



Region 1 Right of Way
18500 East Colfax Ave.
Aurora, Colorado 80011
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Right of Way Plans Unit: Kevin Williams

Sheet Revisions		
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Right of Way Plans				
Control Diagram				
Proj. No. IM 0703-273				
Hogback Park N Ride Phase II				
I-70 & Morrison Road				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
13385	04-18-2002	1 of 3	3	13

SURVEY CONTROL DIAGRAM

FOR THE COLORADO DEPARTMENT OF TRANSPORTATION, REGION 1
HOGBACK PARK N RIDE PHASE II I-70 & MORRISON ROAD
CDOT PROJECT NUMBER IM 0703-273
LYING IN SECTION 15, TOWNSHIP 4 SOUTH, RANGE 70 WEST, OF THE 6TH PRINCIPAL MERIDIAN,
COUNTY OF JEFFERSON, STATE OF COLORADO.

GEODETIC COORDINATE SUMMARY TABLE (ADJUSTED FIELD DATA)

POINT NAME	GEODETIC COORDINATES NAD-83(92) (CHARN)		ELLIP. HEIGHT (NAVD 88)sft	MAPPING ANGLE	SCALE FACTOR	NAD 83/92 NORTHING (m)	ZONE 0502 EASTING (m)	NAD 83/92 ZONE 0502		ELEV. (NAVD 88)sft	DESCRIPTION
	LATITUDE	LONGITUDE						NORTHING (sft)	EASTING (sft)		
CURLY	39°43'28.76492"N	105°09'45.24087"W	5833.65	0°12'46.13592"	0.99999508	514811.899	943331.735	1689012.04	3094914.20	5886.	NGS PID AA7126
E 1/4 COR.S15	39°42'13.03467"N	105°12'10.73576"W	6355.33	0°11'14.37379"	0.99999115	512464.201	939874.373	1681309.63	3083571.17	6406.36	3.25" ACP PLS 16837
HILL	39°42'11.46043"N	105°12'37.63618"W	6550.33	0°10'57.40797"	0.99999107	512413.581	939233.694	1681143.56	3081469.21	6601.12	1.5" ACP STAMPED "HILL"
LAURA	39°38'01.46498"N	105°11'35.41773"W	6094.97	0°11'36.64845"	0.99997907	504708.451	940741.935	1655864.31	3086417.50	6146.	NGS PID AA7130
MP 258.6	39°41'50.70532"N	105°12'18.74725"W	6384.92	0°11'09.32102"	0.99999002	511774.922	939685.754	1679048.22	3082952.35	6435.78	CDOT TYPE 2 MONUMENT
MP 258.8	39°41'59.10372"N	105°12'16.12979"W	6361.11	0°11'10.97183"	0.99999045	512034.138	939747.271	1679898.67	3083154.17	6412.09	CDOT TYPE 2 MONUMENT
MP 284.3	39°41'44.31198"N	105°12'36.80752"W	6466.35	0°10'57.93060"	0.99998970	511576.361	939256.106	1678396.78	3081542.74	6517.11	CDOT TYPE 2 MONUMENT
MP 284.4	39°41'47.36502"N	105°12'31.81518"W	6433.39	0°11'01.07922"	0.99998985	511670.900	939374.747	1678706.94	3081931.98	6484.14	CDOT TYPE 2 MONUMENT
PP 100	39°41'50.84328"N	105°12'15.51925"W	6334.21	0°11'11.35689"	0.99999003	511779.426	939762.646	1679063.00	3083204.61	6385.14	NGS PID KK2102
PP 108	39°42'11.81779"N	105°12'15.21635"W	6283.28	0°11'11.54793"	0.99999109	512426.323	939767.756	1681185.36	3083221.38	6334.21	NO. 5 REBAR
RMCL 100	39°42'37.86287"N	105°17'37.05125"W	7693.09	0°07'48.57003"	0.99999243	513208.392	932099.000	1683751.20	3058061.47	7741.	NO. 5 REBAR
RMCL 40	39°41'45.57996"N	105°12'35.38115"W	6465.53	0°10'58.83016"	0.99998976	511615.574	939289.963	1678525.43	3081653.82	6516.26	NGS PID AA7134
SE CORNER S.15	39°41'47.16548"N	105°12'10.29226"W	6348.15	0°11'14.65350"	0.99998984	511666.406	939887.547	1678692.20	3083614.40	6399.10	CHISELED X IN STONE
SIXTEENTH COR	39°42'13.27492"N	105°11'53.73424"W	6135.94	0°11'25.09647"	0.99999117	512472.945	940279.365	1681338.32	3084899.88	6187.11	1.5" ACP, LS 438

CDOT TYPE 2 SURVEY CONTROL MONUMENTS SET BY JFSA LOCATION DESCRIPTIONS



CP 258.6

APPROXIMATELY 450 FT. WEST OF
THE CENTERLINE OF STATE HIGHWAY 26, SOUTH
OF I-70. 300 FT. SOUTH OF THE CENTERLINE
OF THE EB I-70 OFF RAMP, 5 FT. NORTH
OF THE EXISTING R.O.W. FENCE, ON A HIGH RIDGE.



CP 258.8

NORTHSIDE OF I-70 AT THE EAST END
OF OVERPASS. 4 FT. NORTH OF GUARDRAIL AND
16.5 FT. FROM THE END OF THE OVERPASS
BRIDGE ABUTEMENT.



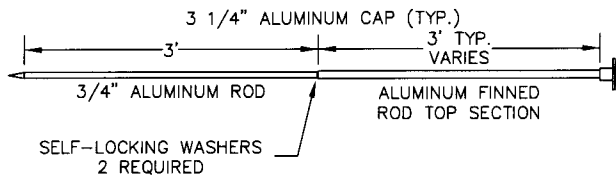
CP 284.3

SOUTHSIDE OF STATE HIGHWAY 40, 4/10 MI.
FROM INTERSECTION OF HIGHWAY 40 AND HIGHWAY 26.
23.8 FT. SOUTH OF CENTERLINE OF HIWAY 40 AND
5.8 FT. FROM GUARDRAIL.



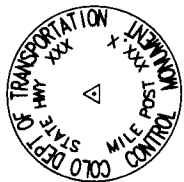
CP 284.4

SOUTHSIDE OF STATE HIGHWAY 40, 3/10 MI.
FROM INTERSECTION OF HIGHWAY 40 AND HIGHWAY 26.
21 FT. SOUTH OF CENTERLINE OF HIWAY 40 AND
4.7 FT. FROM GUARDRAIL.



(no scale)

CDOT TYPE 2 MONUMENT
TYPICAL DETAIL



GENERAL NOTES:

- THIS CONTROL SURVEY IS FOR THE USE OF THE COLORADO DEPARTMENT OF TRANSPORTATION. THIS SURVEY IS NOT A COMPLETE BOUNDARY SURVEY.
- NO GUARANTEE AS TO THE ACCURACY OF THE INFORMATION CONTAINED ON THIS DIAGRAM IS EITHER STATED OR IMPLIED UNLESS THIS COPY BEARS AN ORIGINAL SIGNATURE OF THE REGISTERED LAND SURVEYOR HEREON NAMED.
- NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. IN NO EVENT, MAY ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
- THE GPS FIELD WORK WAS PERFORMED BY JFSA FIELD CREWS IN JANUARY 2002. VALUES LISTED ON ALL POINTS HEREON WERE DETERMINED BY FAST-STATIC, REAL-TIME KINEMATIC (RTK) GPS AND CONVENTIONAL OBSERVATIONS. FAST-STATIC GPS DATA WAS REDUCED BY AREA SURVEYING CONSULTANTS INC. BASED ON HORIZONTAL DATUM: NAD 83/92
- PRIMARY SURVEY CONTROL PRECISION (FAST STATIC, RTK GPS AND CONVENTIONAL METHODS) COMPUTED TO EXCEED COLORADO DEPARTMENT OF TRANSPORTATION MINIMUM HORIZONTAL CONTROL TOLERANCE FOR TYPE A SURVEY (± 0.10 FEET AT 95 % CERTAINTY).
- CONVERSION OF COLORADO STATE PLANE CENTRAL ZONE TO MODIFIED DATUM PLANE COORDINATES (METERS) WAS MADE USING 1.00030492 AS AN AVERAGED COMBINED SCALE FACTOR. CONVERSION FROM METERS TO US SURVEY FEET 3937/1200.
- TOPOGRAPHIC AND NATURAL FEATURES SHOWN ON THIS DOCUMENT ARE FOR ORIENTATION PURPOSES ONLY.
- MONUMENT RECORDS HAVE BEEN FILED PER COLORADO REVISED STATUTES 38-53-103.
- BASIS OF BEARINGS: THE EAST LINE OF THE SOUTHEAST 1/4 OF SECTION 15, TOWNSHIP 4 SOUTH, RANGE 70 WEST, 6th P.M. IS MONUMENTED AT THE EAST 1/4 CORNER OF SAID SECTION 15 WITH A 3 1/4" DIAMETER ALUMINUM CAP "LANE ENG. & SURVEYING, INC., 1997, PLS 16837". THE SOUTHEAST CORNER OF SAID SECTION 15 IS MONUMENTED WITH A CHISELED X IN A 1.5' X 1.5' NATIVE STONE. THE LINE FROM THE EAST 1/4 CORNER OF SAID SECTION 15 TO THE SOUTHEAST CORNER OF SAID SECTION 15 BEARS A PROJECT SPECIFIC DATUM OF SOUTH 00° 56' 46" EAST, WITH A DISTANCE OF 2,618.59 FEET, PER CDOT PROJECT (IM 0703-273), PROJECT CODE 13385. SAID POINTS ARE GRAPHICALLY SHOWN ON THE SURVEY CONTROL DIAGRAM SHEET 3A.
- BASIS OF ELEVATIONS: ELEVATIONS ARE BASED ON F445 HAVING A NAVD88 ELEVATION OF 6395.65 FEET. STAMPED "F445", IS A CDOT BRASS TABLET SET IN THE NORTHSIDE OF THE NORTHERLY CENTER BRIDGE PIER AT STATE HIGHWAY 26 AND I-70.

SURVEYOR'S STATEMENT:

I, WILLIAM G. BUNTROCK, A REGISTERED LAND SURVEYOR IN THE STATE OF COLORADO, HEREBY STATE THAT THE FIELD WORK, AS WELL AS, THIS SURVEY CONTROL DIAGRAM WERE DONE BY ME, OR UNDER MY DIRECT RESPONSIBILITY, SUPERVISION, AND CHECKING, FOR AND ON BEHALF OF THE COLORADO DEPARTMENT OF TRANSPORTATION, REGION NO. 1.

WILLIAM G. BUNTROCK P.L.S. #35585

COUNTY SURVEYORS DEPOSIT

DEPOSITED THIS 14th DAY OF April AD, 2003 AT

O'CLOCK M. IN BOOK AT PAGE OF THE COUNTY

SURVEYOR'S LAND SURVEY PLATS AND RIGHTS OF WAY SURVEYS, JEFFERSON COUNTY, COLORADO.

RECEPTION No. F1723952

ASSIGNED BY

TITLE



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Sheet Revisions		
04/04	REVISE PARCEL 102rev	JH
	ADD PARCELS SE101, SE102	
09/04	REVISE PARCEL 102rev2	JH
	DELETE PARCELS 101X, SE101, SE102	

Sheet Revisions		
mm/yy	XXXXX	XXX

Sheet Revisions		
mm/yy	XXXXX	XXX

JFS&A
J.F. SATO AND ASSOCIATES
Engineering, Environmental,
Surveying and Program
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5898 South Rapp Street
Littleton, Colorado 80120
Phone 303.797.1200
Fax 303.797.1187

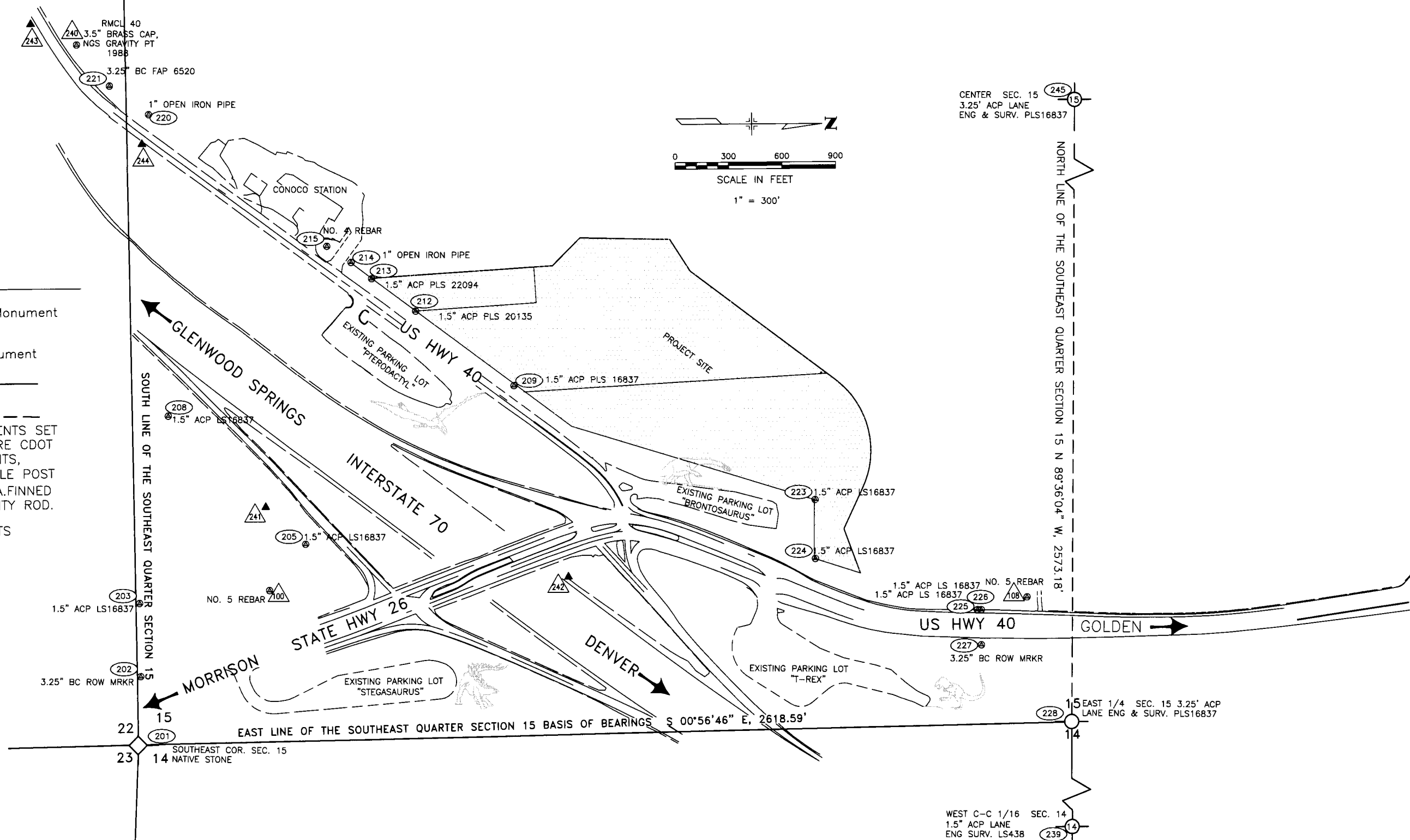
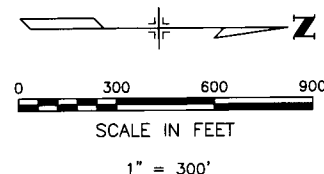
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COUNTY OF JEFFERSON, STATE OF COLORADO.

246 1.5" ACP ON NO. 5
REBAR STAMPED "HILL"

- LEGEND**
- Section Corner Monument
 - 1/4 Corner Monument
 - Section Line
 - Quarter Line
 - CONTROL MONUMENTS SET BY JFSA. THEY ARE CDOT TYPE 2 MONUMENTS, 3" ALUMINUM MILE POST CAP ON A 3/4" DIA. FINNED ALUMINUM SECURITY ROD.
 - FOUND MONUMENTS AS SHOWN





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COUNTY OF JEFFERSON, STATE OF COLORADO.

PROJECT COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

POINT NAME		PROJECT COORDINATES US FT		ELEV. (NAVD 88)	DESCRIPTION
		NORTHING	EASTING		
100	PP 100	1679574.979	3084144.740	6385.14	NO. 5 REBAR
108	PP 108	1681697.987	3084161.515	6334.21	NO. 5 REBAR
201	SE COR SEC 15	1679204.070	3084554.660	6399.10	CHISELED X IN NATIVE STONE
202	ROW MARKER	1679206.220	3084362.320	N/A	3.25" BC ROW MONUMENT
203	PROP COR	1679204.580	3084159.990	N/A	1.5" ACP PLS16837
204	PROP COR	1679570.170	3084126.360	N/A	1.5" ACP PLS16837
205	PROP COR	1679672.190	3083997.590	N/A	1.5" ACP PLS16837
208	PROP COR	1679286.630	3083635.830	N/A	1.5" ACP PLS16837
209	PROP COR	1680257.830	3083557.010	N/A	1.5" ACP PLS16837
212	PROP COR	1679983.250	3083345.470	N/A	1.5" ACP PLS20135
213	PROP COR	1679860.200	3083253.410	N/A	1.5" ACP PLS22094
214	PROP COR	1679802.690	3083207.350	N/A	1" OPEN IRON PIPE
215	NO. 4 REBAR	1679734.890	3083161.590	N/A	NO. 4 REBAR
220	PROP COR	1679234.200	3082788.610	N/A	1" IRON PIPE
221	ROW MARKER	1679125.080	3082707.190	N/A	3.25" BC FAP 6520
223	PROP COR	1681103.350	3083884.060	N/A	1.5" ACP PLS16837
224	PROP COR	1681103.610	3084048.960	N/A	1.5" ACP PLS16837
225	PROP COR	1681557.930	3084196.300	N/A	1.5" ACP PLS16837
226	PROP COR	1681568.710	3084196.430	N/A	1.5" ACP PLS16837
227	ROW MARKER	1681568.880	3084294.310	N/A	3.25" BC IN CONCRETE POST
228	E 1/4 COR S15	1681822.294	3084511.412	6406.36	3.25" ACP "LANE ENG.& SURVEY, PLS16837
239	W C-C 1/16 S14	1681850.993	3085840.527	6187.11	1.5" ACP "LANE ENGR. SERVICE" LS438
240	RMCL 40	1679037.245	3082593.477	6516.26	3.5" BC IN CONCRETE, NGS GRAVITY CP, 1988
241	MP 258.6	1679560.195	3083892.403	6435.78	CDOT TYPE 2 MONUMENT "MP 258,6"
242	MP 258.8	1680410.904	3084094.285	6412.09	CDOT TYPE 2 MONUMENT "MP 258,8"
243	MP 284.3	1678908.556	3082482.304	6517.11	CDOT TYPE 2 MONUMENT "MP 284.3"
244	MP 284.4	1679218.811	3082871.727	6484.14	CDOT TYPE 2 MONUMENT "MP 284.4"
245	CENTER SEC 15	1681840.210	3081938.305	6678.77	3.25" ACP "LANE ENG. & SURVEY." PLS 16837
246	HILL	1681656.174	3082408.811	6601.12	1.5" ACP ON NO. 5 REBAR "HILL"