A CARDINAL DIRECTION CLOSURE (NORTH) TO CLOSE TO THE POINT OF BEGINNING. THE INTENTION OF THE DEED IMPLIES THAT THE 1/16TH LINE IS THE EASTERLY BOUNDARY AND WAS SHOWN ON THIS SURVEY, AND ALSO IN CS 17763.

OLD TRAIL CREEK ROAD RESOLUTION

THIS RIGHT OF WAY RESOLUTION COVERS A PORTION OF OLD TRAIL CREEK ROAD (OLD TILLER-TRAIL HIGHWAY) IN THE VICINITY OF THE TRAIL QUARRY. ROAD RECORDS INDICATE THAT THE ROAD WAS ESTABLISHED BY PETITION IN 1889. IN THE COMMISSIONER'S JOURNAL (VOL. 8, PAGES 308-311) A HORIZONTAL ALIGNMENT AND A RIGHT OF WAY WIDTH OF 60 FEET WERE CALLED OUT IN THE FINAL ORDER ESTABLISHING THE ROAD. ACCORDING TO OREGON DEPARTMENT OF TRANSPORTATION (ODOT) RECORDS, THIS ROAD AT ONE POINT IN TIME WAS A STATE HIGHWAY AND THEN ABANDONED BACK TO THE COUNTY BY STATE ABANDONMENT AND RETENTION RESOLUTION NUMBER 80, DATED DECEMBER 21, 1940. NO OTHER RIGHT OF WAY DOCUMENTATION WAS FOUND WHICH WOULD DIFFER FROM THIS ORIGINAL PETITION.

THE ONLY REFERENCE MONUMENT SHOWN IN COMMISSIONER'S JOURNAL VOL. 8, PAGES 310-311 IS THE SECTION CORNER COMMON TO SECTIONS 3, 4, 33 & 34. THE ORIENTATION AND POSITION OF THIS SECTION OF THE OLD TRAIL CREEK RIGHT OF WAY WAS ESTABLISHED BY HOLDING THE RECORD SHAPE AND THEN ROTATING BY THE LOCAL CONVERGENCE ANGLE. THE LOCAL CONVERGENCE ANGLE MATCHES CLOSELY WITH THE DIFFERENCE BETWEEN STATE PLANE BEARINGS AND THE BEARINGS SHOWN ON LOCAL SURVEYS. THE RELATIONSHIP BETWEEN THIS AND THE ACTUAL TRAVELED ROAD SURFACE IS SHOWN ON THE SURVEY MAP.

N.W. 1/4, SEC. 3, T.34 S., R.1 W., W.M.
S.W. 1/4, SEC. 34, T.33 S., R.1 W., W.M.

RESIDUALS FOR ANGLES AND DISTANCES

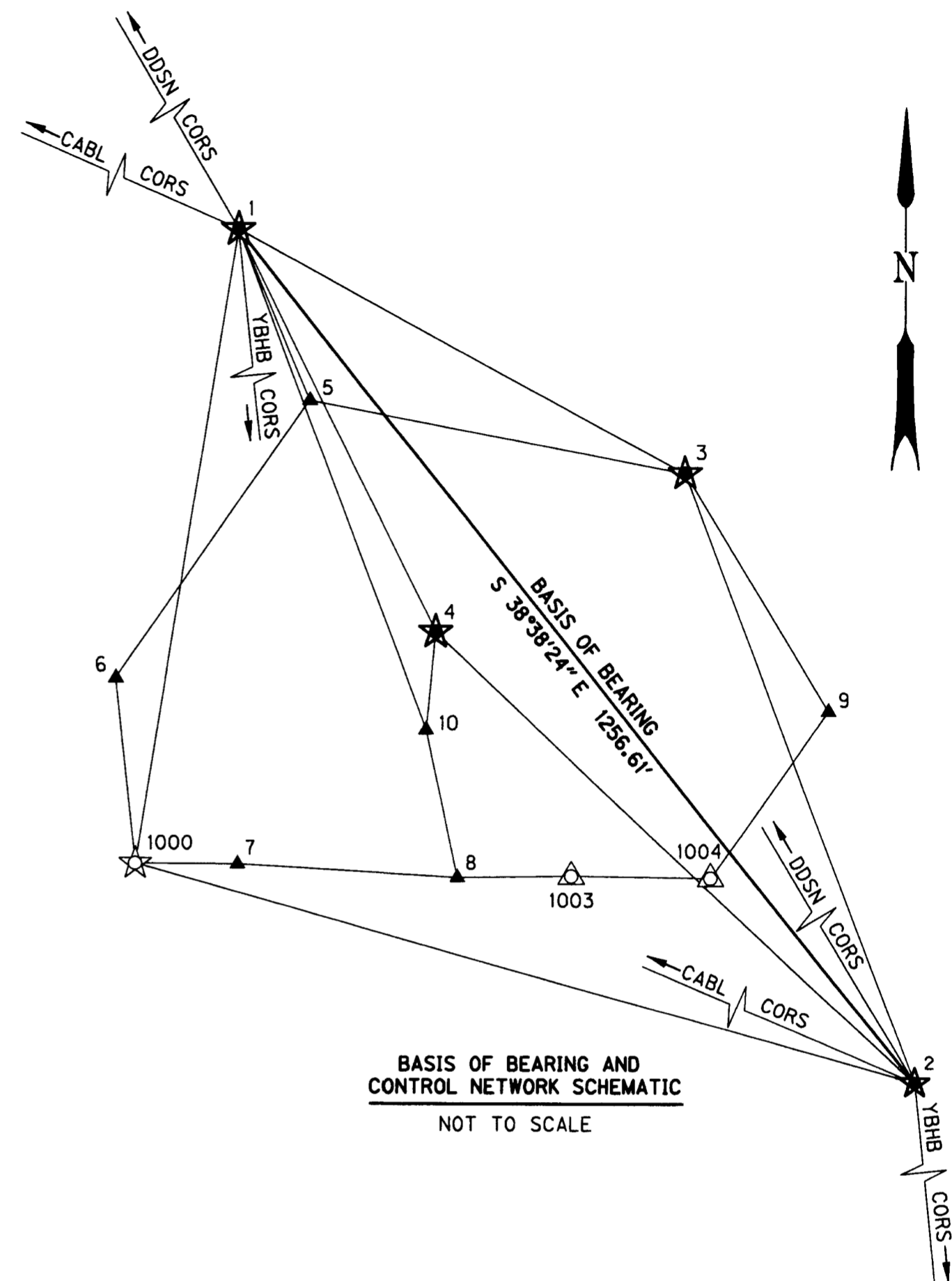
AT	TO	DISTANCE*	DISTANCE RESIDUAL	ANGLE RESIDUAL
3	5	443.29 ft.	0.02 ft.	0°00'00"
5	6	390.76 ft.	-0.02 ft.	0°00'04"
6	1000	213.39 ft.	-0.02 ft.	0°00'25"
7	8	255.66 ft.	0.00 ft.	0°00'00"
8	1003	319.73 ft.	0.00 ft.	0°00'01"
9	3	319.70 ft.	-0.01 ft.	0°00'07"
10	8	173.01 ft.	0.00 ft.	-0°00'11"
10	8	173.01 ft.	0.00 ft.	0°00'00"
1000	7	267.82 ft.	0.06 ft.	0°00'00"
1003	1004	161.65 ft.	-0.07 ft.	-0°00'31"
1004	9	235.05 ft.	0.01 ft.	0°00'00"

* CALCULATED HORIZONTAL DISTANCE IN FEET DERIVED FROM THE MEASURED SLOPE DISTANCE

CONFIDENCE LEVEL LIMITS AT 1.96 SIGMA (95%)

POINT ID	SEMI MAJOR	SEMI MINOR	ORIENTATION*
3	0.05 ft.	0.04 ft.	342°45'19"
4	0.04 ft.	0.04 ft.	184°31'03"
5	0.02 ft.	0.01 ft.	191°01'30"
6	0.00 ft.	0.00 ft.	0°00'00"
7	0.00 ft.	0.00 ft.	0°00'00"
8	0.03 ft.	0.02 ft.	191°19'35"
9	0.03 ft.	0.01 ft.	237°04'39"
10	0.02 ft.	0.02 ft.	358°04'39"
1000	0.05 ft.	0.05 ft.	227°12'49"
1003	0.00 ft.	0.00 ft.	0°00'00"
1004	0.05 ft.	0.02 ft.	271°11'41"

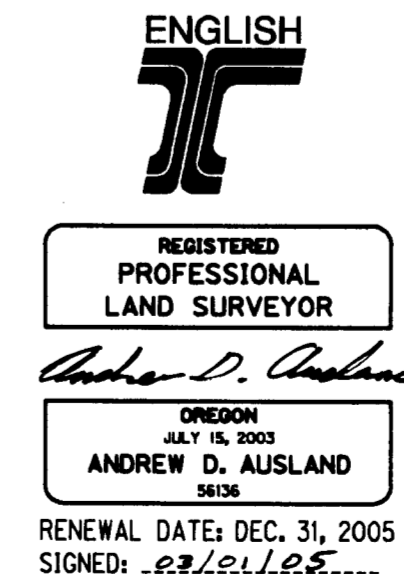
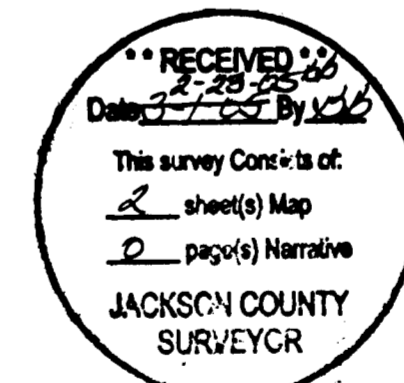
* NORTH AZIMUTH
FIXED POINTS NOT SUBJECT TO LEAST SQUARES ADJUSTMENT OR CONFIDENCE LEVEL ANALYSIS: 1, 2



BASIS OF BEARING AND CONTROL NETWORK SCHEMATIC
NOT TO SCALE

NETWORK POINT COORDINATE TABLE CS = COUNTY SURVEY YPC = YELLOW PLASTIC CAP RPC = RED PLASTIC CAP

PT. ID.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
1	367580.60	4299124.29	1-21-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
2	366599.08	4299908.95	1-21-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
3	367301.21	4299642.77	1-21-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
4	367118.34	4299353.46	1-21-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
5	367384.94	4299207.43	1-22-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
6	367065.24	4298982.74	1-22-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
7	366852.61	4299123.49	1-22-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL"
8	366837.66	4299378.71	1-22-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
9	367028.17	4299809.11	1-22-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
10	367006.90	4299342.41	1-24-2005	SET 5/8" REBAR W/ RPC "OBEC CONTROL" AND WITNESS POST
1000	366853.00	4299004.95	1-21-2005	FND 5/8" REBAR W/ YPC "KAISER RLS 803" - CS 15511 (SET WITNESS POST AT CORNER)
1003	366839.14	4299510.78	1-22-2005	FND 5/8" REBAR W/ YPC "KAISER RLS 803" - CS 15511
1004	366836.89	4299672.49	1-22-2005	FND 3/4" IRON ROD - PER CS 17763 (SET WITNESS POST AT CORNER)



LEGEND	
▲	SET NETWORK TRAVERSE POINT
★	SET NETWORK GPS POINT
☆	FOUND MONUMENT USED AS NETWORK GPS POINT
△	FOUND MONUMENT USED AS NETWORK TRAVERSE POINT
—▲—▲—	LINES OF OBSERVATION

OBEC CONSULTING ENGINEERS 1335 POPLAR DRIVE MEDFORD, OREGON 97504 TEL. (541) 774-5590 FAX. (541) 774-5591

BOUNDARY RESOLUTION, HORIZONTAL CONTROL AND RECOVERY SURVEY
TRAIL QUARRY, OLD TILLER-TRAIL HWY
JACKSON COUNTY

FOR O.D.O.T. REGION 3
FEBRUARY 2005 NO SCALE

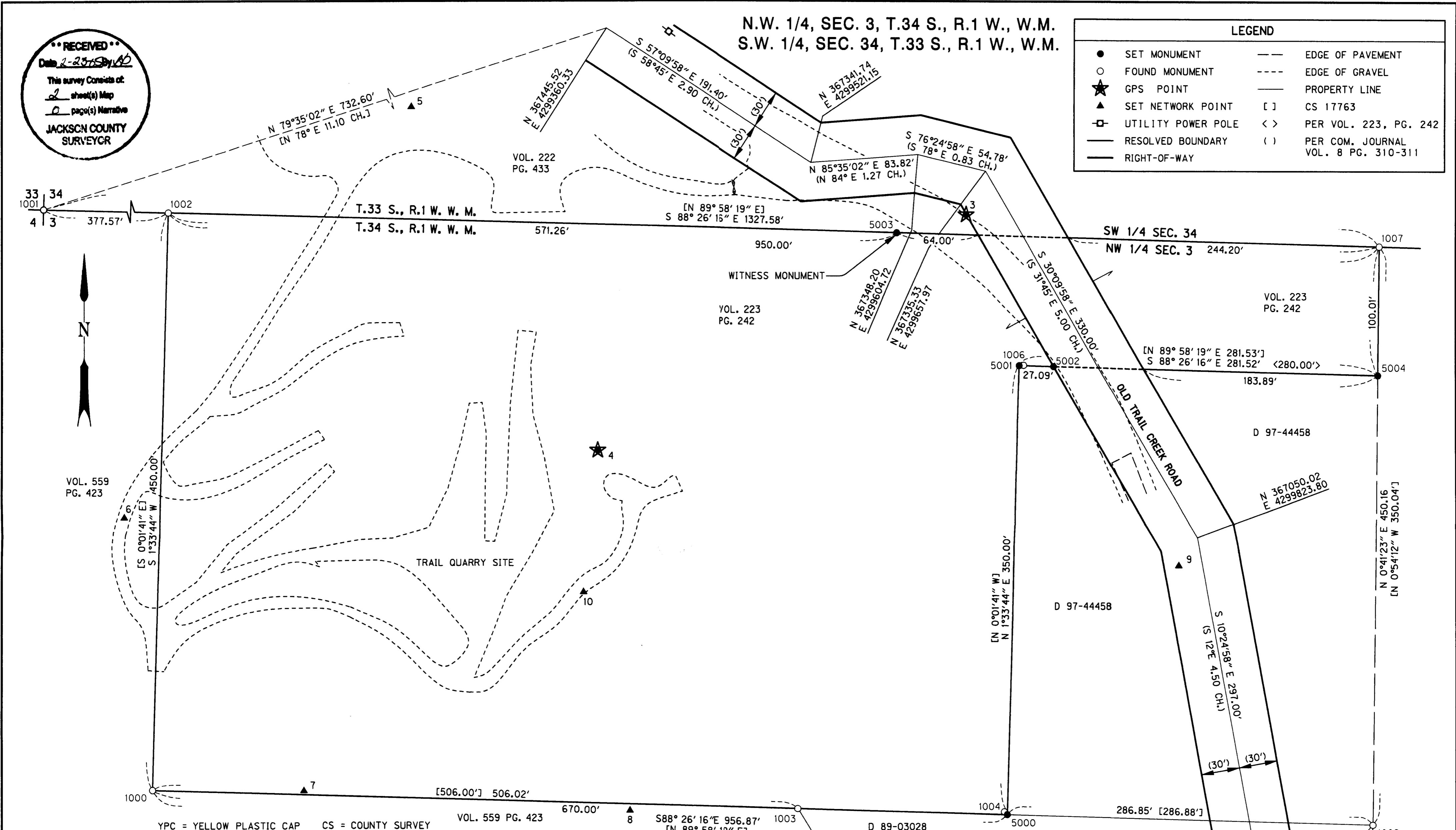
DESIGNED: ANDY AUSLAND PROJ. NO. 019-80.4 SHT. 1 OF 2
DRAWN: R. ODEAR CHK'D: RANDY FITCH FILE NO. 144835

APPROVED BY: RANDY FITCH, GROUP MANAGER TITLE

RECEIVED
 Date 2-23-05
 This survey consists of
2 sheet(s) Map
0 page(s) Narrative
JACKSON COUNTY SURVEYOR

N.W. 1/4, SEC. 3, T.34 S., R.1 W., W.M.
 S.W. 1/4, SEC. 34, T.33 S., R.1 W., W.M.

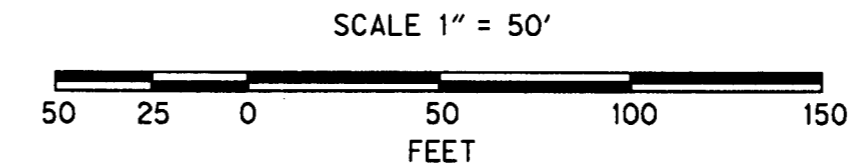
LEGEND			
●	SET MONUMENT	---	EDGE OF PAVEMENT
○	FOUND MONUMENT	----	EDGE OF GRAVEL
★	GPS POINT	—	PROPERTY LINE
▲	SET NETWORK POINT	[]	CS 17763
□	UTILITY POWER POLE	< >	PER VOL. 223, PG. 242
—	RESOLVED BOUNDARY	()	PER COM. JOURNAL VOL. 8 PG. 310-311
—	RIGHT-OF-WAY		



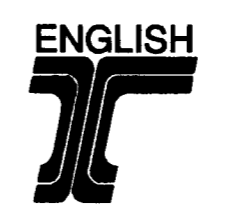
MONUMENT LIST

YPC = YELLOW PLASTIC CAP CS = COUNTY SURVEY
 GIP = GALVANIZED IRON PIPE WP = WITNESS POST

PT. ID.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
1000	366853.00	4299004.95	1-21-2005	FND 5/8" REBAR W/ YPC "KAISER RLS 803", UP 2" - CS 15511 (SET WITNESS POST)
1001	367313.07	4298639.80	1-21-2005	FND 2 1/2" BRASS DISK "3, 4, 33 & 34, T33S RIW", DN 16" - PER CS RE-ESTAB.
1002	367302.76	4299017.29	1-21-2005	FND 5/8" REBAR W/ YPC "KAISER RLS 803", UP 1" - CS 15511 (SET WITNESS POST)
1003	366839.14	4299510.78	1-21-2005	FND 5/8" REBAR W/ YPC "KAISER RLS 803", UP 1" - CS 15511
1004	366836.89	4299672.49	1-22-2005	FND 3/4" IRON ROD, UP 1" - CS 17763 (SET WITNESS POST)
1006	367184.77	4299687.85	1-22-2005	FND 1" (ID) IRON PIPE, UP 14" - (NOT RECORDED)
1007	367276.88	4299966.88	1-27-2005	FND 1 1/2" (ID) GIP W/ 1"X1" BOLT HEAD, UP 4" - CS RE-ESTAB. 1928 (SET WP)
1009	366826.75	4299961.46	1-27-2005	FND 5/8" REBAR W/ YPC "KAISER RLS 803", FLUSH - CS 17763
5000	366834.68	4299674.72	2-16-2005	SET 5/8" REBAR W/ YPC "OBEC LS 56136" AND WITNESS POST
5001	367184.55	4299684.26	2-16-2005	SET 5/8" REBAR W/ YPC "OBEC LS 56136" AND WITNESS POST
5002	367183.81	4299711.34	2-16-2005	SET 5/8" REBAR W/ YPC "OBEC LS 56136" AND WITNESS POST
5003	367287.21	4299588.28	2-16-2005	SET 5/8" REBAR W/ YPC "OBEC LS 56136" AND WITNESS POST
5004	367176.88	4299965.68	2-16-2005	SET 5/8" REBAR W/ YPC "OBEC LS 56136" AND WITNESS POST



REGISTERED PROFESSIONAL LAND SURVEYOR
Andrew D. Ausland
 OREGON JULY 15, 2003
ANDREW D. AUSLAND
 56136
 RENEWAL DATE: DEC. 31, 2005
 SIGNED: 2/23/05



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BOUNDARY RESOLUTION, HORIZONTAL CONTROL AND RECOVERY SURVEY
TRAIL QUARRY, OLD TILLER-TRAIL HWY
JACKSON COUNTY

FOR O.D.O.T. REGION 3
 FEBRUARY 2005
 SCALE 1"=50'

DESIGNED: ANDY AUSLAND	PROJ. NO. 019-80.4	SHT. 2 OF 2
DRAWN: R. ODEAR	CHK'D: RANDY FITCH	FILE NO. 14484S