

# SW 1/4 SECTION 26, T. 3 N., R. 10 E., W.M.

HOOD RIVER COUNTY  
SURVEYOR'S OFFICE

CS# 2022 073

DATE FILED: 12/15/2022

BY: *BL*

**PURPOSE**  
THE PURPOSE OF THIS SURVEY IS TO RE-ESTABLISH A PORTION OF THE CENTERLINE ALIGNMENT AND RIGHT-OF-WAY FOR CASCADE AVE. (US HWY 30) LOCATED IN THE SW 1/4, SECTION 26, TOWNSHIP 3 NORTH, RANGE 10 EAST, WILLAMETTE MERIDIAN, IN PREPARATION FOR FUTURE ROADWAY IMPROVEMENTS. THE PROJECT LIMITS ARE 400 FEET, MORE OR LESS, WEST OF THE INTERSECTION OF CASCADE AVE. (US HWY 30) AND RAND ROAD AND 600 FEET, MORE OR LESS, EAST OF THE INTERSECTION OF CASCADE AVE. (US HWY 30) AND RAND ROAD. THIS PRE-CONSTRUCTION SURVEY IS FILED IN ACCORDANCE WITH O.R.S. 209.155.

**HORIZONTAL DATUM**  
THE HORIZONTAL DATUM IS NAD 83 (2011) EPOCH 2010.00 USING THE PROJECTION OREGON COORDINATE REFERENCE SYSTEM (OGRS), COLUMBIA RIVER EAST ZONE, INTERNATIONAL FEET.

**BASIS OF BEARINGS**  
THE BASIS OF BEARINGS IS OGRS, COLUMBIA RIVER EAST ZONE.

**HORIZONTAL & VERTICAL ADJUSTMENT**  
STATIC GPS OBSERVATIONS WERE MADE ON NOVEMBER 26, AND DECEMBER 3, 2018 USING TRIMBLE DUAL FREQUENCY RECEIVERS. RINEX DATA WAS DOWNLOADED FROM ODOT'S REAL TIME REFERENCE STATIONS FOR STATIONS PDXA AND PKDL. THE VECTORS WERE PROCESSED USING TRIMBLE BUSINESS CENTER. TERRESTRIAL OBSERVATIONS WERE MADE USING A TRIMBLE S6-VX TOTAL STATION ON NOVEMBER 29 AND 30, 2018, AND DECEMBER 3, 4, 5, 6, 7, AND 10, 2018. THE RAW GPS VECTORS FROM STATIC OBSERVATIONS AND THE TERRESTRIAL OBSERVATIONS WERE ADJUSTED USING STAR\*NET LEAST SQUARES ADJUSTMENT PROGRAM. THE NETWORK WAS CONSTRAINED TO THE PUBLISHED NAD 83 (2011) EPOCH 2010.00 ODOT'S REAL TIME REFERENCE STATIONS. DIFFERENTIAL LEVELS WERE RUN IN CLOSED CIRCUITS ON NOVEMBER 30, 2018 USING A LEICA DNA03 ELECTRONIC LEVEL. THE UNADJUSTED RAW CLOSURES WERE LESS THAN 0.004 FEET. AN INTERIM ADJUSTMENT OF THE RAW GPS VECTORS WAS MADE TO COMPUTE THE VALUE OF STATION 503 ON SITE FROM THE ORGN STATIONS. THE RESULTING POSITION FOR CONTROL STATION 503 WAS HELD FOR THE CONSTRAINED ADJUSTMENT AS SHOWN IN THE ADJUSTMENT REPORT.

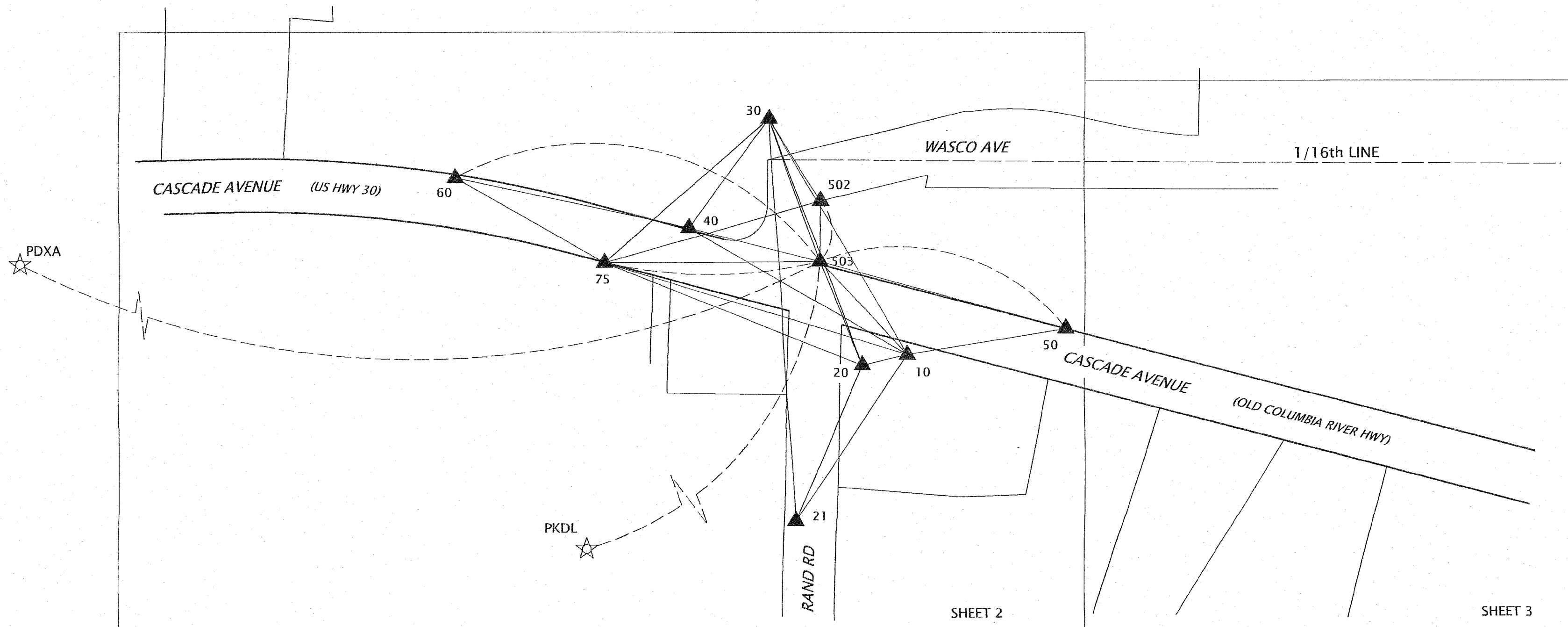
**VERTICAL DATUM**  
THE VERTICAL DATUM FOR THIS SITE IS NAVD 88, REFERENCED TO CONTROL STATION 503. FIELD DIFFERENTIALS WERE PERFORMED BY PACE ENGINEERS REFERENCED TO USGS STATION "PONDER-2" WITH A PUBLISHED ORTHOMETRIC HEIGHT OF 102.638 METERS. DIFFERENTIAL LEVELS WERE RUN THROUGH THE ESTABLISHED CONTROL NETWORK USING A DINI 07 DIGITAL LEVEL.

**PROCEDURE**  
THE CENTERLINE ALIGNMENT AND STATIONING OF CASCADE AVE. (US HWY 30) WAS ESTABLISHED HOLDING RECORD GEOMETRY BASED ON OREGON STATE HIGHWAY DEPARTMENT, COLUMBIA RIVER HIGHWAY, DRAWING NUMBER 38-14-8 AND A LINE 30.00 FEET NORTHEASTERLY AND SOUTHEASTERLY, RESPECTIVELY, BETWEEN FOUND AND HELD MONUMENTS 507, 520, AND 505 HOLDING THE POINT OF TANGENCY, AT STATION +1157+66.20, PERPENDICULAR TO POINT NUMBER 516. FOUND MONUMENTS 523 AND 504 ON THE SOTHERLY RIGHT-OF-WAY LINE OF SAID CASCADE AVE. DID NOT AGREE WITH THE MONUMENTS ON THE NORTHERLY RIGHT-OF-WAY. THEY WERE 29.00 FEET AND 27.42 FEET SOUTHERLY OF THE RESOLVED CENTER LINE. VARIOUS SURVEYS NOTE THAT FOUND AND HELD MONUMENT 505 IS LOCATED 2.58 FEET SOUTH 0°32'34" EAST ALONG THE WESTERLY RIGHT-OF-WAY LINE OF RAND ROAD FROM THE RIGHT-OF-WAY LINE OF SAID CASCADE AVE. MY FINDINGS AGREE WITH TERRA SURVEYING, COUNTY SURVEY 1993008, HOOD RIVER COUNTY SURVEY RECORDS, THAT THIS MONUMENT IS MONUMENTING THE SOUTHERLY RIGHT-OF-WAY LINE AND BEING THAT MONUMENT SET IN COUNTY SURVEY 1975045, HOOD RIVER COUNTY SURVEY RECORDS.

MONUMENTS OF RECORD WERE SEARCH FOR AND LOCATED RELATIVE TO THE ABOVE CENTERLINE LOCATION WITH CONTROL MONUMENTATION SHOWN HEREON. NO ATTEMPT HAS BEEN MADE TO RECONCILE MONUMENT LOCATIONS TO ACTUAL BOUNDARY OR PROPERTY LOCATIONS. PROPERTY LINES SHOWN HEREON ARE FOR CONVENIENCE ONLY AND WERE COMPILED FROM VARIOUS REFERENCES LISTED AND COUNTY TAX MAPS.

## TRAVERSE

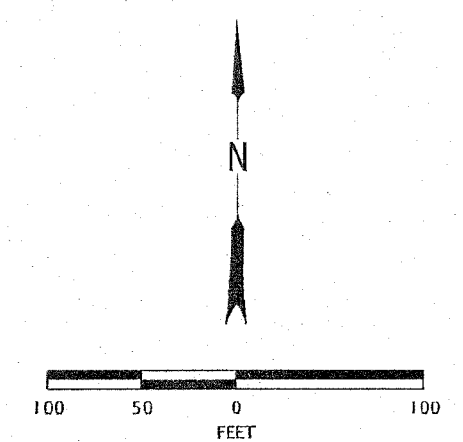
FROM	TO	BEARING	DISTANCE
10	20	S76°38'06"W	52.56
10	21	S33°55'05"W	227.57
10	30	N30°38'18"W	308.91
10	40	N60°04'37"W	287.01
10	50	N80°38'33"E	182.22
10	75	N73°13'16"W	360.11
10	503	N43°25'28"W	145.66
20	21	S23°13'59"W	192.29
20	30	N20°55'44"W	297.56
20	75	N68°25'36"W	315.76
20	503	N22°33'34"W	127.71
21	30	N03°49'50"W	455.65
30	40	S36°40'51"W	152.89
30	75	S49°10'51"W	247.57
30	502	S32°25'26"E	108.86
30	503	S19°42'13"E	169.94
40	60	N78°05'12"W	270.77
40	503	S75°52'57"E	153.25
50	503	N74°46'45"W	290.10
60	75	S60°37'02"E	193.85
60	503	S77°17'24"E	423.96
75	502	N74°06'42"E	255.48
75	503	N89°34'13"E	244.66
502	503	S00°53'60"W	68.11
503	83	N08°42'06"E	132.58
503	87	N04°29'23"W	126.80
503	506	S08°48'31"W	253.25
507	503	N74°41'16"W	266.45
508	503	N13°44'32"E	155.67



LEGEND	
	SET NETWORK POINT
	FOUND GPS STATION
YPC	YELLOW PLASTIC CAP
OPC	ORANGE PLASTIC CAP
	LINE OF OBSERVATION
	GPS OBSERVATION

NETWORK POINT COORDINATE TABLE

PT. NO.	ADJUSTED POSITIONS AND ELLIPSOID HEIGHTS (FEET)				ADJUSTED COORDINATES (FEET)			ERROR ELLIPSES (FEET) 95% CONFIDENCE REGION				DESCRIPTION
	LATITUDE	LONGITUDE	ELLIP HT	GEOID HT	LDP NORTHING	LDP EASTING	ELEV	SEMI-MAJOR	SEMI-MINOR	MAJOR AZIMUTH	ELEV	
PDXA	45°35'48.728250"	122°36'33.178810"	-15.146	-74.743	-	-	59.597	-	-	-	-	ORGN STATION
PKDL	45°31'05.876950"	121°33'49.188070"	1680.331	-69.417	-	-	1749.748	-	-	-	-	ORGN STATION
10	45°42'37.400000"	121°32'18.718525"	225.150	-70.597	116088.512	226819.959	295.747	0.006	0.004	47°36'	0.00	SET 5/8" IR W/OPC, "PACE ENGRS CONTROL"
20	45°42'37.273532"	121°32'19.436780"	224.639	-70.597	116076.364	226768.827	295.236	0.007	0.004	64°40'	0.00	SET 5/8" IR W/OPC, "PACE ENGRS CONTROL"
21	45°42'35.519547"	121°32'20.473294"	232.609	-70.600	115899.666	226692.974	303.208	0.014	0.008	98°47'	0.00	SET PK NAIL
30	45°42'40.003534"	121°32'20.985304"	209.684	-70.594	116354.295	226662.535	280.278	0.007	0.004	74°59'	0.00	SET 5/8" IR W/OPC, "PACE ENGRS CONTROL"
40	45°42'38.781471"	121°32'22.249761"	210.867	-70.596	116231.683	226571.206	281.463	0.012	0.009	128°15'	0.00	SET 5/8" IR W/OPC, "PACE ENGRS CONTROL"
50	45°42'37.715479"	121°32'16.190524"	229.156	-70.596	116118.140	226999.754	299.752	0.012	0.008	18°13'	0.00	SET 1-1/4" BRONZE DISC, "PACE ENGRS" W/PUNCH
60	45°42'39.299297"	121°32'25.993175"	207.355	-70.596	116287.580	226306.265	277.951	0.014	0.008	7°12'	0.00	SET 1-1/4" BRONZE DISC, "PACE ENGRS" W/PUNCH
75	45°42'38.381862"	121°32'23.595878"	208.757	-70.597	116192.449	226475.164	279.354	0.009	0.003	177°39'	0.00	FOUND MAG NAIL IN ASPHALT
502	45°42'39.103693"	121°32'20.145891"	213.334	-70.595	116262.382	226720.914	283.929	0.007	0.005	167°19'	0.01	FOUND YPC IN CONCRETE SIDEWALK RAMP - "OR 932 WA 22098"
503	45°42'38.431435"	121°32'20.148795"	216.092	-70.596	116194.296	226719.825	286.688	HELD	HELD	-	HELD	FOUND YPC IN CONCRETE SIDEWALK RAMP - "OR 932 WA 22098"

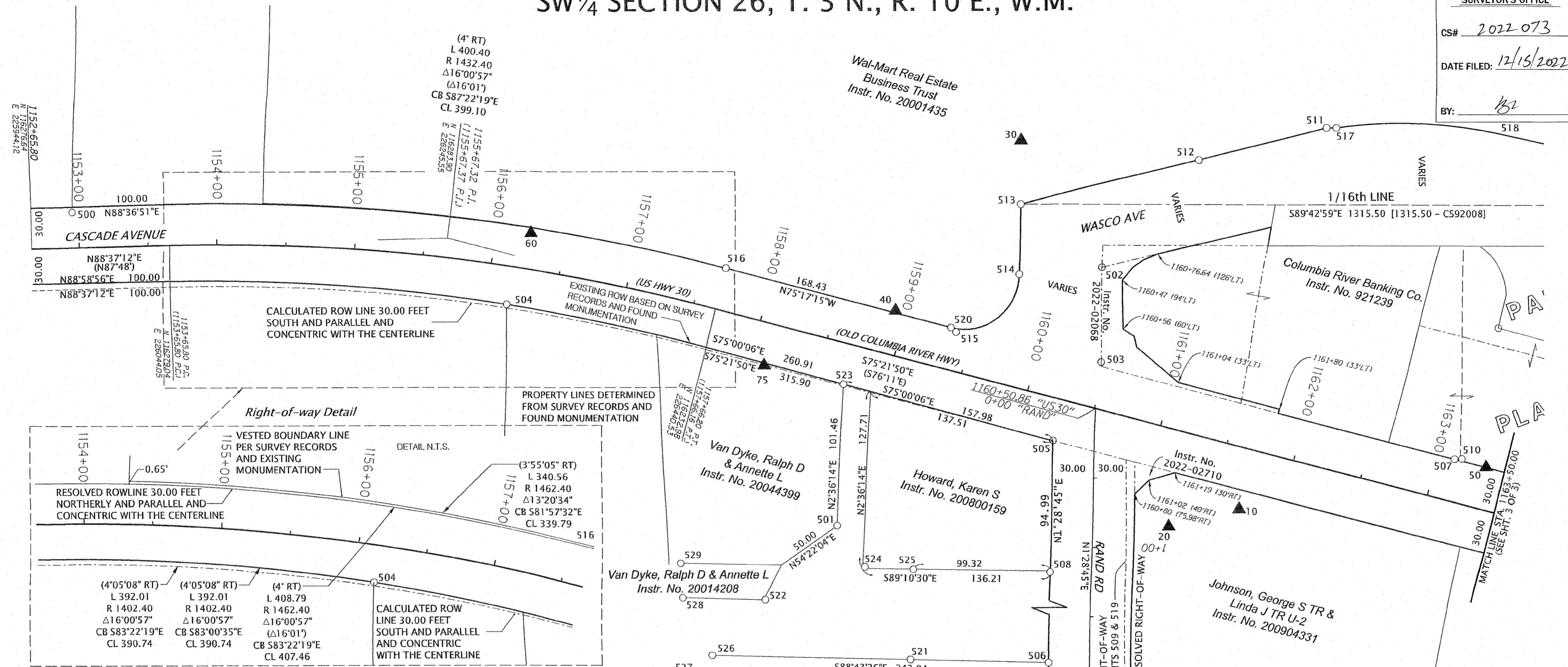


STRUCTURE NO.	REGISTERED PROFESSIONAL LAND SURVEYOR <i>Aaron B. Blaisdell</i> 12/15/22	OREGON DEPARTMENT OF TRANSPORTATION	HIGHWAY 30 AND RAND ROAD MONUMENT RECOVERY AND CONTROL SURVEY US HIGHWAY 30 (OLD COLUMBIA RIVER HIGHWAY) HOOD RIVER COUNTY	DESIGNER: Name AARON B. BLAISDELL 99413	CHECKER: Name JMW	DATE 10/06	RENEWS: 12/31/2023	SHEET NO. 1 OF 3
BUS DWG NO.								
CALC. BOOK								
HWY: 100 (US 30)								
M.P.: 49.3-49.5								
COUNTY: HOOD RIVER								
FINAL ELECTRONIC JUDGMENT AVAILABLE UPON REQUEST								

CS# 2022 073

SW 1/4 SECTION 26, T. 3 N., R. 10 E., W.M.

HOOD RIVER COUNTY  
SURVEYOR'S OFFICE  
CS# 2022 073  
DATE FILED: 12/15/2022  
BY: *[Signature]*



RECOVERED MONUMENT LIST

PT. NO.	LDP NORTHING	LDP EASTING	STATION	OFFSET	DESCRIPTION
500	116303.49	225973.00	1152+95.32	26.14 LT	FOUND "X" CHISELED IN CONCRETE - CS2006121
501	116077.55	226528.13	-	-	FOUND RAIL ROAD SPIKE - ORIGIN UNKNOWN
502	116262.38	226720.91	1160+30.06	99.29 LT	FOUND YELLOW PLASTIC CAP IN ADA RAMP, "OR 932 WA 22098" - CS90098
503	116194.30	226719.83	1160+46.21	33.14 LT	FOUND YELLOW PLASTIC CAP IN ADA RAMP, "OR 932 WA 22098" - CS90098
504	116236.20	226288.94	1156+15.57	27.42 RT	FOUND 5/8" IRON ROD, NO CAP - CS2001041
505	116138.01	226685.34	1160+27.07	30.03 RT	FOUND RAIL ROAD SPIKE - CS7545
506	115944.03	226681.04	-	-	FOUND 1/2" IRON ROD W/YELLOW PLASTIC CAP, "OR 932 WA 22098" - CS91011
507	116123.93	226976.82	1163+12.64	30.00 LT	FOUND SCRIBBED "X" IN SIDEWALK - ORIGIN UNKNOWN
508	116043.08	226682.89	-	-	FOUND 1" AXEL ROD - ORIGIN UNKNOWN
509	115799.70	226734.95	-	-	FOUND 1-1/2" ALUMINUM CAP, MARKED "TERRA 72306" - CS2007065
510	116124.21	226982.20	1163+17.77	31.62 LT	FOUND 5/8" IRON ROD - ORIGIN UNKNOWN
511	116362.64	226884.31	-	-	FOUND 2-1/2" BRASS CAP, MARKED "1993 PLS 1815" - CS93008
512	116339.72	226791.65	-	-	FOUND 2-1/2" BRASS CAP, MARKED "1993 PLS 1815" - CS93008
513	116308.40	226661.80	-	-	FOUND 2-1/2" BRASS CAP, MARKED "1993 PLS 1815" - CS93008
514	116257.66	226661.20	1159+73.47	79.64 LT	FOUND 2-1/2" BRASS CAP, MARKED "1993 PLS 1815" - CS93008
515	116216.23	226614.85	1159+39.10	27.84 LT	FOUND COPPER PLUG, MARKED "WH PACIFIC 12" - CS2002003
516	116262.21	226448.16	1157+66.20	30.20 LT	FOUND 2-1/2" BRASS CAP, MARKED "1993 PLS 1815" - CS93008
517	116362.54	226891.38	-	-	FOUND 2-1/2" BRASS CAP, MARKED "1993 PLS 1815" - CS93008
518	116358.13	227008.47	-	-	FOUND 2-1/2" BRASS CAP, MARKED "1993 PLS 1815" - CS93008
519	115590.15	226732.50	-	-	FOUND 1-1/2" ALUMINUM CAP, MARKED "TERRA 72306" - CS2007065
520	116219.47	226611.13	1159+34.68	30.03 LT	FOUND 2-1/2" BRASS CAP, "1993 PLS 1815" - CS93008
521	115946.37	226581.10	-	-	FOUND 3/8" IRON ROD W/YELLOW PLASTIC CAP, "OR 932 WA 22098" - CS91011
522	116023.77	226476.56	-	-	FOUND RAILROAD SPIKE IN ASPHALT PARKING LOT - ORIGIN UNKNOWN
523	116178.89	226532.74	1158+69.08	29.03 RT	FOUND 5/8" IRON ROD, NO CAP, BENT WESTERLY - CS91011
524	116047.12	226548.37	-	-	FOUND 1/3" IRON ROD, NO CAP - CS91011
525	116045.31	226583.60	-	-	FOUND 1/2" IRON ROD, LYING ON SIDE, W/YELLOW PLASTIC CAP, ILLEGIBLE - CS91011
526	115949.53	226437.24	-	-	FOUND 1/2" IRON ROD W/YELLOW PLASTIC CAP, UP 0.5', "OR 932 WA 22098" - CS91011
527	115937.43	226424.63	-	-	FOUND 3/4" IRON PIPE, UP 1.0' - ORIGIN UNKNOWN
528	116025.09	226416.43	-	-	FOUND 1/2" IRON ROD, NO CAP, BENT WESTERLY, IN ASPHALT - CS91011
529	116049.94	226414.67	-	-	FOUND 1/2" IRON ROD, NO CAP, IN GRAVEL - ORIGIN UNKNOWN

LEGEND

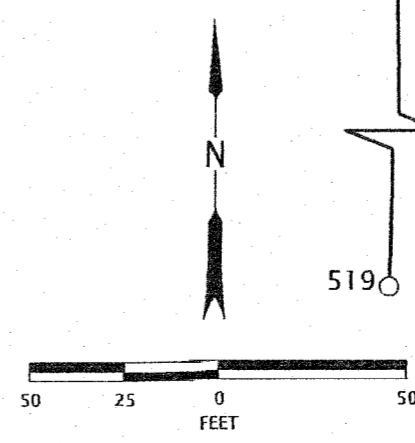
○	FOUND MONUMENT	---	EXISTING RIGHT-OF-WAY
▲	SET NETWORK POINT	—	RESOLVED RIGHT-OF-WAY
CS	COUNTY SURVEY NUMBER	( )	RECORD DATA PER ODOT DRG. 3B-14-8

STRUCTURE NO. \_\_\_\_\_  
BDS DWG. NO. \_\_\_\_\_  
CALC. BOOK \_\_\_\_\_  
HWY: 100 (US 30)  
M.P.: 49.3-49.5  
COUNTY HOOD RIVER  
DATE 10/06

REGISTERED PROFESSIONAL LAND SURVEYOR  
*[Signature]*  
OREGON MAY 10, 2022  
AARON B. BLAISDELL 99413  
RENEWALS: 12/31/2023

OREGON DEPARTMENT OF TRANSPORTATION  
HIGHWAY 30 AND RAND ROAD MONUMENT RECOVERY AND CONTROL SURVEY  
US HIGHWAY 30 (OLD COLUMBIA RIVER HIGHWAY)  
HOOD RIVER COUNTY  
Designer: Name \_\_\_\_\_  
Checker: JMW

SHEET NO. 2 OF 3



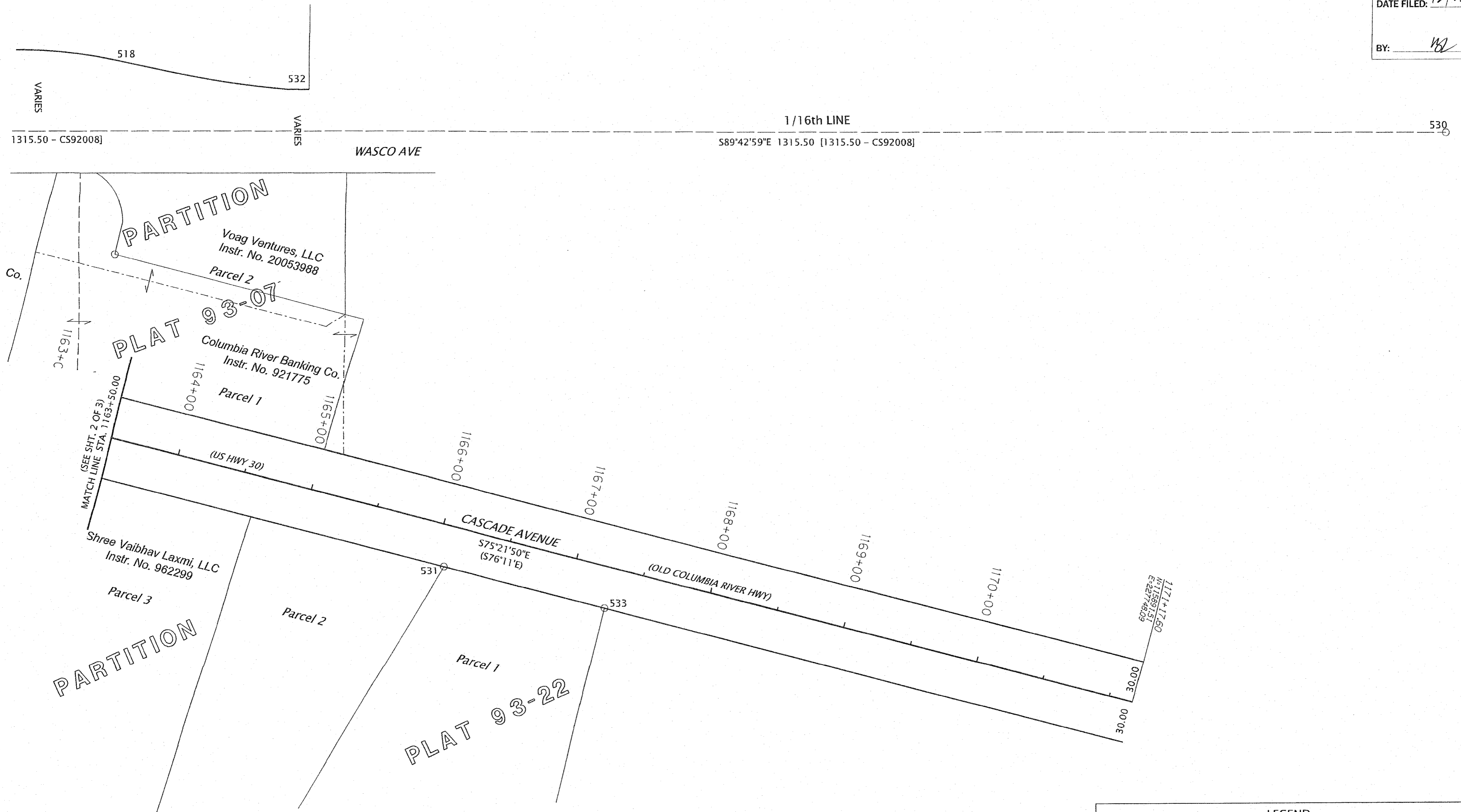
SW 1/4 SECTION 26, T. 3 N., R. 10 E., W.M.

HOOD RIVER COUNTY  
SURVEYOR'S OFFICE

CS# 2022 073

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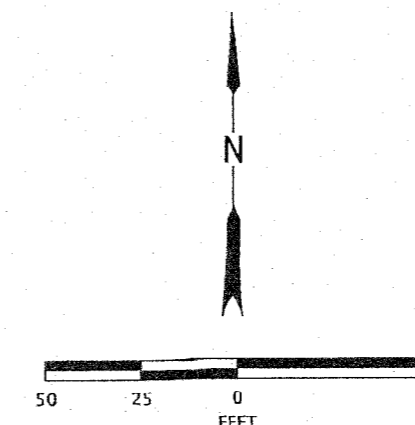
BY: *MB*



RECOVERED MONUMENT LIST

PT. NO.	LDP NORTHING	LDP EASTING	STATION	OFFSET	DESCRIPTION
530	116301.89	227977.25	-	-	FOUND RAIL ROAD SPIKE AT NE COR OF GOV LOT 6 - REFERENCED IN CS93008
531	115991.42	227247.31	1166+07.84	29.87 RT	FOUND 5/8" IR W/ RPC, ILLEGABLE - CS93069
532	116336.12	227135.10	-	-	FOUND 5/8" IR W/ RPC, MARKED "TERRA LS 1815" - CS93008
533	115960.98	227363.38	1167+27.84	30.00 RT	FOUND 5/8" IR W/ YPC, MARKED WA PLS 42690 OR PLS 59002" - CS20160918

LEGEND	
○	FOUND MONUMENT
▲	SET NETWORK POINT
CS	COUNTY SURVEY NUMBER HOOD RIVER SURVEY RECORDS
---	EXISTING RIGHT-OF-WAY
---	RESOLVED RIGHT-OF-WAY
( )	RECORD DATA PER ODOT DRG. 3B-14-8



STRUCTURE NO.	REGISTERED PROFESSIONAL LAND SURVEYOR	OREGON DEPARTMENT OF TRANSPORTATION
BDS DWG NO.	<i>[Signature]</i>	HIGHWAY 30 AND RAMP ROAD MONUMENT RECOVERY AND CONTROL SURVEY
CALC. BOOK	OREGON MAY 10, 2022	US HIGHWAY 30 (OLD COLUMBIA RIVER HIGHWAY) HOOD RIVER COUNTY
HWY: 100 (US 30) M.P.: 49.349.5	AARON B. BLAISDELL 99413	Designer: Name Reviewer: Name
COUNTY HOOD RIVER	RENEWS: 12/31/2023	Drafter: JML Checker: JMW
DATE 10/06		SHEET NO. 3 OF 3

CS# 2022 073