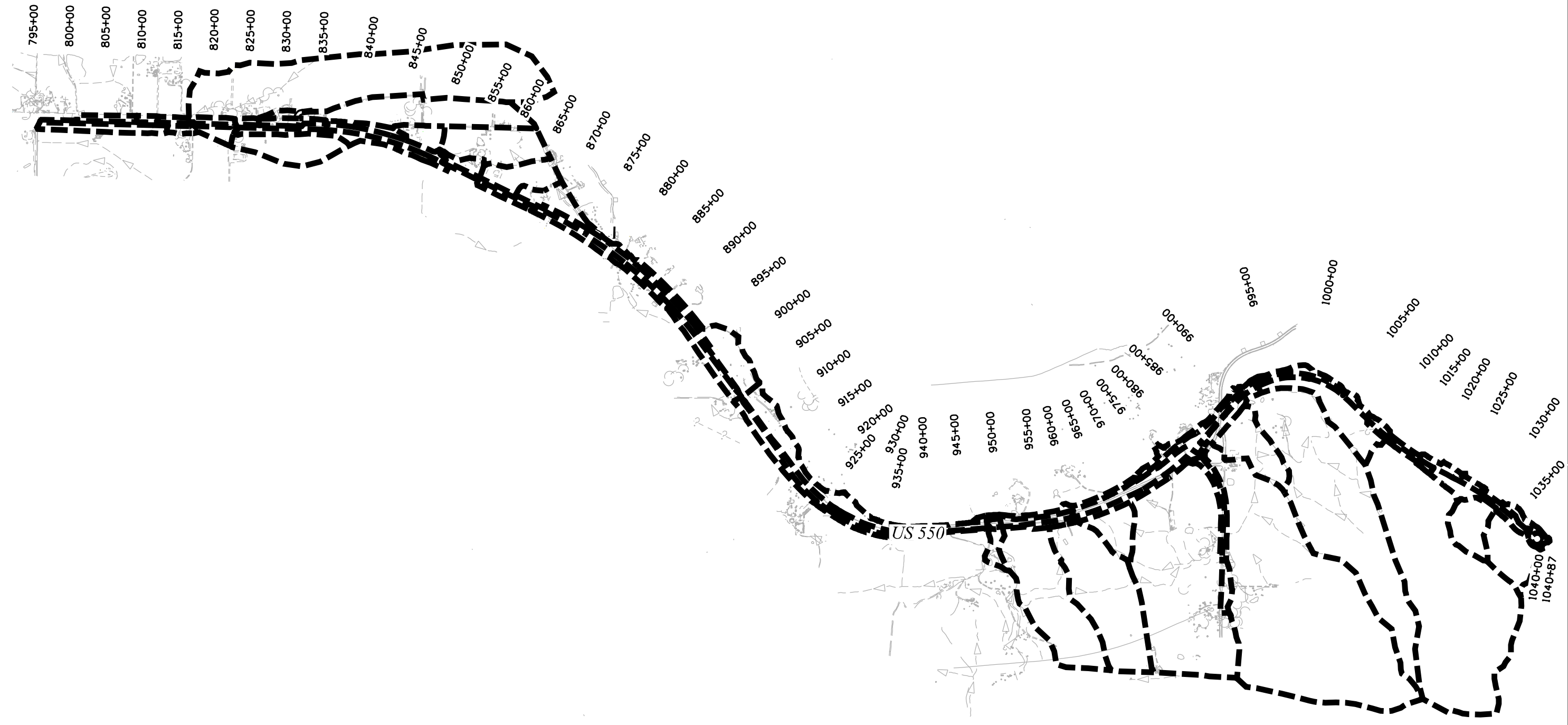
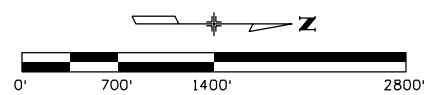


# Appendix A

---

## Hydrology

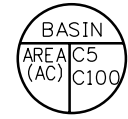


- Basin Maps
- Summary and Rational Method Calculations for Connection Segment (SF-2 & SF-3)
- Summary and Rational Method Calculations for 302 North Segment (SF-2 & SF-3)
- Soils Report
- Supplemental Information

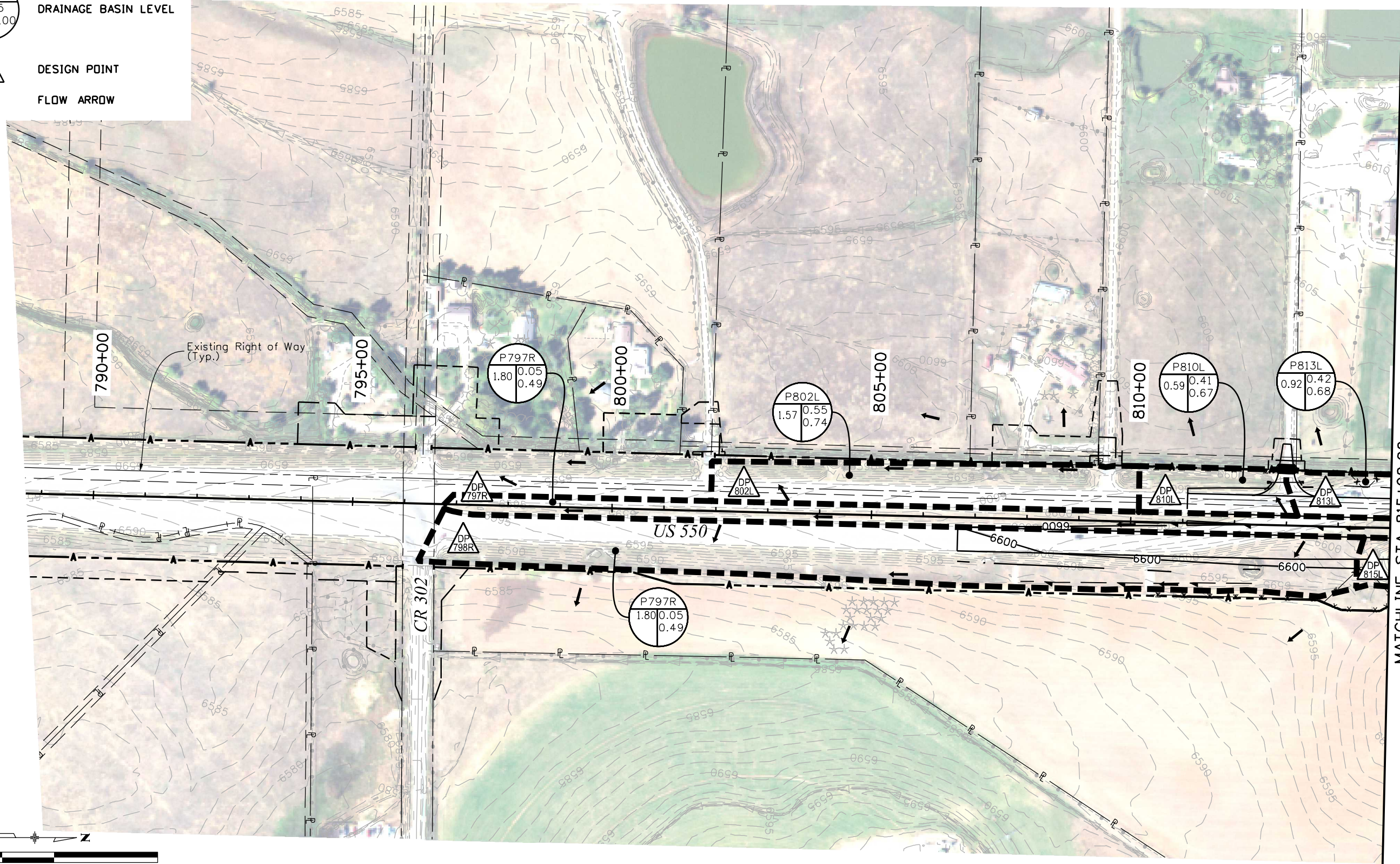


L:\Projects\11\00\47 AM P\2018 Projects\18-018.01 US 550 S Connection D-B - CDDT R-5\22420\Hydraulics\Drawings\22420HYDR\_BASIN\_OverallMap.dgn  
 2/19/2019 CDDT-DePaulPrinter\_V8i.plt.ctb CDDT V8i Basin CAD BW.tbl

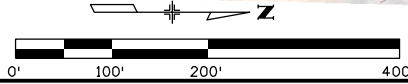
Print Date: 2/19/2019		<b>Sheet Revisions</b> Date:      Comments      Init.    			<b>Colorado Department of Transportation</b>  3803 North Main Avenue Suite 200 Durango, CO 81301 Phone: 970-385-1440 FAX: 970-385-8365 <b>Region 5</b> <b>DRV</b>		As Constructed		<b>22420 - US 160/550 DESIGN BUILD</b> <b>OVERALL WATER QUALITY MAP</b>		Project No./Code	
Drawing File Name: 22420HYDR_BASIN_OverallMap.dgn							No Revisions:				Project Number	
Horiz. Scale: 1:1400      Vert. Scale: As Noted		Revised:		Designer: EGS		Structure Numbers		22420				
Unit Information      Unit Leader Initials		Void:		Detailer: LMR		Sheet Subset: BASINS		Subset Sheets: 1 of 11				
												

**LEGEND**

-  DRAINAGE BASIN LEVEL
-  DESIGN POINT
-  FLOW ARROW



MATCHLINE STA. 815+00.00



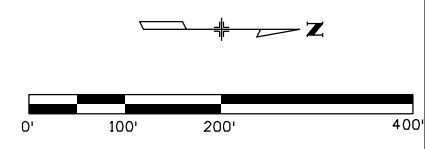
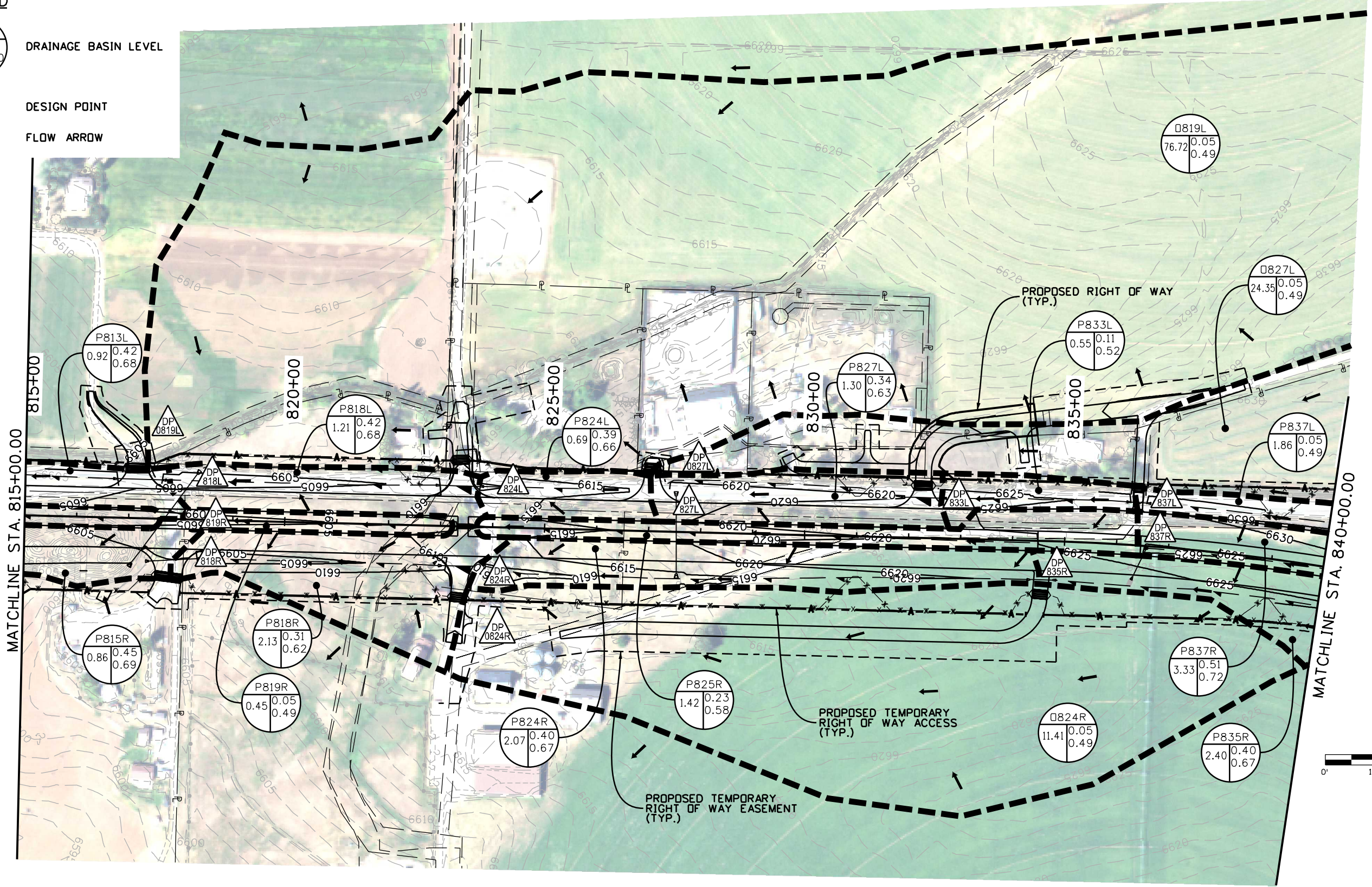
Know what's below  
Call before you dig.

L:\Projects\11\03\32 AM P\2018 Projects\18-018.01 US 550 S Connection D-B - CDDT R-5\22420\Hydraulics\Drawings\22420HYDR\_BASIN\_Map01.dgn  
2/19/2019 CDDT-Debra\Printer\_V81.plt.ctb CDDT V81 Basin CAD BW.tbl

Print Date: 2/19/2019		<b>Sheet Revisions</b>		Colorado Department of Transportation		As Constructed		22420 - US 160/550 DESIGN BUILD DRAINAGE BASIN MAP		Project No./Code	
Drawing File Name: 22420HYDR_BASIN_Map01.dgn		Date:	Comments	Init.	3803 North Main Avenue Suite 200 Durango, CO 81301 Phone: 970-385-1440 FAX: 970-385-8365		No Revisions:		Designer: EGS		Project Number
Horiz. Scale: 1:200      Vert. Scale: As Noted					Region 5      DRV		Revised:		Detailer: REW		22420
Unit Information      Unit Leader Initials							Void:		Structure Numbers		Sheet Number
								Sheet Subset: BASINS		Subset Sheets: 2 of 11	

**LEGEND**

- BASIN**
- DESIGN POINT**
- FLOW ARROW**



L:\Projects\110613\_AM\_P\2018\_Projects\18-018.01\_US\_550\_S\_Connection\_D-B - CDDT R-5\22420\Hydraulics\Drawings\22420HYDR\_BASIN\_Map02.dgn  
 2/19/2019 11:06:13 AM P:\2018\_Projects\18-018.01\_US\_550\_S\_Connection\_D-B - CDDT R-5\22420\Hydraulics\Drawings\22420HYDR\_BASIN\_Map02.dgn  
 CDDT-DefaultPrinter\_V81.pctg CDDT\_V81 Basin CAD BW.tbl

Print Date: 2/19/2019	
Drawing File Name: 22420HYDR_BASIN_Map02.dgn	
Horiz. Scale: 1:200	Vert. Scale: As Noted
Unit Information	Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**




3803 North Main Avenue  
Suite 200  
Durango, CO 81301  
Phone: 970-385-1440 FAX: 970-385-8365

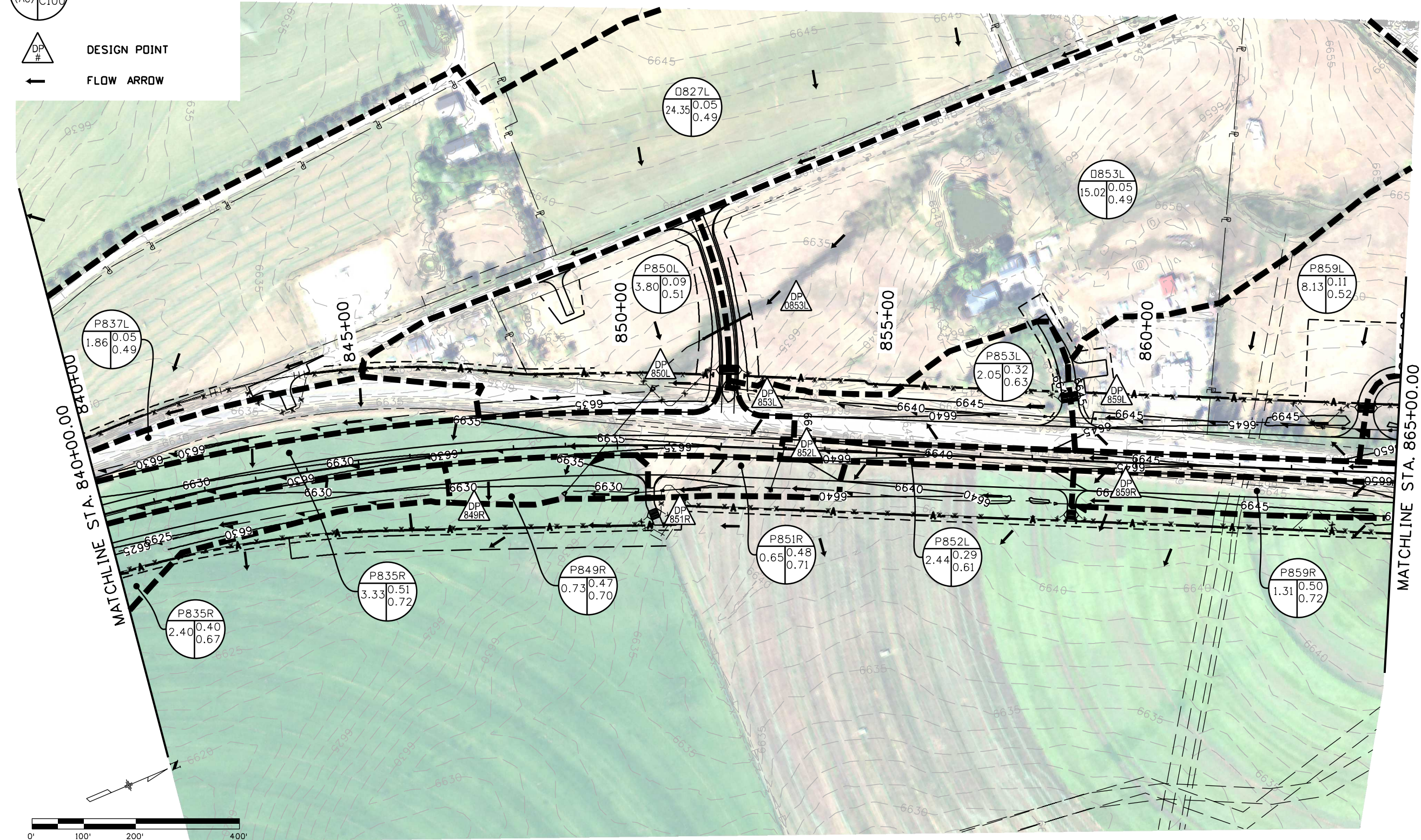
**Region 5** **DRV**

<b>As Constructed</b>	<b>22420 - US 160/550 DESIGN BUILD DRAINAGE BASIN MAP</b>
No Revisions:	Designer: EGS
Revised:	Detailer: REW
Void:	Sheet Subset: BASINS
	Structure Numbers: 3 of 11

<b>Project No./Code</b>
Project Number
22420
Sheet Number

**LEGEND**

-  DRAINAGE BASIN LEVEL
-  DESIGN POINT
-  FLOW ARROW



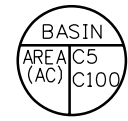


L:\ret\10-07-29 AM P\2018 Projects\18-018.01 US 550 S Connection D-B - CDDT R-5\22420\Hydraulics\Drawings\22420HYDR\_BASIN\_Map03.dgn  
 2/19/2019 CDDT-Debra\Printer\_V81.pctcig CDDT V81 Basin CAD BW.tbl

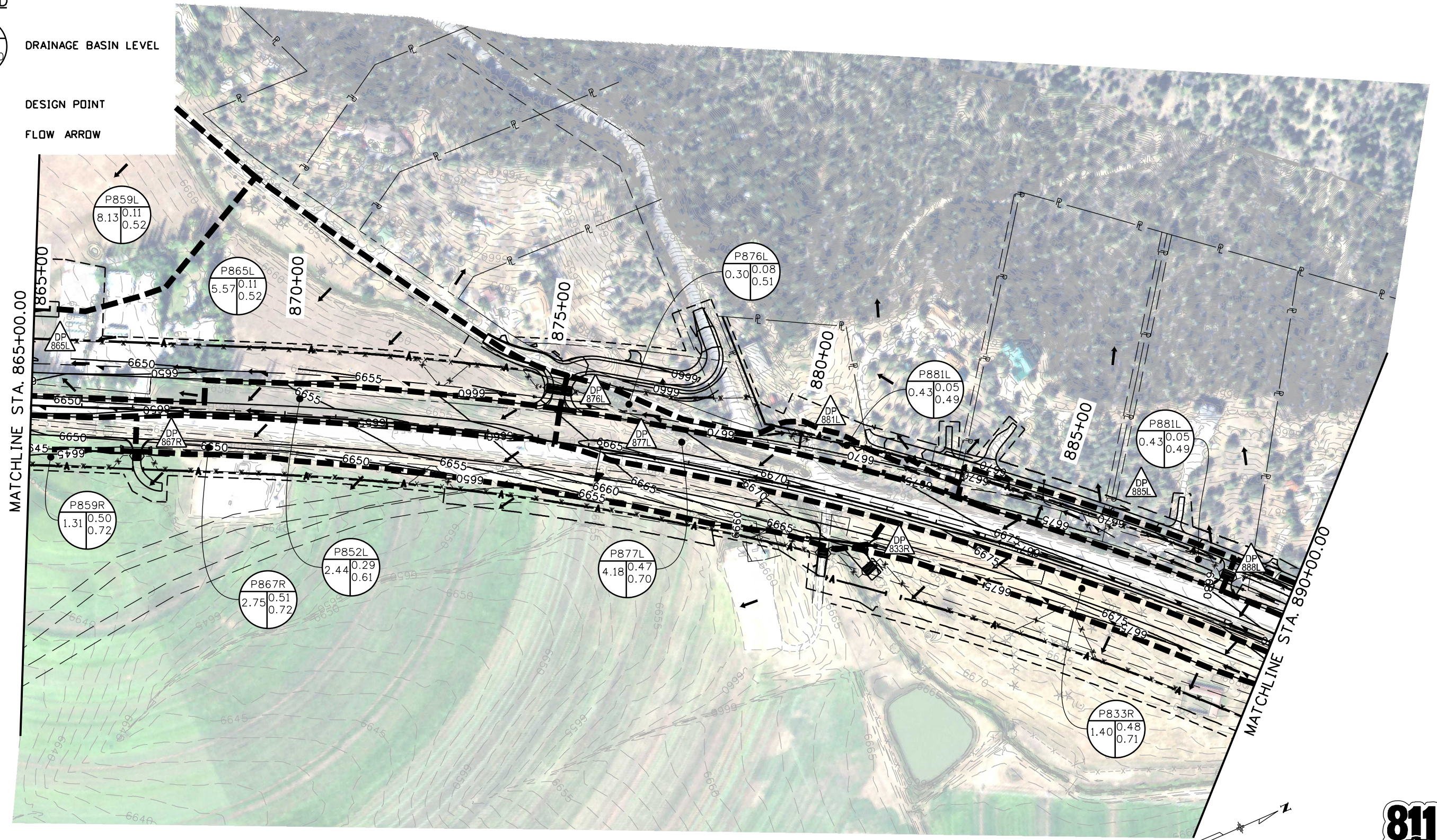


Know what's below  
Call before you dig.

Print Date: 2/19/2019		<b>Sheet Revisions</b>		Colorado Department of Transportation		As Constructed		22420 - US 160/550 DESIGN BUILD		Project No./Code	
Drawing File Name: 22420HYDR_BASIN_Map03.dgn		Date:	Comments	Init.	3803 North Main Avenue		No Revisions:		DRAINAGE BASIN MAP		Project Number
Horiz. Scale: 1:200      Vert. Scale: As Noted					Suite 200		Revised:		Designer: EGS		22420
Unit Information      Unit Leader Initials					Durango, CO 81301		Void:		Detailer: REW		Sheet Number
					Phone: 970-385-1440    FAX: 970-385-8365				Sheet Subset: BASINS		4 of 11
					Region 5      DRV				Subset Sheets:		Sheet Number

**LEGEND**

-  DRAINAGE BASIN LEVEL
-  DESIGN POINT
-  FLOW ARROW



L:\Projects\1011103\_2018\Projects\18-018.01\_US\_550\_S\_Connection\_D-B - CDDT R-5\22420\Hydraulics\Drawings\22420HYDR\_BASIN\_Map04.dgn  
 2/19/2019 10:11:03 AM P:\2018\Projects\18-018.01\_US\_550\_S\_Connection\_D-B - CDDT R-5\22420\Hydraulics\Drawings\22420HYDR\_BASIN\_Map04.dgn  
 CDDT-Printer-V8.plt;c1g CDDT V81 Basin CAD BW.tbl



Print Date: 2/19/2019	
Drawing File Name: 22420HYDR_BASIN_Map04.dgn	
Horiz. Scale: 1:200	Vert. Scale: As Noted
Unit Information	Unit Leader Initials
<b>MULLER</b> ENGINEERING COMPANY	

Sheet Revisions		
Date:	Comments	Init.

**Colorado Department of Transportation**  
 3803 North Main Avenue  
 Suite 200  
 Durango, CO 81301  
 Phone: 970-385-1440 FAX: 970-385-8365  
**Region 5** **DRV**

<b>As Constructed</b>
No Revisions:
Revised:
Void:

<b>22420 - US 160/550 DESIGN BUILD DRAINAGE BASIN MAP</b>			
Designer:	EGS	Structure	
Detailer:	REW	Numbers	
Sheet Subset:	BASINS	Subset Sheets:	5 of 11

<b>Project No./Code</b>
Project Number
22420
Sheet Number