Colorado Department of Transportation



Region 2

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

DRP

	Sheet Revisions		Sheet Revisions			
Date	Description	Initials	Date	Description	Initials	



4755 FORGE ROAD, SUITE 150 COLORADO SPRINGS, CO 80907 (719) 590-9194 / (719) 590-9111 Fax

Projec	t/Land S	Survey (Control Dia	gram
	Ti	tle Shee	et	
Project Nu	mber: FBR f	R200-266		
Project Lo	cation: BRIDG	E REPLACE	MENT	
	I-17-X	X - US HIGH	HWAY 24	
Project Code:	Last Mod. Date	Subset	Sheet No.	
23559	12-7-2020	3.01 of 3.	02 3.01	

(1) Title Sheet

(2) Total Sheets

INDEX OF SHEETS

(1) Project Control Diagram

1 $\sqrt{1}$ QUARTER AND SIXTEENTH SECTION CORNER SECTION CORNERS (1) (1) 1 RIGHT DF WAY SET EASEMENT TEMPORARY O NOAA QUARTER AND SIXTEENTH NOAA MARKER BLM MARKER PROPERTY PIN O WC FED WC WITNESS CORNER USGS MARKER FEDERAL MONUMENT . LOCAL OR PLSS SECONDARY CONTROL RIGHT OF WAY MARKER ^A N 9.88 [®]N 10.13 E 3.81 FI 0.00

DENSIFICATION

DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

PROJECT / LAND SURVEY CONTROL DIAGRAM

US HIGHWAY NO 24 SECTIONS 25 & 36, T-13-S, R-68-W SIXTH PRINCIPAL MERIDIAN EL PASO COUNTY

M-79-19 N N CASCADE T-13-S T-13-S 27 H 30 26 US 1-17-X 34 36 T-13-S R-68-W T-14-S R-68-W MANITOÙ SPRINGS 2 PROJECT LOCATION MAP

1/2 MILE 1 MILE

SCALE: 1" = 5.280 US SURVEY FEET

The control for this project is part of a larger control network established for CDOT for Project NH 0242-056. The control was checked for accuracy.

SHEET NO.

Basis of Bearings: Bearings used in the calculations of coordinates are based on a arid bearing of S43°16'22"E from Control Point 9581 (a CDOT Type II Control Monument - MP 295.81) to Control Point 9586 (a CDDT Type II Control Monument - MP 295.86). Both monuments are marked appropriately for their milepost location. Coordinates are based on existing control established by the Colorado Department of Transportation for Project No: NH 0242-056 and were verified for this project.

Basis of Elevations: Project elevations are based on Control Point 9581 (a CDOT Type II Control Monument - MP 295.81) established during a prior project.

COORDINATE DATUM: Project coordinates are modified Colorado State Plane Central Zone (502) NAD '83/(11) coordinates. The combined elevation/scale factor used to modify the coordinates from state plane to project coordinates is 1.0003911480. 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

Project Coordinates Northing US Survey Feet = (State Plane Coordinate Northing(ft)

Project Coordinates Easting US Survey Feet = (State Plane Coordinate Easting(ft) * 1.0003911480).

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 vears from the date of the certification shown hereon.

SURVEYOR STATEMENT (Project Control Diagram)

I, <u>Lorelei A. Ward</u>, 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.

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. Existing features are shown as screened weight (aray scale). Proposed or new features are shown as full weight without screening.



PROJECT CONTROL

Typical Control Monument Cap Not to Scale

PROJECT FBR R200-266 US 24 - MP 295.45

HIGH ACCURACY REFERENCE

CM-MP - Control Point Monuments set by CDOT. They are CDOT Type 2 monuments, a 31/4" dia. aluminum control monument cap (as shown) on a

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 CDDT 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.

PLS No. 34982

Colorado Department of Transportati	ion		Sheet Revisions			Sheet Revisions	
	II	Date	Description	Initials	Date	Description	Initials
5615 Wills Boulevard							
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Pueblo, CD 81008 Phone: 719-546-5746 FAX: 719-54	40 E 414 [
Phone: /19-546-5/46 FAX: /19-54	46-5414 [[
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US HIMA 24



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

Project Control Diagram								
Plan Sheet								
Project Number: FBR R200-266								
Project Location: BRIDGE REPLACEMENT								
I-17-X - US HIGHWAY 24								
Project Code: Last Mod. Date Subset Sheet No.								
23550 11-10-2020 3.02 of 3.02 3.02								

DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

PROJECT CONTROL DIAGRAM **US HIGHWAY 24 SECTION 25 & 36, T-13-S R-68-W, 6TH PM EL PASO COUNTY**

PROJECT COORDINATE TABLE								
Point No	Project Co	ordinates	Elev(ft)	Description				
	Northing(ft)	Easting(ft)	(NAVD88)	Description				
701	384,841.56	156,576.63	7,138.93	1.5" ALUM CAP - "DEA INC CONTROL"				
702	382,836.89	157,783.07	7,031.53	#4 REBAR W/DIMPLE IN CENTER				
9449	382,896.40	157,898.03	7,030.37	CDOT TYPE II CONTROL MONUMENT - "MP 294.49"				
9450	382,776.53	157,646.33	7,035.95	CDOT TYPE II CONTROL MONUMENT - "MP 294.50"				
9497	384,994.93	156,072.27	7,157.70	CDOT TYPE II CONTROL MONUMENT - "MP 294.97"				
9581	381,949.07	158,856.89	6,992.63	CDOT TYPE II CONTROL MONUMENT - "MP 295.81"				
9586	381,749.84	159,044.45	6,984.54	CDOT TYPE II CONTROL MONUMENT - "MP 295.86"				

General Notes:

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- 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.

GEODETIC COORDINATE TABLE									
Point No	Geodetic Coordinates NAD-83(2011)		Elip Height	Ortho Height	Mapping Angle	Mapping Angle Grid Scale Factor	NAD 83(2011) Zone 0502		Description
	Latitude(N)	Longitude(W)	(NAVD88)	(NAVD88)	Mapping Angle	Gilu Scale Factor	SP Northing	SP Easting	Description
9449	38°52'54.82132"	-104°56'58.73683"	6,979.10	7,030.37	-6°02'24.7"	1.001302496	1,382,355.69	3,156,663.30	CDOT TYPE II CONTROL MONUMENT - "MP 294.49"
9450	38°52'53.65194"	-104°57'01.92776"	6,984.69	7,035.95	-6°02'26.5"	1.001302628	1,382,235.87	3,156,411.70	CDOT TYPE II CONTROL MONUMENT - "MP 294.50"
9497	38°53'15.66507"	-104°57'21.65812"	7,106.64	7,157.70	-6°02'40.3"	1.001291186	1,384,453.40	3,154,838.25	CDOT TYPE II CONTROL MONUMENT - "MP 294.97"
9581	38°52'45.40335"	-104°56'46.68849"	6,941.26	6,992.63	-6°02'16.7"	1.001306620	1,381,408.73	3,157,621.78	CDOT TYPE II CONTROL MONUMENT - "MP 295.81"
9586	38°52'43.42353"	-104°56'44.33288"	6,933.14	6,984.54	-6°02'15.1"	1.001307499	1,381,209.58	3,157,809.28	CDOT TYPE II CONTROL MONUMENT - "MP 295.86"

Combined Scale Factor: 1.0003911480 Northing Truncation: 1,000,000 Easting Truncation: 3,000,000 All values are US Survey Feet Elevation is NAVD 88

Basis of Bearings: Bearings used in the calculations of coordinates are based on a grid bearing of S43°16'22"E from Control Point 9581 (a CDDT Type II Control Monument - MP 295.81) to Control Point 9586 (a CDOT Type II Control Monument - MP 295.86). Both monuments are marked appropriately for their milepost location. Coordinates are based on existing control established by the Colorado Department of Transportation for Project No: NH 0242-056 and were verified for this project.

Coordinate Datum: Project coordinates are modified Colorado State Plane Central Zone (0502) NAD 83 (2011) coodinates. The combined elevation/scale factor used to modify state plane to project coordinates is 1.0003911480. 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 * 1.0003911480 - 1,000,000)

Project Coordinates Easting US Survey Feet = (State Plane Coordinate Easting * 1.0003911480 - 3,000,000)

