



Sheet Revisions

Date	Description	Initials

Sheet Revisions

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Project Control Diagram

Title Sheet			
Project Number: FBR R200-266			
Project Location: BRIDGE REPLACEMENT			
J-15-G & J-14-C - ST HIGHWAY 9			
Project Code:	Last Mod. Date:	Subset:	Sheet No.:
23558	11-19-2020	3.01 of 3.04	3.01

DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

PROJECT CONTROL DIAGRAM

State Highway 9
Section 7

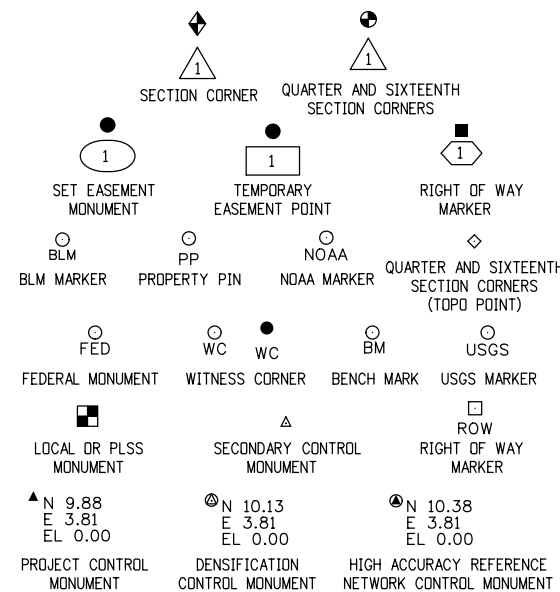
Township 16 South, Range 72 West
& Sections 23, 25 and 26
Township 15 South, Range 73 West
of the 6th Principal Meridian
Counties of Fremont and Park

SHEET NO.

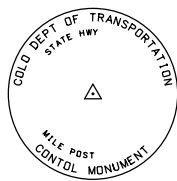
3.01
3.02
3.03-3.04

INDEX OF SHEETS

(1) Title Sheet
(1) Coordinate Tables
(2) Plan Sheet
(4) Total Sheets



Note: For a complete listing of symbolology 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. Existing features are shown as screened weight (gray scale). Proposed or new features are shown as full weight without screening.

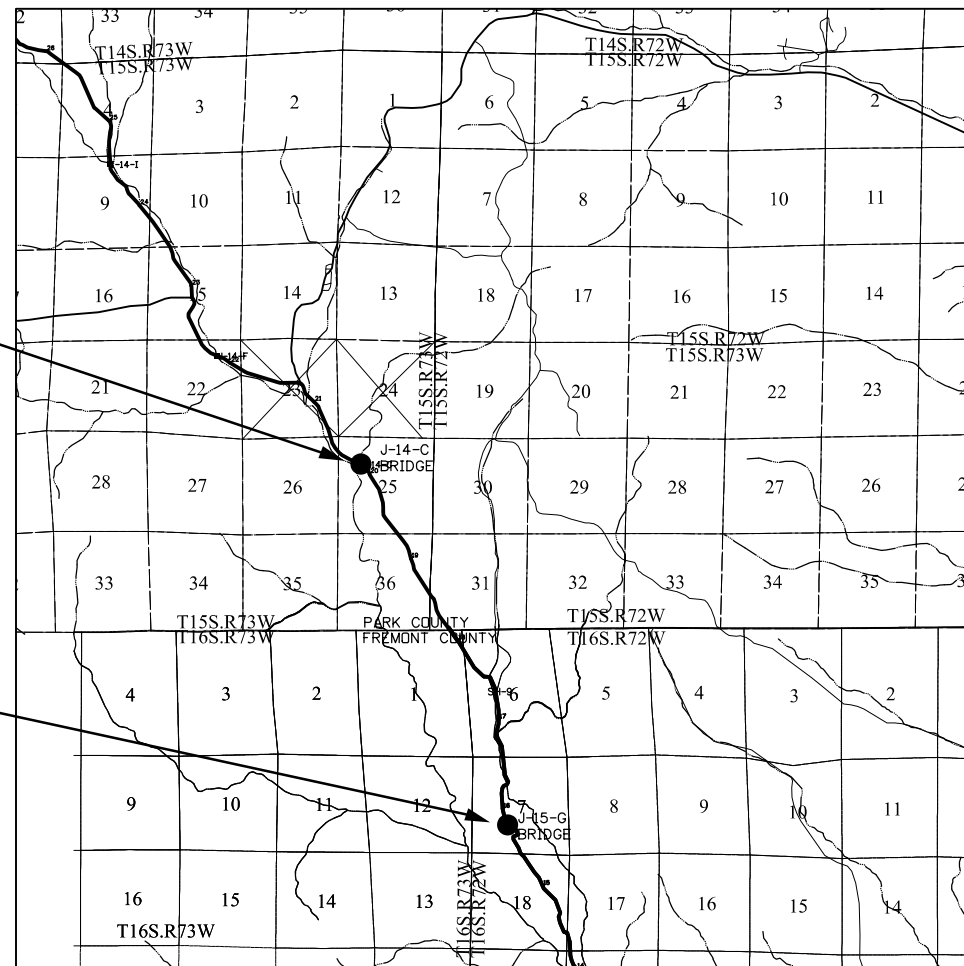


Typical Control Monument Cap
Not to Scale

▲ CM-MP - Control Point Monuments set by CDOT. They are CDOT Type 2 monuments, a 3 3/4" dia. aluminum control monument cap (as shown) on a 3' x 3/4" dia. aluminum security rod on a 3' x 3/4" dia. smooth aluminum rod.

General Notes:

1. This Project Control Diagram is not a boundary survey of the adjoining property and is prepared for the Colorado Department of Transportation purposes only.
2. 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.
3. Refer to the M-629-1 Survey Monuments of the Standard Plans found in The Colorado Department of Transportation, M & S Standards for typical survey monument descriptions.



PROJECT LOCATION MAP



SCALE: 1" = 10,560 US SURVEY FEET

Basis of Bearings: Bearings used in the calculations of coordinates are based on a grid bearing of S 76°14'42"E from CM-MP 203 to CM-MP 201. Both monuments are CDOT Type II, marked appropriately for their milepost location and control position. The survey data was obtained from a Global Positioning System (GPS) survey in September of 2020 and is based on the National Spatial Reference System (NSRS).

Basis of Elevations: Project elevations for J-15-G are based on a GPS elevation of 7949.77 on C.P. 154. Project elevations for J-14-C are based on a GPS elevation of 8283.00 on C.P. 203. All project control were then leveled through using the elevations listed above.

COORDINATE DATUM: Project coordinates are modified Colorado State Plane Central Zone NAD '83/(11) coordinates. The combined elevation/scale factor used to modify the coordinates from state plane to project coordinates is 1.0004436603. The resulting project coordinates are truncated by 1,000,000ft in the Northing and 2,000,000 ft in the Easting after converting from state plane coordinates to project coordinates.

Project Coordinates Northing US Survey Feet = (State Plane Coordinate Northing * 1.0004436603) - 1,000,000.

Project Coordinates Easting US Survey Feet = (State Plane Coordinate Easting * 1.0004436603) - 2,000,000.

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 (PROJECT CONTROL DIAGRAM)

I, Lorelei A. Ward, a professional land surveyor licensed in the State of Colorado, do hereby state to the Colorado Department of Transportation this Project 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. 34982



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Project/Land Survey Control Diagram			
Coordinate Tables			
Project Number: FBR R200-266			
Project Location: BRIDGE REPLACEMENTS			
J-14-C MP 20.11 & J-15-G MP 15.83			
Project Code:	Last Mod. Date	Subset	Sheet No.
23558	10-15-2020	3.01 of 3.04	3.02



GEODETIC COORDINATE TABLE									
Point No.	Geodetic Coordinates NAD-83(2011)		Elev Height (NAVD88)	Ortho Height (NAVD88)	Mapping Angle	Combined Scale Factor	NAD 83(2011) Zone 0502		Description
	Latitude(N)	Longitude(W)					SP Northing (f)	SP Easting (f)	
154	38°40'02.05263"	-105°28'50.69659"	7,902.05	7,949.77	0°00'43.7"	0.999586643	1,303,705.04	3,005,496.59	CDOT TYPE II MONUMENT
157	38°40'12.34487"	-105°28'58.37261"	7,943.88	7,991.54	0°00'38.9"	0.999584270	1,304,746.12	3,004,887.59	CDOT TYPE II MONUMENT
159	38°40'11.95241"	-105°29'08.00937"	7,976.26	8,023.92	0°00'32.8"	0.999582737	1,304,706.28	3,004,123.32	CDOT TYPE II MONUMENT
195	38°42'54.90242"	-105°30'40.39565"	8,405.92	8,452.76	-0°00'25.5"	0.999556619	1,321,190.80	2,996,798.30	CDOT TYPE II MONUMENT
201	38°43'18.77890"	-105°30'52.84544"	8,252.02	8,298.76	-0°00'33.3"	0.999563206	1,323,606.38	2,995,811.94	CDOT TYPE II MONUMENT
203	38°43'21.11017"	-105°31'05.01144"	8,236.28	8,283.00	-0°00'41.0"	0.999563884	1,323,842.40	2,994,847.82	CDOT TYPE II MONUMENT
207	38°43'39.14240"	-105°31'20.17685"	8,279.03	8,325.68	-0°00'50.6"	0.999561271	1,325,666.88	2,993,646.40	CDOT TYPE II MONUMENT
1615	38°40'28.61367"	-105°29'19.25562"	8,038.02	8,085.59	0°00'25.7"	0.999579186	1,306,391.67	3,003,231.18	CDOT TYPE II MONUMENT
T287	38°44'05.39583"	-105°32'04.80329"	8,351.92	8,398.44	-0°01'18.7"	0.999556973	1,328,323.89	2,990,111.00	CDOT TYPE II MONUMENT
WILLIAMS	38°39'10.66213"	-105°28'21.53538"	7,682.08	7,730.09	0°01'02.1"	0.999599057	1,298,506.77	3,007,810.99	CDOT TYPE II MONUMENT



PROJECT COORDINATE TABLE				
Point No.	Project Coordinates		Elev(ft) (NAVD88)	Description
	Northing(ft)	Easting(ft)		
154	304,283.44	1,006,830.01	7,949.77	CDOT TYPE II MONUMENT
157	305,324.98	1,006,220.74	7,991.54	CDOT TYPE II MONUMENT
159	305,285.13	1,005,456.13	8,023.92	CDOT TYPE II MONUMENT
195	321,776.96	998,127.86	8,452.76	CDOT TYPE II MONUMENT
201	324,193.62	997,141.06	8,298.76	CDOT TYPE II MONUMENT
203	324,429.73	996,176.51	8,283.00	CDOT TYPE II MONUMENT
207	326,255.02	994,974.56	8,325.68	CDOT TYPE II MONUMENT
1615	306,971.26	1,004,563.60	8,085.59	CDOT TYPE II MONUMENT
T287	328,913.22	991,437.60	8,398.44	CDOT TYPE II MONUMENT
WILLIAMS	299,082.87	1,009,145.43	7,730.09	CDOT TYPE II MONUMENT



FOUND BOUNDARY MONUMENT TABLE - J-15-G				
Point No.	Project Coordinates		Elev(ft) (NAVD88)	Description
	Northing(ft)	Easting(ft)		
1	310,697.61	1,004,029.04	8,228.02	3.5" ALUM CAP BLM WC SECTION 6 72.7 FT SOUTHEAST
2	310,703.52	1,004,131.66	8,215.86	3.5" ALUM CAP BLM WC SECTION 6 72.7 FT SOUTHWEST
4	305,305.60	1,005,912.20	7,994.42	3" ALUM CAP BLM C 1/4 SECTION 7 1996
5	302,626.67	1,008,461.87	7,997.09	3.5" BLM BRASS CAP SECTION CORNER MARKED 7/8/17/18 DATED 1996
148371	306,180.29	1,004,846.54	8,046.49	WPC M-2 LS34587
148400	306,613.25	1,004,744.11	8,067.06	NO CAP #4 REBAR
148402	306,532.33	1,004,764.68	8,063.05	WPC M2 SURVEYING PLS 34587
148403	306,498.39	1,004,772.58	8,062.78	WPC M2 SURVEYING PLS 34587
148404	306,465.58	1,004,780.17	8,063.65	WPC M2 SURVEYING PLS 34587
148418	306,791.09	1,004,695.18	8,072.97	3.5" ALUM CAP ROW L2 L1 PLS 34597 2008
148440	307,248.56	1,004,579.33	8,081.34	WPC M2 SURVEYING PLS 345870
148454	307,749.76	1,004,494.41	8,097.46	WPC M2 SURVEYING PLS 345870
148571	306,230.48	1,004,753.22	8,063.92	REBAR W9
148578	306,123.87	1,004,755.51	8,066.81	1" WHITE PLASTIC CAP MARKED "ASC PLS28651"
148591	305,874.74	1,004,793.54	8,054.55	1" WHITE PLASTIC CAP MARKED "ASC PLS28651"
148619	305,504.47	1,005,122.91	8,038.61	#4 REBAR NO CAP
148977	306,138.93	1,004,854.42	8,039.19	WPC M-2 PLS 34578
148990	306,524.20	1,004,937.58	8,056.24	WPC M-2 PLS 34578
147049	303,985.08	1,007,096.26	7,950.97	BLM TAG 100 SE TO COR
147050	303,966.14	1,007,190.58	7,981.22	3.5" BLM BRASS CAP SE 1/16 SEC 7 1996
149037	308,042.07	1,003,083.57	8,187.19	BEARING TREE
149038	308,013.04	1,003,070.06	8,193.25	BEARING TREE
149039	308,098.77	1,003,114.25	8,180.62	NAIL AND WASHER 36" FROM BOTTOM OF TREE
149040	305,438.12	1,005,914.81	8,018.17	2.5" ALUM CAP MARKED L1 ROW PLS 34587 DATED 2008
149041	302,597.77	1,008,458.01	7,995.32	YPC ILLEGIBLE
149042	302,621.14	1,008,440.66	7,995.05	YPC ILLEGIBLE
149043	302,637.75	1,008,480.43	7,997.79	X CHISELED IN STONE - STONE ON GROUND
300000	308,030.67	1,003,111.85	8,184.57	3.5" BRASS CAP IN MOUND OF STONE



FOUND BOUNDARY MONUMENT TABLE - J-14-C				
Point No.	Project Coordinates		Elev(ft) (NAVD88)	Description
	Northing(ft)	Easting(ft)		
5401	326,238.65	994,996.79	8,325.72	RPC ON #4 REBAR MARKED PLS 25968
5402	326,148.29	995,027.81	8,324.30	RPC ON #4 REBAR MARKED PLS 25968
5403	325,696.72	995,056.14	8,306.67	YPC ON #4 REBAR MARKED PLS 19883
5404	325,662.15	995,064.64	8,306.52	2 1/2" RPC ON #4 REBAR MARKED PLS 19883
5405	324,325.77	996,946.89	8,286.33	NW 1/16 S25
5406	324,350.90	996,903.54	8,288.47	NW 1/16 S25 REFERENCE
5407	324,413.80	996,912.12	8,290.74	NW 1/16 S25 REFERENCE



5615 Wills Boulevard
 Pueblo, CO 81008
 Phone: 719-546-5746 FAX: 719-546-5414

Region 2

DRP

Sheet Revisions

Date	Description	Initials

Sheet Revisions

Date	Description	Initials

ENGINEERS
 ARCHITECTS
 SURVEYORS
 SCIENTISTS



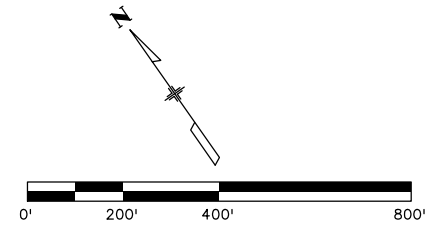
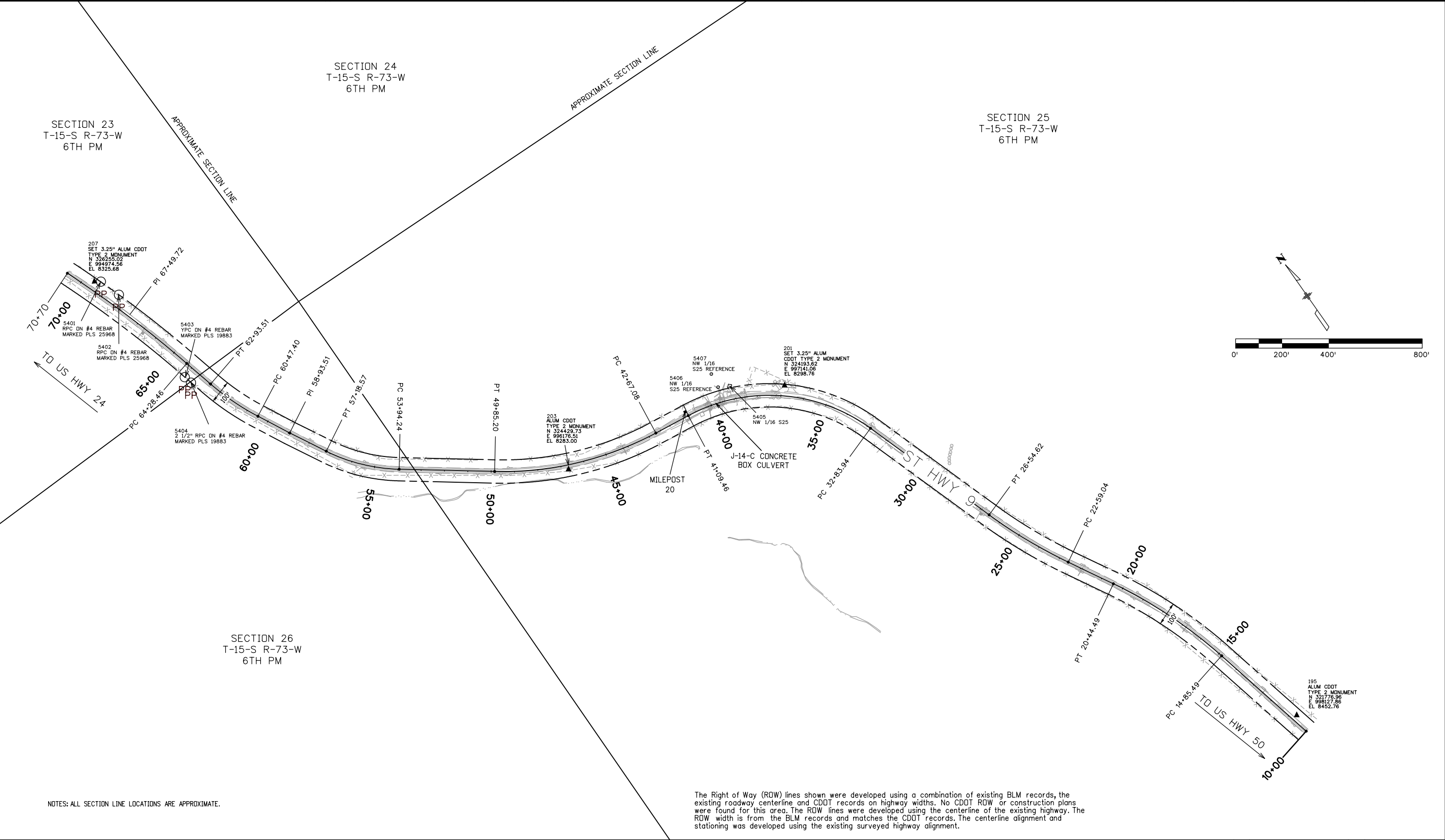
4755 FORGE ROAD, SUITE 150
 COLORADO SPRINGS, CO 80907
 (719) 590-9194 / (719) 590-9111 Fax
 www.f-w.com

Project/Land Survey Control Diagram

Plan Sheet

Project Number: FBR R200-266			
Project Location: BRIDGE REPLACEMENT			
J-14-C - ST HIGHWAY 9			
Project Code:	Last Mod. Date	Subset	Sheet No.
23558	12-18-2020	3.01 to 3.04	3.03

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NOTES: ALL SECTION LINE LOCATIONS ARE APPROXIMATE.

The Right of Way (ROW) lines shown were developed using a combination of existing BLM records, the existing roadway centerline and CDDT records on highway widths. No CDDT ROW or construction plans were found for this area. The ROW lines were developed using the centerline of the existing highway. The ROW width is from the BLM records and matches the CDDT records. The centerline alignment and stationing was developed using the existing surveyed highway alignment.



5615 Wills Boulevard
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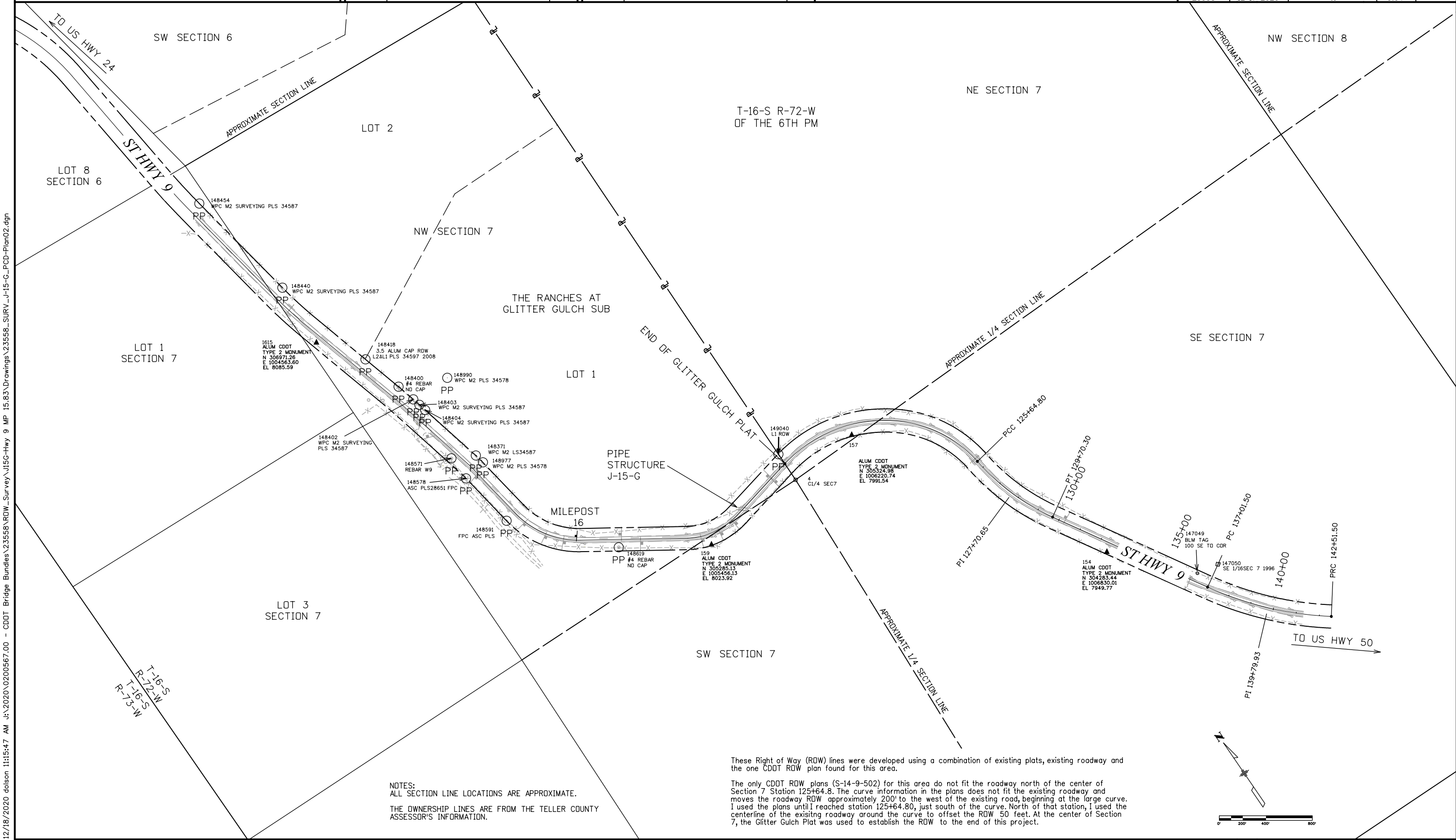
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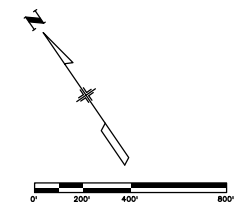
Farnsworth GROUP
ENGINEERS ARCHITECTS SURVEYORS SCIENTIST
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COLORADO SPRINGS, CO 80907
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PROJECT/LAND SURVEY CONTROL DIAGRAM			
PLAN SHEET			
Project Number: FBR R200-266			
Project Location: BRIDGE REPLACEMENT			
J-15-G STATE HIGHWAY 9			
Project Code:	Last Mod. Date	Subset	Sheet No.
23558	12-17-2020	3.01 to 3.04	3.04



NOTES:
ALL SECTION LINE LOCATIONS ARE APPROXIMATE.
THE OWNERSHIP LINES ARE FROM THE TELLER COUNTY ASSESSOR'S INFORMATION.

These Right of Way (ROW) lines were developed using a combination of existing plats, existing roadway and the one CDOT ROW plan found for this area.
The only CDOT ROW plans (S-14-9-502) for this area do not fit the roadway north of the center of Section 7 Station 125+64.8. The curve information in the plans does not fit the existing roadway and moves the roadway ROW approximately 200' to the west of the existing road, beginning at the large curve. I used the plans until I reached station 125+64.80, just south of the curve. North of that station, I used the centerline of the existing roadway around the curve to offset the ROW 50 feet. At the center of Section 7, the Glitter Gulch Plat was used to establish the ROW to the end of this project.



12/18/2020 dolson 11:15:47 AM J:\2020\0200567.00 - CDOT Bridge Bundles\23558 ROW_Survey\J15G-Hwy 9 MP 15.83\Drawings\23558_SURV_J-15-G_PCD-Plan02.dgn