

**PARTICIPANT LESSON MATERIALS**

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## UTILITY CONFLICT MATRIX SAMPLES

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Station	Offset	Station	Offset	Size/Type	Length	Conflict	ADJ/REL	Cost	PE/CE Cost	Total Cost
<b>CEA Distribution Relocation Costs</b>										
9+00	150' RT		200' LT	3φ UG	350	FG	REL	52,500	15,750	68,250
16+00	100' LT	42+30	80' LT	3φ UG	2630	FG	REL	394,500	118,350	512,850
16+00	100' LT	15+50	100' RT	3φ UG	250	FG	REL	37,500	11,250	48,750
16+00	100' LT	29+00	75' LT	1φ UG	1650	FG	REL	165,000	49,500	214,500
36+40	80' LT	35+80	350' RT	3φ UG	430	FG	REL	64,500	19,350	83,850
36+60	80' LT	36+70	380' LT	3φ UG	300	FG	REL	45,000	13,500	58,500
	UG Loop to the North			3φ UG	1000	FG	REL	150,000	45,000	195,000
Subtotal								909,000	272,700	1,181,700
<b>CEA Transmission Relocation Costs</b>										
14+75	55' RT			138 kV OH	1	PWY	REL	30,000	9,000	39,000
32+75	55' RT			138 kV OH	1	EX	REL	50,000	15,000	65,000
36+38	45' RT			138 kV OH	1	EX	REL	50,000	15,000	65,000
Subtotal								130,000	39,000	169,000
<b>Total CEA Relocation Costs</b>								<b>1,039,000</b>	<b>311,700</b>	<b>1,350,700</b>

1φ Underground (UG) loop to extend across Dowling Road and along the south side to reconnect existing services.

UG loop provided to the north of the project to accommodate undergrounding.

Removal of existing swamp braces removed and steel piling added, down guys replaced with overhead span guy and down guys.

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# I-10-EA 122401-Utilities Conflict Status

date of last revision May 30, 2000  
this document was prepared by

Conflict No.	Utility Sheet No.	Pothole No. <i>(On U-sheets)</i>	Owner	Utility Description	Pothole/Manhole Location	Conflict Location	Utility Conflict/ Work Description	Investigation			Depth  (ft)	Impact?		Action			Util. Reloc. <i>A</i> - Abandon <i>RB</i> -Reloc.Before <i>RD</i> -Reloc.During <i>P</i> -Protect in place <i>NC</i> -No conflict	Resp. Party <i>U</i> -Utility Co <i>C</i> - Contractor	Required Completion Date	Comments
								Pothole	Manhole	Overhead		Y	N	Remove	Relocate	Other				
1	U-2	1	PACBELL	40 DU Telephone	62 m Rt of I-405 Sta 165+55	40 m Rt and 57 m Rt of I-405 Sta 165+55	conflict with Retaining Walls No. 166 & No. 168	X			4.55 14.40		N							
2	U-2	2	PACBELL	40 DU Telephone	48 m Lt of I-405 Sta 165+55	40 m Rt and 57 m Rt of I-405 Sta 165+55	conflict with Retaining Walls No. 166 & No. 168				-		N							
3	U-3	3	SCE	25 mm DU	35 m Rt of I-405 Sta 165+01	43 m Rt of I-405 Sta 165+01	conflict with Retaining Wall No. 166				-		N						Located in Bristol OC	
4	U-3	4	SCE	25 mm DU	46 m Lt of I-405 Sta 165+01	43 m Rt of I-405 Sta 165+01	conflict with Retaining Wall No. 166				-		N						Located in Bristol OC	
5	U-3	5	MWD	900 mm WSP Water in 380 mL ENC	50 m Rt of I-405 Sta 164+96	44 m Rt of I-405 Sta 164+95	conflict with Retaining Wall No. 166	X			6.70		N							
6	U-3	6	MWD	900 mm WSP Water in 380 mL ENC	50 m Lt of I-405 Sta 164+96	44 m Rt of I-405 Sta 164+95	conflict with Retaining Wall No. 166	X			6.50		N							
7	U-3	7	Caltrans	600 mm RCP	53 m Rt of I-405 Sta 163+42	53 m Rt of I-405 from Sta 163+29 to Sta 163+42	conflict with Delhi Channel Bridge	X			6.00		N							
8	U-3	8	Caltrans	600 mm RCP	53 m Rt of I-405 Sta 163+29	53 m Rt of I-405 from Sta 163+29 to Sta 163+42	conflict with Delhi Channel Bridge	X			9.00		N							
9	U-3	9	MCWD	300 mm ACP Water in 119mL, 500mm STL Casing	32 m Rt of I-405 Sta 163+25	35 m Rt of I-405 Sta 163+25	conflict with I-405 Widening & BR1 Line	X			10.30		N							
10	U-3	10	MCWD	300 mm ACP Water in 119mL, 500mm STL Casing	32 m Lt of I-405 Sta 163+25	33 m Lt of I-405 Sta 163+25	conflict with I-405 Widening & BR1 Line	X			8.75		N							
11	U-3	MH 11	CSDOC	Manhole	81 m Rt of I-405 Sta 162+92	35 m Rt of I-405 Sta 162+92	conflict with I-405 Widening & BR1 Line		X		18.40		N							
12	U-3	12	CSDOC	380 mm VCP Sewer	36 m Lt of I-405 Sta 162+91	32 m Lt of I-405 Sta 162+90	conflict with I-405 Widening & BR1 Line				-		N							
13	U-4	13	MCWD	600mm CCP Water in 94m L 900mm Dia Stl Casing	67 m Rt of I-405 Sta 161+44	58 m Rt of I-405 Sta 161+44	Conflict with Airport Channel	X			4.55	Y		X	X				600 mm Waterline to be Lowered Extend Encasement	
14	U-4	14	MCWD	600mm CCP Water in 94m L 900mm Dia Stl Casing	38 m Lt of I-405 Sta 161+40	32 m Lt of I-405 Sta 161+42	conflict with I-405 Widening				-		N							
15	U-4	15	MCWD	300 mm ACP Water	70 m Rt of I-405 Sta 160+29	72 m Rt of I-405 from Sta 157+20 to Sta 160+29	Conflict with AOA Line and Retaining Wall No. 268	X			-	Y		X					Enchroachment CT R/W and Private Owner Encased under Roadway	
16	U-4	16	MCWD	300 mm ACP Water	70 m Rt of I-405 Sta 159+07	72 m Rt of I-405 from Sta 157+20 to Sta 160+29	Conflict with AOA Line and Retaining Wall No. 268	X			-	Y		X					Enchroachment CT R/W and Private Owner Encased under Roadway	
17	U-5	17	MCWD	300 mm ACP Water	70 m Rt of I-405 Sta 156+87	72 m Rt of I-405 from Sta 157+20 to Sta 160+29	conflict with AOA Line and Retaining Wall No. 268	X			4.35		N							
18	U-5	MH 18	CSDOC	Manhole	60 m Rt of I-405 Sta 156+65	28 m Rt of I-405 Sta 156+65	conflict with I-405 Widening		X		16.20		N							
19	U-5	19	CSDOC	380 mm VCP Sewer	46 m Lt of I-405 Sta 156+65	25 m Rt of I-405 Sta 156+65	conflict with I-405 Widening	X			18.40		N							
20	U-5	20	CSDOC	830 mm VCP Sewer	14 m Rt of B2 Sta 24+96		conflict with construction of B2 Line						N							
21	U-5	21	CSDOC	830 mm VCP Sewer	6 m Lt of B2 Sta 25+54		conflict with construction of B2 Line						N							
22	U-8	MH 22	CSDOC	Manhole	8m Rt of Main St Sta 102+78				X			Y			X				MH to be Lowered New Top MH Elev= 9.588	
23	U-8	MH 23 SCE MH 4503	SCE	Manhole No. 4503	8m Rt of Main St Sta 102+87				X			Y			X				MH to be Lowered New Top MH Elev= 9.583 m	
24	U-8	MH 24 SCE MH 4502	SCE	Manhole No. 4502	8m Rt of Main St Sta 104+17				X			Y			X				MH to be Lowered New Top MH Elev= 9.728 m	

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Conflict #	Station and Offset	Dwg. No.	*Utility	Identified Conflict	TH	Utility Impact with Cost ("As-designed")	Recommended Resolution	**Benefit of Resolution

\* Please fill the cell with the color code for the utility as shown below. The color code can be found on the Georgia Utilities Protection Center website at [www.gaupc.com](http://www.gaupc.com) in the tab "LAWS/POLICIES" in the section "APWA COLOR CODE REQUIREMENTS."  
 \*\*Please include all benefits incurred including time, costs, and safety improvements.

**UTILITY KEY**

Underground	Overhead
E - Electric	OE - Overhead Electric
G - Gas	OGW - Overhead Guy Wire
NW - Non-Potable Water	OT - Overhead Telecommunications
P - Petroleum	OTC - Overhead Traffic Control
SFM - Sanitary Sewer	OTV - Overhead Cable TV
SS - Sanitary Sewer	
STM - Steam	
T - Telecommunications	
TC - Traffic Control	
TV - Cable TV	
UNK - Unknown Type	
W - Water	

**ABBREVIATIONS**

Material	Other
AC - Asbestos Concrete	BL - Baseline
FO - Fiber Optic	L - Left
MES - Mitered End Section	R - Right
RCP - Reinforce Concrete Pipe	TH - Test Hole

**UTILITY OWNERS**

AGL - Atlanta Gas Light
GP - Georgia Power
ATT - AT&T (formerly BellSouth)
L3 - Level 3 Communications
MFN - Metromedia Fiber Network
FCPW - Fulton County Public Works
CoA - City of Atlanta
UNK - Unknown Owner

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**M-6 (South Beltline) from I-196 to West of Eastern Avenue  
South of Grand Rapids, Michigan  
Utility Log - Electric  
CS 70025 - JN 33330**

Item #	Utility Owner / Operator	Conflict Location	Segment	Date Relocation Plan must be submitted	Relocation Plan submitted to Design Team	Design Team Review / Comment / Approval	Permit Application Submitted to MDOT	MDOT Permit Number / Approval Date	Relocation Scheduled	Action Items
1	Consumers Energy Transmission	Consumers Power Transmission Overhead – 8th Ave	1			7/6/2000	7/27/00 rev.	41064-0125-00-0174	4/1/2001	Final permit approval from MDOT.
2	Consumers Energy Transmission	West of Kenowa Ave.	1			7/6/2000	7/27/00 rev.	41064-0125-00-0174	4/1/2001	Final permit approval from MDOT.
3	Consumers Energy Distribution	Aerial Lines at Jackson and Angling Road	1							Design in process.
4	Consumers Energy Distribution	Aerial Lines at Kenowa and 64th St.	2							Design in process.
5	Consumers Energy Transmission	64th at Wilson and East and West of Wilson– Overhead	2			7/6/2000	7/27/00 rev.	41064-0125-00-0174	4/1/2001	Final permit approval from MDOT.
6	Consumers Energy Transmission	East and West of Ivanrest	2			7/6/2000	7/27/00 rev.	41064-0125-00-0174	10/15/2000	Final permit approval from MDOT.
7	<b>Consumers Energy Distribution</b>	<b>along Ivanrest</b>	<b>2</b>							<b>Permit to be submitted the week of August 14, 2000.</b>
8	Consumers Energy Transmission	East and West of Byron Center - overhead	3			7/6/2000	7/27/00 rev.	41064-0125-00-0174	4/1/2001	Final permit approval from MDOT. Schedule Relocation
9	<b>Consumers Energy Transmission</b>	<b>At Burlingame - overhead</b>	<b>3</b>			<b>6/5/2000</b>		<b>41064-0124-00-173</b>	<b>10/15/2000</b>	<b>Final permit approval from MDOT.</b>
10	<b>Consumers Energy Distribution</b>	<b>along Burlingame</b>	<b>3</b>						<b>11/14/2000</b>	<b>Permit for relocation has been submitted. Need design team approval.</b>
11	Consumers Energy Transmission	East and West of Clyde Park - overhead	3			7/6/2000	7/27/00 rev.	41064-0125-00-0174	12/1/2000	Final permit approval from MDOT.
12	<b>Consumers Energy Transmission</b>	<b>East and West of US131 - overhead</b>	<b>4</b>			7/6/2000	7/27/00 rev.	<b>41064-0125-00-0174</b>	<b>12/1/2000</b>	<b>Final permit approval from MDOT.</b>
13	<b>Consumers Energy Transmission</b>	<b>East and West of Norfolk Southern - overhead</b>	<b>4</b>			7/6/2000	7/27/00 rev.	<b>41064-0125-00-0174</b>	<b>12/1/2000</b>	<b>Final permit approval from MDOT.</b>
14	Consumers Energy Transmission	Clyde Park and M-6 - temporary	4						Coordination Clause	Design team approval.
15	Consumers Energy Transmission	US 131/Norfolk Southern and M-6 - temporary	4						Coordination Clause	Design team approval.
16	Consumers Energy Transmission	Buck Creek @ M-6 - temporary	4						Coordination Clause	Design team approval.
17	<b>Consumers Energy Distribution</b>	<b>Clyde Park and 64th – Overhead</b>	<b>4</b>			<b>7/6/2000</b>	<b>6/1/2000</b>	<b>41604-0085-00-0117</b>		<b>Permit approval required.</b>
18	<b>Consumers Energy Distribution</b>	<b>End of Contract 4 n/o M-6 Between Clyde Park and US 131 - overhead</b>	<b>4</b>			<b>7/6/2000</b>	<b>6/1/2000</b>	<b>41604-0085-00-0122</b>		<b>Design team has approved. MDOT needs to issue permit so that work can be scheduled.</b>
19	<b>Consumers Energy Distribution</b>	<b>Division – Overhead</b>	<b>4</b>			<b>7/6/2000</b>	<b>6/1/2000</b>	<b>41064-0089-00-0123</b>		<b>CE to submit revised plans based on discussion at previous utility meeting.</b>

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## Utility Conflict Table

Picture No.	PCN	Picture Looking	City or Town	Hwy. No.	Description
<a href="#">6.JPG</a>	02BF	N	Platte	44	Water valve in the SE quadrant of Hwy 44 & Indiana
<a href="#">7.JPG</a>	02BF	W	Platte	44	Power Pole in the SW quadrant of Hwy 44 & Indiana
<a href="#">8.JPG</a>	02BF	N	Platte	44	Power Pole in the SW quadrant of Hwy 44 & Indiana
<a href="#">9.JPG</a>	02BF	N	Platte	44	Power Pole in the SW quadrant of Hwy 44 & Indiana
<a href="#">10.JPG</a>	02BF	E	Platte	44	Power Pole (Transmission w/ riser) in the SE quadrant of Hwy 44 & Ohio
<a href="#">11.JPG</a>	02BF	E	Platte	44	Power Pole (Transmission w/ riser) in the SE quadrant of Hwy 44 & Ohio
<a href="#">12.JPG</a>	02BF	N	Platte	44	Power Pole, Fire hydrant & water valve in the SE quadrant of Hwy 44 & Ohio
<a href="#">13.JPG</a>	02BG	S	Platte	45	Light Pole in the SW quadrant of Hwy 45 & 4th St
<a href="#">14.JPG</a>	02BG	E	Platte	45	Light Pole in the NE quadrant of Hwy 45 & 4th St
<a href="#">15.JPG</a>	02BG	S	Platte	45	Light Pole in the SW quadrant of Hwy 45 & 6th St
<a href="#">16.JPG</a>	02BG	E	Platte	45	Power Pole in the NE quadrant of Hwy 45 & 6th St
<a href="#">17.JPG</a>	02BG	E	Platte	45	Power Pole in the NE quadrant of Hwy 45 & 6th St
<a href="#">18.JPG</a>	02BG	W	Platte	45	Power Pole & Fire hydrant in the NW quadrant of Hwy 45 & 6th St
<a href="#">19.JPG</a>	02BG	W	Platte	45	Power Pole w/ riser in the NW quadrant of Hwy 45 & 6th St



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County Highway ROW CSJ	Name of Utility	Reimbursable?	Location of Agreement Package	Packet Status?	Current Action	Adjustment Status	Responsible TxDOT Employee	Amount Approved	Amount Billed	90% Payment	Audit Exceptions	10% Retainage	Outstanding Balance
HOPKINS SH 11 ROW CSJ: 0083-03-046 SH 19 0108-09-039	Verizon	No	ROW	Approved	U11114: Relocation is complete. NR	Complete	Keith Hollje						
	TXU Electric	Yes	ROW	Approved	U11655: Relocation & Reimbursement is complete	Complete	Keith Hollje	\$ 74,397.96	\$ 62,850.69	\$ 56,565.62	\$ -	\$ 6,285.07	\$ -
	Atmos Energy (Trans)	Yes	ROW	Approved	U12208: Relocation & Reimbursement is complete	Complete	Mike Powers	\$ 235,912.59	\$ 184,436.76	\$ 165,993.08	\$ -	\$ 18,443.68	\$ -
	Atmos Energy (Distribution)	No	ROW	Approved	U12446: Relocation is complete. NR	Complete	Mike Powers						
	SS Water & Sewer	No	ROW	Approved	U12450: Relocation is complete. NR	Complete	Mike Powers						
	TXU Distribution	No	ROW	Approved	U12614: Relocation is complete. NR	Complete	Mike Powers						
	Sudden Link Communications	No	AO	Approved	Relocation is complete by Permit. NR	Complete	Tim Taylor						
	People's Telephone	No	AO	Approved	Relocation is complete by Permit. NR	Complete	Tim Taylor						
Shady Grove WSC	No	AO	Approved	Relocation is complete by Permit. NR	Complete	Tim Taylor							
								\$ 310,310.55	\$ 247,287.45	\$ 222,558.70	\$ -	\$ 24,728.75	\$ -
HUNT US 380 ROW CSJ: 0135-06-022	Caddo Basin	Yes	ROW	Approved	U11423: Relocation & Reimbursement is complete.	Complete	Mike Powers	\$ 853,746.47	\$ 783,618.01	\$ 705,256.21	\$ -	\$ 78,361.80	\$ -
	Verizon	No	ROW	Approved	U11450: Relocation is complete. NR	Complete	Mike Powers						
	One OK Pipeline	Yes	ROW	Approved	U11523: Relocation is complete. Reimbursement has not been submitted.	Complete	Keith Hollje	\$ 229,170.00	\$ -	\$ -	\$ -	\$ -	\$ 229,170.00
	Cap Rock Energy	Yes	ROW	Approved	U11524: Relocation & Reimbursement is complete.	Complete	Mike Powers	\$ 741,668.69	\$ 741,668.69	\$ 667,388.42	\$ (27,771.80)	\$ 46,508.47	\$ -
	AT&T	No	ROW	Approved	U11526: Relocation is complete. NR	Complete	Mike Powers						
	Explorer	Yes	ROW	Approved	U11534: Relocation & Reimbursement is complete.	Complete	Keith Hollje	\$ 191,805.22	\$ 201,206.44	\$ 181,085.80	\$ -	\$ 20,120.64	\$ -
	Energy Transfer (Gas)	Yes	ROW	Approved	U11695: Relocation is complete. Reimbursement returned to Utility 4/29/09. No Coorespondence!	Complete	Mike Powers	\$ 370,006.39	\$ 420,136.25	\$ -	\$ -	\$ -	\$ 370,006.39
	GEUS	No	ROW	Approved	U11850: Relocation is complete. NR	Complete	Mike Powers						
	AT&T	No	ROW	Approved	U12358: Relocation is complete. NR	Complete	Mike Powers						
	TMPA	No	n/a	n/a	No effect (no adjustment required)	n/a	Mike Powers						
	Comcast	No	n/a	n/a	No effect (no adjustment required)	n/a	Mike Powers						
Kinder-Morgan	No	n/a	n/a	No effect (no adjustment required)	n/a	Mike Powers							
								\$ 2,386,396.77	\$ 2,146,629.39	\$ 1,553,730.43	\$ (27,771.80)	\$ 144,990.91	\$ 599,176.39
HUNT US 380 ROW CSJ: 0135-07-037	AT&T	No	ROW	Approved	U11525: Relocation is complete. NR	Complete	Mike Powers						
	Atmos Energy (Pipeline)	Yes	ROW	Approved	U12012: Relocation & Reimbursement is complete.	Complete	Mike Powers	\$ 193,912.59	\$ 73,187.29	\$ 65,868.56	\$ -	\$ 7,318.73	\$ -
	Atmos Energy (Distribution)	No	ROW	Approved	U12013: Relocation is complete. NR	Complete	Mike Powers						
	Caddo Basin	Yes	ROW	Approved	U12026: Relocation & Reimbursement is complete.	Complete	Mike Powers	\$ 651,005.00	\$ 383,518.60	\$ 345,166.74	\$ -	\$ 38,351.86	\$ -
	TMPA	Yes	ROW	Approved	U12076: Relocation is complete. Supplemental Agreement approved 8/06/09.	Complete	Mike Powers	\$ 514,097.06	\$ 516,702.66	\$ 462,196.85	\$ -	\$ 51,355.21	\$ 51,355.21
	GEUS	No	ROW	Approved	U12077: Relocation is complete. NR	Complete	Mike Powers						
	TXU Electric(Transmission)	No	ROW	Approved	U12079: Relocation is complete. NR	Complete	Mike Powers						
	GEUS	Yes	ROW	No	U12445: Utility Package approved 5/19/09. Utility working on relocation.	35%	Mike Powers	\$ 88,073.29	\$ -	\$ -			\$ 88,073.29
	City of Greenville (Water)	No	AO	n/a	City has already moved utility on private easement. (no agreement required)	n/a	Mike Powers						
	City of Greenville (Sewer)	No	AO	n/a	City has already moved utility on private easement. (no agreement required)	n/a	Mike Powers						
Cap Rock Energy	No	AO	n/a	No effect (no adjustment required)	n/a	Mike Powers							
								\$ 1,447,087.94	\$ 973,408.55	\$ 873,232.15	\$ -	\$ 97,025.80	\$ 139,428.50
DELTA SH 24 0136-04-032	Delta MUD	Yes	ROW	Approved	U11736: Relocation & Reimbursement is complete.	Complete	Keith Hollje	\$ 196,689.02	\$ 196,689.02	\$ 177,020.12	\$ -	\$ 19,668.90	\$ -
	Embarq Communication	No	ROW	Approved	U11853: Relocation is complete. NR	Complete	Mike Powers						
	Lamar Electric Coop	Yes	ROW	Approved	U12095: Relocation & Reimbursement is complete.	Complete	Keith Hollje	\$ 124,447.65	\$ 124,447.65	\$ 112,002.89	\$ -	\$ 12,444.76	\$ -
	Atmos Energy (Trans)	Yes	ROW	Approved	U12215: Relocation & Reimbursement is complete.	Complete	Mike Powers	\$ 193,721.26	\$ 98,779.90	\$ 88,901.91	\$ -	\$ 9,877.99	\$ -
								\$ 514,857.93	\$ 419,916.57	\$ 377,924.92	\$ -	\$ 41,991.65	\$ -
GRAYSON FM 1417 ROW CSJ: 0202-08-040	Atmos Energy (Distr)	Yes	ROW	Approved	U11703: Relocation & Reimbursement is complete	Complete	Mike Powers	\$ 574,800.00	\$ 369,005.12	\$ 332,104.61	\$ -	\$ 36,900.51	\$ -
	City of Denison (Sewer & Water)	No	ROW	Approved	U11720: Relocation is complete. NR	Complete	Mike Powers						
	City of Denison (Water)	Yes	ROW	Approved	U11721: Relocation is complete. City has never submitted payment request.	Complete	Mike Powers	\$ 86,145.00	\$ -	\$ -	\$ -	\$ -	\$ 86,145.00
	AT&T	No	ROW	Approved	U11722: Relocation is complete. NR	Complete	Mike Powers						
	TXU Electric	Yes	ROW	Approved	U11723: Relocation is complete & Reimbursement is 90%. Waiting on Audit!	Complete	Mike Powers	\$ 246,170.45	\$ 201,416.66	\$ 181,275.00	\$ -	\$ 20,141.66	\$ 20,141.66
	Cable ONE	No	ROW	Approved	U11724: Relocation is complete. NR	Complete	Mike Powers						
	Atmos Energy (Trans)	Yes	ROW	Approved	U12072: Relocation & Reimbursement is complete	Complete	Mike Powers	\$ 481,788.16	\$ 311,510.91	\$ 280,359.82	\$ -	\$ 31,151.09	\$ -
	City of Denison (Water)	Yes	ROW	Approved	U12182: Relocation is complete. City has never submitted payment request.	Complete	Mike Powers	\$ 24,850.00	\$ -	\$ -	\$ -	\$ -	\$ 24,850.00
	Verizon	No	n/a	n/a	No effect (no adjustment required)	n/a	Susan Pitman						
SEMGAS	Special Case	n/a	n/a	Relocation & Reimbursement is complete and paid through Acquisition. Parcels 33X, 36X, & 37X	Complete	LAN	\$ 158,998.53	\$ 158,998.53	\$ 143,098.68	\$ -	\$ 15,899.85	\$ -	
								\$ 1,572,752.14	\$ 1,040,931.22	\$ 936,838.11	\$ -	\$ 104,093.11	\$ 131,136.66
GRAYSON FM 1417 ROW CSJ: 2456-01-007	City of Denison (Water)	Yes	Utility	No	U11725: Relocation is complete. City has never submitted Agreement.	Complete	Mike Powers	Unknown					Unknown
	AT&T	No	ROW	Approved	U11726: Relocation is complete. NR	Complete	Mike Powers						
	TXU Electric	Yes	ROW	Approved	U11727: Relocation & Reimbursement is complete.	Complete	Mike Powers	\$ 50,042.19	\$ 34,991.26	\$ 31,492.14	\$ -	\$ 3,499.12	\$ -
	Cable ONE	No	ROW	Approved	U11728: Relocation is complete. NR	Complete	Mike Powers						
								\$ 50,042.19	\$ 34,991.26	\$ 31,492.14	\$ -	\$ 3,499.12	\$ -
PROJECT TOTALS OF ALL UTILITY COST:								\$ 6,281,447.52	\$ 4,863,164.44	\$ 3,995,776.45	\$ (27,771.80)	\$ 416,329.34	\$ 869,741.55

NOTE: US 82 in Lamar County from Reno to Blossom: The utilities have not been completely determined and is not available for Status update!

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# UTILITY CONFLICT MATRIX SAMPLE DATABASE REPORTS

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# Utility Conflict Matrix



**Project Owner:** Texas Department of Transportation  
**Project No.:** 1234-56-789  
**Project Description:** Road construction project in Houston  
**Highway or Route:** I-10 Katy Freeway

**Utility Conflict Matrix Developed/Revised By:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Reviewed By:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Utility Owner and/or Contact Name	Conflict ID	Drawing or Sheet No.	Utility Type	Size and/or Material	Utility Conflict Description	Start Station	End Station	Start Offset	End Offset	Utility Investigation Level Needed	Test Hole No.	Recommended Action or Resolution	Estimated Resolution Date	Resolution Status	Cost Analysis
AT&T	1	U-1	Telephone	Fiber Optic	Conflict with construction of frontage road widening.	21+00	22+00	45' Lt	45' Lt	QLC		Relocation before construction.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	2	U-1	Telephone	Fiber Optic	Conflict with construction of frontage road widening.	21+80	23+00	37' Rt	37' Rt	QLC		Relocation before construction.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	3	U-1	Telephone	Fiber Optic	Conflict with construction of frontage road widening.	27+50	30+00	48' Rt	48' Rt	QLC		Relocation before construction.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	4	U-1	Telephone	Fiber Optic	Conflict with construction of frontage road widening.	44+40	45+15	48' Rt	48' Rt	QLC		Relocation before construction.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	5	U-1	Telephone	Unknown	Conflict with construction of frontage road widening.	45+10	45+20	49' Lt	49' Lt	QLB		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	6	U-1	Telephone	Copper	Conflict with retaining wall No. 18.	45+80	45+90	57' Lt	49' Lt	QLB		Design change.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	7	U-1	Telephone	Copper	Conflict with retaining wall No. 18.	25+80	25+90	65' Lt	49' Lt	QLC		Protect in-place.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	8	U-1	Telephone	Copper	Conflict with retaining wall No. 18.	25+80	25+90	62' Rt	49' Lt	QLC		Protect in-place.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	9	U-1	Telephone	Copper	Conflict with retaining wall No. 18.	27+40	28+00	55' Lt	55' Lt	QLC		Protect in-place.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	10	U-1	Telephone	Copper	Conflict with retaining wall No. 18.	27+40	28+00	55' Rt	55' Lt	QLC		Protect in-place.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	11	U-1	Telephone	Copper	Conflict with retaining wall No. 18.	28+05	29+00	62' Rt	55' Lt	QLC		Exception to policy.	3/8/2010	Utility conflict identified	<a href="#">Detail</a>
AT&T	12	U-2	Telephone	Multiple Concrete Duct	Conflict with retaining wall No. 18.	15+50	16+00	49' Lt	80' Rt	QLC		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	13	U-2	Telephone	Multiple Concrete Duct	Conflict with retaining wall No. 27.	15+90	16+00	40' Lt	80' Rt	QLC		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	14	U-2	Telephone	Multiple Concrete Duct	Conflict with retaining wall No. 27.	20+40	22+00	115' Rt	80' Rt	QLC		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	15	U-2	Telephone	Multiple Concrete Duct	Conflict with retaining wall No. 27.	22+30	23+00	80' Rt	80' Rt	QLC		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	16	U-2	Telephone	Multiple Concrete Duct	Conflict with retaining wall No. 27.	25+85	28+00	55' Rt	80' Rt	QLB		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	17	U-2	Telephone	Multiple Concrete Duct	Conflict with retaining wall No. 27.	28+05	30+00	62' Rt	80' Rt	QLB		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	18	U-2	Telephone	Multiple Concrete Duct	Conflict with retaining wall No. 27.	33+15	35+00	65' Rt	80' Rt	QLB		Design change.	3/8/2010	Utility owner informed of utility conflict	<a href="#">Detail</a>
AT&T	19	U-2	Manhole	Steel	Conflict with retaining wall No. 27.	445+55	446+00	48' Rt	48' Rt	QLA	1	Relocation before construction.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>
Centerpoint Energy	20	U-3	Electricity Distribution	Steel	Conflict with retaining wall No. 27.	445+55	446+00	48' Rt	48' Rt	QLA	2	Relocation before construction.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>

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Utility Owner and/ or Contact Name	Conflict ID	Drawing or Sheet No.	Utility Type	Size and/or Material	Utility Conflict Description	Start Station	End Station	Start Offset	End Offset	Utility Investigation Level Needed	Test Hole No.	Recommended Action or Resolution	Estimated Resolution Date	Resolution Status	Cost Analysis
Centerpoint Energy	21	U-3	Electricity Distribution	Steel	Conflict with construction of storm sewer.	445+50	446+00	48' Rt	48' Rt	QLA	3	Relocation before construction.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>
Centerpoint Energy	22	U-3	Electricity Distribution	Steel	Conflict with construction of storm sewer.	445+60	447+00	55' Rt	48' Rt	QLA	4	Relocation before construction.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>
Centerpoint Energy	23	U-3	Electricity Distribution	Steel	Conflict with construction of storm sewer.	445+80	448+00	55' Rt	48' Rt	QLA	5	Relocation before construction.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>
Centerpoint Energy	24	U-3	Electricity Distribution	Steel	Conflict with construction of storm sewer.	445+80	448+00	55' Rt	48' Rt	QLA	6	Relocation before construction.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>
Centerpoint Energy	25	U-3	Electricity Distribution	Steel	Conflict with construction of storm sewer.	445+80	448+00	55' Rt	48' Rt	QLA	7	Relocation before construction.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>
Centerpoint Energy	26	U-3	Electricity Distribution	Steel	Conflict with construction of storm sewer.	445+90	448+00	55' Rt	48' Rt	QLA	8	Design change.	7/2/2010	Utility conflict identified	<a href="#">Detail</a>

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# Utility Conflict Resolution Alternatives



Date: 11/24/2010

**Project Owner:** Texas Department of Transportation  
**Project No.:** 1234-56-789  
**Project Description:** Road construction project in Houston  
**Highway or Route:** I-10 Katy Freeway

## Cost Estimate Analysis

<b>Conflict ID:</b>	1
<b>Utility Owner:</b>	AT&T
<b>Utility Type:</b>	Telephone
<b>Size and/or Material:</b>	Fiber Optic
<b>Project Phase:</b>	60% Design

Alternative Number	Alternative Description	Alternative Advantage	Alternative Disadvantage	Responsible Party	Engineering Cost (Utility)	Direct Cost (Utility)	Engineering Cost (DOT)	Direct Cost (DOT)	Total Cost	Feasibility	Decision
0	Relocation before construction.	No design change required and no additional cost to DOT.	Cost to utility for relocation.	Utility Company	\$10,375.00	\$63,875.00	\$0.00	\$0.00	\$74,250.00	Yes	Selected
1	Protect in-place.			Utility Company	\$7,875.00	\$32,375.00	\$0.00	\$0.00	\$40,250.00	No	Rejected
2	Design change.			DOT	\$0.00	\$0.00	\$95,375.00	\$0.00	\$95,375.00	No	Rejected
3	Exception to policy.			DOT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	No	Rejected

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# Utility Conflict Resolution Alternatives



Date: 11/24/2010

**Project Owner:** Texas Department of Transportation  
**Project No.:** 1234-56-789  
**Project Description:** Road construction project in Houston  
**Highway or Route:** I-10 Katy Freeway

## Cost Estimate Analysis

<b>Conflict ID:</b>	2
<b>Utility Owner:</b>	AT&T
<b>Utility Type:</b>	Telephone
<b>Size and/or Material:</b>	Fiber Optic
<b>Project Phase:</b>	60% Design

Alternative Number	Alternative Description	Alternative Advantage	Alternative Disadvantage	Responsible Party	Engineering Cost (Utility)	Direct Cost (Utility)	Engineering Cost (DOT)	Direct Cost (DOT)	Total Cost	Feasibility	Decision
0	Relocation before construction.	No design change required and no additional cost to DOT.	Cost to utility for relocation.	Utility Company	\$10,750.00	\$64,250.00	\$0.00	\$0.00	\$75,000.00	Yes	Selected
1	Protect in-place.			Utility Company	\$8,250.00	\$32,750.00	\$0.00	\$0.00	\$41,000.00	No	Rejected
2	Design change.			DOT	\$0.00	\$0.00	\$95,750.00	\$0.00	\$95,750.00	No	Rejected
3	Exception to policy.			DOT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	No	Rejected

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# Alaska UCM



DRAFT Utility Conflict Report  
West Dowling Road Phase 1

Anchorage, Alaska  
DOT&PF No. 50898

Start Station	Start Offset	End Station	End Offset	Size	Type	Length	Conflict	ADJ/REL	Cost	PE/CE Cost	Total Cost
<b>CEA Distribution Relocation Costs</b>											
9+00	150' RT		200' LT	3 phi	UG	350	FG	Relocation before construction	\$52,500	\$15,750	\$68,250
16+00	100' LT	42+30	80' LT	3 phi	UG	2,630	FG	Relocation before construction	\$394,500	\$118,350	\$512,850
16+00	100' LT	15+50	100' RT	3 phi	UG	250	FG	Relocation before construction	\$37,500	\$11,250	\$48,750
16+00	100' LT	29+00	75' LT	1 phi	UG	1,650	FG	Relocation before construction	\$165,000	\$49,500	\$214,500
36+40	80' LT	35+80	350' RT	3 phi	UG	430	FG	Relocation before construction	\$64,500	\$19,350	\$83,850
36+60	80' LT	36+70	380' LT	3 phi	UG	300	FG	Relocation before construction	\$45,000	\$13,500	\$58,500
	UG Loop to the North			3 phi	UG	1,000	FG	Relocation before construction	\$150,000	\$45,000	\$195,000
Subtotal:									\$909,000	\$272,700	\$1,181,700
<b>CEA Transmission Relocation Costs</b>											
14+75	55' RT			138 kV	OH	1	PWY	Relocation before construction	\$30,000	\$9,000	\$39,000
32+75	55' RT			138 kV	OH	1	EX	Relocation before construction	\$50,000	\$15,000	\$65,000
36+38	45' RT			138 kV	OH	1	EX	Relocation before construction	\$50,000	\$15,000	\$65,000
Subtotal:									\$130,000	\$39,000	\$169,000
<b>Total Relocation Costs:</b>									<b>\$1,039,000</b>	<b>\$311,700</b>	<b>\$1,350,700</b>

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# California UCM



## I-10-EA 122401 - Utilities Conflict Status

Date of last revision: 12/4/2009

This document was prepared by: \_\_\_\_\_

Conflict No.	Utility Sheet No.	Test Hole No.	Owner	Utility Description	Test Hole/ Manhole Location	Start Station	End Station	Offset	Utility Conflict/ Work Description	Utility Conflict Investigation	Depth (ft)	Impact?	Utility Relocation	Resp. Party	Required Completion Date	Comments
1	U-2	1	PACBELL	40 mm DU Telephone	62 m Rt of I-405 Sta 165+55	165+55		40 m Rt and 57 m Rt of I-405	Conflict with retaining walls No. 166 and No. 168	QLA	4.55	N	P	U	1/10/2010	
2	U-2	2	PACBELL	40 mm DU Telephone	48 m Lt of I-405 Sta 165+55	165+55		40 m Rt and 57 m Rt of I-405	Conflict with retaining walls No. 166 and No. 168		14.40	N	P	U	1/10/2010	
3	U-3	3	SCE	25 mm DU Telephone	35 m Rt of I-405 Sta 165+01	165+01		43 m Rt of I-405	Conflict with retaining wall No. 166			N	P	U	1/10/2010	Located in Bristol OC
4	U-3	4	SCE	25 mm DU Telephone	46 m Lt of I-405 Sta 165+55	165+01		43 m Rt of I-405	Conflict with retaining wall No. 166			N	P	U		Located in Bristol OC
5	U-3	5	MWD	900 mm Water	in 380 mL ENC 50 m Rt of I-405 Sta 165+96	164+95		44 m Rt of I-405	Conflict with retaining wall No. 166	QLA	6.70	N	P	U		
6	U-3	6	MWD	900 mm Water	in 380 mL ENC 50 m Lt of I-405 Sta 165+96	164+95		44 m Rt of I-405	Conflict with retaining wall No. 166	QLA	6.50	N	P	U		
7	U-3	7	Caltrans	600 mm		163+29	163+24	53 m Rt of I-405 Sta 163+42	Conflict with Delhi Channel Bridge	QLA	6.00	N	P	U		
8	U-3	8	Caltrans	600 mm		163+29	163+42	53 m Rt of I-405 Sta 163+29	Conflict with Delhi Channel Bridge	QLA	9.00	N	P	U		
9	U-3	9	MCWD	300 mm Water	in 119 mL, 500 mm STL Casing 32 m Rt of I-405 Sta 163+25	163+25		35 m Rt of I-405	Conflict with I-405 widening and BR1 Line	QLA	10.30	N	P	U		
10	U-3	10	MCWD	300 mm Water	in 119 mL, 500 mm STL Casing 32 m Lt of I-405 Sta 163+25	163+25		33 m Lt of I-405	Conflict with I-405 widening and BR1 Line	QLA	8.75	N	P	U		
11	U-3	MH 11	CSDOC	Manhole		162+92		35 m Rt of I-405 Sta 162+92	Conflict with I-405 widening and BR1 Line	QLB	18.40	N	P	U		
12	U-3	12	CSDOC	380 mm Sewer		162+92		32 m Lt of I-405 Sta 162+91	Conflict with I-405 widening and BR1 Line			N	P	U		
13	U-4	13	MCWD	600 mm Water	in 94 mL, 900 mm STL Casing 67 m Rt of I-405 Sta 161+44	161+44		58 m Rt of I-405	Conflict with airport channel	QLA	4.55	Y	RB	U		600 mm waterline to be lowered, extend encasement
14	U-4	14	MCWD	600 mm Water	in 94 mL, 900 mm STL Casing 38 m Lt of I-405 Sta 161+40	161+42		32 m Lt of I-405	Conflict with I-405 widening			N	P	U		
15	U-4	15	MCWD	300 mm Water		157+20	160+29	70 m Rt of I-405 Sta 160+29	Conflict with AOA line and retaining wall No. 268	QLA		Y	RD	U		Encroachment CR R/W and private owner, encased under roadway
16	U-4	16	MCWD	300 mm Water		157+20	160+29	70 m Rt of I-405 Sta 159+07	Conflict with AOA line and retaining wall No. 268	QLA		Y	RD	U		Encroachment CR R/W and private owner, encased under roadway
17	U-5	17	MCWD	300 mm Water		157+20	160+29	70 m Rt of I-405 Sta 156+87	Conflict with AOA line and retaining wall No. 268	QLA	4.35	N	P	U		
18	U-5	MH 18	CSDOC	Manhole		156+65		28 m Rt of I-405 Sta 156+65	Conflict with I-405 widening	QLB	16.20	N	P	U		

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Conflict	Station and Offset	Utility	Identified Conflict	Testhole Needed	Utility Impact with Cost ("As-designed")	Recommended Resolution	Benefit of Resolution*
C1	100+05, 21' L, 14th St Constr. BL	AGL-BFO	Proposed storm structure and existing BFO.		Relocate 1150 LF of BFO-DUCT (\$91,000).	Relocate proposed storm drainage into street. Use DI's that drain toward roadway.	Save cost to relocate BFO-DUCT (\$91,000).
C2	100+66, 21' L, 14th St Constr. BL	AGL-BFO	Proposed storm structure and existing BFO.		Relocate 1150 LF of BFO-DUCT (\$91,000).	Relocate proposed storm drainage into street. Use DI's that drain toward roadway.	Save cost to relocate BFO-DUCT (\$91,000).
C3	100+38, 24' R, 14th St Constr. BL	UNK-UNK	Proposed 18" storm and unknown utility tee.	TH 1	Relocate unknown type and function utility.	TH to identify utility and conflict.	Eliminate possible delay during construction.
C4	100+56, 25' R, 14th St Constr. BL	8"W	Proposed 18" storm and existing 8" W.	TH 2	Relocate 8" W (\$7,500).	TH on 8" W, adjust depth of proposed storm drainage.	Save cost to relocate 8" W (\$6,000).
C5	100+61, 25' R, 14th St Constr. BL	8"W	Proposed 18" storm and existing 8" W.	TH 3	Relocate 8" W (\$7,500).	TH on 8" W, adjust depth of proposed storm drainage.	Save cost to relocate 8" W (\$6,000).
C6	100+82, 28' R, 14th St Constr. BL	4"G	Proposed storm structure and existing 4" G.	TH 4	Relocate 20 LF of 4" G (\$6,000).	TH on 4" G, adjust depth of proposed storm structure.	Save cost to relocate 4" G (\$4,5000).
C7	101+22, 27' R, 14th St Constr. BL	4"G	Proposed 18' and existing 4" by 2" gas tee.	TH 5	Relocate 2" G and 4" G Tee (\$12,500).	TH on G lines, adjust depth of proposed storm structure.	Save cost to relocate G lines (\$11,000).
C8	101+01, 28' L, 14th St Constr. BL	16"G	Proposed storm structure and existing 16" G.	TH 6	Relocate 16" G (\$10,000).	TH on 16" G, adjust depth of proposed storm structure.	Save cost to relocate 16" G (\$8,5000).
C9	101+25, 41' L, 14th St Constr. BL	UNK-BT-DUCT	Proposed storm structure and two BT ducts.	TH 7	Relocate BT-DUCT and 2" G (\$11,000).	TH on BT-DUCT and 2" G, adjust depth of proposed storm structure.	Save cost to relocate BT duct and 2" G (\$10,500).
C10	101+37, 41' L, 14th St Constr. BL	6"W	Proposed 18" storm and existing 6" W.	TH 8	Relocate 6" W (\$5,000).	TH on 6" W, adjust depth of proposed storm drainage.	Save cost to relocate 6" W (\$3,500).
C11	101+57, 27' L, 14th St Constr. BL	16"G	Proposed 18" storm and existing 16" G.	TH 9	Relocate 16" G (\$10,000).	TH on 16" G, adjust depth of proposed storm structure.	Save cost to relocate 16" G (\$8,5000).
C12	101+58, 22' L, 14th St Constr. BL	AGL-BFO	Proposed storm structure and existing BFO.		Relocate 1150 LF of BFO-DUCT (\$91,000).	Relocate proposed storm drainage into street. Use DI's that drain toward roadway.	Save cost to relocate BFO-DUCT (\$91,000).
C13	101+90, 22' L, 14th St Constr. BL	AGL-BFO	Proposed storm structure and existing BFO.		Relocate 1150 LF of BFO-DUCT (\$91,000).	Relocate proposed storm drainage into street. Use DI's that drain toward roadway.	Save cost to relocate BFO-DUCT (\$91,000).
C14	102+20, 27' R, 14th St Constr. BL	4"G	Proposed storm structure and existing 4" G.		Relocate 4" G (\$4,500).	Relocate 4" G.	Eliminate conflict with proposed DI.
C15	102+36, 24" L, 14th St Constr. BL	AGL-BFO	Proposed storm structure and existing BFO.		Relocate 1150 LF of BFO-DUCT (\$91,000).	Relocate proposed storm drainage into street. Use DI's that drain toward roadway.	Save cost to relocate BFO-DUCT (\$91,000).

\* Please include all benefits incurred including time, costs, and safety improvements

**Key:**

AC - Asbestos Concrete  
 BE - Buried Electric  
 BFO - Buried Fiber Optic  
 BT - Buried Telephone  
 G - Gas  
 L - Left  
 MES - Mitered End Section  
 OT - Overhead Telephone  
 R - Right  
 RCP - Reinforced Concrete Pipe  
 W - Water  
 WM - Water Main  
 TH - Test Hole  
 UNK - Unknown

**Utility Owner:**

AGL Atlanta Gas Light  
 BE Georgia Power  
 BT Bell South  
 L3 Level 3 Communications  
 MFN Metromedia Fiber Network  
 SAN Fulton County Public Works  
 W City of Atlanta

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# Texas UCM

**TxDOT District:** Houston

IH 10: from Gelhorn to Mercury Dr.

US 90: from IH 10 to 0.29 miles west of Mercury Dr.

**CSJ:** 050-80-1166

**CSJ:** 002-80-2081

Item Number	Owner	Utility	Utility Size/Material	Location	Crossing	Conflict	Sheet Number	Conflict Status	Estimated Conflict Resolution Date	Agreement Assembly	Agreement Status	Agreement Submittal Date	Comments
1	Centerpoint Energy	Electrical Conduit	18" Conduit Duct	115+36, US 90	Underground	Proposed pavement, ditch.	Utility Sketch - Centerpoint Electric Sheet 1 of 1	Document received	3/1/2006	JUA A	Agreement Submittal	5/17/2010	CPEE completed design.
2	Centerpoint Energy	Transmission Tower	N/A	115+57, US 90	Underground	Proposed pavement.	Utility Sketch - Centerpoint Transmission Sheet 1 of 1	Document received		JUA B			CPEE completed design.
3	Centerpoint Energy	Transmission Lines	N/A	114+56	Overhead	Minimum clearance requirement.	Utility Sketch - Centerpoint Transmission Sheet 1 of 1	Document received		JUA A	Agreement Approval or Execution	5/17/2010	CPEE completed design.
4	Centerpoint Energy	Distribution Line	N/A	IH 10 at Oates Rd	Overhead	Minimum clearance requirement.		Utility conflict resolved	1/12/2006	JUA B			CPEE completed design.
5	Centerpoint Energy	Distribution Line	N/A	102+00, US 90 WBFR	Overhead	Minimum clearance requirement.		Utility conflict created		JUA B			CPEE completed design.
6	Centerpoint Energy	Distribution Line	N/A	129+00, US 90	Overhead	Minimum clearance requirement, proposed bridge at Oates Rd.	Utility Sketch - Centerpoint Distribution Sheet 1 of 1	Document received		JUA B			CPEE completed design.

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## **SAMPLE PROJECT FILES**

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### UTILITY LINECODES

EXISTING	TO BE REMOVED	PROPOSED	TYPE OF UTILITY
			ELECTRIC
			ELECTRIC/TELECOMMUNICATIONS
			ELECTRIC/CABLE TV
			ELECTRIC/TRAFFIC CONTROL
			ELECTRIC/TELECOMMUNICATIONS/CABLE TV
			ELECTRIC/TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
			ELECTRIC/CABLE TV/TRAFFIC CONTROL
			ELECTRIC/TELECOMMUNICATIONS/TRAFFIC CONTROL
			GUY WIRE
			TELECOMMUNICATIONS
			TELECOMMUNICATIONS/TRAFFIC CONTROL
			TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
			TELECOMMUNICATIONS/CABLE TV
			CABLE TV
			CABLE TV/TRAFFIC CONTROL
			TRAFFIC CONTROL

### UTILITY SYMBOLS

EXISTING	PROPOSED	TEMPORARY	EXISTING	PROPOSED	TEMPORARY	DESCRIPTION
						CLEANOUT
						SANITARY SEWER MANHOLE
						AIR RELEASE VALVE
						GREASE TRAP
						SANITARY SEWER FORCE MAIN VALVE
						GAS VALVE
						GAS METER
						GAS MANHOLE
						GAS PRESSURE REGULATOR
						GAS VAULT
						GAS TEST STATION
						PETROLEUM VALVE
						TRAFFIC CONTROL MANHOLE/ ELECTRIC COMMUNICATIONS BOX
						TRAFFIC CONTROL PEDESTRIAN SIGNAL/BUTTON POST

MISCELLANEOUS		DESCRIPTION
		LIMITS OF OVERHEAD AND SUBSURFACE UTILITY INVESTIGATION
		TEST HOLE (OL-A ONLY)
		END OF INFORMATION
		QUALITY LEVEL (OL) DELINEATION
		POLE ID
		SANITARY SEWER MANHOLE (SSMH) ID
		CONFLICT LOCATION (UTILITY IMPACT ANALYSIS (UIA) ONLY)

			ELECTRIC (QL-D)
			ELECTRIC (QL-C)
			ELECTRIC (QL-B)
			TELECOMMUNICATIONS (QL-D)
			TELECOMMUNICATIONS (QL-C)
			TELECOMMUNICATIONS (QL-B)
			CABLE TV (QL-D)
			CABLE TV (QL-C)
			CABLE TV (QL-B)
			WATER (QL-D)
			WATER (QL-C)
			WATER (QL-B)
			WATER FOR LABELED PIPE SIZES (QL-D)
			WATER FOR LABELED PIPE SIZES (QL-C)
			WATER FOR LABELED PIPE SIZES (QL-B)
			NON-POTABLE WATER (QL-D)
			NON-POTABLE WATER (QL-C)
			NON-POTABLE WATER (QL-B)
			NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-D)
			NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-C)
			NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-B)
			STEAM (QL-D)
			STEAM (QL-C)
			STEAM (QL-B)
			STEAM FOR LABELED PIPE SIZES (QL-D)
			STEAM FOR LABELED PIPE SIZES (QL-C)
			STEAM FOR LABELED PIPE SIZES (QL-B)
			SANITARY SEWER WITH FLOW DIRECTION (QL-D)
			SANITARY SEWER WITH FLOW DIRECTION (QL-C)
			SANITARY SEWER WITH FLOW DIRECTION (QL-B)
			SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-D)
			SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-C)
			SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-B)
			SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-D)
			SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-C)
			SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-B)
			GAS (QL-D)
			GAS (QL-C)
			GAS (QL-B)
			GAS FOR LABELED PIPE SIZES (QL-D)
			GAS FOR LABELED PIPE SIZES (QL-C)
			GAS FOR LABELED PIPE SIZES (QL-B)
			PETROLEUM (QL-D)
			PETROLEUM (QL-C)
			PETROLEUM (QL-B)
			PETROLEUM FOR LABELED PIPE SIZES (QL-D)
			PETROLEUM FOR LABELED PIPE SIZES (QL-C)
			PETROLEUM FOR LABELED PIPE SIZES (QL-B)
			TRAFFIC CONTROL (QL-D)
			TRAFFIC CONTROL (QL-C)
			TRAFFIC CONTROL (QL-B)
			UNKNOWN UTILITY FOUND IN SUE INVESTIGATION (QL-B)

**QUALITY LEVELS AND DEFINITIONS**

QL-D DEPICTED ACCORDING TO UTILITY RECORD INFORMATION AND IN-FIELD VISUAL INSPECTION. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

QL-C EXISTING UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN DEPICTING THE UTILITIES SHOWN ON RECORDS. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

QL-B INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES. QL-B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

OL-A OBTAIN PRECISE HORIZONTAL AND VERTICAL POSITION OF THE UTILITY LINE BY EXCAVATING A TEST HOLE. THE TEST HOLE SHALL BE DONE USING VACUUM EXCAVATION OR COMPARABLE NONDESTRUCTIVE EQUIPMENT IN A MANNER AS TO CAUSE NO DAMAGE TO THE UTILITY LINE. AFTER EXCAVATING A TEST HOLE, A FIELD SURVEY SHALL BE PERFORMED TO DETERMINE THE EXACT LOCATION AND POSITION OF THE UTILITY LINE.

**TELEPHONE PAIR SIZE TABLE**

TELEPHONE PAIR SIZE	TELEPHONE CABLE DIAMETER
5 - 100	0.50 TO 2.00 IN
101 - 2400	UP TO 3.50 IN

NOT TO SCALE	REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
		OFFICE: UTILITIES
		UTILITY PLANS
		LEGEND
		SR 120/ROSWELL RD. WIDENING
		DRAWING No. 24-0B

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UTILITY POLE DATA SHEET

Table with columns: Description, TBE Job #, Pole #, Pole ID, Pole Owner, Electric, Telecom, Cable TV, Traffic, Other, Northing, Easting, Height, Dia., Material, Misc. Rows include utility poles 1 through 41 with various specifications.

UTILITY POLE DATA SHEET

Table with columns: Description, TBE Job #, Pole #, Pole ID, Pole Owner, Electric, Telecom, Cable TV, Traffic, Other, Northing, Easting, Height, Dia., Material, Misc. Rows include utility poles 42 through 92A with various specifications.

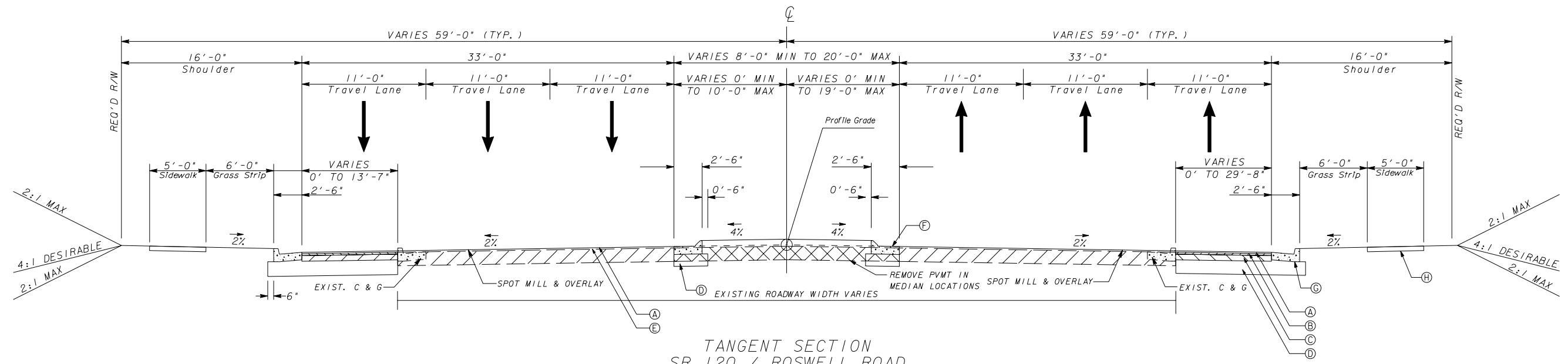
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: UTILITIES
UTILITY PLANS
UTILITY POLE DATA
SR 120/ROSWELL RD. WIDENING

DRAWING No. 24-0C

NOT TO SCALE

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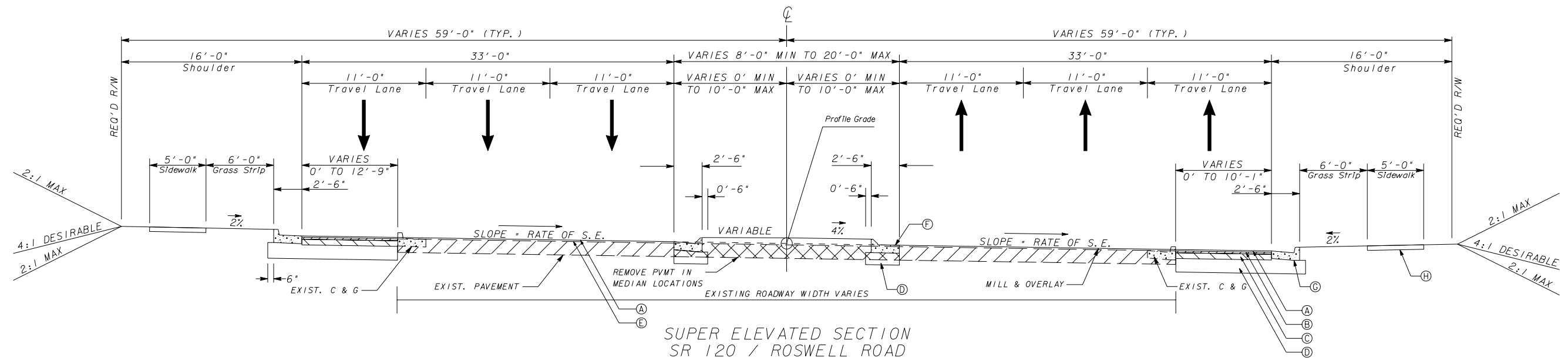


TANGENT SECTION  
SR 120 / ROSWELL ROAD

STA. 14+95.93 TO 24+67.00  
STA. 35+89.00 TO 62+90.00  
STA. 86+88.96 TO 90+50.00

SLOPE CONTROLS		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
3:1	--	--
2:1	OVER 10'	OVER 10'

PAVEMENT MATERIAL SCHEDULE	
(A)	RECYCLED ASPH. CONC. 12.5 mm SMA, GP 2 ONLY, 165 LBS./SY, DESIGN MIX LEVEL D
(B)	RECYCLED ASPH. CONC. 19 mm SUPERPAVE, GP 1 OR GP2, 330 LBS./SY, DESIGN MIX LEVEL D
(C)	RECYCLED ASPH. CONC. 25 mm SUPERPAVE, GP 1 OR GP2, 880 LBS./SY, DESIGN MIX LEVEL C
(D)	GRADED AGGREGATE BASE COURSE, 12"
(E)	ASPHALTIC CONCRETE LEVELING, AS REQUIRED
(F)	CONCRETE CURB & GUTTER, 8" X 30", TYPE 7, GA STD. 9032 B
(G)	CONCRETE CURB & GUTTER, 8" X 30", TYPE 2, GA STD. 9032 B
(H)	5' CONCRETE SIDEWALK, 4 INCH THICK



SUPER ELEVATED SECTION  
SR 120 / ROSWELL ROAD

STA. 24+67.00 TO 35+89.00  
STA. 62+90.00 TO 66+29.91

NOTE: SEE DRAWING NO. 5-07 FOR STD. DETAILS



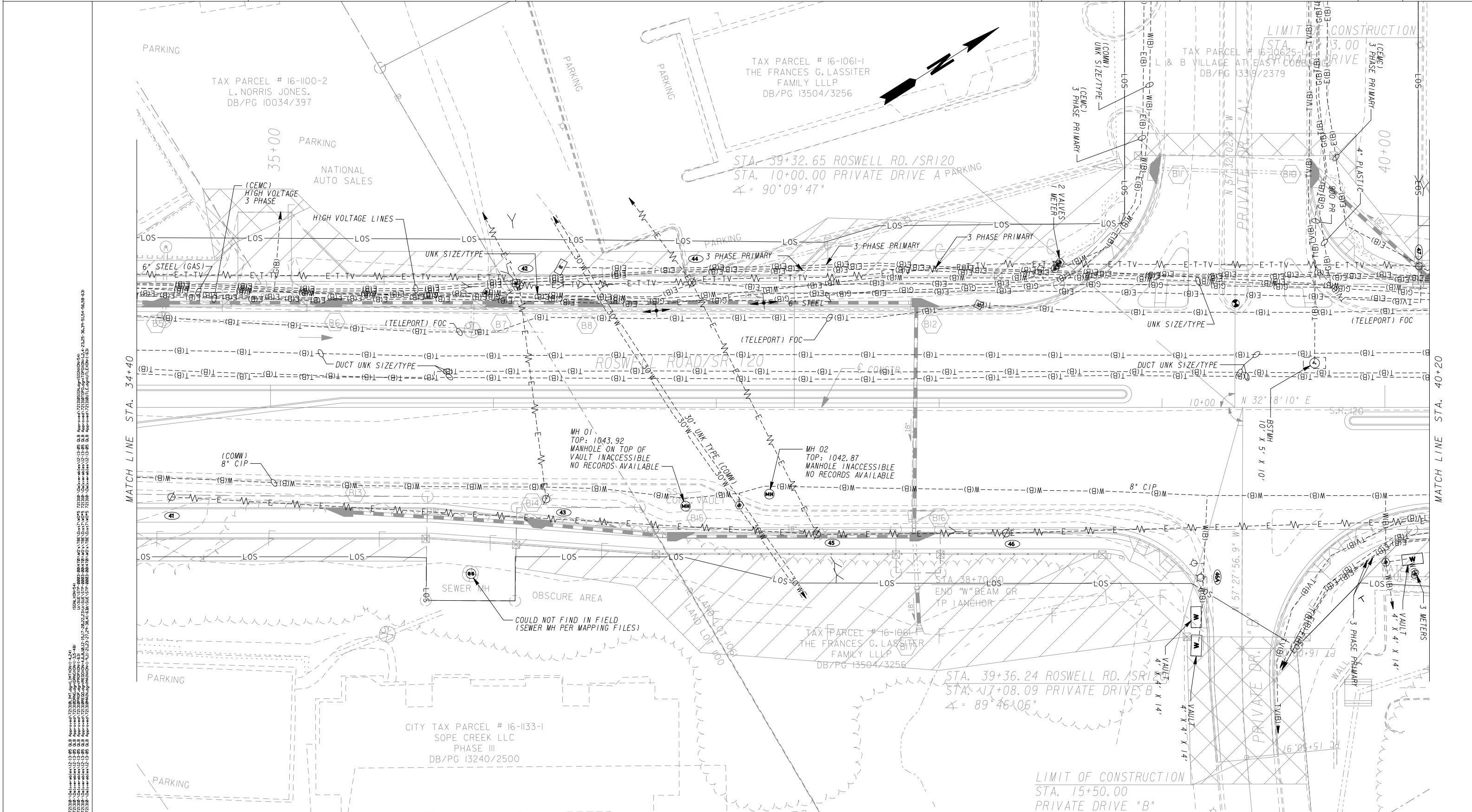
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STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: URBAN DESIGN  
TYPICAL SECTIONS

SR 120/ROSWELL RD. WIDENING

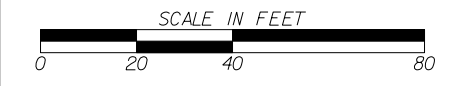
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PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	C F
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

BEGIN LIMIT OF ACCESS.....	BLA
END LIMIT OF ACCESS.....	ELA
LIMIT OF ACCESS	----
R/W AND LIMIT OF ACCESS	====
EXISTING R/W LINE	- - - -



REVISION DATES	

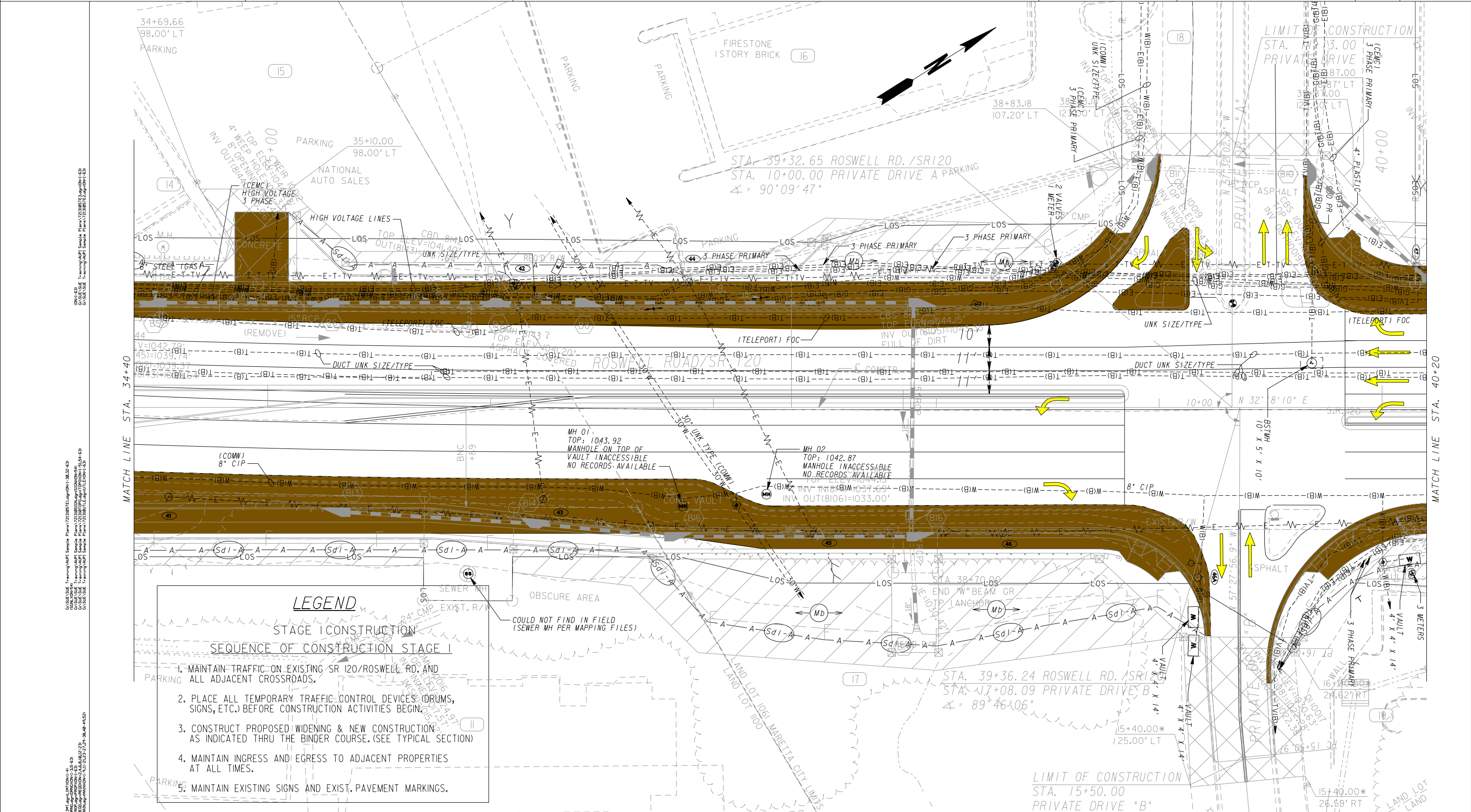
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OFFICE: UTILITIES  
UTILITY PLANS

SR 120/ROSWELL RD. WIDENING  
STA. 34+40 - STA. 40+20

DRAWING No. 24-05

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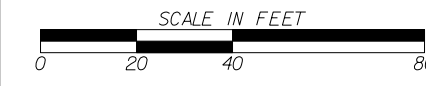
**LEGEND**

**STAGE I CONSTRUCTION SEQUENCE OF CONSTRUCTION STAGE I**

1. MAINTAIN TRAFFIC ON EXISTING SR 120/ROSWELL RD. AND ALL ADJACENT CROSSROADS.
2. PLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES (DRUMS, SIGNS, ETC.) BEFORE CONSTRUCTION ACTIVITIES BEGIN.
3. CONSTRUCT PROPOSED WIDENING & NEW CONSTRUCTION AS INDICATED THRU THE BINDER COURSE. (SEE TYPICAL SECTION)
4. MAINTAIN INGRESS AND EGRESS TO ADJACENT PROPERTIES AT ALL TIMES.
5. MAINTAIN EXISTING SIGNS AND EXIST. PAVEMENT MARKINGS.

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	—C— F—
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	▨
EASEMENT FOR CONSTR OF SLOPES	▩
EASEMENT FOR CONSTR OF DRIVES	▧

BEGIN LIMIT OF ACCESS.....	BLA
END LIMIT OF ACCESS.....	ELA
LIMIT OF ACCESS	—○—○—
R/W AND LIMIT OF ACCESS	—  —  —
EXISTING R/W LINE	---



REVISION DATES	

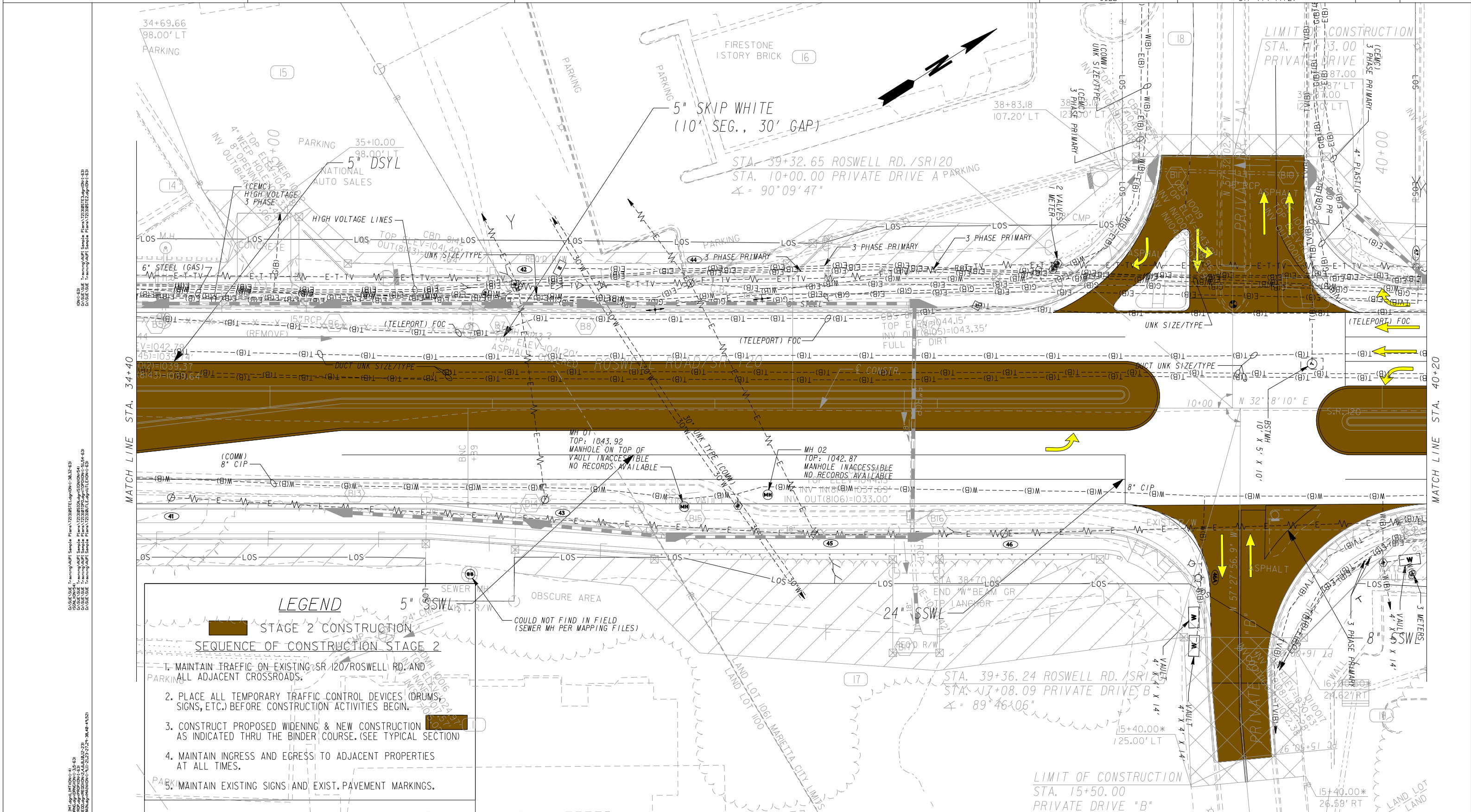
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DEPARTMENT OF TRANSPORTATION  
OFFICE: URBAN DESIGN

MAINLINE PLAN  
STAGE I CONSTRUCTION  
SR 120/ROSWELL RD. WIDENING  
STA. 34+40 - STA. 40+20

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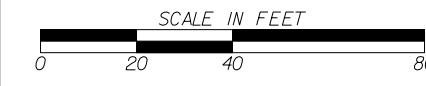


**LEGEND**

STAGE 2 CONSTRUCTION  
 SEQUENCE OF CONSTRUCTION STAGE 2  
 1. MAINTAIN TRAFFIC ON EXISTING SR 120/ROSWELL RD. AND ALL ADJACENT CROSSROADS.  
 2. PLACE ALL TEMPORARY TRAFFIC CONTROL DEVICES (DRUMS, SIGNS, ETC.) BEFORE CONSTRUCTION ACTIVITIES BEGIN.  
 3. CONSTRUCT PROPOSED WIDENING & NEW CONSTRUCTION AS INDICATED THRU THE BINDER COURSE. (SEE TYPICAL SECTION)  
 4. MAINTAIN INGRESS AND EGRESS TO ADJACENT PROPERTIES AT ALL TIMES.  
 5. MAINTAIN EXISTING SIGNS AND EXIST. PAVEMENT MARKINGS.

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	— C — F —
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

BEGIN LIMIT OF ACCESS.....	BLA
END LIMIT OF ACCESS.....	ELA
LIMIT OF ACCESS	—•••••—
R/W AND LIMIT OF ACCESS	—   —
EXISTING R/W LINE	---



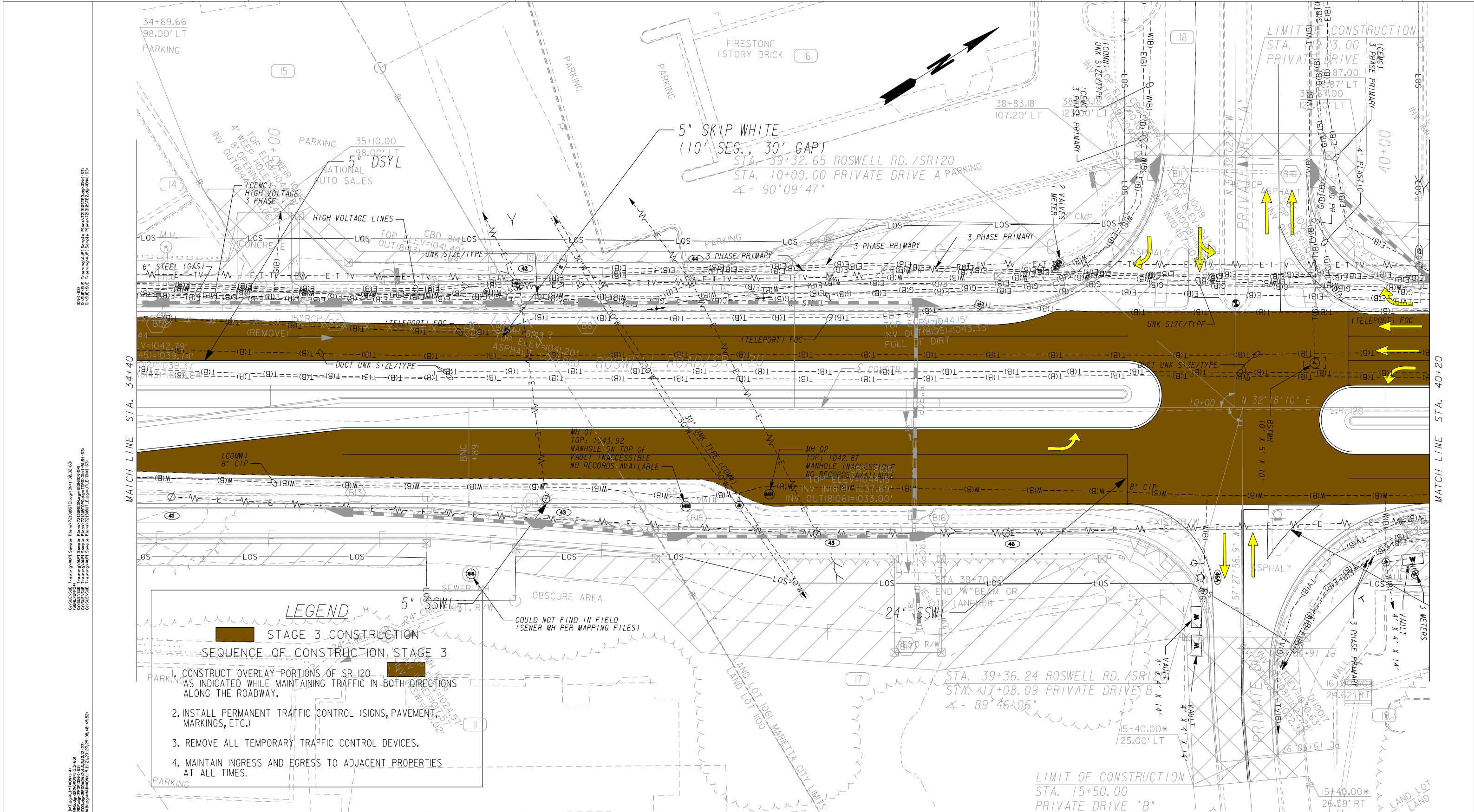
REVISION DATES

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: URBAN DESIGN

MAINLINE PLAN  
STAGE 2 CONSTRUCTION  
SR 120/ROSWELL RD. WIDENING  
STA. 34+40 - STA. 40+20

DRAWING No.  
**13-05**

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**LEGEND**

**5" SSWL**

**STAGE 3 CONSTRUCTION SEQUENCE OF CONSTRUCTION STAGE 3**

1. CONSTRUCT OVERLAY PORTIONS OF SR 120 AS INDICATED WHILE MAINTAINING TRAFFIC IN BOTH DIRECTIONS ALONG THE ROADWAY.
2. INSTALL PERMANENT TRAFFIC CONTROL (SIGNS, PAVEMENT, MARKINGS, ETC.)
3. REMOVE ALL TEMPORARY TRAFFIC CONTROL DEVICES.
4. MAINTAIN INGRESS AND EGRESS TO ADJACENT PROPERTIES AT ALL TIMES.

COULD NOT FIND IN FIELD (SEWER MH PER MAPPING FILES)

OBSCURE AREA

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	C F
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	▨
EASEMENT FOR CONSTR OF SLOPES	▧
EASEMENT FOR CONSTR OF DRIVES	▩

BEGIN LIMIT OF ACCESS.....	BLA
END LIMIT OF ACCESS.....	ELA
LIMIT OF ACCESS	---
R/W AND LIMIT OF ACCESS	▨
EXISTING R/W LINE	---



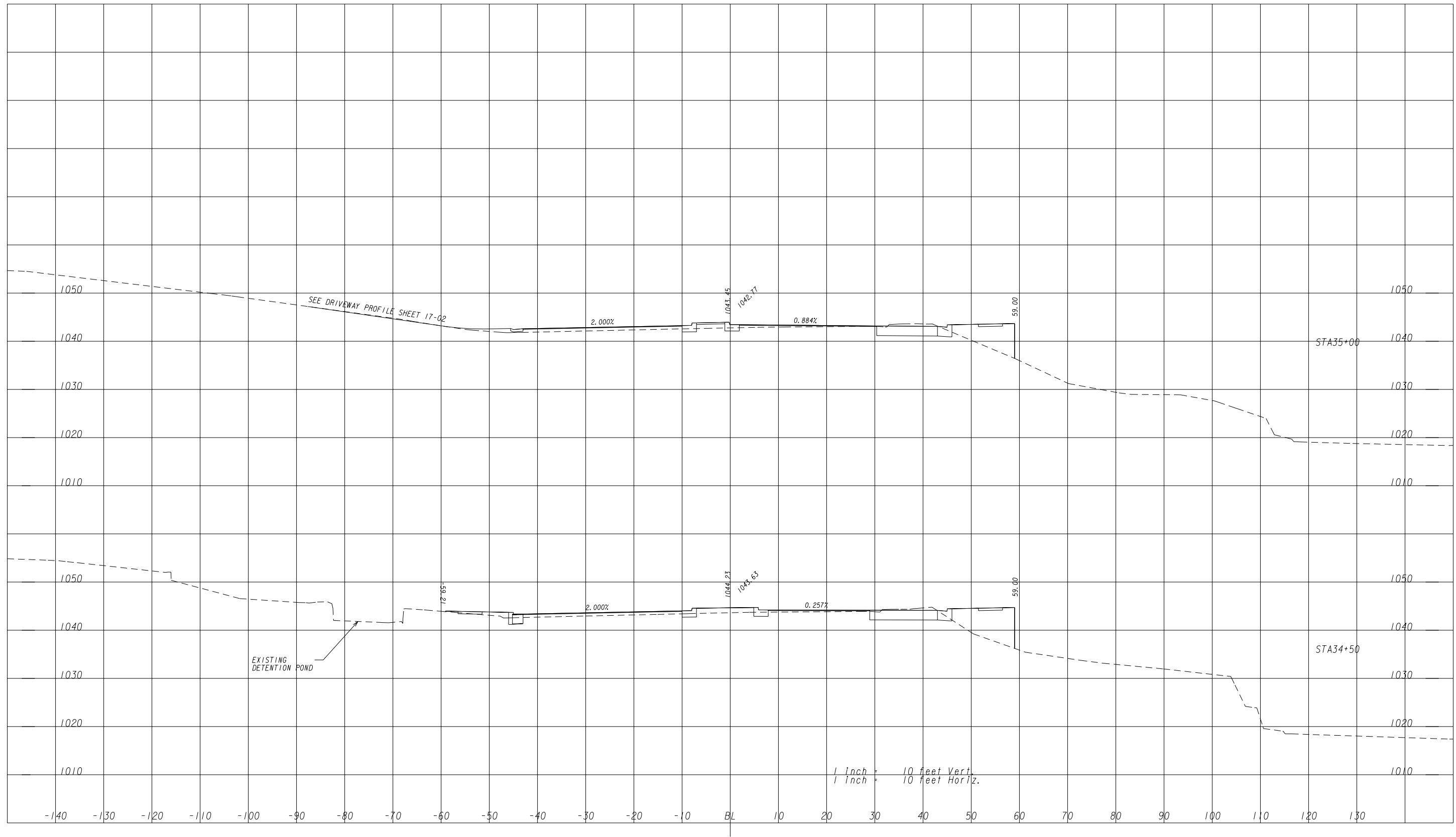
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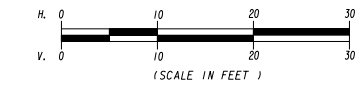
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STAGE 3 CONSTRUCTION  
SR 120/ROSWELL RD. WIDENING  
STA. 34+40 - STA. 40+20

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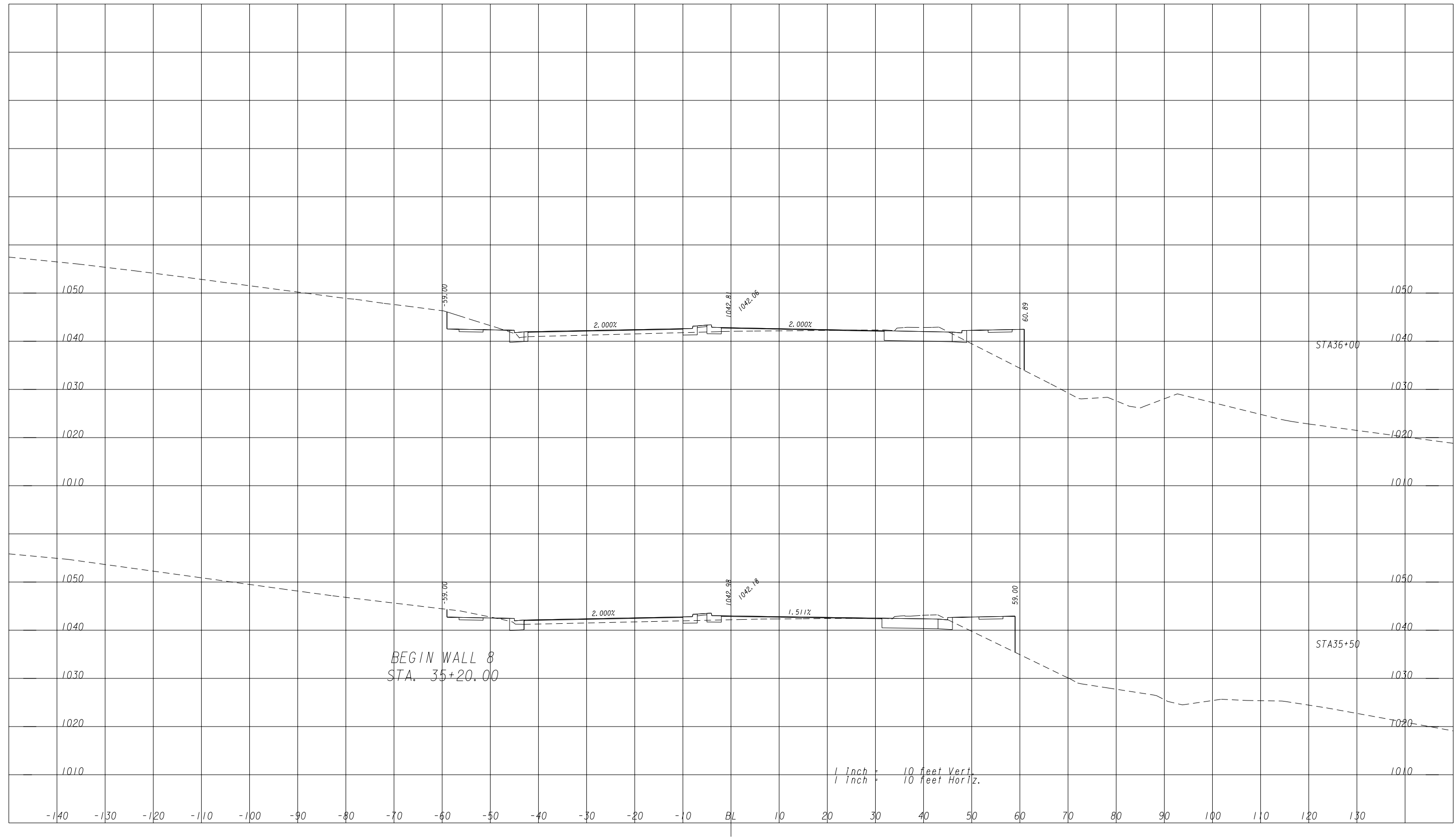
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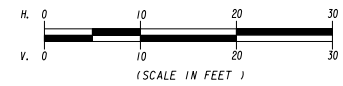
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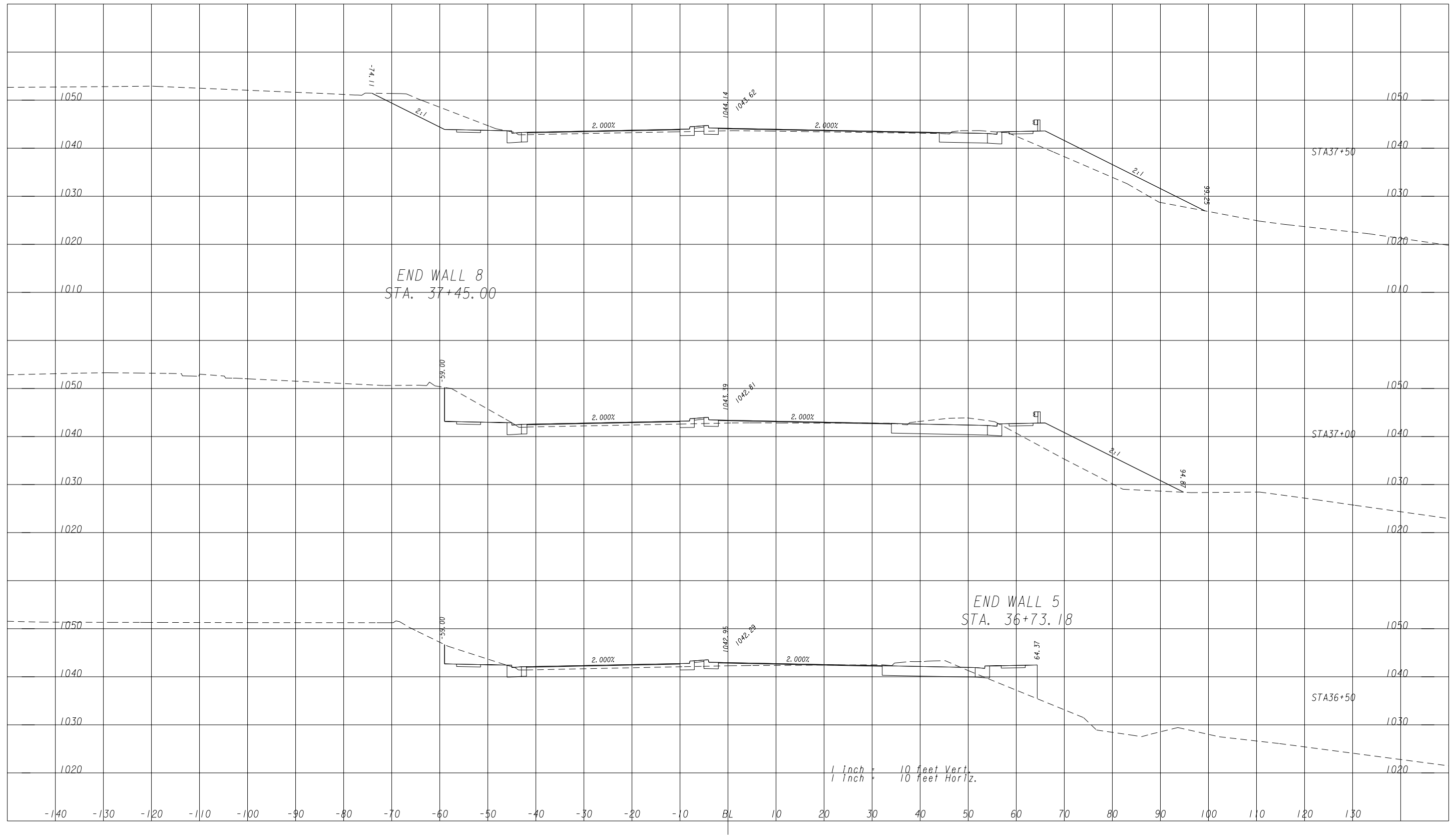
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 EARTHWORK CROSS SECTIONS  
 SR 120/ROSWELL RD. WIDENING

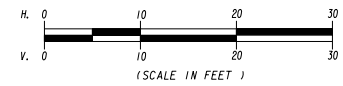
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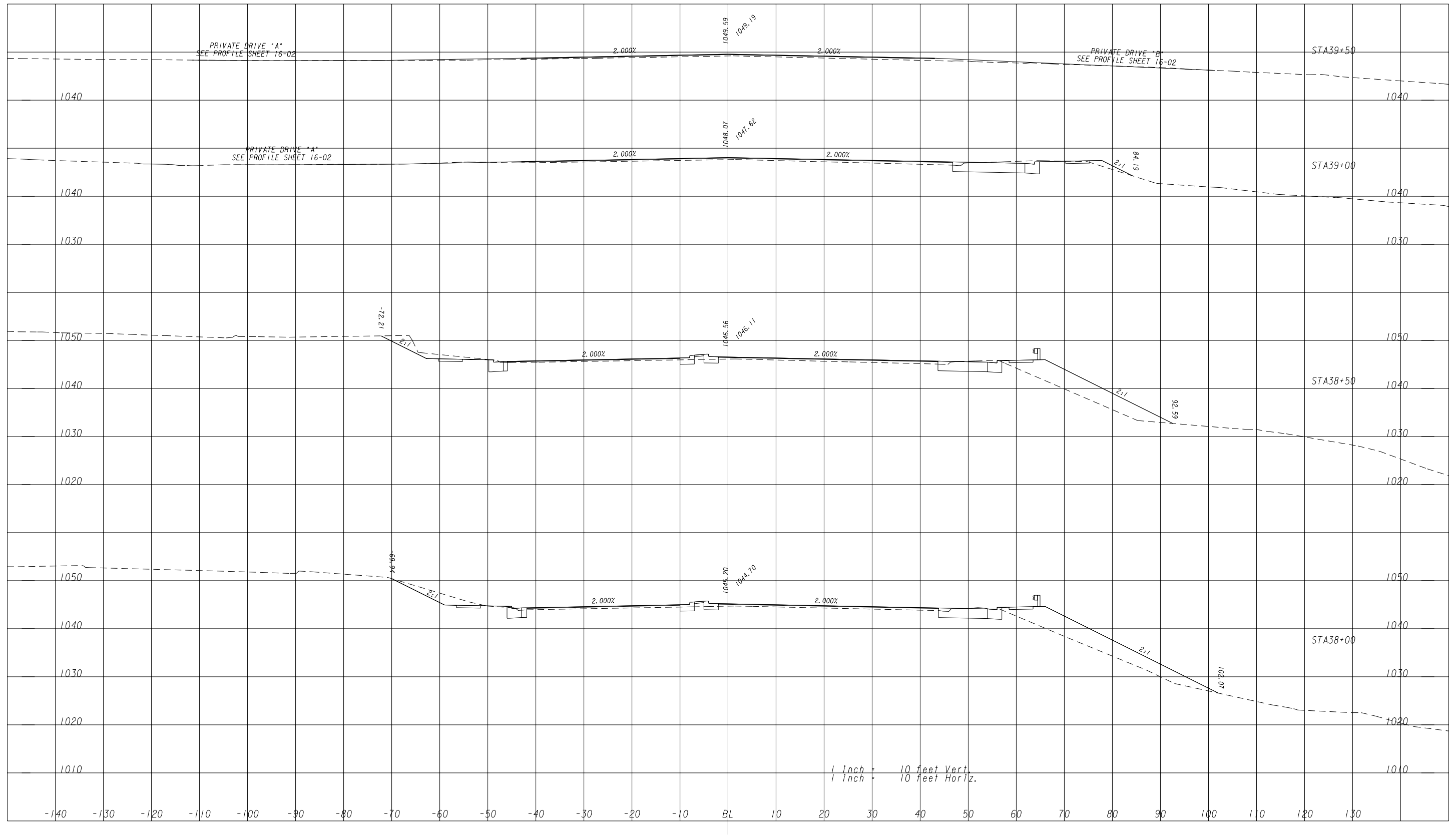
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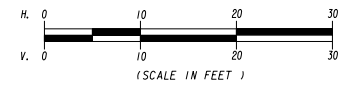
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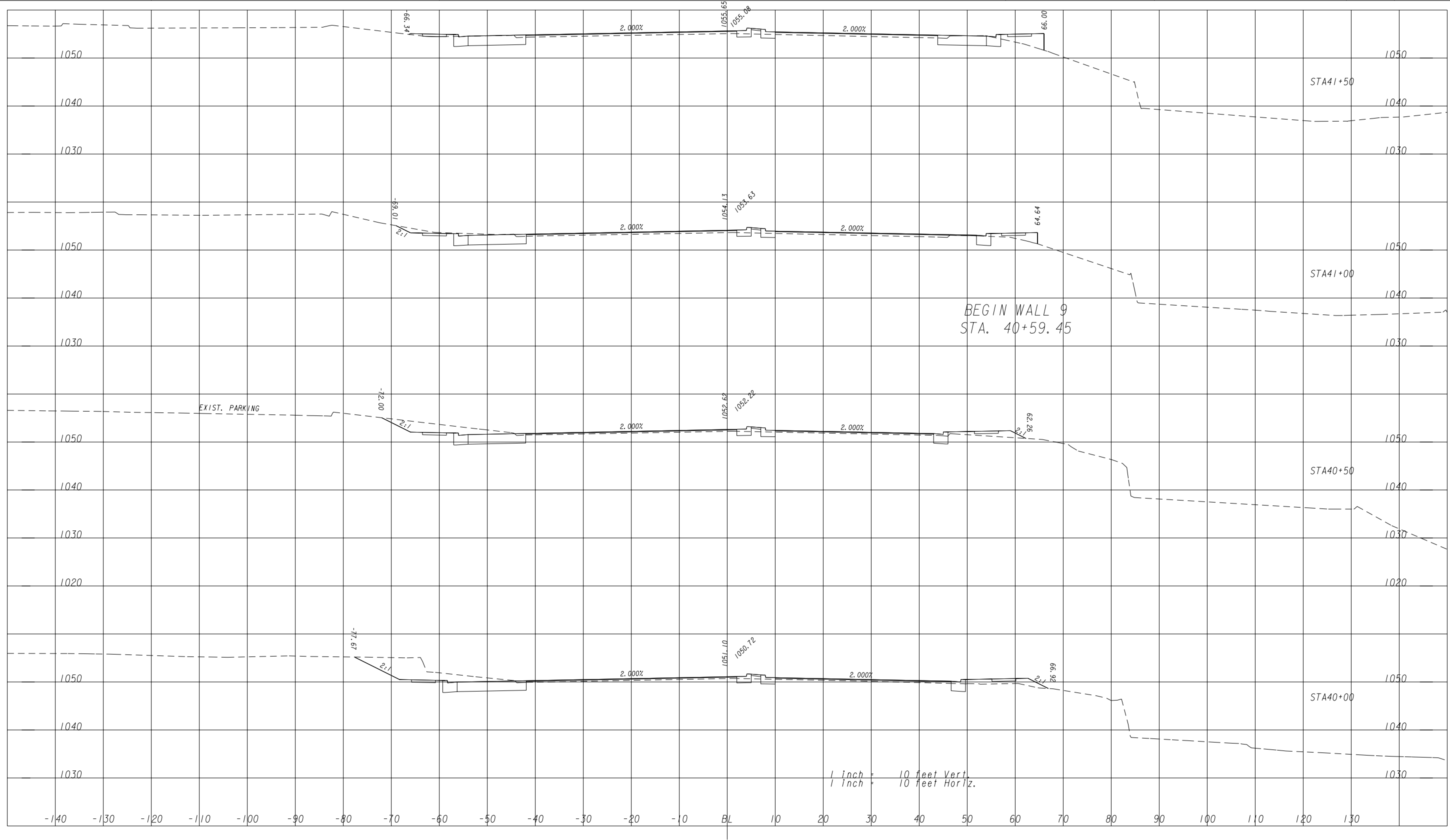


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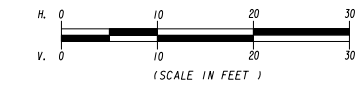
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 SR 120/ROSWELL RD. WIDENING

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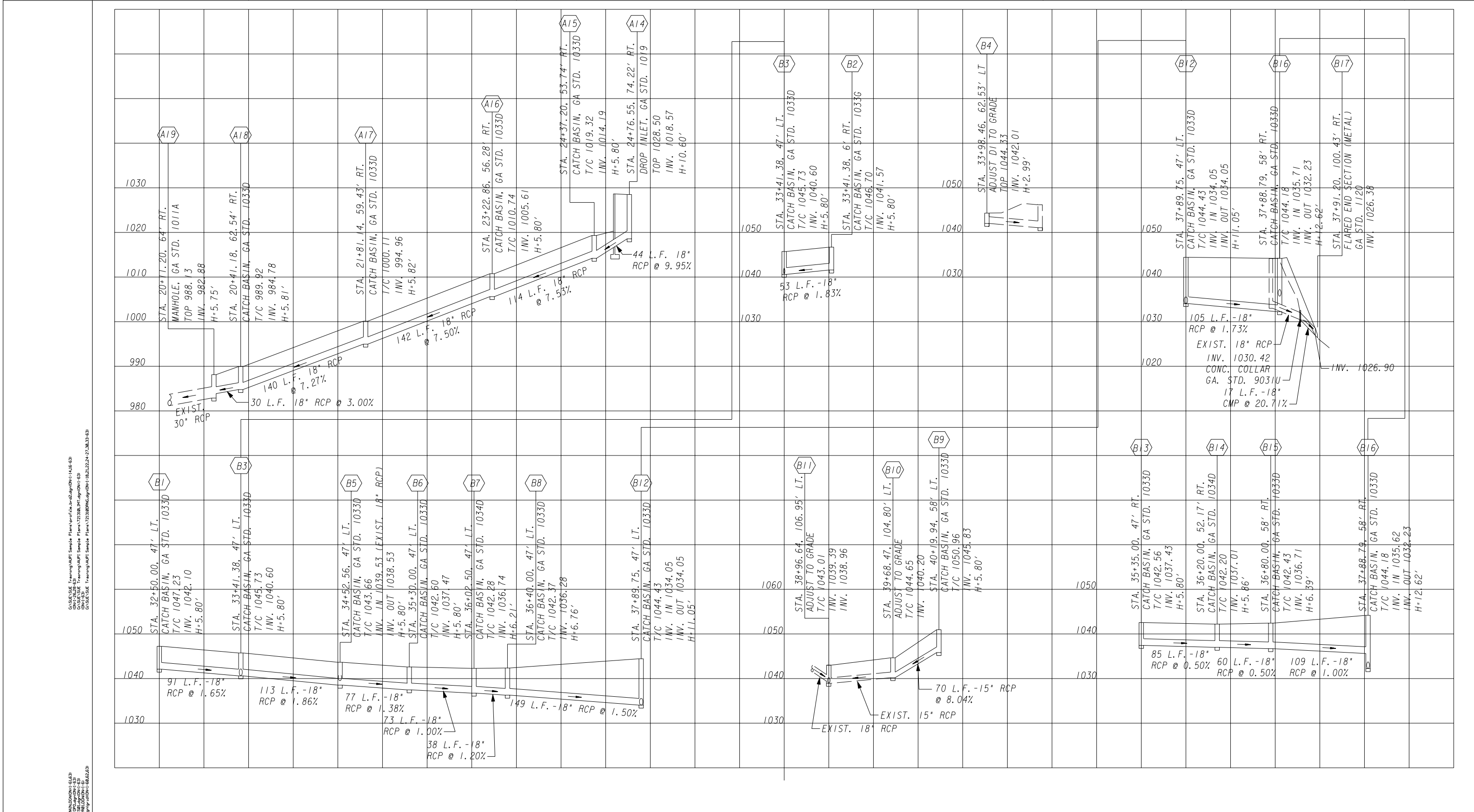
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SR 120/ROSWELL RD. WIDENING

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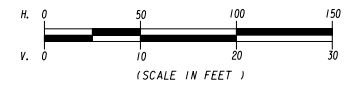
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REVISION DATES	

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE: URBAN DESIGN  
DRAINAGE PROFILES

SR 120/ROSWELL ROAD WIDENING

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**22-02**



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# Utility Conflict Resolution Alternatives

## Cost Estimate Analysis



Date: \_\_\_\_\_

Project Owner: \_\_\_\_\_

Project No.: \_\_\_\_\_

Project Description: \_\_\_\_\_

Highway or Route: \_\_\_\_\_

<b>Conflict ID:</b>	
<b>Utility Owner:</b>	
<b>Utility Type:</b>	
<b>Size and/or Material:</b>	
<b>Project Phase:</b>	

Alternative Number	Alternative Description	Alternative Advantage	Alternative Disadvantage	Responsible Party	Engineering Cost (Utility)	Direct Cost (Utility)	Engineering Cost (DOT)	Direct Cost (DOT)	Total Cost	Feasibility	Decision
1					\$	\$	\$	\$	\$		
2					\$	\$	\$	\$	\$		
3					\$	\$	\$	\$	\$		
4					\$	\$	\$	\$	\$		

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## **SELECTED DATABASE LOOKUP TABLES**

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## LESSON 5

### Lookup Tables Used In Lesson 5

**Table 1. Company**

CMPNY		
COMPANY ID:	COMPANY NAME:	COMPANY ACRONYM TEXT:
0	Chugach Electric Association, Inc.	CEA
1	Pacific Bell	PACBELL
2	Southern California Edison	SCE
3	Metropolitan Water District of Southern California	MWD
4	California Department of Transportation	Caltrans
5	Marina Coast Water District	MCWD
6	County Sanitation Districts of Orange County	CSDOC
7	AT&T	ATT
8	Centerpoint Energy	CPE
9	Southwestern Bell	SBC
10	Atlanta Gas Light	AGL
11	Unknown	UNK

**Table 2. Estimate Type**

ESTMT_TYPE		
ESTIMATE TYPE ID:	ESTIMATE TYPE NAME:	ESTIMATE TYPE DESCRIPTION:
0	Alternate Procedure Estimate	An Alternate Procedure Estimate is the approximate amount a utility adjustment will cost that a utility company provides to a DOT and which is then subsequently submitted to FHWA for review. The Alternate Procedure Estimate is typically a rough approximation of the actual cost that is submitted during the preliminary design phase of a highway project.
1	Direct Cost to Utility Estimate	A Direct Cost to Utility Estimate is the approximate amount that a utility adjustment will cost that a utility company provides to a DOT, not including the cost for engineering and design. Typical cost items of a Direct Cost to Utility Estimate are construction labor, materials, and transportation costs.
2	Engineering Cost to Utility Estimate	An Engineering Cost to Utility Estimate is the approximate amount that the engineering and design portion of a utility adjustment will cost that a utility company provides to a DOT, not including direct adjustment costs such as construction labor and materials.
3	Total Cost Estimate	A Total Cost Estimate is the approximate amount that a utility adjustment will cost that a utility company provides to a DOT, including engineering costs and direct construction costs.
4	Direct Cost to DOT Estimate	A Direct Cost to DOT Estimate is the approximate amount that a modification to the highway design will cost the DOT, except cost for redesign and reengineering.
5	Engineering Cost to DOT Estimate	An Engineering Cost to DOT Estimate is the approximate amount that a modification to the highway will cost the DOT to reengineer or redesign the project.

**Table 3. Horizontal Spatial Reference**

<b>HRZNTL_SPATIAL_REF</b>		
<b>HORIZONTAL SPATIAL REFERENCE ID:</b>	<b>HORIZONTAL SPATIAL REFERENCE NAME:</b>	<b>HORIZONTAL SPATIAL REFERENCE DESCRIPTION:</b>
0	NAD_1983_UTM_Zone_12N	North American Datum 1983 Universal Transverse Mercator Zone 12 N (meters).
1	NAVD_1988	North American Vertical Datum 1988 (meters).
2	GCS_WGS_1984	Geographic Coordinate System World Geodetic System 1984 (degrees).
3	GCS_North_American_1983	Geographic Coordinate System North American Datum 1983 (degrees).
4	Geodetic (lat/long)	Geographic Coordinate System of latitude and longitude.

**Table 4. Highway Functional Class**

<b>HWY_FUNCL_CLASS</b>		
<b>HIGHWAY FUNCTIONAL CLASS ID:</b>	<b>HIGHWAY FUNCTIONAL CLASS CODE:</b>	<b>HIGHWAY FUNCTIONAL CLASS NAME:</b>
0	I	Interstate
1	UF	Other Urban Freeway or Expressway
2	RA	Rural Principal Aterial
3	FM	Farm to Market Road
4	US	United States Highway

**Table 5. State**

STATE			
STATE ID:	STATE NAME:	STATE DOT NAME:	STATE DOT ACRONYM TEXT:
1	Alabama	Alabama Department of Transportation	ALDOT
2	Alaska	Alaska Department of Transportation and Public Facilities	Alaska DOT&PF
3	American Samoa		
4	Arizona	Arizona Department of Transportation	ADOT
5	Arkansas	Arkansas State Highway and Transportation Department	AHTD
6	California	California Department of Transportation	Caltrans
7	Colorado	Colorado Department of Transportation	CDOT
8	Connecticut	Connecticut Department of Transportation	CONNDOT
9	Delaware	Delaware Department of Transportation	DELDOT
10	District of Columbia	District Department of Transportation	DDOT
11	Federated States of Micronesia		
12	Florida	Florida Department of Transportation	FDOT
13	Georgia	Georgia Department of Transportation	GDOT
14	Guam		
15	Hawaii	Hawaii Department of Transportation	HDOT
16	Idaho	Idaho Transportation Department	ITD
17	Illinois	Illinois Department of Transportation	IDOT
18	Indiana	Indiana Department of Transportation	INDOT
19	Iowa	Iowa Department of Transportation	Iowa DOT
20	Kansas	Kansas Department of Transportation	KDOT
21	Kentucky	Kentucky Transportation Cabinet	KTC
22	Louisiana	Louisiana Department of Transportation and Development	DOTD
23	Maine	Maine Department of Transportation	MaineDOT
24	Marshall Islands		
25	Maryland	Maryland Department of Transportation	MDOT
26	Massachusetts	Massachusetts Department of Transportation	MassDOT
27	Michigan	Michigan Department of Transportation	MDOT
28	Minnesota	Minnesota Department of Transportation	Mn/DOT
29	Mississippi	Mississippi Department of Transportation	MDOT
30	Missouri	Missouri Department of Transportation	MoDOT
31	Montana	Montana Department of Transportation	MDT

**Table 5. State (Continued)**

STATE			
STATE ID:	STATE NAME:	STATE DOT NAME:	STATE DOT ACRONYM TEXT:
32	Nebraska	Nebraska Department of Roads	NDOR
33	Nevada	Nevada Department of Transportation	NDOT
34	New Hampshire	New Hampshire Department of Transportation	NHDOT
35	New Jersey	New Jersey Department of Transportation	NJDOT
36	New Mexico	New Mexico Department of Transportation	NMDOT
37	New York	New York State Department of Transportation	NYS DOT
38	North Carolina	North Carolina Department of Transportation	NCDOT
39	North Dakota	North Dakota Department of Transportation	NDDOT
40	Northern Mariana Islands		
41	Ohio	Ohio Department of Transportation	ODOT
42	Oklahoma	Oklahoma Department of Transportation	ODOT
43	Oregon	Oregon Department of Transportation	ODOT
44	Palau		
45	Pennsylvania	Pennsylvania Department of Transportation	PennDOT
46	Puerto Rico		
47	Rhode Island	Rhode Island Department of Transportation	RIDOT
48	South Carolina	South Carolina Department of Transportation	SCDOT
49	South Dakota	South Dakota Department of Transportation	SDDOT
50	Tennessee	Tennessee Department of Transportation	TDOT
51	Texas	Texas Department of Transportation	TxDOT
52	Utah	Utah Department of Transportation	UDOT
53	Vermont	Vermont Agency of Transportation	VTrans
54	Virgin Islands		
55	Virginia	Virginia Department of Transportation	VDOT
56	Washington	Washington State Department of Transportation	WSDOT
57	West Virginia	West Virginia Department of Transportation	WVDOT
58	Wisconsin	Wisconsin Department of Transportation	WisDOT
59	Wyoming	Wyoming Department of Transportation	WYDOT

**Table 6. Utility Conflict Event Type**

<b>UTIL_CNFLT_EVNT_TYPE</b>	
<b>UTILITY CONFLICT EVENT TYPE ID:</b>	<b>UTILITY CONFLICT EVENT TYPE NAME:</b>
0	Utility conflict identified
1	Comment created
2	Utility owner informed of utility conflict
3	Utility conflict resolved
4	Utility owner acknowledges receipt of document
5	Document requested
6	Document sent
7	Document received
8	Document reviewed
9	Document certified
10	Document approved
11	Document uploaded
12	Document review, comment, and approval
13	Utility coordination meeting
14	ROW cleared for adjustment
15	Required adjustment completion
16	Estimated adjustment completion
17	Scheduled adjustment completion
18	Notice to proceed to utility owner
19	Adjustment construction start
20	Adjustment construction end
21	Permit application
22	Permit approved
23	Exception requested
24	Exception approved
25	Plans sufficient sent to utility owner
26	30-day notice submitted
27	90-day notice submitted
28	Utility conflict resolution strategy selected
29	Utility relocation under construction
30	Utility conflict archived

**Table 7. Utility Conflict Investigation Need Type**

<b>UTIL_CNFLT_INVESTIGATION_NEED_TYPE</b>		
<b>UC INVESTIGATION NEED TYPE ID:</b>	<b>UC INVESTIGATION NEED TYPE NAME:</b>	<b>UC INVESTIGATION NEED TYPE DESCRIPTION:</b>
0	QLD	Utility Investigation QLD
1	QLC	Utility Investigation QLC
2	QLB	Utility Investigation QLB
3	QLA	Utility Investigation QLA
4	Unknown	Unknown



**Table 8. Utility Conflict Type**

UTIL_CNFLT_TYPE		
UTILITY CONFLICT TYPE ID:	UTILITY CONFLICT TYPE NAME:	UTILITY CONFLICT TYPE DESCRIPTION:
0	Conflict with roadway project features.	A conflict of a utility facility with a feature of the roadway project. For example, this can be roadway drainage feature that is planned to be installed in the location of an underground sewer line.
1	Conflict with another utility feature.	A conflict of a utility facility with another utility facility feature. For example, this can be a conflict between two existing facilities that are found to be in violation of a safety standard. This can also be a proposed facility that is designed to be installed in a location that is either occupied by an existing utility facility or that would violate a safety distance requirement of an existing utility facility.
2	Conflict with utility regulations or standards.	A conflict of a utility facility with a utility standard, utility installation regulation, or utility accommodation rule. For example, buried utility facilities must be installed with a minimum depth of cover above the facility. If a utility is buried at a shallower depth, it is a conflict with the depth of cover regulation.
3	Conflict with safety regulations.	A conflict of a utility facility with an established safety regulation. For example, a utility pole may be located within the clear zone of a roadway. If the pole is unprotected, it may violate clear zone safety regulations.
4	Conflict with transportation construction or phasing.	A conflict of a utility facility with temporary activities during construction or construction phasing. For example, a utility facility may interfere with the space requirements to construct a roadway. This type of conflict may only exist temporarily for the duration of a construction phase, and may not exist as a conflict of the utility facility with the constructed roadway.

**Table 9. Utility Conflict Subtype**

<b>UTIL_CNFLT_SUBTYPE</b>		
<b>UTILITY CONFLICT SUBTYPE ID:</b>	<b>UTILITY CONFLICT SUBTYPE NAME:</b>	<b>UTILITY CONFLICT SUBTYPE DESCRIPTION:</b>
0	FG	Finish grade
1	PWY	Pathway
2	EX	Excavation

**Table 10. Utility Conflict Resolution Alternative Decision**

<b>UTIL_CNFLT_RESOLN_ALTERNAT_DCSN</b>	
<b>UTILITY CONFLICT RESOLUTION ALTERNATIVE DECISION ID:</b>	<b>UTILITY CONFLICT RESOLUTION ALTERNATIVE DECISION NAME:</b>
0	Under review
1	Selected
2	Rejected

**Table 11. Utility Conflict Resolution Alternative Responsibility**

<b>UTIL_CNFLT_RESOLN_ALTERNAT_RSPNBL</b>		
<b>UCR ALTERNATIVE RESPONSIBILITY ID:</b>	<b>UCR ALTERNATIVE RESPONSIBILITY CODE:</b>	<b>UCR ALTERNATIVE RESPONSIBILITY NAME:</b>
0	U	Utility Company
1	D	DOT
2	U/D	Utility Company and DOT
3	N/A	Not Available
4	C	Contractor

**Table 12. Utility Facility Material**

<b>UTIL_FCLTY_MTRL</b>		
<b>UTILITY FACILITY MATERIAL ID:</b>	<b>UTILITY FACILITY MATERIAL NAME:</b>	<b>UTILITY FACILITY MATERIAL ACRONYM TEXT:</b>
0	Welded Steel Pipe	WSP
1	Reinforced Concrete Pipe	RCP
2	Asbestos Cement Pipe	ACP
3	Concrete Cylinder Pipe	CCP
4	Vitrified Clay Pipe	VCP
5	Unknown	U
6	Multiple Concrete Duct	MCD
7	Fiber Optic	FO
8	Copper	CO
9	Steel	ST

**Table 13. Utility Facility Operation Type**

<b>UTIL_FCLTY_OPERATION_TYPE</b>	
<b>UTILITY FACILITY OPERATION TYPE ID:</b>	<b>UTILITY FACILITY OPERATION TYPE NAME:</b>
0	Public Utility
1	Private Utility

**Table 14. Utility Facility Type**

UTIL_FCLTY_TYPE			
UTILITY FACILITY TYPE ID:	UTILITY FACILITY TYPE NAME:	UTILITY FACILITY SUBTYPE ID:	UTILITY FACILITY TYPE ACRONYM TEXT:
0	Electricity Distribution	0	
1	Electricity Distribution	1	
2	Electricity Transmission	2	
3	Telephone	3	
4	Water	4	W
5	Sewer	4	
6	Manhole	4	
7	Unknown	4	UNK
8	Electricity Distribution		
9	Communication	4	
10	Gas	4	G
11	Buried Fiber Optic	4	BFO
12	Buried Telephone Duct Bank		BT-DUCT
13	Electrical Conduit	4	
14	Transmission Tower	4	
15	Transmission Lines	4	
16	Distribution Line	4	

**Table 15. Utility Facility Subtype**

<b>UTIL_FCLTY_SUBTYPE</b>		
<b>UTILITY FACILITY SUBTYPE ID:</b>	<b>UTILITY FACILITY SUBTYPE NAME:</b>	<b>UTILITY FACILITY SUBTYPE DESCRIPTION:</b>
0	3 phi	
1	1 phi	
2	138 kV	
3	DU	
4		No subtype



**Table 16. Vertical Spatial Reference**

<b>VERT_SPATIAL_REF</b>		
<b>VERTICAL SPATIAL REFERENCE ID:</b>	<b>VERTICAL SPATIAL REFERENCE NAME:</b>	<b>VERTICAL SPATIAL REFERENCE DESCRIPTION:</b>
0	NAD_1983_UTM_Zone_12N	North American Datum 1983 Universal Transverse Mercator Zone 12 N (meters).
1	NAVD_1988	North American Vertical Datum 1988 (meters).
2	GCS_WGS_1984	Geographic Coordinate System World Geodetic System 1984 (degrees).
3	GCS_North_American_1983	Geographic Coordinate System North American Datum 1983 (degrees).
4	Geodetic (lat/long)	Geographic Coordinate System of latitude and longitude.

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