Colorado Department of Transportation
DEPARTMENT OF TRANSPORTATION
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Phone: 719-546-5496 FAX: 719-546-5414
Region 2 JPE

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Land Survey Control Diagram
Title Sheet

Project Number: IM 0251-334
Project Location: I-25 ILEX BRIDGE REPLACEMENT
PUEBLO COUNTY, COLORADO

Project Code:	Last Mod. Date	Subset	Sheet No.	Sheet Total
17666	07-25-12	4.01 of 4.05	4.01	

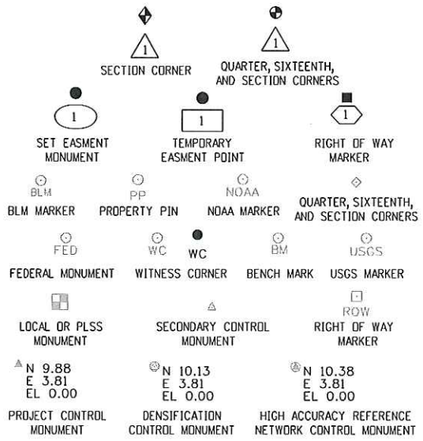
DEPARTMENT OF TRANSPORTATION
STATE OF COLORADO

LAND SURVEY CONTROL DIAGRAM

US Interstate Highway 25 - MP 97.70 to 98.37
Section 31, Township 20 South, Range 64 West
&
Section 6, Township 21 South, Range 64 West
of the 6th Principle Meridian
County of Pueblo

SHEET NO. INDEX OF SHEETS

SHEET NO.	INDEX OF SHEETS
4.01	(1) Title Sheet
4.02-4.03	(2) Monument Coordinate Tables
4.04-4.05	(2) Plan Sheet
	(5) Total Sheets



Note: For a complete listing of symbololgy used within this set of plans, please refer to the M-100-1 Standard Symbols of the Colorado Department of Transportation M&S Standards Publication dated July 2006. Existing features are shown as screened weight (gray scale). Proposed or new features are shown as full weight without screening.

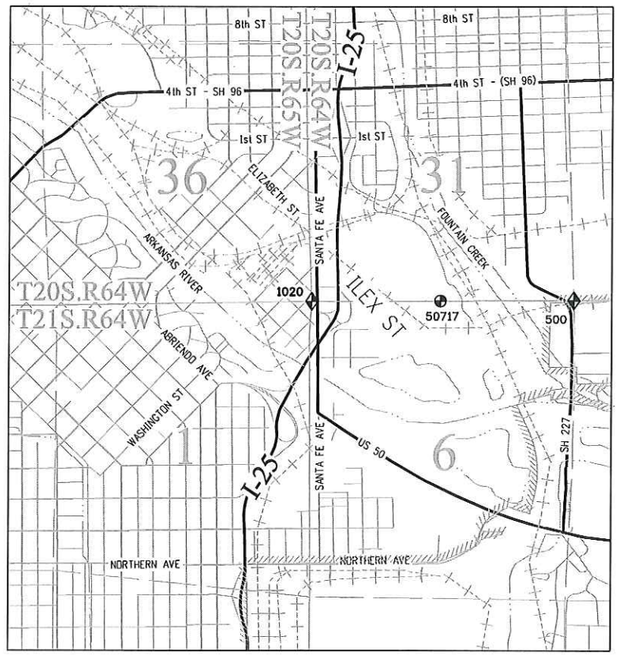
General Notes:

1. This Land Survey Control Diagram is not a boundary survey of the adjoining property and is prepared for the Colorado Department of Transportation purposes only. No determination has been made to determine if the found monuments as shown are in their proper position or if they are at the corners they are intended to monument.

2. Title policy, title commitment, and title research are not part of this survey, therefore easements, rights, and restrictions of record were not researched and are not shown on this diagram. The verification of the physical evidence with relation to easements, rights of ways, property boundaries, and restrictions, as described in the instruments of record, were not included in this control survey.

3. This plan set is subject to change and may not be the most current set. It is the user's responsibility to verify with CDOT that this set is the most current. The information contained on the attached drawing is not valid unless this copy bears an original signature of the Professional Land Surveyor hereon named.

4. Refer to the M-629-1 Survey Monuments of the Standard Plans dated July, 2006 found in The Colorado Department of Transportation, M & S Standards for typical survey monument descriptions.



PROJECT LOCATION MAP

0' 1,500' 3,000' 6,000'
LINEAL UNITS = SURVEY FEET

N

Basis of Bearings: All bearings are based on the south line of the SW 1/4 of Section 31, Township 20 South, Range 64 West, of the 6th Principal Meridian. Bearing being S88° 22'15"E. The SW corner of said Section 31 being a 3 1/4" Brass Cap in concrete and the S 1/4 corner of said Section being a #4 rebar.

Basis of Elevations: Project elevations are based on NGS Monument, Abriendo, PID: JK1392, with a NAVD 88 elevation of 4747.76 ft. (Supplied by CDOT).

COORDINATE DATUM: Project coordinates are modified Colorado State Plane South Zone NAD '83/(92) (CHARN) coordinates. The combined elevation/scale factor used to modify the coordinates from state plane to project coordinates is 1.00026241213, supplied by CDOT. The resulting project coordinates are truncated by 1,000,000 in the Northing and 3,000,000 in the Easting after converting from state plane coordinates to project coordinates.

Project Coordinates Northing US Survey Feet = (State Plane Coordinate Northing * 1.00026241213 - 1,000,000).
Project Coordinates Easting US Survey Feet = (State Plane Coordinate Easting * 1.00026241213 - 3,000,000).

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

SURVEYOR STATEMENT (LAND SURVEY CONTROL DIAGRAM)

I, Micheal L. Bouchard, a professional land surveyor licensed in the State of Colorado, do hereby state to the Colorado Department of Transportation this Land Survey Control Diagram was prepared and the field survey it represents was performed under my responsible charge and, based upon my knowledge, information and belief is in accordance with applicable standards of practice defined by Colorado Department of Transportation publications. This statement is not a guaranty or warranty, either expressed or implied.

PLS No. 24941

COLORADO LICENSED
MICHEAL L. BOUCHARD
24941
PROFESSIONAL LAND SURVEYOR

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Land Survey Control Diagram
Coordinate Tables

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Project Location: I-25 ILEX BRIDGE REPLACEMENT
PUEBLO COUNTY, COLORADO

Project Code:	Last Mod. Date	Subset	Sheet No.	Sheet Total
17666	07-25-12	4.02 of 4.05	4.02	

CHARN GEODETIC COORDINATE SUMMARY TABLE

Point No.	Geodetic Coordinates NAD-83(92)		Elip Height	Ortho Height	Mapping	Grid Scale Factor	NAD 83(92) Zone South		Description
	Latitude(N)	Longitude(W)	(NAVD88)(m)	(m)	Angle		SP Northing(m)	SP Easting(m)	
abriendo	38ø15'00.25293"N	104ø36'34.51689"W	1427.905	1447.120	0ø32'46"	0.999971684	480907.8303	992339.1938	3 1/4" BRASS CAP IN CONC 1993 NGS ABRIENDO
Deherrerra	38ø14'21.68685"N	104ø31'40.42712"W	1412.604	1432.114	0ø35'47"	0.999970346	479790.0917	999501.7649	3 1/4" BRASS CAP IN CONC 1995 NGS DEHERRERRA
polhill	38ø12'24.05082"N	104ø39'43.60333"W	1491.332	1510.310	0ø30'50"	0.999966482	476049.3607	987785.1167	3 1/4" BRASS CAP IN CONC 1995 NGS POLHILL
pueblocbl973	38ø18'54.58612"N	104ø34'18.35466"W	1489.389	1508.717	0ø34'10"	0.999980567	488164.9378	995577.9014	3 1/4" BRASS CAP IN CONC PUEBLO CBL 973

GEODETIC COORDINATE TABLE

Point No.	Geodetic Coordinates NAD-83(92)		Elip Height	Ortho Height	Mapping	Grid Scale Factor	NAD 83(92) Zone South		Description
	Latitude(N)	Longitude(W)	(NAVD88)(m)	(m)	Angle		SP Northing(m)	SP Easting(m)	
1	38ø15'19.31204"N	104ø36'24.74682"W	1403.074	1422.300	0ø32'52"	0.999972358	481497.7189	992571.1148	PANEL POINT PK & WASHER
2	38ø15'19.93851"N	104ø36'08.64251"W	1399.277	1418.519	0ø33'02"	0.999972381	481520.7871	992962.4461	PANEL POINT FGI RPC
3	38ø15'35.24978"N	104ø36'25.06743"W	1398.741	1417.966	0ø32'52"	0.999972929	481989.0288	992558.6216	PANEL POINT NAIL & WASHER
4	38ø15'34.75977"N	104ø36'08.64902"W	1398.546	1417.788	0ø33'02"	0.999972911	481977.7475	992957.8961	PANEL POINT FGI RPC
5	38ø15'47.53871"N	104ø36'25.77107"W	1399.419	1418.644	0ø32'52"	0.999973372	482367.7521	992537.8939	PANEL POINT FGI RPC
6	38ø15'49.36368"N	104ø36'07.63312"W	1406.940	1426.184	0ø33'03"	0.999973439	482428.2459	992978.2634	PANEL POINT FGI RPC
10	38ø15'32.87524"N	104ø36'11.50075"W	1399.369	1418.608	0ø33'00"	0.999972843	481918.9783	992889.1285	PROJECT CONTROL
11	38ø15'32.81695"N	104ø36'11.90401"W	1399.143	1418.382	0ø33'00"	0.999972841	481917.0870	992879.3425	PROJECT CONTROL
12	38ø15'26.06671"N	104ø36'16.11886"W	1396.917	1416.151	0ø32'57"	0.999972599	481707.9840	992778.8748	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
13	38ø15'25.20710"N	104ø36'19.49758"W	1397.437	1416.668	0ø32'55"	0.999972569	481680.6937	992696.9898	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
14	38ø15'32.03123"N	104ø36'19.35197"W	1397.481	1416.712	0ø32'55"	0.999972813	481891.1259	992698.5141	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
15	38ø15'41.83985"N	104ø36'22.32465"W	1401.260	1420.489	0ø32'54"	0.999973166	482192.8490	992623.3536	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
16	38ø15'40.69354"N	104ø36'16.61137"W	1396.710	1415.945	0ø32'57"	0.999973125	482158.8366	992762.5780	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
17	38ø15'38.85183"N	104ø36'16.24712"W	1399.558	1418.793	0ø32'57"	0.999973058	482102.1388	992771.9771	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
977	38ø15'22.81486"N	104ø36'23.38727"W	1405.780	1425.007	0ø32'53"	0.999972483	481606.0322	992603.1341	3 1/4" AL CAP CDOT MP 97.22
56	38ø15'05.77511"N	104ø36'29.56906"W	1421.359	1440.579	0ø32'58"	0.999975141	481079.2350	992457.8649	3 1/4" AL CAP CDOT MP 99.17
70	38ø16'35.55871"N	104ø36'15.46012"W	1408.313	1427.545	0ø32'49"	0.999971879	483850.6860	992774.3406	3 1/4" AL CAP CDOT MP 97.7

PROJECT COORDINATE TABLE

Point No.	Project Coordinates		Elev(ft) (NAVD88)	Description
	Northing(ft)	Easting(ft)		
abriendo	578192.47	256553.84	4747.76	3 1/4" BRASS CAP IN CONC 1993 NGS ABRIENDO
Deherrerra	574524.39	280059.21	4698.53	3 1/4" BRASS CAP IN CONC 1995 NGS DEHERRERRA
polhill	562248.46	241608.75	4955.08	3 1/4" BRASS CAP IN CONC 1995 NGS POLHILL
pueblocbl973	602008.08	267182.29	4949.85	3 1/4" BRASS CAP IN CONC PUEBLO CBL 973
1	580128.30	257314.93	4666.33	PANEL POINT PK & WASHER
2	580204.01	258599.16	4653.93	PANEL POINT FGI RPC
3	581740.63	257273.94	4652.11	PANEL POINT NAIL & WASHER
4	581703.61	258584.23	4651.53	PANEL POINT FGI RPC
5	582983.49	257205.91	4654.33	PANEL POINT FGI RPC
6	583182.01	258651.07	4679.07	PANEL POINT FGI RPC
10	581510.75	258358.56	4654.22	PROJECT CONTROL
11	581504.54	258326.44	4653.48	PROJECT CONTROL
12	580818.33	257996.74	4646.16	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
13	580728.77	257728.02	4647.85	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
14	581419.34	257733.02	4648.00	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
15	582409.51	257486.36	4660.40	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
16	582297.89	257943.26	4645.48	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
17	582111.82	257974.10	4654.82	SET #5 REBAR W/ RPC - FARNSWORTH CONTROL POINT
56	578754.97	256943.28	4726.30	3 1/4" AL CAP CDOT MP 97.22
70	587850.02	257981.86	4683.54	3 1/4" AL CAP CDOT MP 99.17
977	580483.75	257420.01	4675.21	3 1/4" AL CAP CDOT MP 97.7

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Land Survey Control Diagram
Monument Coordinate Tables

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PUEBLO COUNTY, COLORADO

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FOUND ALIQUOT MONUMENT COORDINATE TABLE

Point No.	Northing(ft)	Easting(ft)	Description
500	581357.351	262539.534	FND TACK IN LEAD PLUG IN STONE IN RANGE BOX
1020	581391.634	257231.206	FND 3-1/4" BRASS CAP IN CONC
50717	581315.592	259904.738	FND #4 REBAR

□
ROW

FOUND R.O.W. MONUMENT COORDINATE TABLE

Point No.	Northing(ft)	Easting(ft)	Description

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PP

FOUND BOUNDARY MONUMENT COORDINATE TABLE

Point No.	Northing(ft)	Easting(ft)	Description
2007	581335.63	257627.23	FND BENT #4 REBAR
2008	581235.16	257604.61	FND YPC - 10902
2024	582298.41	257878.55	FND YPC IN 8" DIA CONC - PLS 16128
2040	581323.77	257844.46	FND #6 REBAR
5001	581328.97	257371.19	FND TACK W/ 3/4" BRASS TAG IN LEAD PLUG PE-LS 10402
5002	581365.29	258082.92	FND YPC - M&A INC PLS 16128
5003	581365.36	258082.80	FND BENT #4 REBAR
5004	581555.24	257642.95	FND RPC - COLO NO 6128
5005	581420.75	257657.83	FND YPC - LS 6128
5006	581394.29	257580.76	FND YPC - COLO REG 6128
5007	581514.45	257578.06	FND YPC - COLO REG 6128
5008	581512.60	257502.90	FND YPC - COLO REG 6128
5009	581592.30	258284.78	FND YPC - M&A INC PLS 6128
5010	581890.38	257998.24	FND YPC - PLS 6128
5011	582410.50	257415.18	FND YPC - PLS 6128
5012	581740.46	257865.42	FND BENT #4 REBAR W/ YPC ILLEG
5013	581228.83	257373.57	FND TACK W/ 1/4" BRASS SHINER - PE-LS 10402
5014	581228.78	257373.77	FND #4 REBAR W/ YPC - COLO REG 6128
5015	581031.66	257475.87	FND CHISELED X ON TOP OF CONC. WALL
5016	581392.07	257489.72	FND #4 REBAR W/ BROKEN ILLEG YPC
5017	581392.38	257505.72	FND ILLEG YPC
5018	583076.31	257402.37	FND YPC - COLO REG 12933
5019	583174.23	257324.92	FND #4 REBAR
5020	583174.50	257323.87	FND 6-SIDED NUT
5021	583146.37	257346.43	FND 6-SIDED NUT

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PP

FOUND BOUNDARY MONUMENT COORDINATE TABLE

Point No.	Northing(ft)	Easting(ft)	Description
5025	581516.17	257657.57	FND YPC - LS 6128
5026	581907.51	257493.32	FND #4 REBAR W/ BROKEN YPC
5030	582065.70	257484.59	FND RPC - AM INC PLS 16128
5031	581839.30	257565.55	
5032	581765.80	257496.46	FND OPC - LS 22359
5033	581767.47	257481.02	FND 60D NAIL W/ FLAGGING
5034	581913.86	257476.89	FND ILLEG YPC
5035	581762.34	257360.59	FND BROKEN ILLEG YPC
5036	581746.57	257360.66	FND POSS 60D NAIL
5037	581912.13	257356.09	FND BENT #4 REBAR
5038	582085.45	257352.94	FND YPC - AM INC PLS 16128
5039	582289.90	257348.90	FND BENT #8 REBAR
5040	582243.76	257347.70	FND 1 1/2" AL CAP - ILLEG
5050	580856.64	259369.22	FND YPC M&A PLS16128 (1' E OF FENCE)
5051	580848.48	259426.97	FND YPC M&A PLS16128 (1' FROM PATH)
5052	581942.76	258490.23	FND YPC PLS 16128
5053	581112.93	258822.13	YPC PLS 16128 (CALC)
5054	582473.62	257342.64	FND YPC M&A PLS16128
5055	583159.42	258297.32	FND YPC M&A PLS16128
5056	583271.63	258619.72	FND YPC M&A PLS16128
5057	583250.73	258693.98	FND YPC M&A PLS16128
5058	583146.45	259078.32	FND YPC M&A PLS16128
5059	583226.10	258495.83	FND YPC M&A PLS16128
5060	583030.81	257915.94	FND YPC ILLEG
5061	582915.62	257905.75	FND YPC M&A PLS16128
5062	582461.91	257883.53	FND YPC M&A PLS16128
5063	582432.23	257948.19	FND YPC M&A PLS16128
5064	582546.95	257340.35	FND YPC PLS16128 IN 8" DIA CONC
50710	581326.04	259499.06	FND YPC
50711	581454.32	259479.15	FND YPC M&A PLS1612?
50712	581394.14	259415.14	FND #4 REBAR NO CAP
50713	581455.44	259357.11	FND YPC AM INC PLS16128
50716	581332.59	259252.63	FND YPC
70098	581389.02	257369.93	#4 REBAR THROUGH YPC TOP -COLO REG LS 6XX88

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FOUND EASEMENT MONUMENT COORDINATE TABLE

Point No.	Northing(ft)	Easting(ft)	Description

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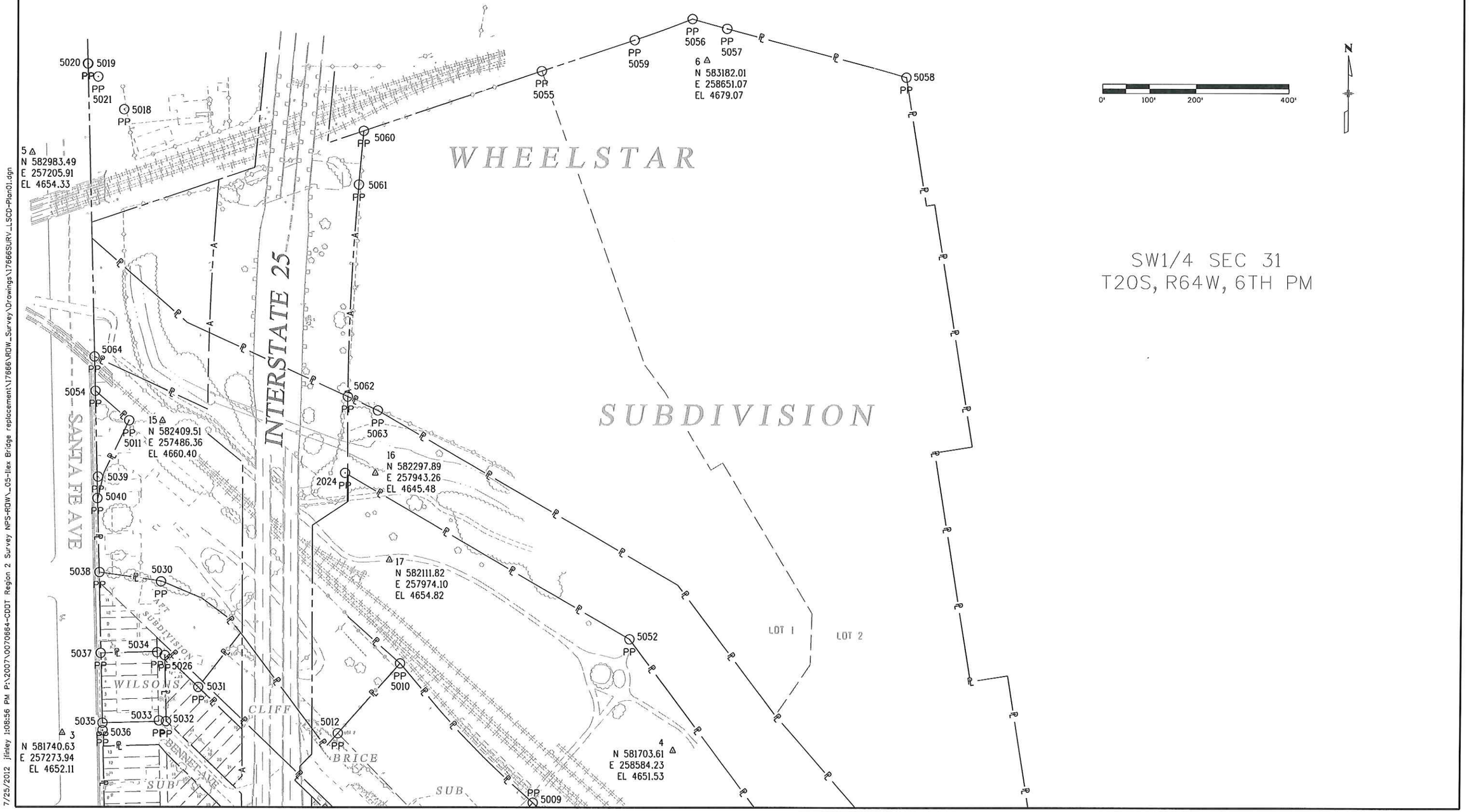

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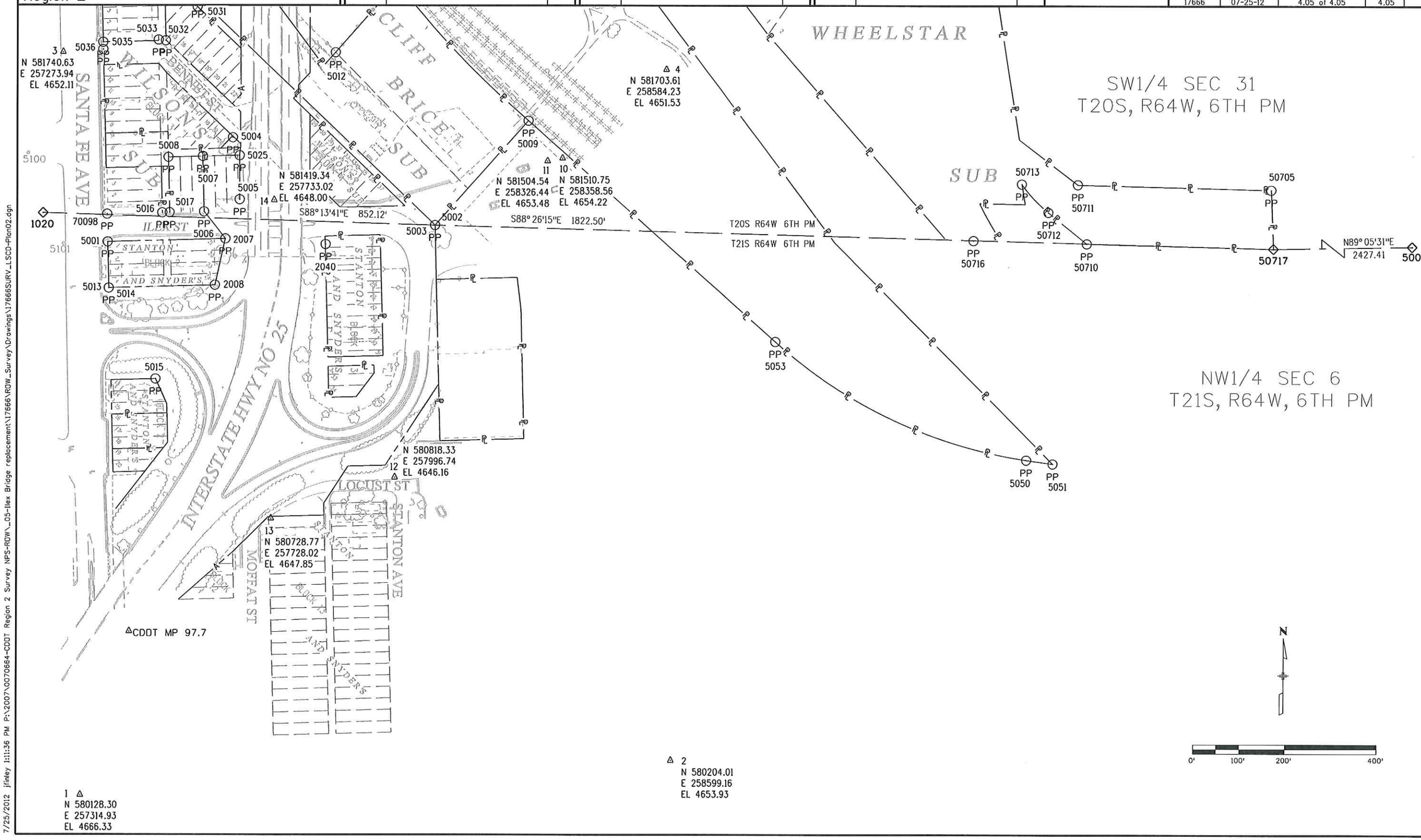

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