



**City of Tampa**

*Jane Castor, Mayor*

**Contract Administration**

**Michael W. Chucran, Director**

306 East Jackson Street, 4N

Tampa, FL 33602

Office (813) 274-8116

Fax: (813) 274-7368

**ADDENDUM 1**

**Via E-Mail**

**DATE: October 21, 2020**

Contract 20-C-00039; ARMENIA AVE AT BUSCH BLVD INTERSECTION IMPROVEMENTS

Bidders on the above referenced project are hereby notified that the following addendum is made to the Contract Documents. BIDS TO BE SUBMITTED SHALL CONFORM TO THIS NOTICE.

Item 1: Replace the plans set with the attached plans set which has been optimized for web viewing.

All other provisions of the Contract Documents and Specifications not in conflict with this Addendum shall remain in full force and effect. Questions are to be e-mailed to Contract Administration@tampagov.net.

*Jim Greiner*

Jim Greiner, P.E., Contract Management Supervisor

**COMPONENTS OF CONTRACT PLANS SET**

- ROADWAY PLANS
- SIGNING AND PAVEMENT MARKING PLANS
- SIGNALIZATION PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

**INDEX OF ROADWAY PLANS**

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SIGNATURE SHEET
3 - 4	SUMMARY OF PAY ITEMS
5 - 9	DRAINAGE MAP
10 - 12	TYPICAL SECTION
13 - 14	TYPICAL SECTION DETAILS
15	SUMMARY OF DRAINAGE STRUCTURES
16 - 17	PROJECT LAYOUT
18	PROJECT CONTROL
19 - 20	GENERAL NOTES
21 - 26	ROADWAY PLAN-PROFILES
27	ALIGNMENT DETAIL
28	INTERSECTION DETAIL
29	DRAINAGE DETAILS
30 - 38	DRAINAGE STRUCTURES
39 - 41	POND CROSS SECTIONS
42	ROADWAY SOIL SURVEY
43	ROADWAY SOIL PROFILES
44 - 66	CROSS SECTIONS
67 - 71	DRIVEWAY HALF SECTIONS
72 - 75	STORM WATER POLLUTION PREVENTION PLAN
76 - 83	TEMPORARY TRAFFIC CONTROL PLAN
84 - 90	UTILITY ADJUSTMENTS
91 - 110	UTILITY RELOCATION SHEETS
SQ-1 - SQ-19	SUMMARY OF QUANTITIES

**EQUATION**  
 STA. 129+40.70 BK =  
 STA. 129+37.70 AH

DOT #626889A  
 CSXT MP SY851.32  
 STA. 30+00.00 Q RR R/W  
 STA. 128+11.75 XS B

**GOVERNING DESIGN STANDARDS:**

Florida Department of Transportation, FY 2020/21 Standard Plans for Road and Bridge Construction and applicable Standard Plans Interim Revisions (SPIRs). Standard Plans for Road Construction and SPIRs are available at the following website: <http://www.fdot.gov/design/standardplans>

And City of Tampa Stormwater Standards; which can be found at the following web site:  
[http://www.tampagov.net/sites/default/files/stormwater/files/SW\\_Standard\\_details.pdf](http://www.tampagov.net/sites/default/files/stormwater/files/SW_Standard_details.pdf)

For the City of Tampa Wastewater Department Technical Standards Guideline for Construction of Wastewater Facilities Click on the "Technical Standards" link at the following web site:  
<https://www.tampagov.net/wastewater/info>

For the City of Tampa Water Department Engineering Standard Details, Click on the "Engineering Standard Details" link at the following web site:  
<https://www.tampagov.net/water/programs/establishing-water-service>

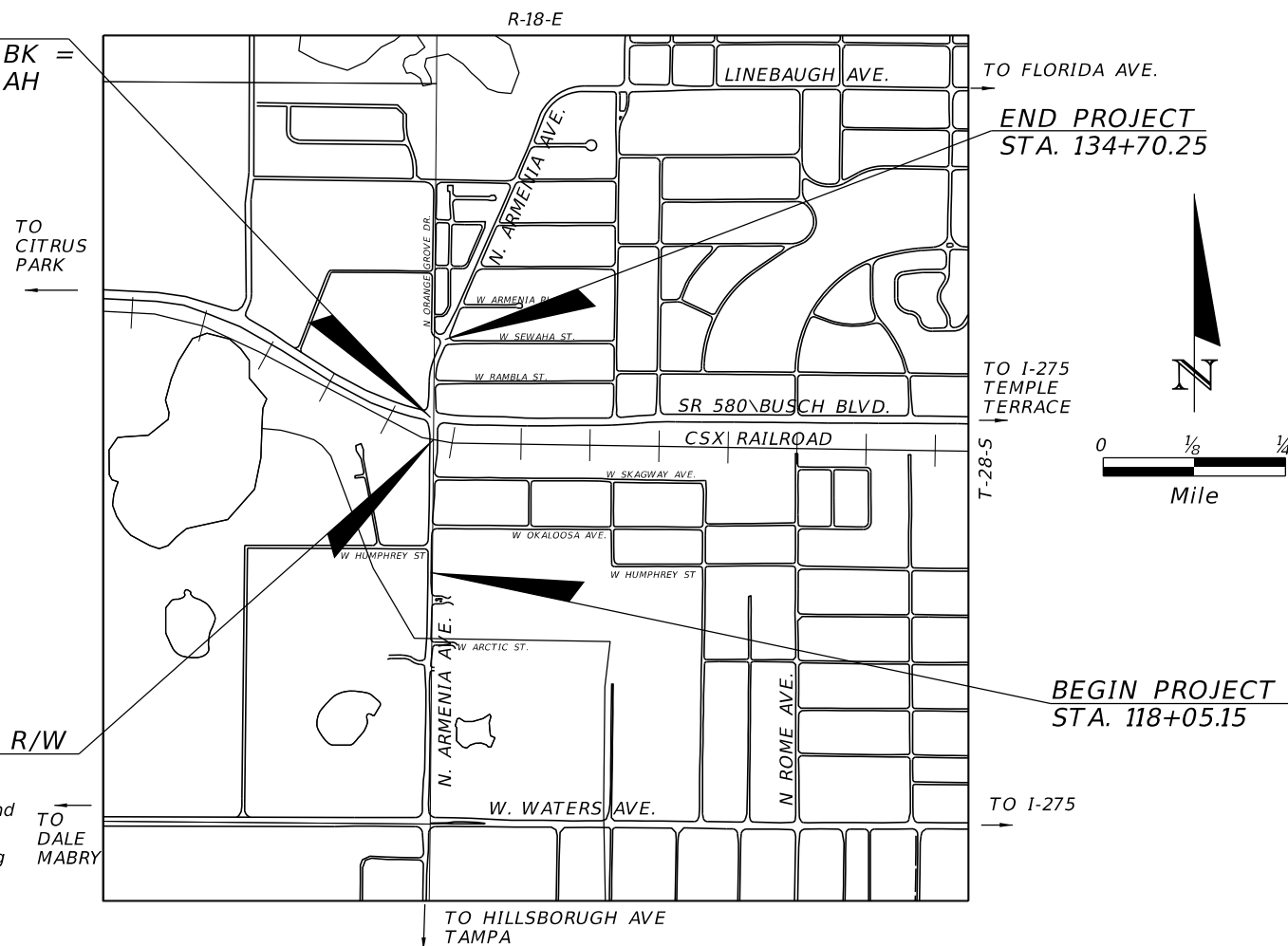
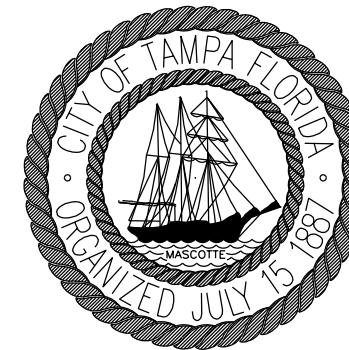
**GOVERNING STANDARD SPECIFICATIONS:**

Florida Department of Transportation, JULY 2020 Standard Specifications for Road and Bridge Construction at the following website:  
<http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

**CITY OF TAMPA  
 TRANSPORTATION DIVISION**

**CONTRACT PLANS**

CITY OF TAMPA PROJECT NO. 0000005  
 CONTRACT NO: 12-D-00057  
 FINANCIAL PROJECT ID 437044-1-54-01  
 ARMENIA AVENUE AT BUSCH BOULEVARD



ROADWAY SHOP DRAWINGS  
 TO BE SUBMITTED TO:  
 DEREK M. GIL, P.E.  
 ELEMENT ENGINEERING GROUP  
 1713 E. 9th AVENUE  
 TAMPA, FL 33605

PLANS PREPARED BY:

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

PROJECT LENGTH IS BASED ON THE B SURVEY

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	1668.10	0.316
BRIDGES	0.00	0.000
NET LENGTH OF PROJECT	1668.10	0.316
EXCEPTIONS	0.00	0.000
GROSS LENGTH OF PROJECT	1668.10	0.316

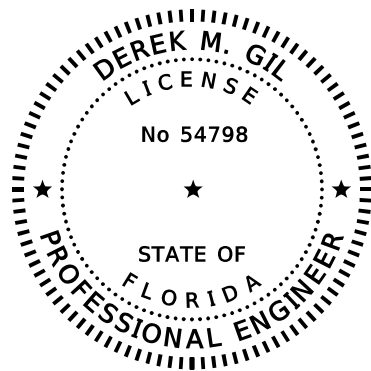
CITY PROJECT MANAGER: NINA MABILLEAU, E.I.

ROADWAY PLANS  
 ENGINEER OF RECORD: DEREK M. GIL

P.E. NO.: 54798

FISCAL YEAR	SHEET NO.
21	1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

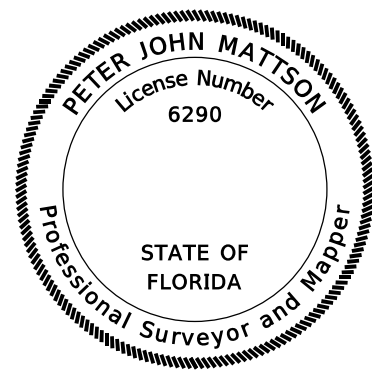
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ELEMENT ENGINEERING GROUP  
1713 E. 9TH AVENUE  
TAMPA, FL 33605  
DEREK M. GIL P.E., NO. 54798

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SIGNATURE SHEET
3 - 4	SUMMARY OF PAY ITEMS
5 - 9	DRAINAGE MAP
10 - 12	TYPICAL SECTION
13 - 14	TYPICAL SECTION DETAILS
15	SUMMARY OF DRAINAGE STRUCTURES
16 - 17	PROJECT LAYOUT
19 - 20	GENERAL NOTES
21 - 26	ROADWAY PLAN-PROFILES
27	ALIGNMENT DETAIL
28	INTERSECTION DETAIL
29	DRAINAGE DETAILS
30 - 38	DRAINAGE STRUCTURES
39 - 41	POND CROSS SECTIONS
44 - 66	CROSS SECTIONS
67 - 71	DRIVEWAY HALF SECTIONS
72 - 75	STORM WATER POLLUTION PREVENTION PLAN
76 - 83	TEMPORARY TRAFFIC CONTROL PLAN
84 - 90	UTILITY ADJUSTMENTS
91 - 97	UTILITY RELOCATION SHEETS
SQ-1 - SQ-19	SUMMARY OF QUANTITIES



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

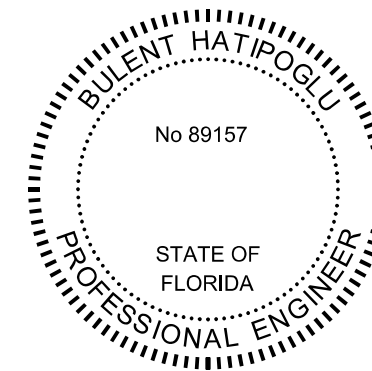
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

ELEMENT ENGINEERING GROUP  
1713 E. 9TH AVENUE  
TAMPA, FL 33605  
PETER JOHN MATTSON, PMS NO. 6290

THE ABOVE NAMED PROFESSIONAL SURVEYOR AND MAPPER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 5J-17.062, F.A.C.

ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
2	SIGNATURE SHEET
18	PROJECT CONTROL



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MC SQUARED, INC.  
5808-A BRECKENRIDGE PARKWAY  
TAMPA, FLORIDA 33610  
BULENT HATIPOGLU, P.E., NO. 89157

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
2	SIGNATURE SHEET
42	ROADWAY SOIL SURVEY
43	ROADWAY SOIL PROFILE

REVISIONS				 ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798	CITY OF TAMPA TRANSPORTATION DIVISION		<b>SIGNATURE SHEET</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057			2
					ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			

PAY ITEMS			
SUMMARY OF ROADWAY			
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY
0101 1	MOBILIZATION		8%
0102 1	MAINTENANCE OF TRAFFIC		10%
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	ED	250
0104 10 3	SEDIMENT BARRIER	LF	1325
0104 18	INLET PROTECTION SYSTEM	EA	13
0110 1 1	CLEARING & GRUBBING (AC = 3.08)	LS	1
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	2992
0120 1	REGULAR EXCAVATION	CY	2411.9
0120 6	EMBANKMENT	CY	616.5
0160 4	TYPE B STABILIZATION	SY	5815
0285707	OPTIONAL BASE, BASE GROUP 07	SY	4052
0285709	OPTIONAL BASE, BASE GROUP 09	SY	583
0286 2	TURNOUT CONSTRUCTION-ASPHALT	TN	88.4
0327 70 4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	SY	4723
0327 70 6	MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH	SY	2882
0334 1 53	SUPERPAVE ASPHALTIC CONC (TRAFFIC C, PG 76-22)	TN	802.7
0337 7 83	ASPHALT CONCRETE FRICTION COURSE (TRAFFIC C, FC-12.5, PG 76-22)	TN	1038.1
0339 1	MISCELLANEOUS ASPHALT PAVEMENT	TN	3.5
0400 1 2	CONCRETE CLASS I, ENDWALLS	CY	1.2
0425 1341	INLETS, CURB, TYPE P-4, <10'	EA	1
0425 1351	INLETS, CURB, TYPE P-5, <10'	EA	2
0425 1471	INLETS, CURB, TYPE 7, <10'	EA	1
0425 2 41	MANHOLES, P-7, <10'	EA	2
0425 2 43	MANHOLES, P-7, PARTIAL	EA	2
0425 2 71	MANHOLES, J-7, <10'	EA	1
0425 5	MANHOLE, ADJUST	EA	2
0425 5 1	MANHOLE, ADJUST, UTILITIES	EA	2
0425 6	VALVE BOXES, ADJUST	EA	26
0430175115	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 15"S/CD	LF	95
0430175118	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	1313
0430175215	PIPE CULVERT,OPTIONAL MATERIAL,OTHER-ELIP/ARCH, 15"S/CD	LF	36
0430175218	PIPE CULVERT,OPTIONAL MATERIAL,OTHER-ELIP/ARCH, 18"S/CD	LF	4
0430982125	MITERED END SECTION, OPTIONAL ROUND, 18" CD	EA	1
0430984125	MITERED END SECTION, OPTIONAL ROUND, 18" SD	EA	1
0515 1 1	PEDESTRIAN / BICYCLE RAILING, STEEL, 42"	LF	20
0520 1 7	CONCRETE CURB & GUTTER, TYPE E	LF	199
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	5304
0520 2 4	CONCRETE CURB, TYPE D	LF	132
0520 5 11	TRAFFIC SEPARATOR CONCRETE-TYPE 1, 4' WIDE	LF	220
0520 6	SHOULDER GUTTER - CONCRETE	LF	54
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	3118
0522 4	BUS SHELTER PAD- CONCRETE	SY	36
0527 2	DETECTABLE WARNINGS	SF	408
0530 3 4	RIPRAP, RUBBLE, F&I, DITCH LINING	TN	2.1
0550 10220	FENCING, TYPE B, 5.1-6.0', STANDARD	LF	459
0550 60237	FENCE GATE, TYPE B, SLIDING/CANTILEVER, GREATER THAN 30' OPENING	EA	1
0570 1 1	PERFORMANCE TURF	SY	60
0570 1 2	PERFORMANCE TURF, SOD	SY	4693
COT425 1	COT STANDARD INLET TYPE BV-1	EA	3
COT425 2	COT STANDARD INLET TYPE BS-1	EA	4
COT425 5	COT STANDARD INLET TYPE T	EA	2
COT425 5m	COT STANDARD INLET TYPE T (MODIFIED)	EA	1

PAY ITEMS			
SUMMARY OF SIGNING AND PAVEMENT MARKINGS			
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY
0700 1 11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	43
0700 1 12	SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF	AS	3
0700 1 50	SINGLE POST SIGN, RELOCATE	AS	15
0700 1 60	SINGLE POST SIGN, REMOVE	AS	24
0700 2 60	MULTI-POST SIGN, REMOVE	AS	1
0700 3 601	SIGN PANEL, REMOVE, UP TO 12 SF	EA	4
0700 13 15	RETROREFLECTIVE SIGN STRIP - FURNISH AND INSTALL, 5'	EA	2
0705 11 1	DELINEATOR, FLEXIBLE TUBULAR	EA	8
0710 11190	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ISLAND NOSE	SF	7
0710 11290	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, ISLAND NOSE	SF	94
0710 90	PAINTED PAVEMENT MARKINGS - FINAL SURFACE	LS	1
0711 11102	THERMOPLASTIC, STANDARD, WHITE, SOLID, 8" FOR URBAN ISLAND	GM	0.031
0711 11103	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR DROP LANE	GM	0.087
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK	LF	1185
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE	LF	409
0711 11141	THERMOPLASTIC, STANDARD, WHITE, (2/4) DOTTED GUIDE LINE/(6/10) GAP EXTENSION, 6"	GM	0.228
0711 11160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	EA	13
0711 11170	THERMOPLASTIC, STANDARD, WHITE, ARROWS	EA	28
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONALS	LF	141
0711 11241	THERMOPLASTIC, STANDARD, YELLOW, (2/4) DOTTED GUIDE LINE, 6"	GM	0.048
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF	1124
0711 16101	THERMOPLASTIC, STD - OTHER SURFACES, WHITE, SOLID, 6"	GM	0.901
0711 16131	THERMOPLASTIC, STD - OTHER SURFACES, WHITE, (10/30) SKIP, 6"	GM	0.107
0711 16133	THERMOPLASTIC, STD - OTHER SURFACES, WHITE, (3/9) SKIP, 12" FOR DROP LANE	GM	0.122
0711 16201	THERMOPLASTIC, STD - OTHER SURFACES, YELLOW, SOLID, 6"	GM	0.669
0711 17 1	THERMOPLASTIC, REMOVE EXISTING THERMOPLASTIC PAVEMENT MARKINGS	SF	85

PAY ITEMS			
SUMMARY OF LIGHTING			
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY
0715 1 60	LIGHTING CONDUCTORS, REMOVE & DISPOSE, CONTRACTOR OWNS	LF	1110
0715 4 70	LIGHT POLE COMPLETE, REMOVE POLE AND FOUNDATION	EA	1
0715 21 1	LIGHTING REPAIRS- ELECTRICAL WORK	LS	1

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**SUMMARY OF PAY ITEMS**

SHEET NO.  
**3**

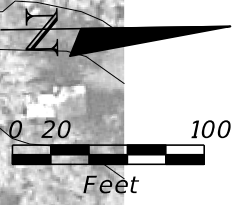
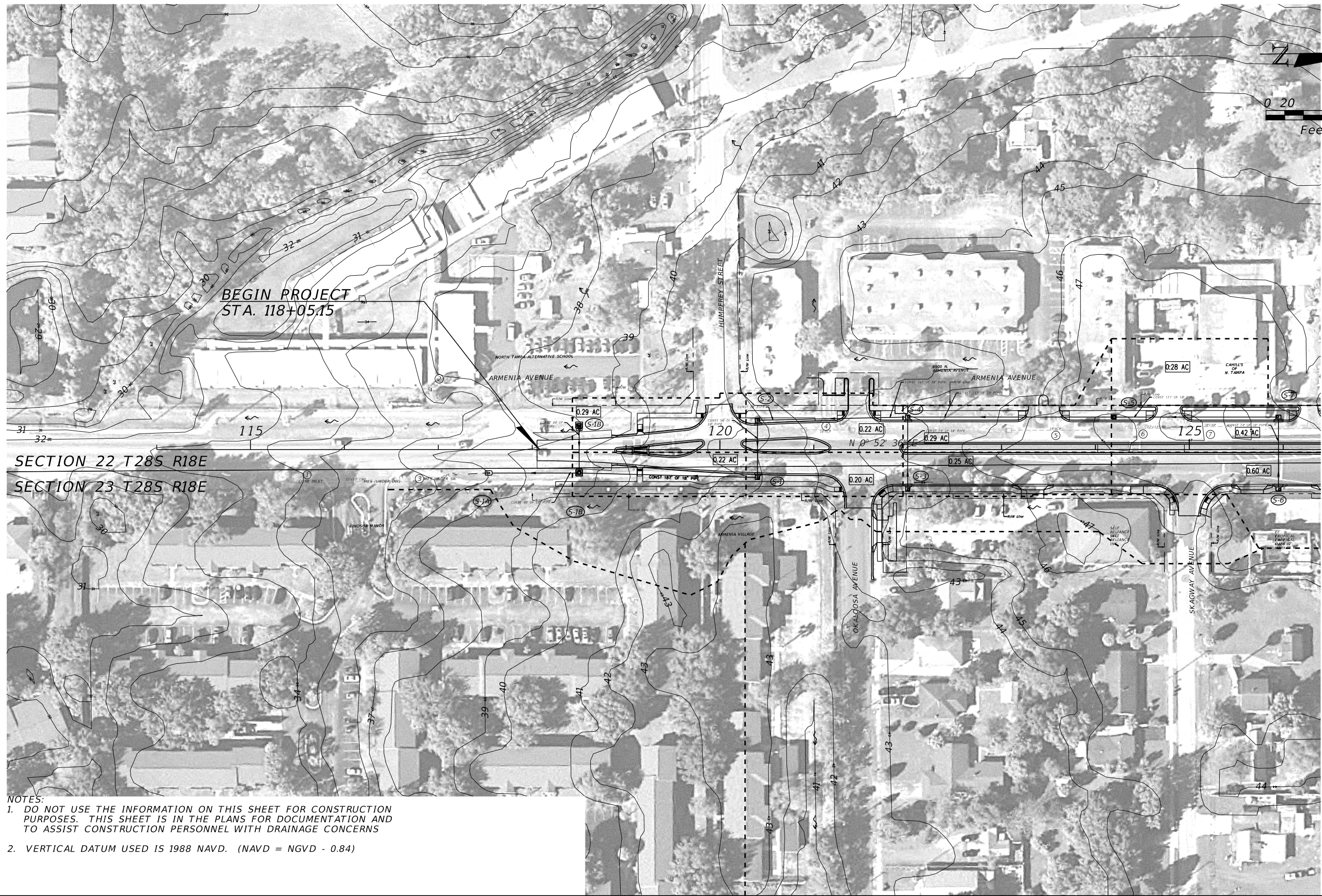
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PAY ITEMS				
SUMMARY OF SIGNALIZATION				
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	
0630 2 11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	336	
0630 2 12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	335	
0630 2 14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	LF	20	
0632 7 1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1	
0632 7 6	SIGNAL CABLE, REMOVE- INTERSECTION	PI	1	
0633 8 1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	LF	199	
0634 4153	SPAN WIRE ASSEMBLY, F&I, TWO POINT, BOX OR DROP BOX	PI	1	
0634 5 1	FIBERGLASS INSULATOR, FURNISH & INSTALL	LF	48	
0635 2 11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA	12	
0635 2 12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA	2	
0639 1122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	AS	1	
0639 2 1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	LF	35	
0639 3 11	ELECTRICAL SERVICE DISCONNECT, F&I, POLE MOUNT	EA	1	
0641 2 11	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II PEDESTAL	EA	1	
0641 2 17	PRESTRESSED CONCRETE POLE, F&I, TYPE P-VII	EA	4	
0641 2 70	PRESTRESSED CONCRETE POLE, SHALLOW POLE REMOVAL- POLE 30' AND GREATER	EA	2	
0646 1 11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	8	
0646 1 60	ALUMINUM SIGNALS POLE, REMOVE	EA	8	
0650 1 14	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 1 WAY	AS	10	
0650 1 16	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 4 SECTION, 1 WAY	AS	2	
0653 1 11	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY	AS	8	
0660 3 11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	EA	4	
0660 3 12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	EA	4	
0665 1 11	PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD	EA	8	
0670 5112	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 2 PREEMPTION	AS	1	
0670 5600	TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET	AS	1	
0685 1 13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	EA	1	
0700 5 50	INTERNALLY ILLUMINATED SIGN, RELOCATE	EA	4	
0700 11391	ELECTRONIC DISPLAY SIGN, FURNISH & INSTALL OVERHEAD MOUNT- AC POWERED, BLANK OUT SIGN, UP TO 12 SF	AS	1	

PAY ITEMS				
SUMMARY OF UTILITIES				
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	
704.06	FURNISH & INSTALL 4"DIA. C900 PVC PIPE, CL-150, GREEN, 0'-6' CUT	LF	80	
2102.00	FURNISH & INSTALL 6" DUCTILE IRON PIPE	LF	46	
2104.00	FURNISH & INSTALL 8" DUCTILE IRON PIPE	LF	685	
2106.00	FURNISH & INSTALL 12" DUCTILE IRON PIPE	LF	52	
2400.40	FURNISH & INSTALL 4" DIA. C900 PVC OR DIP, BENDS, SLEEVES, REDUCERS, CAPS OR PLUGS	EA	18	
2500.00	REMOVE 1" - 3" DIA. ABANDONED PIPE	LF	844	
2501.00	REMOVE 4" - 12" DIA. ABANDONED PIPE	LF	1804	
2600.00	CUT & PLUG 3" AND SMALLER	EA	1	
2601.00	CUT & PLUG 4", 6" AND 8" PIPE	EA	4	
3042.00	FURNISH & INSTALL 8" BELL OR MECHANICAL JOINT RESTRAINTS ON EXISTING PIPE	EA	4	
3043.00	FURNISH & INSTALL 12" BELL OR MECHANICAL JOINT RESTRAINTS ON EXISTING PIPE	EA	1	
3072.00	FURNISH 8" PUSH-ON JOINT RESTRAINT GASKETS	EA	30	
3073.00	FURNISH 12" PUSH-ON JOINT RESTRAINT GASKETS	EA	4	
3304.10	FURNISH & INSTALL 4" DIA. BELL RESTRAINT	EA	2	
3304.20	FURNISH & INSTALL 4" DIA. THRUST RESTRAINT	EA	16	
4005.00	FURNISH & INSTALL 6" DUCTILE IRON MJ BEND, SLEEVE	EA	2	
4009.00	FURNISH & INSTALL 8" DUCTILE IRON MJ BEND, SLEEVE	EA	5	
4010.00	FURNISH & INSTALL 8"X6" DUCTILE IRON MJ TEE	EA	1	
4013.00	FURNISH & INSTALL 12" DUCTILE IRON MJ BEND, SLEEVE OR REDUCER	EA	2	
5000.00	FURNISH & INSTALL FULL STD. FIRE HYDRANT ASSEMBLY ON NEW OR EXISTING MAINS	EA	1	
5200.00	REMOVE & SALVAGE HYDRANT	EA	1	
6001.00	FURNISH & INSTALL 6" GATE OR TAPPING VALVE AND BOX ON DIP	EA	2	
6002.00	FURNISH & INSTALL 8" GATE OR TAPPING VALVE AND BOX ON DIP	EA	6	
6003.00	FURNISH & INSTALL 12" GATE OR TAPPING VALVE AND BOX ON DIP	EA	1	
6107.00	FURNISH & INSTALL 8" LINE STOP ON EXISTING WATER MAIN	EA	2	
6108.00	FURNISH & INSTALL 12" LINE STOP ON EXISTING WATER MAIN	EA	1	
7500.00	FURNISH & INSTALL 4" AIR RELEASE VALVE	EA	2	
8107.00	FURNISH, TAP & INSTALL 1" METER SERVICE (+15' - 80')	EA	2	
8128.00	FURNISH, TAP & INSTALL 2" METER SERVICE (+15' - 80')	EA	3	

REVISIONS				 <p>ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	<p>CITY OF TAMPA TRANSPORTATION DIVISION</p> <p>CONTRACT NO: 12-D-00057</p> <p>ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.</p>	<p><i>SUMMARY OF PAY ITEMS</i></p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				4

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



BEGIN PROJECT  
STA. 118+05.15

SECTION 22 T28S R18E  
SECTION 23 T28S R18E

- NOTES:
- DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS
  - VERTICAL DATUM USED IS 1988 NAVD. (NAVD = NGVD - 0.84)

REVISIONS	
DATE	DESCRIPTION

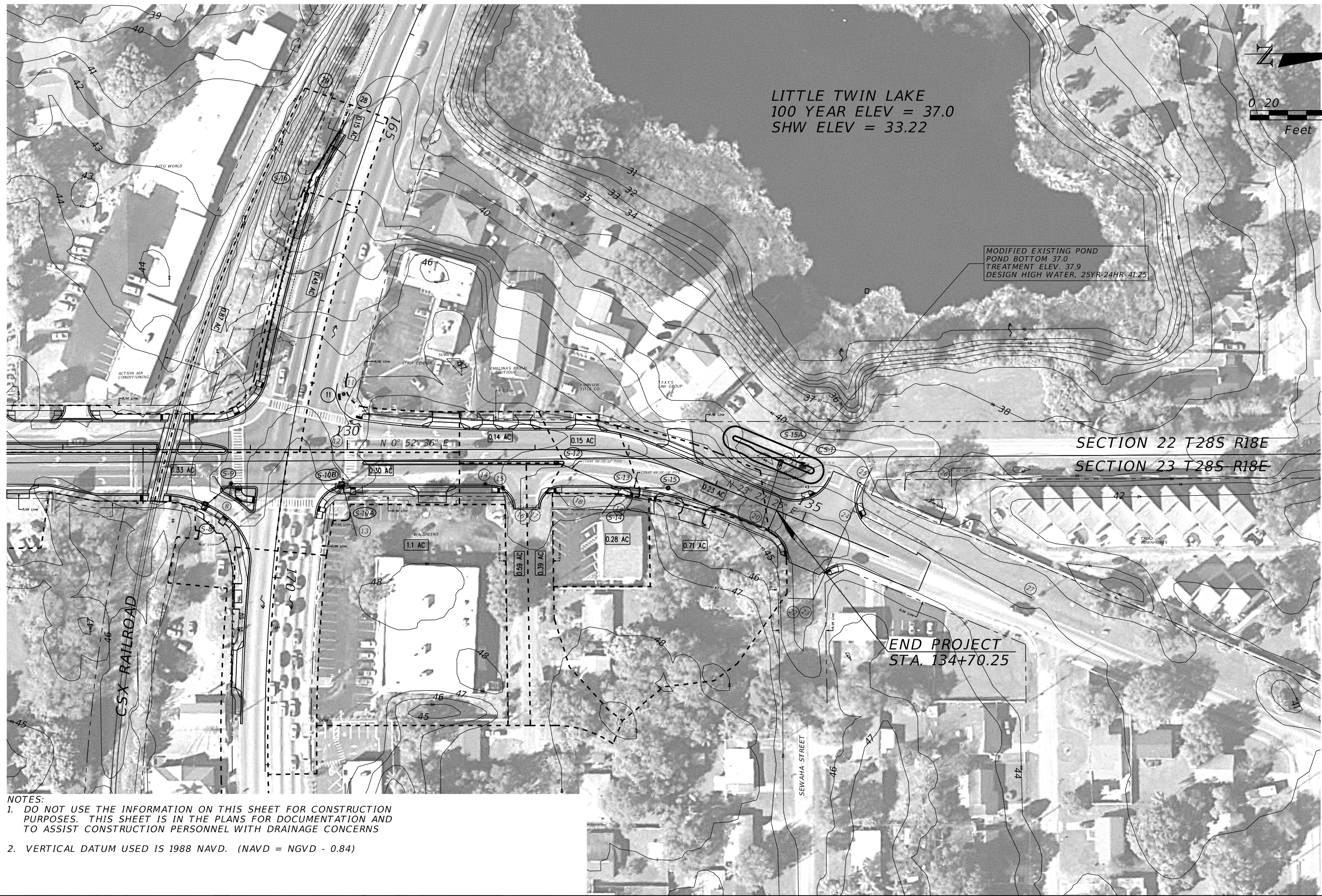
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**DRAINAGE MAP**

SHEET NO.  
5

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



- NOTES:
- DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS
  - VERTICAL DATUM USED IS 1988 NAVD. (NAVD = NGVD - 0.84)

REVISIONS	
DATE	DESCRIPTION

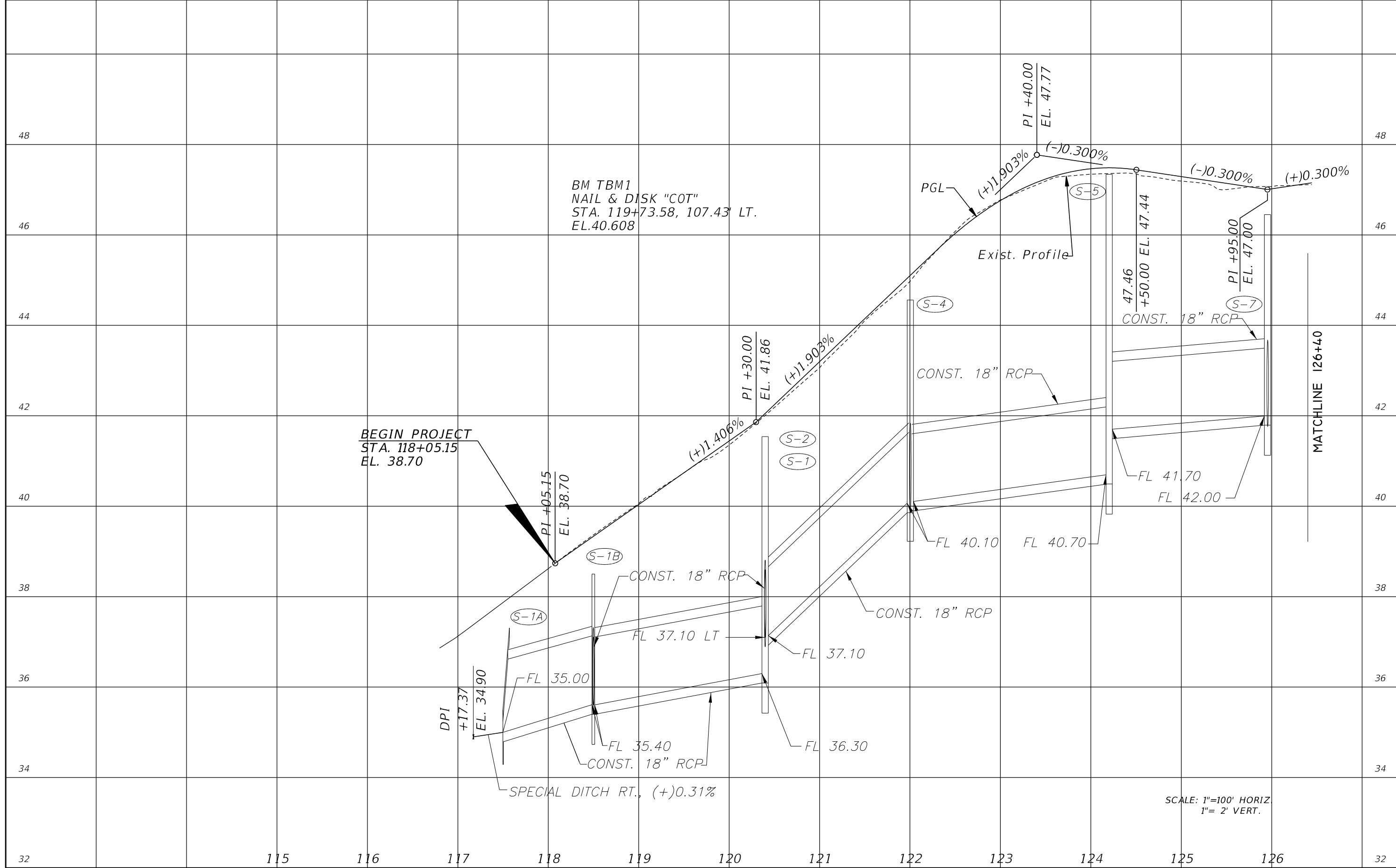
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE MAP**

SHEET NO.  
 6

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



BEGIN PROJECT  
STA. 118+05.15  
EL. 38.70

BM TBM1  
NAIL & DISK "COT"  
STA. 119+73.58, 107.43' LT.  
EL. 40.608

SCALE: 1"=100' HORIZ  
1"= 2' VERT.

MATCHLINE 126+40

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

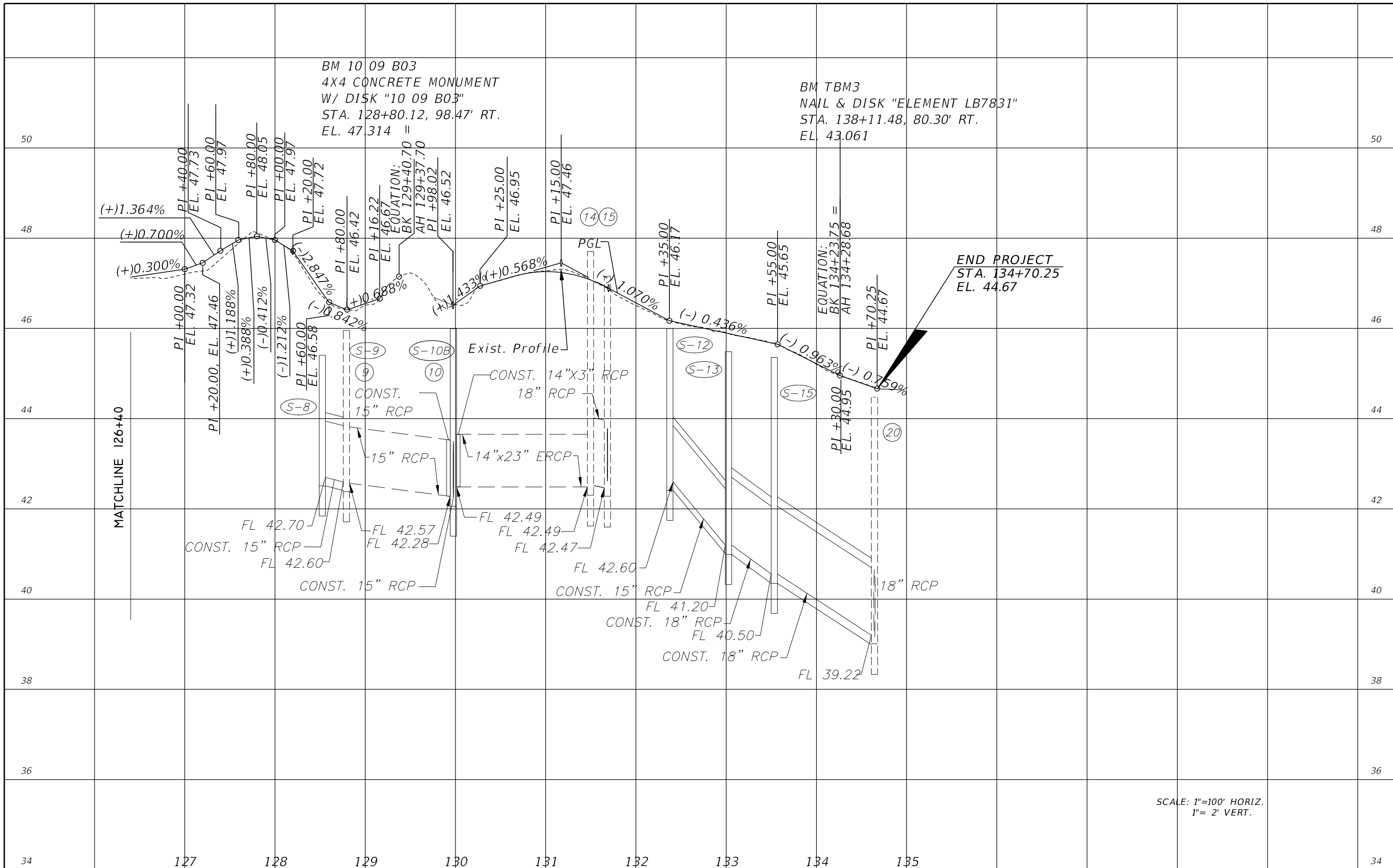
CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**DRAINAGE MAP**

SHEET NO.  
7

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.





BM 10 09 B03  
 4X4 CONCRETE MONUMENT  
 W/ DISK "10 09 B03"  
 STA. 128+80.12, 98.47' RT.  
 EL. 47.314 =

BM TBM3  
 NAIL & DISK "ELEMENT LB7831"  
 STA. 138+11.48, 80.30' RT.  
 EL. 43.061

END PROJECT  
 STA. 134+70.25  
 EL. 44.67

SCALE: 1"=100' HORIZ.  
 1"= 2' VERT.

MATCHLINE 126+40

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

*DRAINAGE MAP*

SHEET NO.
8

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

DRY RETENTION POND NOTES:

1. THE POND IS PROPOSED TO FUNCTION AS A DRY RETENTION POND, WHERE RECOVERY IS DEPENDENT UPON INFILTRATION INTO THE SOIL.
2. AVOIDED DRY RETENTION AREAS FOR USE AS TEMPORARY SEDIMENT BASINS. IF THE PROPOSED DRY RETENTION AREA IS NEEDED FOR A SEDIMENT BASIN AREA DURING CONSTRUCTION, THE FOLLOWING SHALL APPLY:
  - A. THE POND SHALL BE PARTIALLY CONSTRUCTED. EXCAVATED PONDS SHALL BE EXCAVATED TO A DEPTH OF SIX INCHES ABOVE THE PROPOSED POND BOTTOM ELEVATION. EMBANKMENT PONDS SHALL BE OVERFILLED TO SIX INCHES ABOVE THE PROPOSED POND BOTTOM ELEVATION.
  - B. AFTER CONSTRUCTION IS COMPLETE, THE FINAL SIX INCHES OF SOIL AND ADDITIONAL ACCUMULATED SEDIMENTS AND FINES ARE TO BE REMOVED AND DISPOSED OF OFFSITE.
  - C. IF POSSIBLE, THE SEDIMENT BASIN AREA SHALL BE LIMITED TO ONLY THE AREA NEEDED DURING CONSTRUCTION. CONSTRUCT A TEMPORARY BERM TO SEPARATE THE SEDIMENT BASIN AREA FROM THE REMAINDER OF THE DRY RETENTION AREA.
3. CONSIDER THE UTILIZATION OF A BLADDER TO FILTER FINES FOR DISCHARGE OF WATER INTO ANY DRY RETENTION AREA (EXISTING OR PROPOSED) DURING CONSTRUCTION.
4. PROPOSED DRY RETENTION AREAS TO BE CONSTRUCTED BY MEANS OF EXCAVATION SHALL NOT BE OVER-EXCAVATED AND BACK FILLED WITH IMPORTED SOILS UNLESS NOTED ON THE PLANS OR APPROVED BY THE ENGINEER.
5. PROPOSED DRY RETENTION AREAS REQUIRING EMBANKMENT TO ACHIEVE THEIR PROPOSED BOTTOM CONFIGURATION SHALL BE CONSTRUCTED OF A-3 SOILS. EMBANKMENT SOILS SHALL NOT BE COMPACTED.
6. CARE SHALL BE TAKEN DURING CONSTRUCTION TO MINIMIZE THE USE OF HEAVY EQUIPMENT ON THE BOTTOM OF THE PROPOSED DRY RETENTION AREAS TO AVOID COMPACTION OF THE SOILS.
7. ONCE FINAL GRADING OF THE PROPOSED DRY RETENTION AREA IS COMPLETE, SCARIFY THE BOTTOM TO LOOSEN THE SURFACE SOILS.
8. TO VERIFY THAT THE INFILTRATION CAPACITY OF THE SOILS HAVE NOT BEEN COMPROMISED BY CONSTRUCTION ACTIVITIES A DOUBLE RING INFILTRATION TEST SHALL BE PERFORMED AT THE BOTTOM OF EACH DRY RETENTION AREA ONCE CONSTRUCTION IS COMPLETE. IT IS TO BE CONDUCTED BY AN APPROVED GEOTECHNICAL FIRM AT A LOCATION APPROVED BY THE ENGINEER. THE INFILTRATION CAPACITY SHALL BE NO LESS THAN 80% OF THE FOLLOWING DESIGN VALUE:

11 INCHES PER DAY AVERAGE INFILTRATION


SHOULD THE TEST RESULTS INDICATE THAT THE INFILTRATION RATES DO NOT MEET THE SPECIFIED CRITERIA, THE EOR SHALL BE CONSULTED TO DETERMINE WHETHER THE INFILTRATION RATES WILL BE SUFFICIENT OR IF REMEDIATION WILL BE NECESSARY. IF REMEDIATION IS REQUIRED, PREPARE AN ACTION PLAN FOR APPROVAL BY THE EOR, PRIOR TO COMPLETING THE REMEDIATION.

EXISTING DRAINAGE STRUCTURES

- 1 CURB INLET, 22"X13" CMP  
STA. 115+60.48, 34.26' RT.  
S. INV. EL. 31.50  
MES STA. 116+74.99, 34.17' RT.  
N. INV. EL. 33.07
- 2 STA. 116+92.38, 61.87' LT.  
4" PVC  
W. INV. EL. 37.08  
E. INV. EL. 38.19
- 3 MES, 18" HDPE, MES  
STA. 116+96.73, 34.65' RT.  
S. INV. EL. 33.83  
STA. 117+17.37, 26.97' RT.  
N. INV. EL. 34.90
- 4 MES, 18" RCP, MES  
STA. 120+87.28, 20.80' LT.  
S. INV. EL. 40.97  
STA. 121+43.82, 20.68' LT.  
N. INV. EL. 41.80
- 5 MES, 18" RCP, MES  
STA. 123+05.71, 20.42' LT.  
S. INV. EL. 44.72  
STA. 124+02.41, 20.72' LT.  
N. INV. EL. 45.33
- 6 MES, 22"X13" CMP  
STA. 124+31.51, 22.75' LT.  
S. INV. EL. 44.15  
STA. 124+76.16, 22.65' LT.  
N. INV. EL. 44.95
- 7 DBI, 18" CMP  
STA. 125+43.91, 24.74' LT.  
GRATE TOP EL. 46.35  
N. INV. EL. 44.70  
STA. 125+00.63, 24.18' LT.  
S. INV. EL. 44.64
- 8 CURB INLET, 18"X12" ERCP  
STA. 128+77.12, 49.96' RT.  
W. INV. EL. 43.49, TO 9
- 9 MH, 15" RCP  
STA. 128+79.31, 36.26' RT.  
MH RIM EL. 46.04  
E. INV. EL. 43.14, FROM 8  
N. INV. EL. 42.57, TO 10
- 10 MH, 15" RCP  
STA. 129+94.65, 36.69' RT.  
MH RIM EL. 46.55  
S. INV. EL. 42.28, FROM 9  
E. INV. EL. 42.42, FROM 13  
N. INV. EL. 42.49, FROM 14  
W. INV. EL. 42.25, TO 12
- 11 MH, 18 RCP  
STA. 129+96.22, 59.10' LT.  
MH RIM EL. 46.07  
W. INV. EL. 41.44, 18" RCP,

- FROM UNKNOWN  
E. INV. EL. 41.37, TO 12
- 12 UNKNOWN  
LOCATED AROUND STA 130+00  
BURIED UNDER PAVEMENT
  - 13 MH, 12" RCP  
STA. 130+10.12, 92.37' RT.  
MH RIM EL. 50.26  
W. INV. EL. 46.07, TO 10
  - 14 MH, 23" X 14" ERCP  
STA. 131+47.02, 36.88' RT.  
MH RIM EL. 47.79  
N. INV. EL. 42.52, FROM 15  
S. INV. EL. 42.49, TO 10
  - 15 MH, 23" X 14" ERCP  
STA. 131+65.81, 40.41' RT.  
MH RIM EL. 47.16  
E. INV. EL. 42.62, FROM 16  
S. INV. EL. 42.47, TO 14
  - 16 CURB INLET, 23" X 14" ERCP  
STA. 131+77.54, 62.63' RT.  
W. INV. EL. 42.55, TO 15  
N. INV. EL. 42.36, FROM 17
  - 17 CURB INLET, 19" X12" ERCP  
STA. 132+05.02, 61.61' RT.  
S. INV. EL. 42.33, TO 16
  - 18 CONCRETE FLUME  
STA. 132+41.42, 51.44' RT.  
W. INV. EL. 43.93
  - 19 MES, 12" CMP  
STA. 132+91.05, 50.07' RT.  
S. INV. EL. 45.11  
N. INV. ELV. AND LOCATION  
UNKNOWN
  - 20 CURB INELT, 18" RCP, MES  
STA. 134+61.88, 23.53' RT.  
W. INV. EL. 39.21  
MES STA. 134+55.03, 44.75' LT.  
MES INV. EL. 39.06
  - 21 DBI, 18" RCP  
STA. 134+69.53, 52.84' LT.  
GRATE EL. 41.08  
NOTCH EL. 40.38 (S. FACE)  
N. INV. EL. 36.20, TO 25
  - 22 CURB INLET, 18" RCP  
STA. 135+17.36, 81.74' RT.  
N. INV. EL. 38.87, TO 23
  - 23 CURB INLET, 18" RCP  
STA. 135+42.85, 72.20' RT.  
S. INV. EL. 38.64, FROM 22  
NW INV. EL. 37.66, TO 25
  - 24 MH, 24" RCP  
STA. 135+45.21, 30.85' LT.

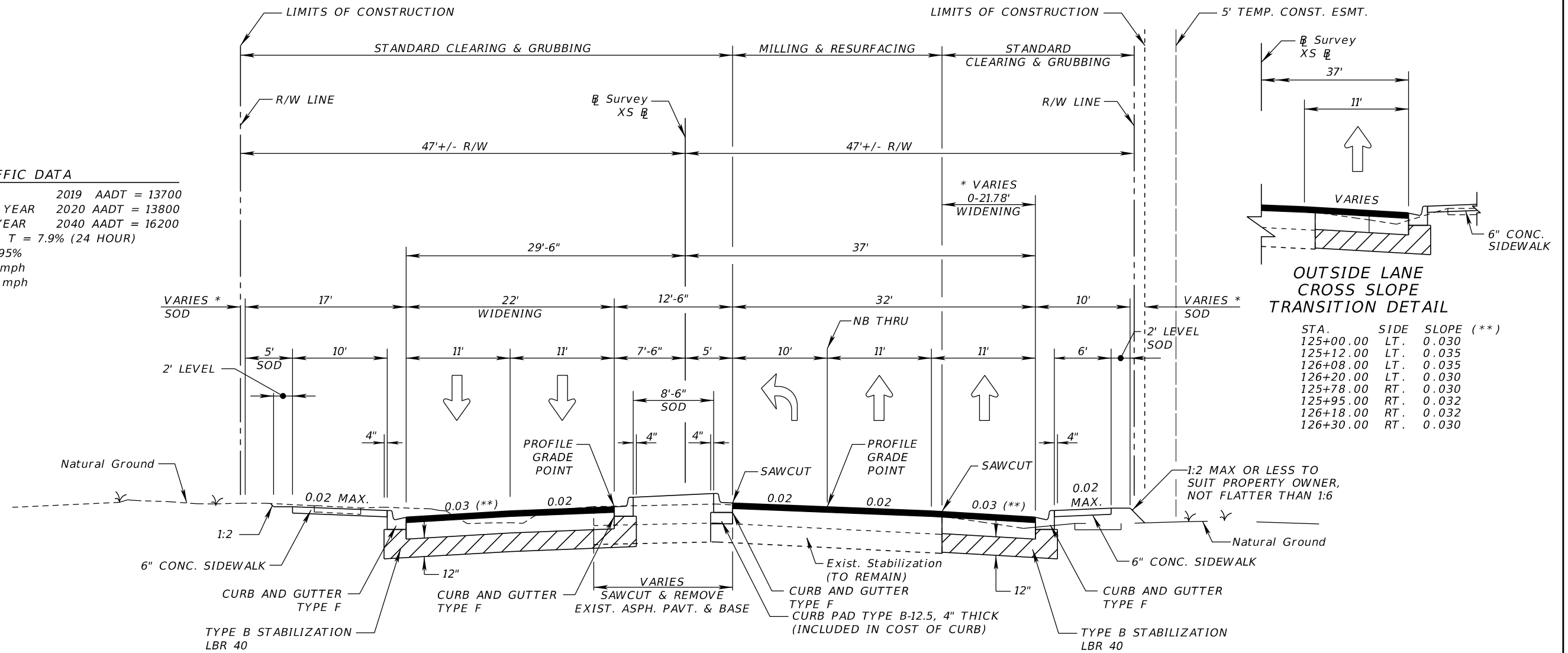
- MH RIM EL. 43.69  
E. EL. 37.37, FROM 23  
N. EL. 38.18, FROM 27  
W. EL. 37.24, TO 24
- 25 MH, 60" X 38" ERCP, EW  
STA. 135+46.85, 82.49' LT.  
MH RIM EL. 41.08  
E. INV. EL. 36.91, FROM 24  
N. INV. EL. 34.00, FROM 26  
S. INV. EL. 35.91, FROM 21  
W. INV. EL. 33.97, TO EW  
STA. 135+09.39, 129.34' LT.  
EW INV. EL. 33.11
- 26 MH, 60" X 38" ERCP  
STA. 136+24.79, 112.91' LT.  
MH RIM EL. 39.65  
E. INV. EL. 37.05, 12" DIP,  
FROM UNKNOWN  
N. INV. EL. 34.31, 60" X 38"  
ERCP, FROM UNKNOWN  
S. INV. EL. 34.36, TO 25
- 27 MH, 18" RCP  
STA. 137+62.68, 18.28' LT.  
MH RIM EL. 42.47  
S. INV. EL. 38.60, TO 24
- 28 CURB INLET, 15" RCP  
STA. 165+00.00, RT.  
MH RIM EL. 39.98  
N. INV. EL. 35.87  
S. INV. EL. 35.88
- 29 ENDWALL  
STA. 165+00.00, RT.  
INV. EL. 35.91
- 30 GRATE INLET, 15" RCP  
STA. 122+23.22, 94.52' RT.  
GRATE EL. 45.11  
E. INV EL 43.23  
W. INV EL 42.19

REVISIONS				 <p>1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	CITY OF TAMPA TRANSPORTATION DIVISION		<p style="text-align: center; font-size: 1.2em; font-weight: bold;">DRAINAGE MAP</p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057			
					ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**TRAFFIC DATA**

CURRENT YEAR	2019	AADT = 13700
ESTIMATED OPENING YEAR	2020	AADT = 13800
ESTIMATED DESIGN YEAR	2040	AADT = 16200
K = 9.0% D = 60% T = 7.9% (24 HOUR)		
DESIGN HOUR T = 3.95%		
DESIGN SPEED = 40 mph		
POSTED SPEED = 35 mph		



**TYPICAL SECTION  
ARMENIA AVENUE  
STA. 118+05.15 TO STA. 129+76.06**

**ASPHALT DRIVEWAY TURNOUTS**  
OPTIONAL BASE GROUP 2, (B-12.5 ONLY)  
AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

**SIDE STREET CONNECTION**  
MILLING & RESURFACING  
MILL 1 1/2" (AVG. DEPTH)  
AND FRICTION COURSE (TRAFFIC C) (1 1/2") (PG 76-22)

**STA. 118+05.15 TO STA. 129+16.22**  
MILLING & RESURFACING  
MILL (VARIABLE DEPTH)  
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2")  
AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

**STA. 118+05.15 TO STA. 129+16.22**  
WIDENING  
TYPE B STABILIZATION (LBR 40) (12")  
OPTIONAL BASE GROUP 7  
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2")  
AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

**STA. 129+16.22 TO STA. 129+76.06**  
SEE SR 580/BUSCH BLVD.  
MILLING & RESURFACING DESCRIPTION

**PAVEMENT REPLACEMENT AT RAILROAD**  
BALLAST 10" \* (INSTALLED BY CSX)  
OPTIONAL BASE GROUP 7 (B-12.5 ONLY) WITH  
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2") (PG 76-22)  
AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

**TYPICAL SECTION AND PAVING NOTES**

- SEE THE PLAN SHEETS FOR THE LIMITS OF SIDE STREET MILLING AND RESURFACING.
- THE TYPICAL SECTION MAY NOT BE REPRESENTATIVE OF THE ACTUAL CONDITIONS AT ALL LOCATIONS ON THE PROJECT. ADJUST VARIABLE CONDITIONS AS DIRECTED BY THE ENGINEER.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

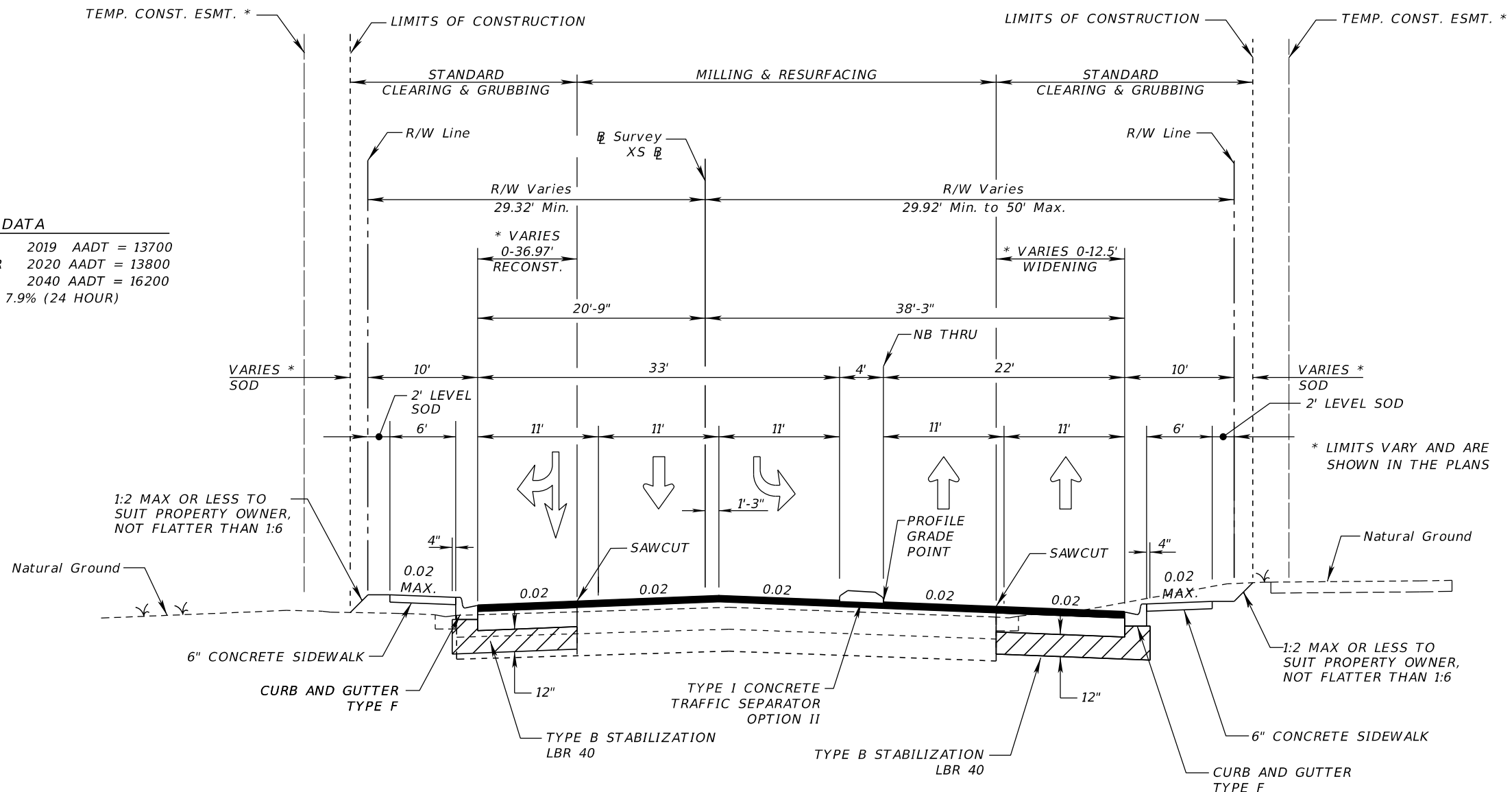
**TYPICAL SECTION**

SHEET NO.

10

**TRAFFIC DATA**

CURRENT YEAR 2019 AADT = 13700  
 ESTIMATED OPENING YEAR 2020 AADT = 13800  
 ESTIMATED DESIGN YEAR 2040 AADT = 16200  
 K = 9.0% D = 60% T = 7.9% (24 HOUR)  
 DESIGN HOUR T = 3.95%  
 DESIGN SPEED = 40 mph  
 POSTED SPEED = 35 mph



STA. 134+70.25 TO STA. 136+42.79

**MILLING & RESURFACING**  
 MILL (VARIABLE DEPTH)  
 AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

**TYPICAL SECTION**  
**ARMENIA AVENUE**  
 STA. 129+76.06 TO STA. 134+70.25

**MILLING & RESURFACING**  
 MILL (VARIABLE DEPTH)  
 TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2")  
 AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

**WIDENING & RECONSTRUCTION**  
 TYPE B STABILIZATION (LBR 40) (12")  
 OPTIONAL BASE GROUP 7  
 TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2")  
 AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

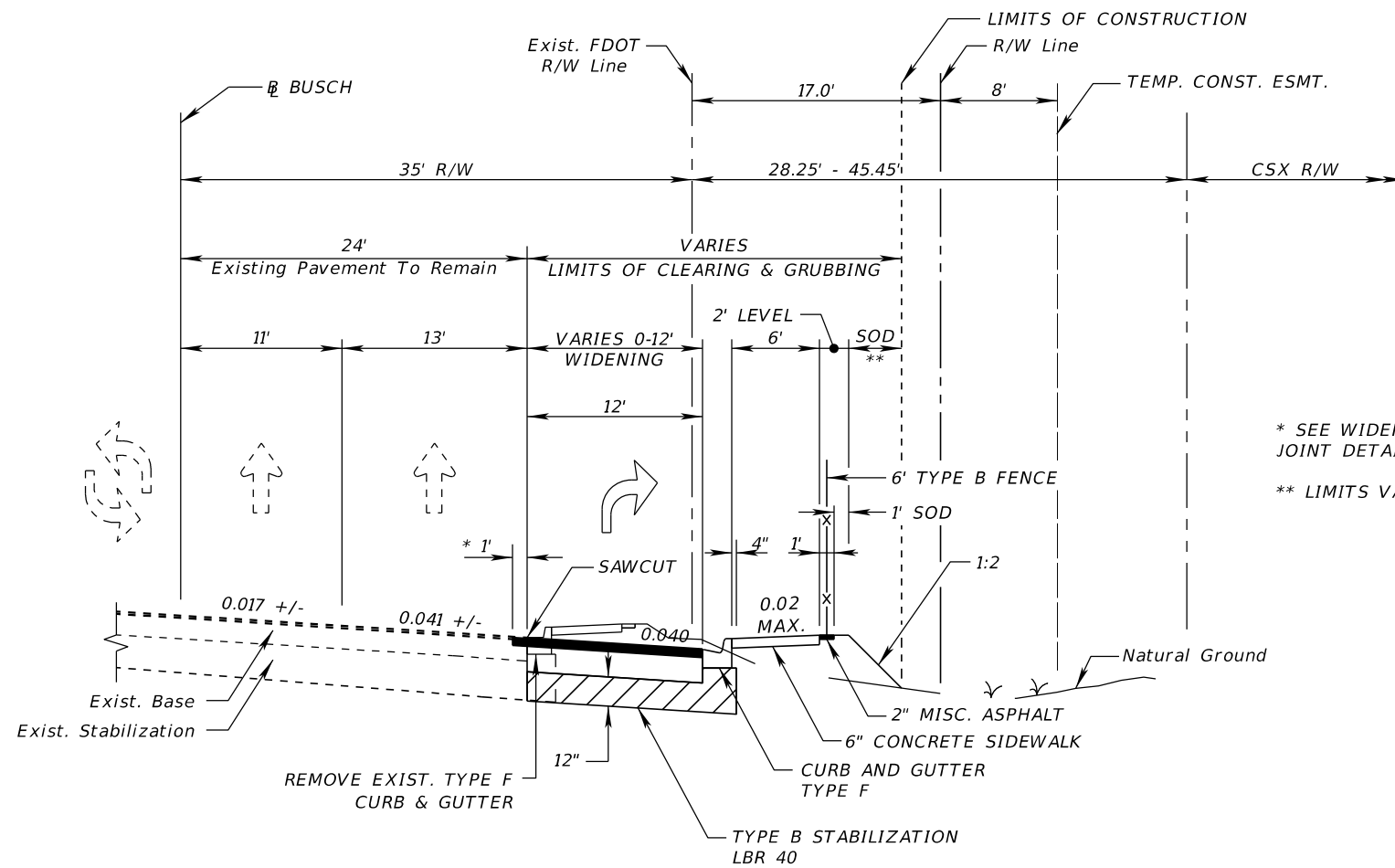
**TYPICAL SECTION**

SHEET NO.  
**11**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**TRAFFIC DATA**

CURRENT YEAR 2019 AADT = 50300  
 ESTIMATED OPENING YEAR 2020 AADT = 20800  
 ESTIMATED DESIGN YEAR 2040 AADT = 59700  
 K = 9.0% D = 59.6% T = 2.9% (24 HOUR)  
 DESIGN HOUR T = 1.45%  
 DESIGN SPEED = 45 mph  
 POSTED SPEED = 45 mph



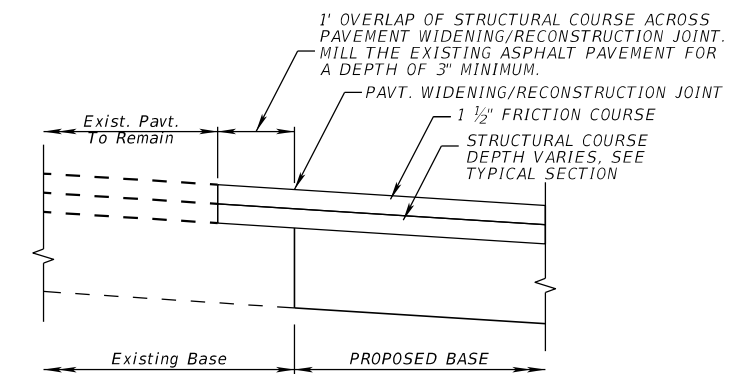
\* SEE WIDENING/RECONSTRUCTION PAVEMENT JOINT DETAIL BELOW.  
 \*\* LIMITS VARY AND ARE SHOWN IN THE PLANS

**WIDENING DETAIL**  
**SR 580/BUSCH BLVD.**  
**STA. 165+25.00 TO STA. 171+56.65**

**WIDENING**  
 TYPE B STABILIZATION (LBR 40) (12")  
 OPTIONAL BASE GROUP 9 (TYPE B 12.5 ONLY)  
 TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1 1/2") (PG 76-22)  
 AND FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)

**SR 580/BUSCH BLVD.**  
**STA. 165+25.00 TO STA. 167+83.26**  
**STA. 168+32.32 TO STA. 171+56.65**

**MILLING & RESURFACING**  
 MILL 1 1/2" (AVG. DEPTH)  
 FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)



**WIDENING/RECONSTRUCTION PAVEMENT JOINT DETAIL**  
 NTS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

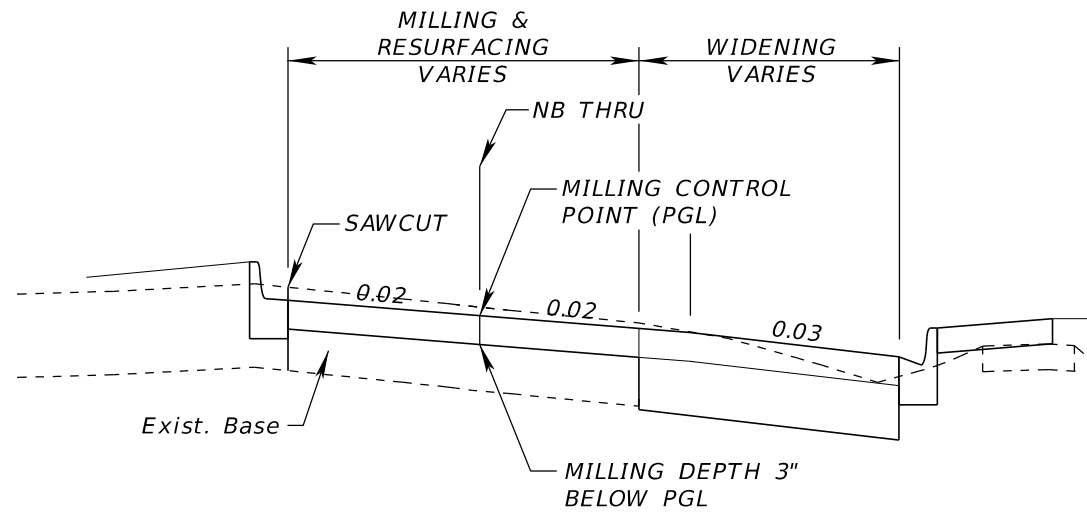
**CITY OF TAMPA**  
**TRANSPORTATION DIVISION**

CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**TYPICAL SECTION**

SHEET NO.

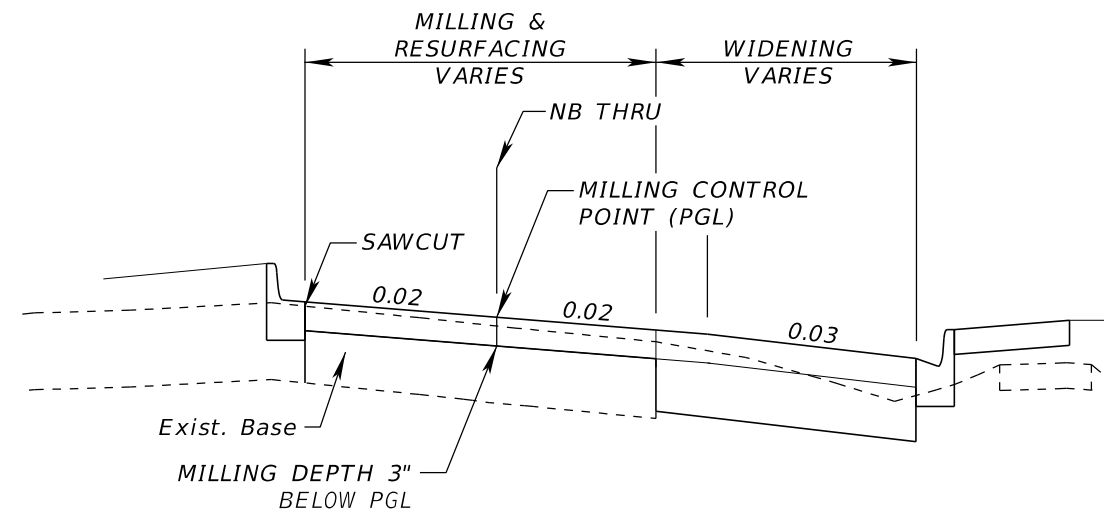
12



**DETAIL OF MILLING FOR CROSS SLOPE CORRECTION 1**  
NTS

**NOTES**

1. SEE PROFILE AND CROSS SECTIONS FOR PGL ELEVATION.
2. ALL CROSS SLOPES SHOWN ARE PROPOSED TYPICAL CROSS SLOPES. SUPERELEVATION LOCATION(S) ARE SHOWN IN THE PROFILE.



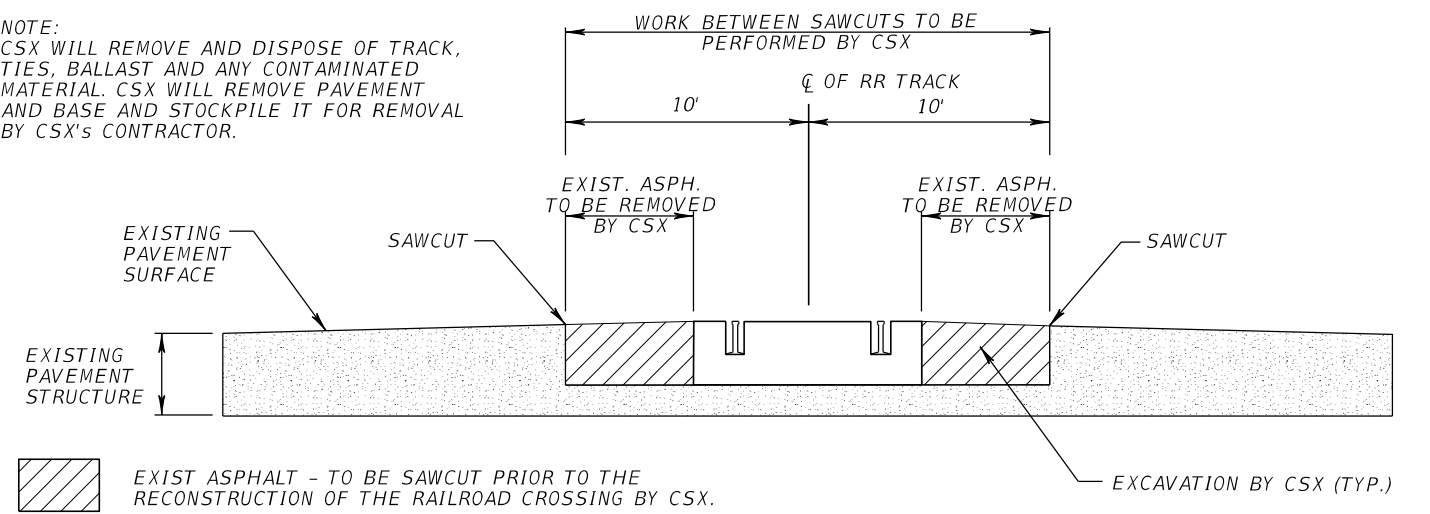
**DETAIL OF MILLING FOR CROSS SLOPE CORRECTION 2**  
NTS

**MILLING DETAILS - ARMENIA AVENUE**

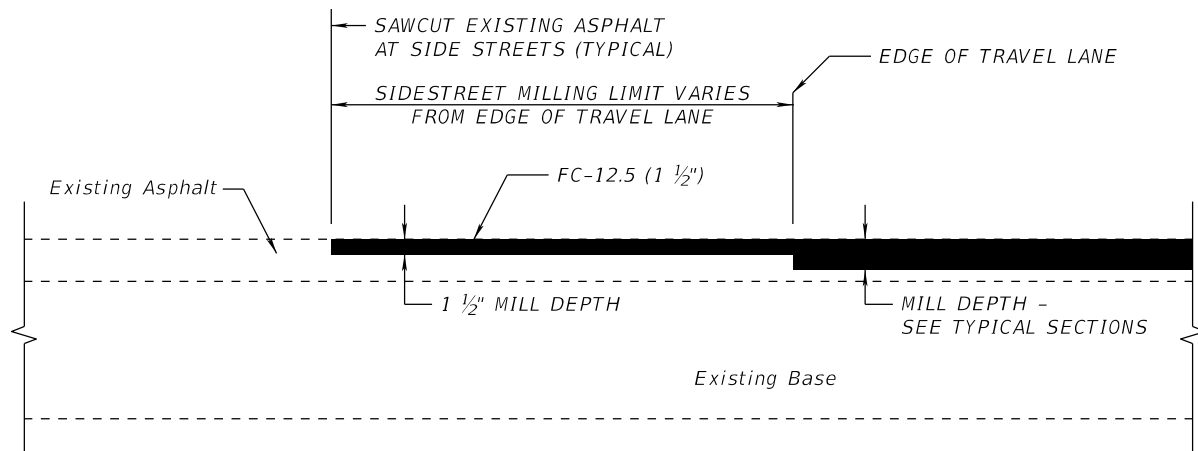
REVISIONS				<b>ELEMENT</b> ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798	CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO: 12-D-00057 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.		<b>TYPICAL SECTION DETAILS</b>		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION						13

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

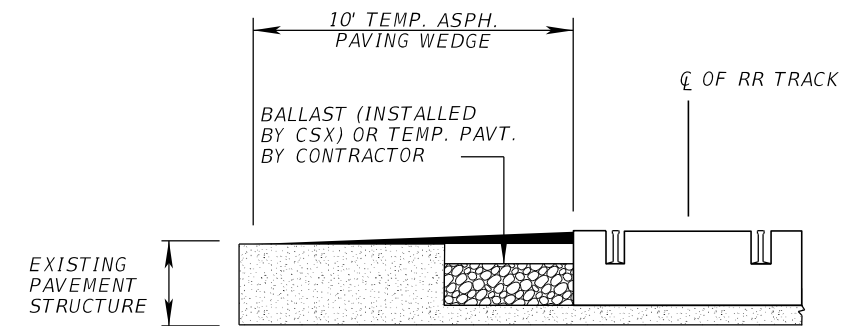
NOTE:  
CSX WILL REMOVE AND DISPOSE OF TRACK, TIES, BALLAST AND ANY CONTAMINATED MATERIAL. CSX WILL REMOVE PAVEMENT AND BASE AND STOCKPILE IT FOR REMOVAL BY CSX'S CONTRACTOR.



**PAVEMENT REMOVAL AT RAILROAD CROSSING DETAIL**  
NTS



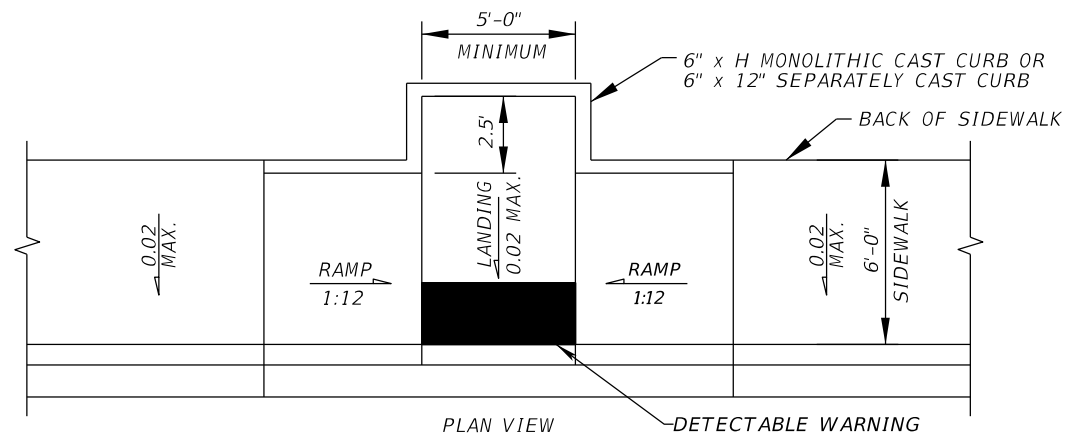
**MATCH EXISTING SIDE STREET PAVEMENT DETAIL**  
NTS



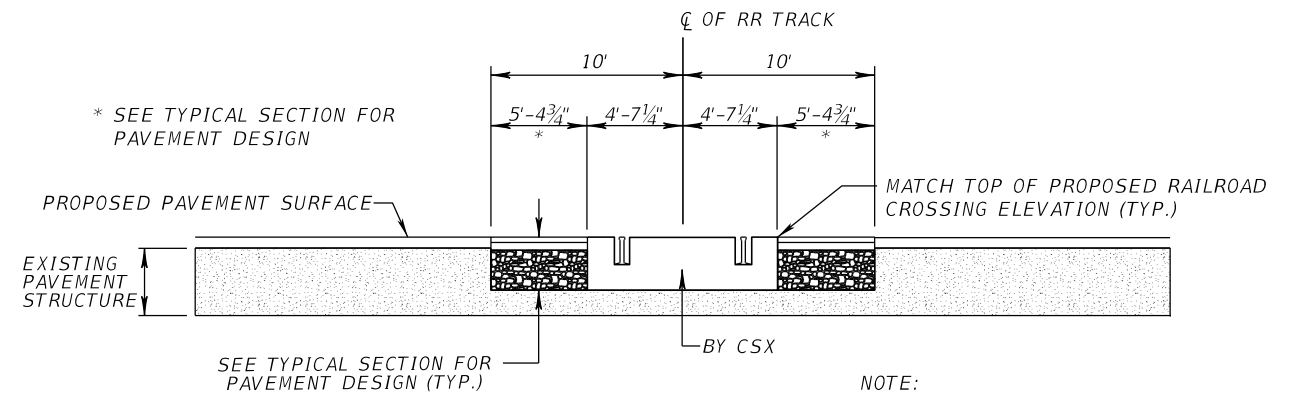
**TEMPORARY PAVING WEDGE DETAIL**  
NTS

NOTES:

1. A TEMPORARY ASPHALT PAVING WEDGE SHALL BE PLACED TO PROTECT THE CROSSING UNTIL THE FINAL PAVEMENT IS CONSTRUCTED.
2. TEMPORARY PAVEMENT IS TO BE PAID FOR UNDER PAY ITEM 102-1, MAINTENANCE OF TRAFFIC, LS.



**MODIFIED CR-C SIDEWALK RAMP DETAIL**  
**USED AT THE SR580/BUSCH BLVD. INTERSECTION**  
NTS



**PAVEMENT REPLACEMENT RAILROAD CROSSING DETAIL**  
NTS

NOTE:  
ADJUST THE THICKNESS OF THE OPTIONAL BASE (TYPE B-12.5) IF NEEDED, TO ENSURE THE FINAL PAVEMENT ELEVATIONS MATCH THE RAILROAD CROSSING ELEVATIONS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**TYPICAL SECTION**  
**DETAILS**

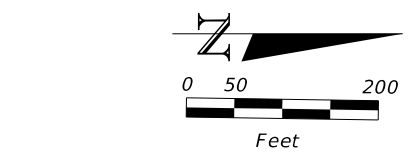
SHEET  
NO.  
14



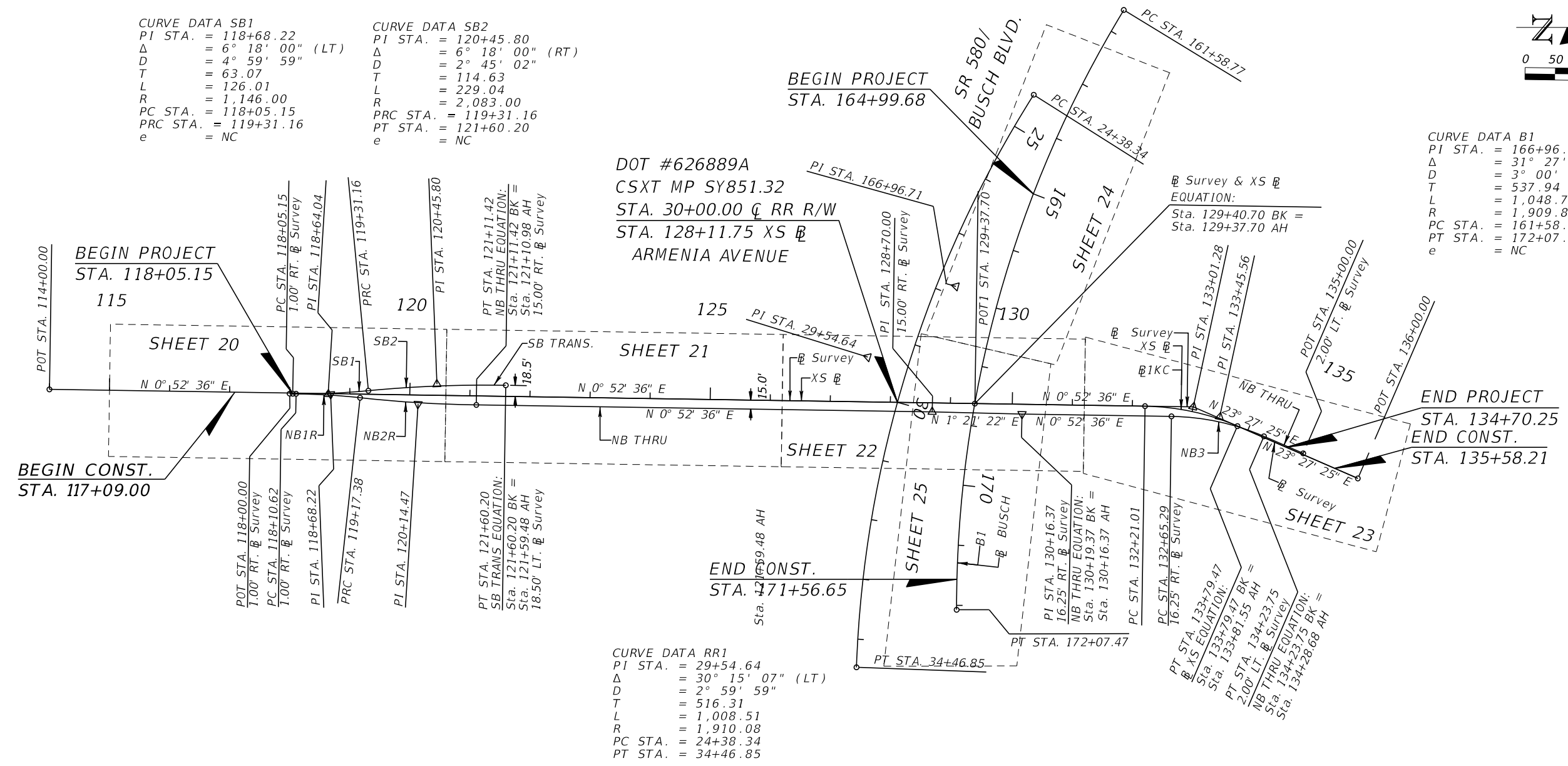


CURVE DATA SB1  
 PI STA. = 118+68.22  
 $\Delta$  = 6° 18' 00" (LT)  
 D = 4° 59' 59"  
 T = 63.07  
 L = 126.01  
 R = 1,146.00  
 PC STA. = 118+05.15  
 PRC STA. = 119+31.16  
 e = NC

CURVE DATA SB2  
 PI STA. = 120+45.80  
 $\Delta$  = 6° 18' 00" (RT)  
 D = 2° 45' 02"  
 T = 114.63  
 L = 229.04  
 R = 2,083.00  
 PRC STA. = 119+31.16  
 PT STA. = 121+60.20  
 e = NC



CURVE DATA B1  
 PI STA. = 166+96.71  
 $\Delta$  = 31° 27' 40" (LT)  
 D = 3° 00' 00"  
 T = 537.94  
 L = 1,048.70  
 R = 1,909.86  
 PC STA. = 161+58.77  
 PT STA. = 172+07.47  
 e = NC



CURVE DATA RR1  
 PI STA. = 29+54.64  
 $\Delta$  = 30° 15' 07" (LT)  
 D = 2° 59' 59"  
 T = 516.31  
 L = 1,008.51  
 R = 1,910.08  
 PC STA. = 24+38.34  
 PT STA. = 34+46.85

CURVE DATA NB1R  
 PI STA. = 118+64.04  
 $\Delta$  = 5° 20' 14" (RT)  
 D = 4° 59' 59"  
 T = 53.42  
 L = 106.75  
 R = 1,146.00  
 PC STA. = 118+10.62  
 PRC STA. = 119+17.38  
 e = NC

CURVE DATA NB2R  
 PI STA. = 120+14.47  
 $\Delta$  = 5° 20' 14" (LT)  
 D = 2° 45' 02"  
 T = 97.09  
 L = 194.04  
 R = 2,083.00  
 PRC STA. = 119+17.38  
 PT STA. = 121+11.42  
 e = NC

CURVE DATA BL1KC  
 PI STA. = 133+01.28  
 $\Delta$  = 22° 34' 49" (RT)  
 D = 14° 15' 00"  
 T = 80.27  
 L = 158.46  
 R = 402.08  
 PC STA. = 132+21.01  
 PT STA. = 133+79.47  
 e = 0.04

CURVE DATA NB3  
 PI STA. = 133+45.56  
 $\Delta$  = 22° 34' 49" (RT)  
 D = 14° 15' 00"  
 T = 80.27  
 L = 158.46  
 R = 402.08  
 PC STA. = 132+65.29  
 PT STA. = 134+23.75  
 e = RC

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**PROJECT LAYOUT**

SHEET NO.  
**16**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**CURVE AND COORDINATE DATA TABLE**

CURVE /PI NO	ALIGNMENT	PC			PI			PT			Δ	D	T	L	R	BACK BEARING	AHEAD BEARING	e	DESIGN SPEED
		STATION	NORTHING	EASTING	STATION	NORTHING	EASTING	STATION	NORTHING	EASTING									
	Ⓜ Survey																		
1					119+00.00	1,344,125.5067	499,964.2527										N 0° 52' 36" E		
5					129+37.70	1,345,166.0849	499,980.1755									N 0° 52' 36" E	N 0° 52' 36" E		
3					133+01.28	1,345,529.6223	499,985.7383									N 0° 52' 36" E	N 23° 27' 25" E		
4					136+00.00	1,345,803.6559	500,104.6467									N 23° 27' 25" E			
	XS Ⓜ																		
KC114					114+00.00	1,343,625.5652	499,956.6027										N 0° 52' 36" E	40 mph	
CK105					129+37.70	1,345,166.0849	499,980.1755									N 0° 52' 36" E	N 0° 52' 36" E		
BL1KC		132+21.01	1,345,449.3610	499,984.5102	133+01.28	1,345,529.6223	499,985.7383	133+79.47	1,345,603.2594	500,017.6908	22° 34' 49" RT	14° 15' 00"	80.27'	158.46'	402.08'	N 0° 52' 36" E	N 23° 27' 25" E	0.04	35 mph
KC106					133+81.55	1,345,603.2594	500,017.6908										N 23° 27' 25" E		
CK104					136+00.00	1,345,803.6559	500,104.6467									N 23° 27' 25" E			
	NB THRU																		
NB100					118+00.00	1,344,025.5031	499,963.7226										N 0° 52' 36" E	40 mph	
NB1R		118+10.62	1,344,036.1239	499,963.8851	118+64.04	1,344,089.5336	499,964.7024	119+17.38	1,344,142.6357	499,970.4842	5° 20' 14" RT	4° 59' 59"	53.42'	106.75'	1,146.00'	N 0° 52' 36" E	N 6° 12' 50" E	NC	
NB2R		119+17.38	1,344,142.6357	499,970.4842	120+14.47	1,344,239.1555	499,980.9935	121+11.42	1,344,336.2344	499,982.4790	5° 20' 14" LT	2° 45' 02"	97.09'	194.04'	2,083.00'	N 6° 12' 50" E	N 0° 52' 36" E	NC	
PTNB200					121+10.98	1,344,336.2344	499,982.4790										N 0° 52' 36" E		
NB101					128+70.00	1,345,095.1637	499,994.0920										N 0° 52' 36" E	N 1° 21' 22" E	35 mph
NB102					130+16.37	1,345,244.4952	499,997.6272										N 1° 21' 22" E	N 0° 52' 36" E	
NB3		132+65.29	1,345,493.3919	500,001.4358	133+45.56	1,345,573.6531	500,002.6640	134+23.75	1,345,647.2902	500,034.6165	22° 34' 49" RT	14° 15' 00"	80.27'	158.46'	402.08'	N 0° 52' 36" E	N 23° 27' 25" E	RC	
PTNB3					134+28.68	1,345,647.2902	500,034.6165										N 23° 27' 25" E		
BB103					135+00.00	1,345,712.7161	500,063.0060										N 23° 27' 25" E		
	SB TRANS.																		
SB1		118+05.15	1,344,030.6529	499,963.8014	118+68.22	1,344,093.7136	499,964.7663	119+31.16	1,344,156.4994	499,958.8055	6° 18' 00" LT	4° 59' 59"	63.07'	126.01'	1,146.00'	N 0° 52' 36" E	N 5° 25' 24" W	NC	40 mph
SB2		119+31.16	1,344,156.4994	499,958.8055	120+45.80	1,344,270.6204	499,947.9710	121+60.20	1,344,385.2412	499,949.7250	6° 18' 00" RT	2° 45' 02"	114.63'	229.04'	2,083.00'	N 5° 25' 24" W	N 0° 52' 36" E	NC	
	Ⓜ BUSCH																		
B1		161+58.77	1,345,413.9979	499,325.6443	166+96.71	1,345,134.3998	499,785.2100	172+07.47	1,345,135.7606	500,323.1449	31° 27' 40" LT	3° 00' 00"	537.94'	1,048.70'	1,909.86'	S 58° 41' 02" E	N 89° 51' 18" E	NC	45 mph
	Ⓞ CSXT RR RW																		
RR1		24+38.34	1,345,264.0788	499,466.6343	29+54.64	1,344,987.8441	499,902.8295	34+46.85	1,344,968.9830	500,418.7909	30° 15' 07" LT	2° 59' 59"	516.31'	1,008.51'	1,910.08'	S 57° 39' 17" E	S 87° 54' 23" E	1/2"	25 mph

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

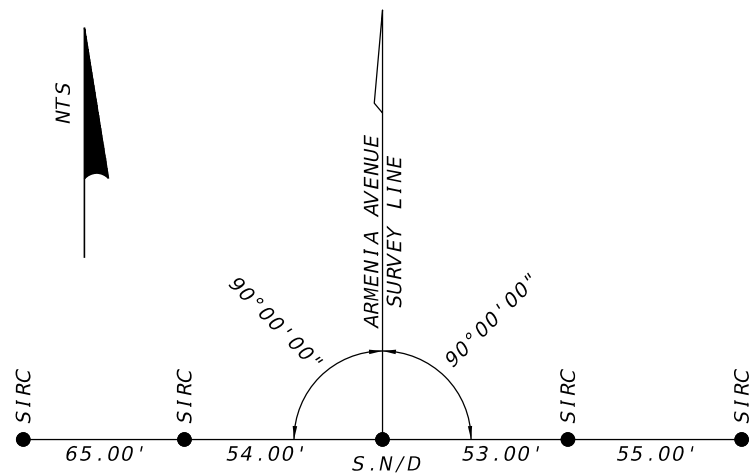
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**PROJECT LAYOUT**

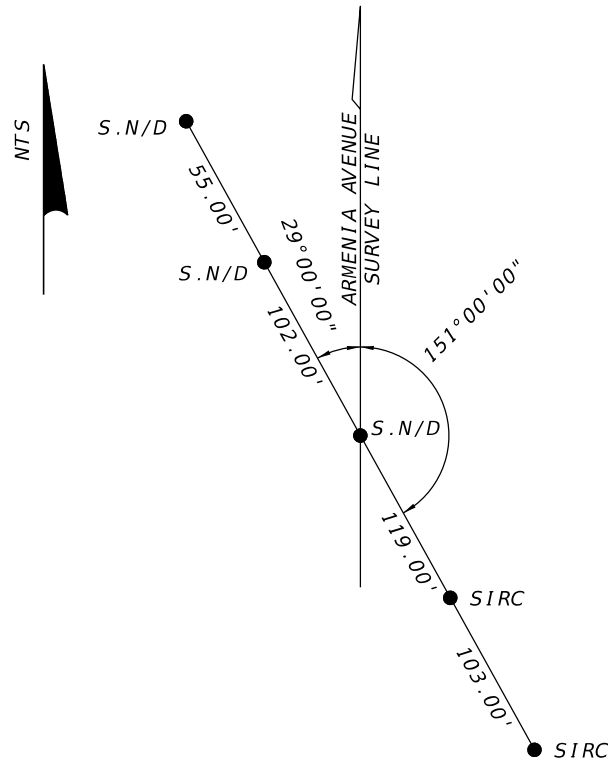
SHEET NO.  
**17**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

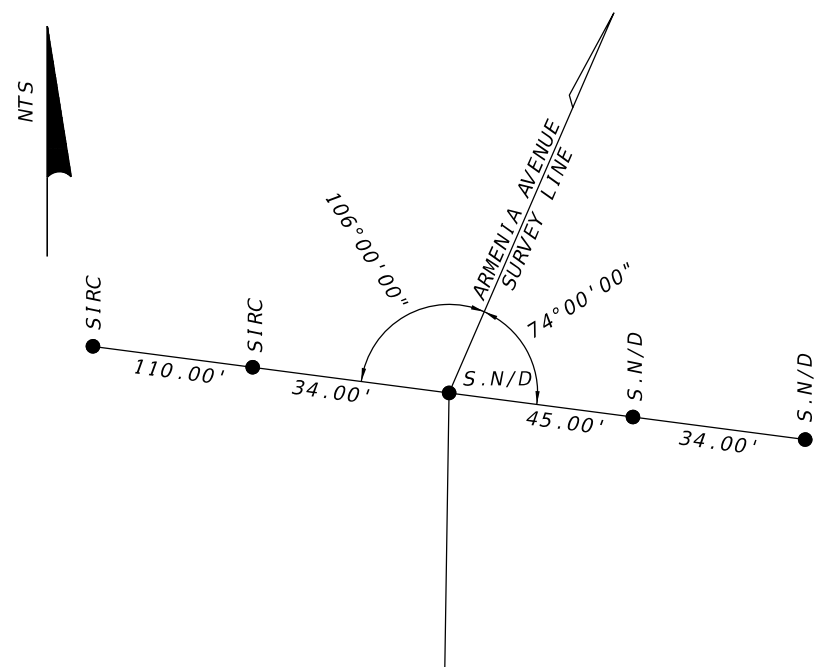


BEGIN SURVEY  
STATION 119+00.00

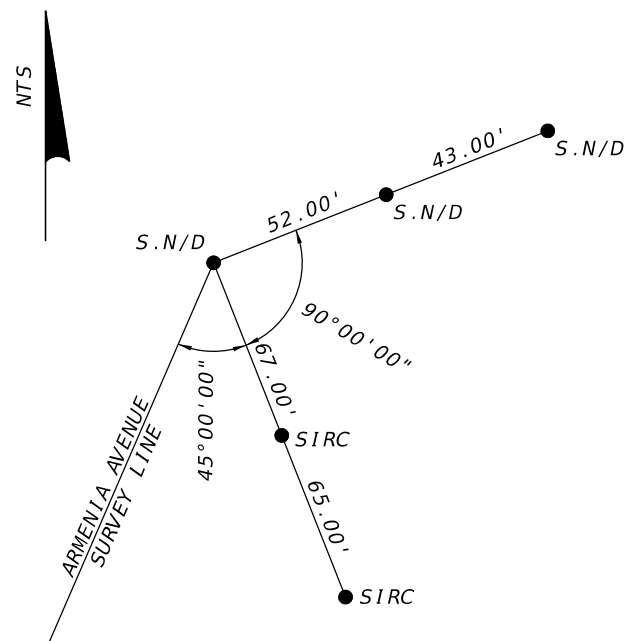
LEGEND  
SIRC = SET 5/8" IRON ROD CAPPED "REF PT LB 7831"  
S.N/D = SET NAIL & DISK "ELEMENT LB 7831"



EQUATION STATION  
129+40.70 BACK  
129+37.70 AHEAD



PI STATION 133+01.28



END SURVEY  
STATION 136+00.00

BENCHMARKS				
Point ID	Station	Offset	Elev. (NAVD 1988)	Description
TBM1	119+73.58	107.43' LT	40.61	NAIL & DISK "COT"
10 09 B03	128+80.12	98.47' RT	47.31	4X4 CONCRETE MONUMENT W/ DISK "10 09 B03"
TBM3	138+11.48	80.30' RT	43.06	NAIL & DISK "ELEMENT LB7831"

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
PSM | PETER JOHN MATTSO, PSM, 6290

CITY OF TAMPA  
TRANSPORTATION DIVISION

CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

PROJECT CONTROL

SHEET NO.

18

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 5J-17.062, F.A.C.

PROJECT NOTES

1. THE PURPOSE OF THIS PROJECT IS TO IMPROVE THE FUNCTION OF THE INTERSECTION OF ARMENIA AVENUE AT SR 580/BUSCH BLVD. THE IMPROVEMENTS WILL INCLUDE THE WIDENING AND MILLING AND RESURFACING OF ARMENIA AVENUE FROM SOUTH OF HUMPHREY STREET TO ORANGE GROVE DRIVE\SEWAHA STREET AND THE ADDITION OF AN EASTBOUND RIGHT TURN LANE ON SR 580\BUSCH BLVD. A RAISED MEDIAN, STORM DRAIN SYSTEM, SIDEWALKS AND PEDESTRIAN RAMPS WILL BE CONSTRUCTED. SIGNALIZATION IMPROVEMENTS AND SIGNING AND PAVEMENT MARKING PLANS ARE ALSO INCLUDED.

THERE IS A RAILROAD CROSSING WITHIN THE PROJECT LIMITS THAT CONSISTS OF 1 TRACK. THE RAILROAD CROSSING WILL BE RECONSTRUCTED BY CSX. PRECAST CONCRETE TUBS WILL BE USED. RAILROAD SIGNAL EQUIPEMENT AND GATES WILL ALSO BE REPLACED. CONTACT THE CSX REPRESENTATIVE TO ARRANGE SCHEDULING AND RECONSTRUCTION OF THE RAILROAD CROSSINGS OR ANY OTHER CONSTRUCTION WORK IN THE CSX RIGHT OF WAY.

2. BENCHMARK ELEVATIONS SHOWN ON THE PLANS DEPICT THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE HORIZONTAL DATUM IS NAD 83/2011.

3. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE ENGINEER SHOULD NOTIFY THE CITY SURVEYOR, CLARENCE "LUCKY" WADE BY TELEPHONE AT (813) 635-3430, WITHOUT DELAY.

4. ALL CALL-OUTS TO RIGHT OF WAY ARE FROM THE BASELINE OF SURVEY.

5. ALL CURB RADII, PI, PC, AND PT REFER TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

6. THE VOLTAGE OF THE OVERHEAD ELECTRIC LINES IS SHOWN IN THE ROADWAY PLANS.

7. EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS ARE TO REMAIN UNLESS OTHERWISE NOTED IN THE PLANS. DESILT ALL EXISTING STRUCTURES AND PIPES THAT ARE TO REMAIN.

8. REPLACE EXISTING DRIVEWAYS FROM THE EDGE OF PAVEMENT TO THE RIGHT OF WAY LINE, WHEREVER AFFECTED BY CONSTRUCTION. USE MATERIALS SIMILAR TO THE EXISTING UNLESS NOTED OTHERWISE, OR IN THE CASE OF UNPAVED DRIVEWAYS, INSTALL A 6" THICK LAYER OF COMPACTED SHELL OR AS SHOWN ON THE PLANS.

9. CONTACT THE CITY CONSTRUCTION ENGINEER 1 WEEK PRIOR TO CLEARING AND GRUBBING EXISTING SPRINKLER SYSTEMS, SIGNS, LANDSCAPING OR OTHER ENCROACHMENTS TO BE REMOVED WITHIN THE PROJECT LIMITS.

10. REMOVE EXISTING SIDEWALK AND CURB, AS CALLED OUT IN THE PLANS, TO THE NEAREST JOINT OR TO THE EXTENT THAT NO REMAINING SECTION IS LESS THAN 5' LONG.

11. FIELD VERIFY LIMITS OF SIDEWALK, WITH CONCURRENCE FROM THE ENGINEER, PRIOR TO BEGINNING REMOVAL AND REPLACEMENT. LIMITS MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER.

12. IMPROVEMENTS FOR THE EXISTING HILLSBOROUGH AREA REGIONAL TRANSIT AUTHORITY (HART) SYSTEM ARE BEING INTEGRATED INTO THIS PROJECT. BUILD ALL BUS BAYS & SHELTER PADS TO HART SPECIFICATIONS. FOR MORE INFORMATION CONTACT DAN RODRIGUEZ AT 813-223-6831, EXTENSION 1712, OR VISIT GOHART.ORG AND SEARCH FOR HART BUS STOP & SHELTER DESIGNS FOR A SET OF DOWNLOADABLE PDFS.

13. THE COST OF SAW-CUTTING IS INCIDENTAL TO THE WORK BEING PERFORMED.

14. VERIFY THE LOCATION AND SIZE OF ALL EXISTING DRAINAGE STRUCTURES TO BE MODIFIED AND THE FLOW LINE OF ALL EXISTING PIPES PRIOR TO ANY CONSTRUCTION ACTIVITIES. FIELD VERIFY THE LIMITS OF INLET TOP REPAIRS, WITH CONCURRENCE FROM THE ENGINEER, PRIOR TO BEGINNING REMOVAL AND REPLACEMENT. LIMITS MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER.

15. USE CLASS III REINFORCED CONCRETE PIPE, CONSTRUCTED WITHOUT LIFT-HOLES, FOR ALL PROPOSED DRAINAGE PIPES, UNLESS NOTED OTHERWISE IN THE PLANS.

16. MANHOLE AND VALVE BOX ADJUSTMENTS ARE TO BE PERFORMED WITH MATERIALS FURNISHED BY THE APPROPRIATE UTILITY. ARRANGE FOR DELIVERY AND RECEIPT OF MATERIALS. WORK TO BE INCLUDED UNDER PAY ITEMS 425-5-1 AND 425-6.

SHOULD CONCRETE COLLARS BE ENCOUNTERED AT THE MANHOLE AND VALVE BOX ADJUSTMENT LOCATIONS, REMOVE THE COLLAR. FILL THE VOID WITH SP ASPHALTIC CONCRETE, TAMP AND PLATE COMPACT PRIOR TO PLACING THE SP PAVEMENT COURSE.

17. SOD GRASSED AREAS DISTURBED BY CONSTRUCTION.

TREE NOTES

1. ALL TREES LOCATED WITHIN THE LIMITS OF CONSTRUCTION ARE TO REMAIN UNLESS OTHERWISE INDICATED IN THE TREE REMOVAL LOCATION TABLE. TRIM REMAINING TREES TO CONFORM TO SECTION 110. COST TO BE INCLUDED IN CLEARING AND GRUBBING.

2. ALL TREES PROPOSED TO BE TRIMMED, ROOT PRUNED, OR REMOVED, SHALL BE COORDINATED WITH THE CITY URBAN FORESTRY CITY NATURAL RESOURCES DEPARTMENT IS REQUIRED FOR THE REMOVAL OF ALL TREES FIVE INCHES OR MORE IN DIAMETER OR THE TRIMMING OR ROOT TREE REMOVAL SHALL COMPLY WITH THE CITY OF TAMPA TREE ORDINANCE. THE CITY OF TAMPA MOBILITY DEPARTMENT WILL PAY THE TREE MITIGATION FEE ASSOCIATED WITH EACH TREE PERMIT.

3. ROOT PRUNING TO 18" DEPTH SHALL BE REQUIRED WHEN SUBSURFACE CONSTRUCTION IS PROPOSED WITHIN 10' OF EXISTING PROTECTED TREE SPECIES, 15' OF SPECIMEN TREES, AND 20' FROM A GRAND TREE. EXISTING PALM TREES ARE REQUIRED TO BE PROVIDED A 6' PROTECTIVE RADIUS OR 3' OFF THE TRUNK OF THE PALM TREE. ALL ROOT PRUNING MUST BE PERFORMED BY AN ISA CERTIFIED ARBORIST AND WITH ADEQUATE TREE PROTECTION SHALL BE PROVIDED PER THE TECHNICAL MANUAL A.2. TREE BARRICADES SHALL BE CHAIN LINK. YOU MAY ERECT BARRICADES AROUND CLUSTERS OF TREES.

THE REQUIRED PROTECTIVE RADIUS IS TO BE MEASURED FROM THE CLOSEST EDGE OF ANY PROPOSED IMPROVEMENT INCLUDING PROPOSED UNDERGROUND UTILITIES TO THE EDGE OF THE TREE TRUNK OF THE TREE AND PROVIDE THE FOLLOWING MINIMUM REQUIRED PROTECTIVE RADIUS FOR EACH TREE TYPE: 20' FOR GRAND TREES (32" OR GREATER), 15' FOR SPECIMEN TREES (24" - 31"), 10' FOR PROTECTED TREES (5" - 23" OR ANY MITIGATION TREE). THE PROPOSED IMPROVEMENTS ON THE EAST SECTION OF THE CONSTRUCTION AREA (9636 ARMENIA AVENUE) AND AT (9710 N. ARMENIA AND 2119 BARCLAY ROAD) APPEAR TO IMPACT TREES. PROVIDE REASONABLE RECONFIGURATION IN ACCORDANCE WITH 27-284.2.4 FOOTNOTE 3 AND 27-284.2.5 FOOTNOTE 5. SHOW ROOT PRUNING AT CONSTRUCTION INTERFACE. ALL UNDERGROUND UTILITIES THAT ARE BEING DEMOLISHED, MUST BE ABANDONED IN PLACE AND PLUGGED WITHIN THE PROTECTIVE RADIUS OF ANY TREE TO REMAIN.

PROVIDE REQUIREMENTS FOR EQUIPMENT WITH RESPECT HEIGHT REQUIREMENTS THAT WILL IMPACT TREE CANOPY. AGAIN, ALL PRUNING MUST MEET ANSI A300 PRUNING STANDARDS PER SECTION 27-284.2.3

4. TREES WITHIN THE LIMITS OF THIS PROJECT THAT ARE TO REMAIN SHALL BE TRIMMED PER SECTION 27-284.2.3 AND MUST BE PRUNED IN A MANNER CONSISTENT WITH THE "AMERICAN NATIONAL STANDARDS FOR TREE CARE OPERATIONS, ANSI, A300, CURRENT EDITION." COORDINATOR MARY DANIELEWICZ-BRYSON, 813-274-7511. A TREE REMOVAL PERMIT, ISSUED BY THE PRUNING OF GRAND TREES.

TREE REMOVAL LOCATION					
STA.	OFFSET	SIDE	STA.	OFFSET	SIDE
120+90.21	37.98	LT	123+93.27	38.87	RT
121+28.51	66.61	LT	124+05.25	38.41	RT
121+77.83	60.10	RT	124+11.40	35.53	RT
121+87.62	121.73	RT	124+19.50	31.86	LT
121+91.63	119.26	RT	124+25.64	38.03	RT
121+94.02	55.47	RT	124+31.34	38.51	RT
122+16.76	37.59	LT	124+78.48	31.57	LT
122+22.22	40.34	LT	124+92.15	28.39	LT
122+70.60	35.03	RT	165+45.17	46.12	RT
122+77.81	46.39	RT	165+48.45	41.90	RT
122+79.23	37.67	RT	165+48.87	55.41	RT
122+89.80	44.63	RT	165+55.10	51.32	RT
123+08.52	45.36	RT	165+72.67	59.63	RT
123+15.96	44.66	RT	165+74.10	51.14	RT
123+64.46	43.48	RT	166+46.98	51.61	RT
123+69.67	45.59	RT	166+49.89	44.93	RT
123+77.58	41.80	RT	166+61.83	59.60	RT
123+78.73	39.63	LT			
123+89.82	41.02	LT			

TREE REMOVAL/REPLACEMENT TABLE			
TREES RETAINED DIAMETER (INCHES)	# OF TREES	MULTIPLIER FOR	TOTAL CREDITS
5" TO 7"	3	0	0
8" TO 12"	14	1	14
13" TO 19"	0	2	0
20" TO 29"	3	4	12
30" OR MORE	1	10	10
ALL PALMS	1	1	1
TOTAL	22		37
TREES REMOVED DIAMETER (INCHES)	# OF TREES	MULTIPLIER FOR	TOTAL DEBITS
5" TO 7"	6	0	0
8" TO 12"	9	1	9
13" TO 19"	0	2	0
20" TO 29"	1	4	4
30" OR MORE	0	INCH FOR INCH	0
ALL PALMS	20	1	20
TOTAL	36		33
% REMOVED	N/A		
SEPARATE REQUIREMENTS. DON'T SUBTRACT ABOVE CREDITS. CREDIT TREES CAN ONLY BE USED TO OFFSET PLANTING REQUIREMENTS IF THEY MEET PLANTING STANDARD.			
VUA TREE REQUIREMENTS	LF/SF	TREES REQ'D	VUA TREES
LINEAR FT. VUA ADJ. STREET FRONTAGE	0	1 PER 40 LF	0
TOTAL SQUARE FOOTAGE OF VUA	0	1 PER 1500 SF	0
VEHICLE USE AREA GREENSPACE	0	20% OF VUA	0
USE TREE REQUIREMENTS			
INSERT PROPOSED USE HERE NONE MUST PLACE "0" IF NO USED TREES REQ'D	0	1 PER 1500 SF	0
TOTAL 2" TREES REQUIRED			33

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

GENERAL NOTES

SHEET NO.  
19

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

RAIL GENERAL NOTES

1. SUBMIT RAILROAD INSURANCE TO CSX AT [insurancedocuments@csx.com](mailto:insurancedocuments@csx.com) FOR CSX REVIEW AND APPROVAL. ONCE APPROVED BY CSX, SUBMIT A COPY OF THE CSX-APPROVED RAILROAD INSURANCE AND APPROVAL LETTER, AS SPECIFIED IN THE SPECIAL PROVISIONS, TO THE CITY OF TAMPA MOBILITY DEPARTMENT. WORK WILL NOT BE ALLOWED WITHIN THE CSX RIGHT- OF- WAY WITHOUT THE INSURANCE APPROVAL FROM CSX AND FLAGMAN CANNOT BE SCHEDULED. NOTE: APPROVAL OF INSURANCE CAN TAKE UP TO 30 TO 45 DAYS.

2. FLAGGING REQUIREMENTS - CONTACT CSX TO REQUEST NEEDED FLAGMAN OR ACCESS TO CSX RIGHT-OF-WAY AND INCLUDE THE CITY OF TAMPA, PROJECT CONSTRUCTION ENGINEER, ON ALL REQUEST UNLESS INSTRUCTED OTHERWISE AT THE PRE- CONSTRUCTION CONFERENCE.

NO WORK WILL BE PERFORMED WITHIN RAILROAD RIGHT OF WAY WITHOUT A RAILROAD FLAGMAN OR AUTHORIZED REPRESENTATIVE BEING PRESENT. ANTICIPATE AN 8 HOUR WORK WINDOW. TO OBTAIN A FLAGMAN, PROVIDE AN ESTIMATE OF START DATE, WORK DAYS, HOURS AND DURATION FOR WHICH A CSX FLAGGER WILL BE NEEDED ON ACTIVITIES WITHIN THE CSX RIGHT-OF-WAY.

PROJECTS WITH RAILROAD INVOLVEMENT OF 20 CONSECUTIVE DAYS OR MORE REQUIRE LONG TERM RAILROAD FLAGGING SERVICES (MAY TAKE THREE (3) TO SIX (6) MONTHS TO OBTAIN).

PLAN TO ONLY HAVE ONE FLAGGER PER PROJECT. ALL ROADWAY WORK WITHIN THE RAILROAD RIGHT OF WAY MUST BE COMPLETED, DURING DAY TIME HOURS, WITHIN XX CONTRACT DAYS. THE WORK TO BE COMPLETED WILL INCLUDE ALL NECESSARY ITEMS NEEDED TO RELIEVE THE FLAGMAN FROM PROVIDING PROTECTIVE SERVICES. ALL COSTS FOR ANY ADDITIONAL DAYS OF FLAGGING DUE TO A CONTRACTOR CAUSED DELAY SHALL BE BORNE SOLELY BY THE CONTRACTOR.

PROVIDE THE CITY WITH A MINIMUM 45 DAY ADVANCE NOTICE OF BEGINNING WORK WITHIN THE ROAD RIGHT OF WAY TO ALLOW FOR THE SCHEDULING OF THE RAILROAD FLAGMAN. FAILURE TO MEET THE REQUIREMENTS OF THIS NOTE CONSTITUTES A FULL, COMPLETE, ABSOLUTE AND IRREVOCABLE WAIVER BY THE CONTRACTOR OF ANY RIGHT TO CLAIM FOR ADDITIONAL COMPENSATION OR A TIME EXTENSION RELATED TO WORK WITHIN THE RAILROAD RIGHT OF WAY.

3. RAILROAD CROSSING WORK - THE EXISTING CROSSING WILL BE RECONSTRUCTED BY THE RAILROAD OR THEIR SUB CONTRACTOR DURING THIS PROJECT. A TRAFFIC CONTROL OFFICER MUST BE PRESENT ON EACH SIDE OF THE RAILROAD WORK ZONE, 24 HOURS A DAY, FOR THE DURATION OF ANY WORK PERFORMED BY CSX OR CSX CONTRACTORS.

4. PROVIDE A DUMP TRUCK, EQUIPMENT AND LABOR TO DISPOSE OF ALL ROADWAY DEBRIS EXCAVATED BY CSX OR CSX CONTRACTOR.

5. DURING AND AFTER COMPLETION OF CONSTRUCTION WITHIN RAILROAD RIGHT OF WAY, CLEAR CSX'S DRAINAGE DITCHES AND SURROUNDING PROPERTIES OF ALL DEBRIS TO THE SATISFACTION OF CSX'S CONSTRUCTION ENGINEER AND INSPECTION REPRESENTATIVE.

6. DO NOT STORE MATERIAL OR EQUIPMENT ON RAILROAD'S PROPERTY.


7. COMPLY WITH CSX CONSTRUCTION SUBMISSION CRITERIA, WHICH CAN BE LOCATED AT <https://www.csx.com/index.cfm/library/files/about-us/property/public-project-manual/>, UNDER PUBLIC PROJECTS MANUAL.

8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY "DELAY OF TRAIN" PENALTIES IMPOSED BY THE RAILROAD. INVOICES FOR SUCH PENALTIES RECEIVED BY THE DEPARTMENT WILL BE FORWARDED TO THE CONTRACTOR FOR PAYMENT. IF THE CONTRACTOR FAILS TO PAY SUCH PENALTIES, THE DEPARTMENT MAY DEDUCT SAID AMOUNT FROM PAYMENTS MADE TO THE CONTRACTOR.

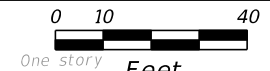
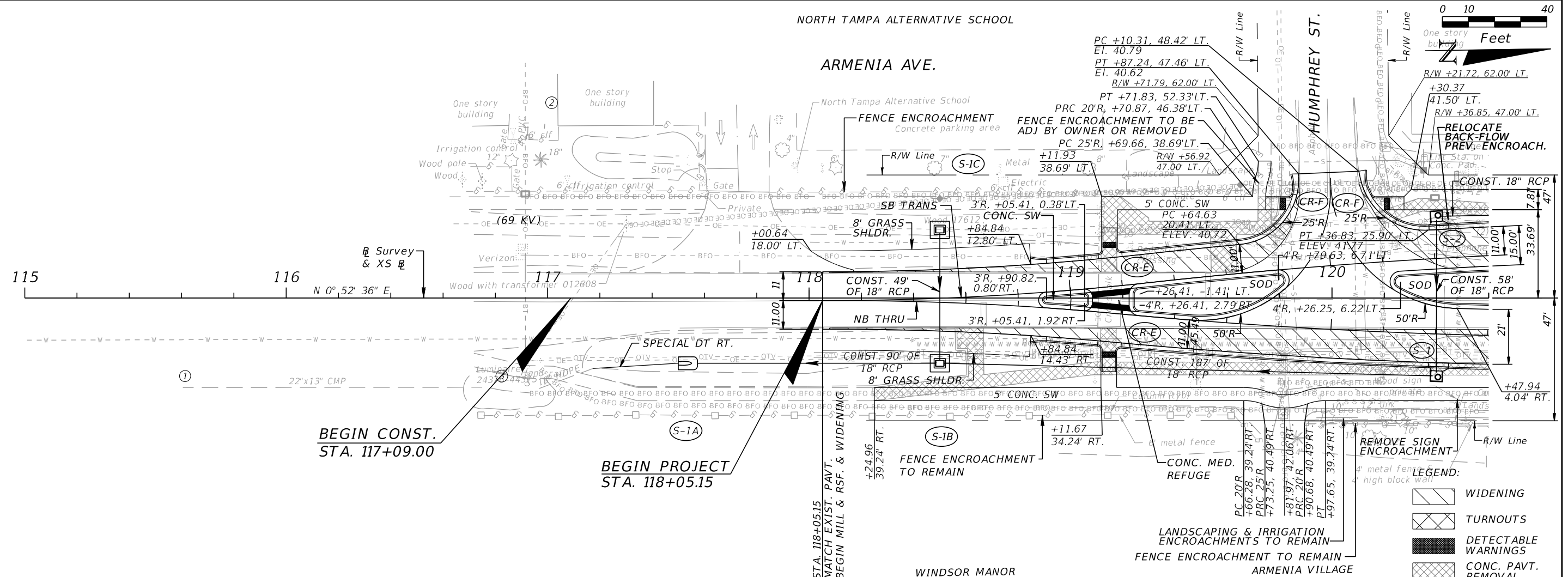
9. ALL WORK ON, OVER, UNDER, OR ADJACENT TO CSXT RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE CSXT SPECIAL PROVISIONS FOUND IN THE CSXT PUBLIC PROJECT MANUAL <https://www.csx.com/index.cfm/library/files/about-us/property/public-project-manual/>.

10. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. CONTACT THE RAILROAD'S REPRESENTATIVE TWO (2) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED. AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, HAND EXCAVATE THE LINE AND PROTECT THE LINE DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.

ABBREVIATIONS:  
El. = Existing Elevation  
ELEV. = PROPOSED ELEVATION

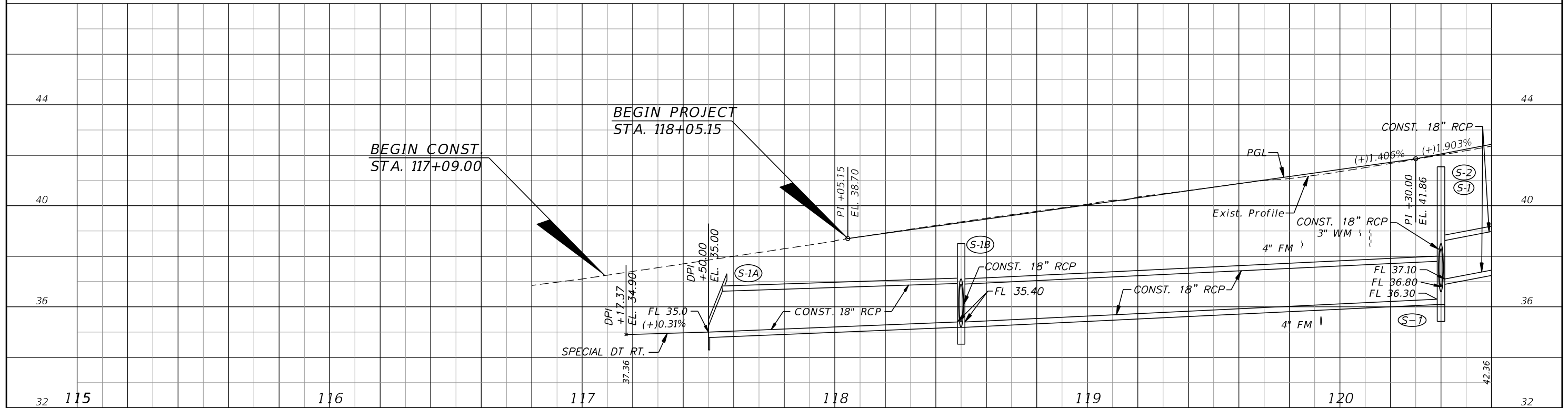
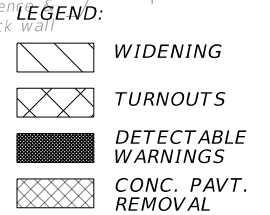
REVISIONS				 <p>1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	<p>CITY OF TAMPA TRANSPORTATION DIVISION</p> <p>CONTRACT NO: 12-D-00057</p> <p>ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.</p>		<p>GENERAL NOTES</p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		20			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



BEGIN CONST.  
STA. 117+09.00

BEGIN PROJECT  
STA. 118+05.15



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

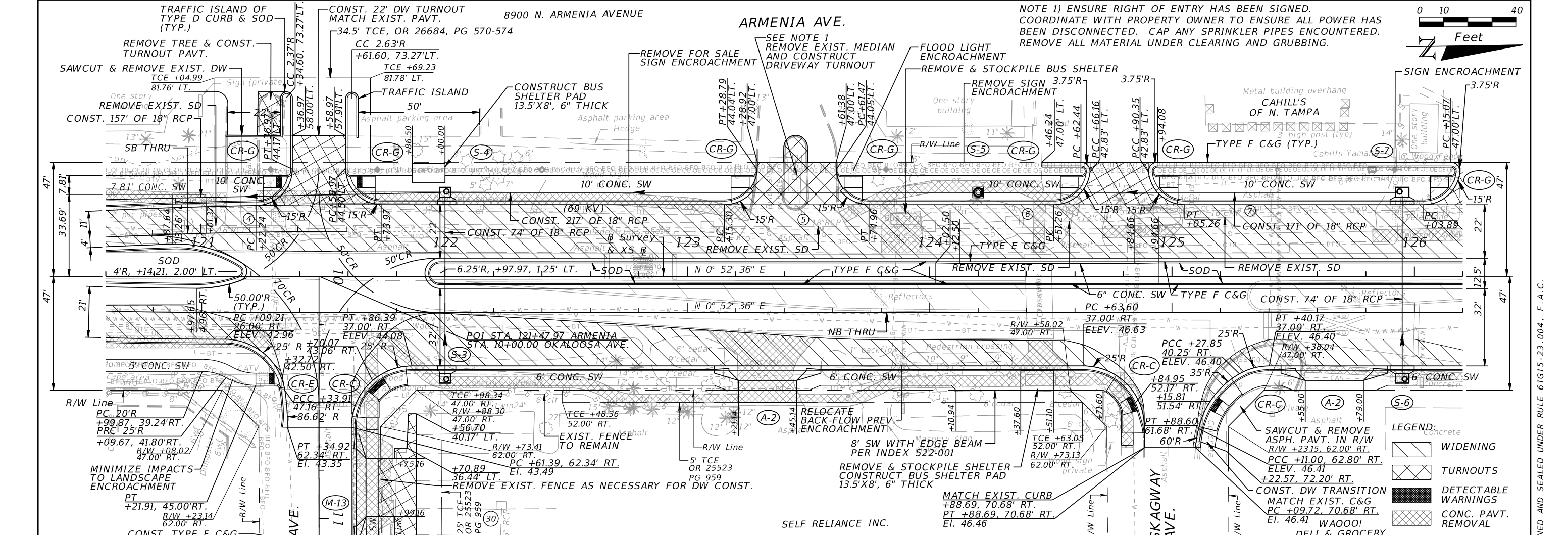
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

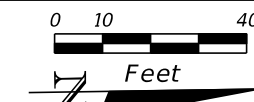
**ROADWAY PLAN-PROFILES**

SHEET NO. 21

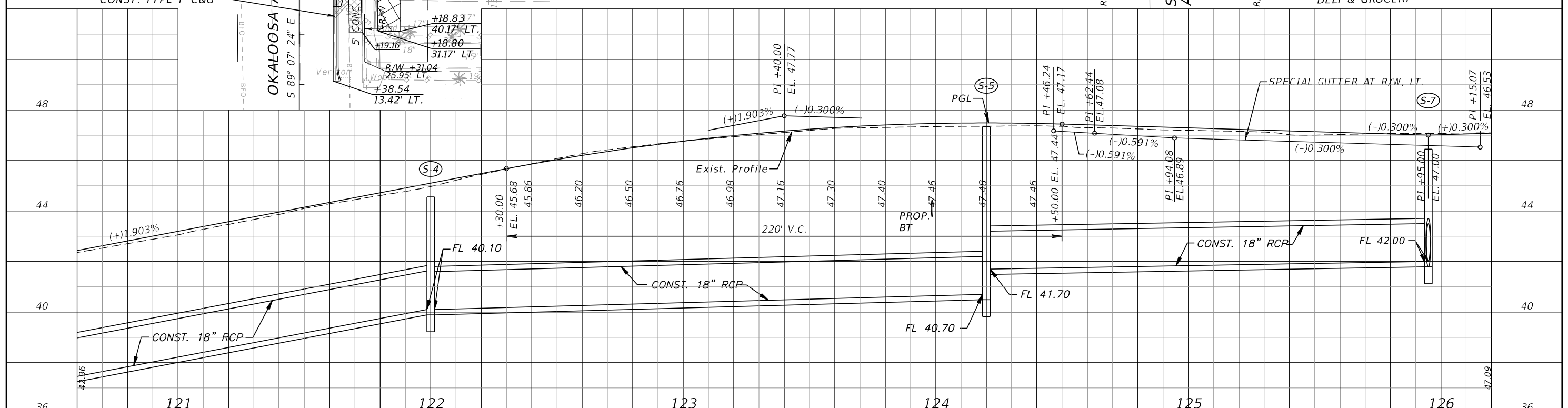
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



NOTE 1) ENSURE RIGHT OF ENTRY HAS BEEN SIGNED. COORDINATE WITH PROPERTY OWNER TO ENSURE ALL POWER HAS BEEN DISCONNECTED. CAP ANY SPRINKLER PIPES ENCOUNTERED. REMOVE ALL MATERIAL UNDER CLEARING AND GRUBBING.



- LEGEND:**
- Concrete
  - WIDENING
  - TURNOUTS
  - DETECTABLE WARNINGS
  - CONC. PAVT. REMOVAL



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

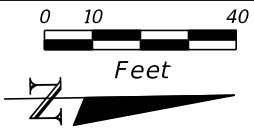
**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**ROADWAY PLAN-PROFILES**

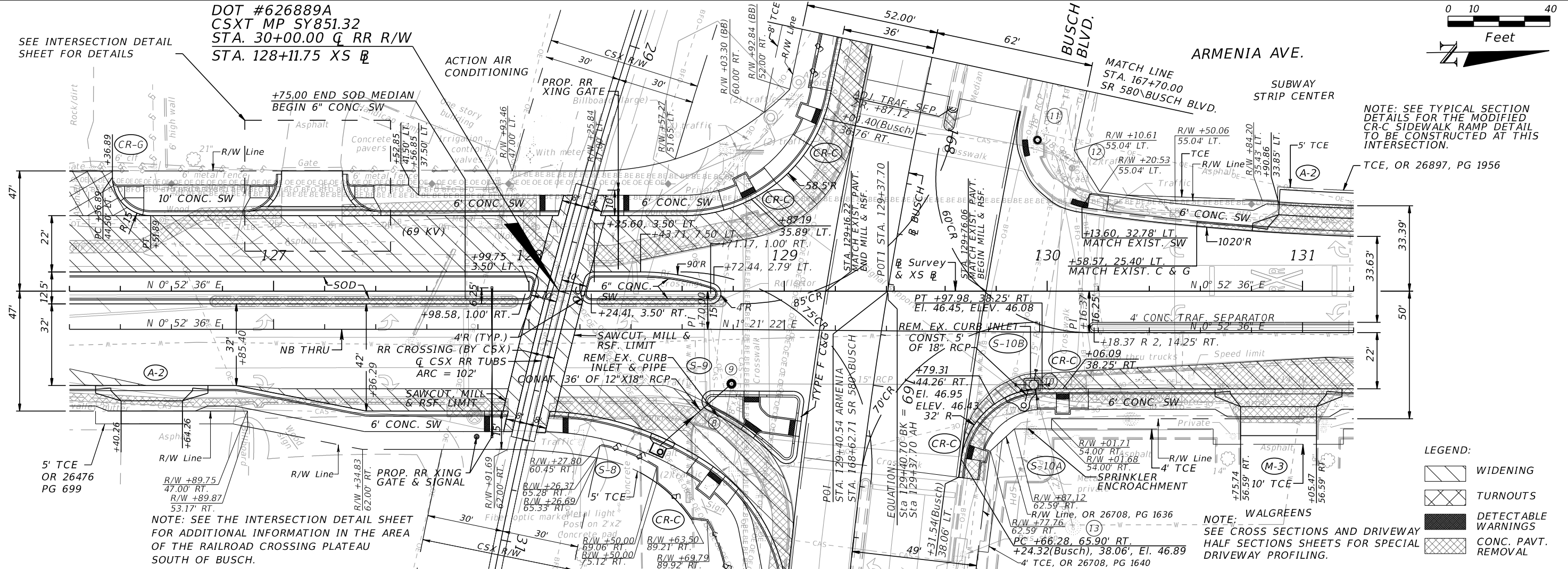
SHEET NO. 22

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

DOT #626889A  
 CSXT MP SY851.32  
 STA. 30+00.00 Q RR R/W  
 STA. 128+11.75 XS B



SEE INTERSECTION DETAIL SHEET FOR DETAILS



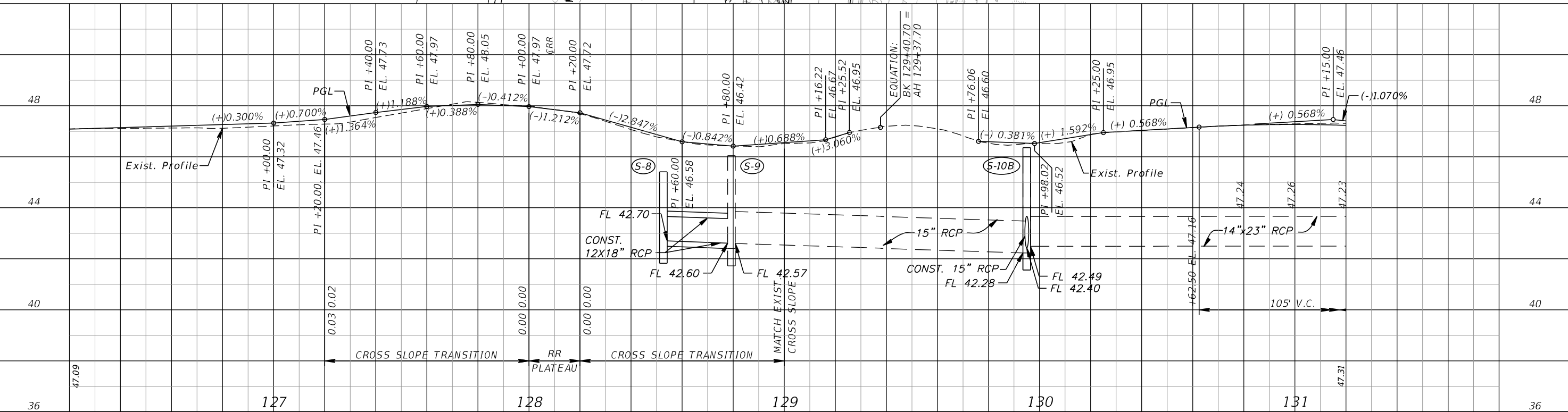
NOTE: SEE TYPICAL SECTION DETAILS FOR THE MODIFIED CR-C SIDEWALK RAMP DETAIL TO BE CONSTRUCTED AT THIS INTERSECTION.

TCE, OR 26897, PG 1956

NOTE: SEE THE INTERSECTION DETAIL SHEET FOR ADDITIONAL INFORMATION IN THE AREA OF THE RAILROAD CROSSING PLATEAU SOUTH OF BUSCH.

- LEGEND:
- WIDENING
  - TURNOUTS
  - DETECTABLE WARNINGS
  - CONC. PAVT. REMOVAL

NOTE: SEE CROSS SECTIONS AND DRIVEWAY HALF SECTIONS SHEETS FOR SPECIAL DRIVEWAY PROFILING.



REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

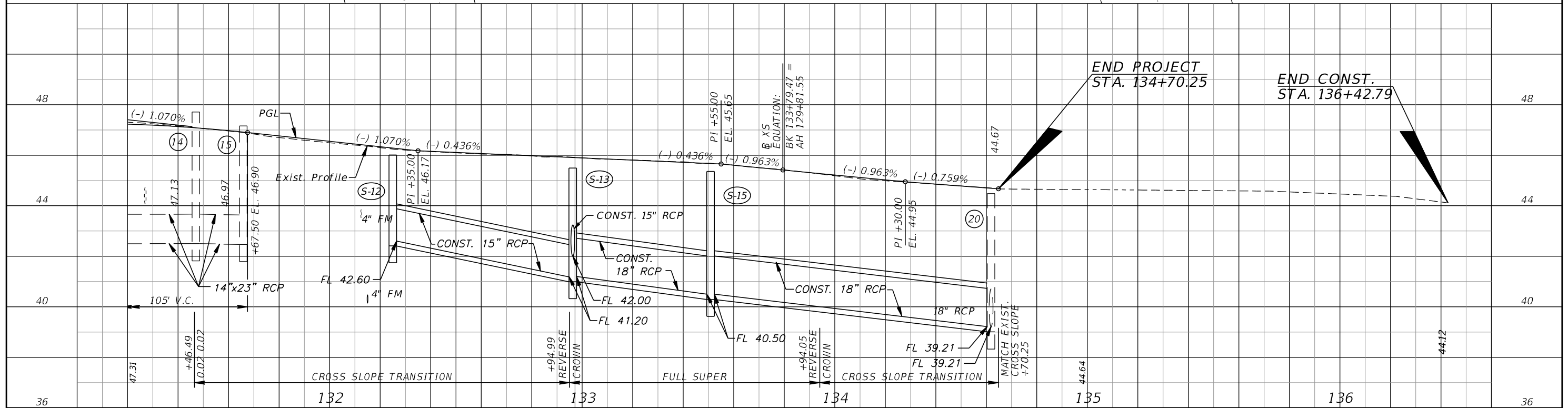
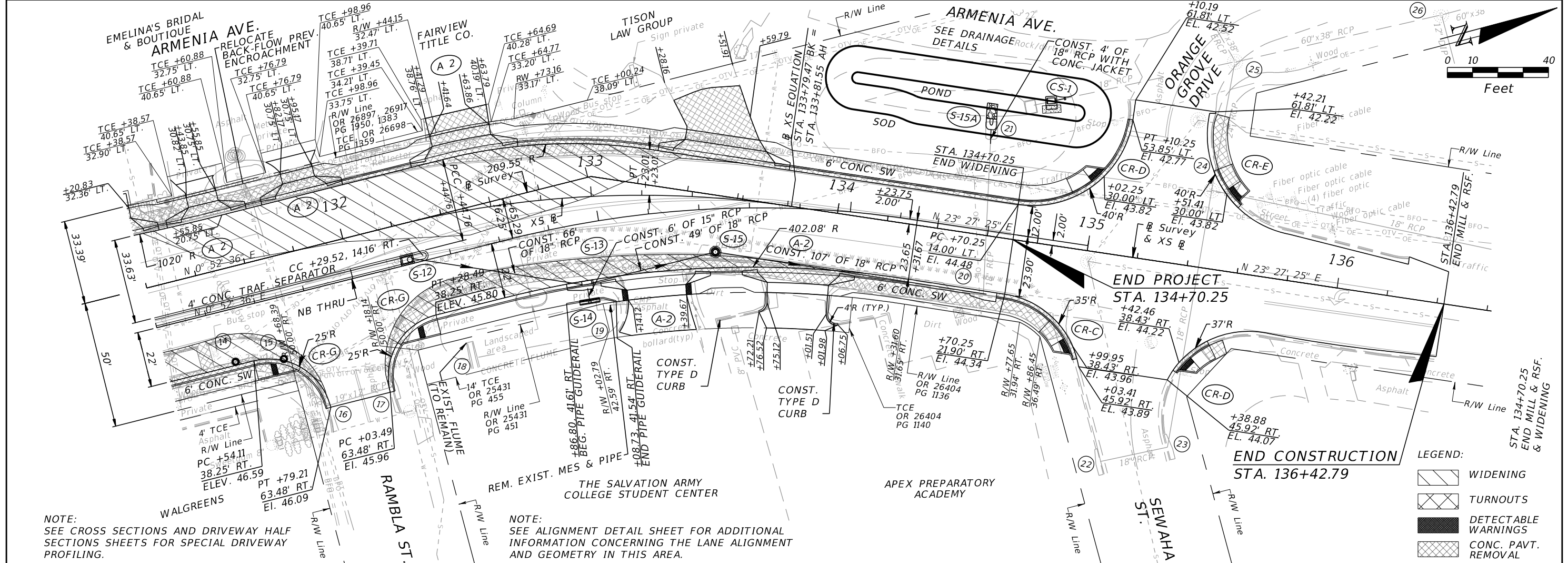
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**ROADWAY PLAN-PROFILES**

SHEET NO. 23

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**ROADWAY PLAN-PROFILES**

SHEET NO. 24

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



LEGEND:

- WIDENING
- TURNOUTS
- CONC. PAVT. REMOVAL

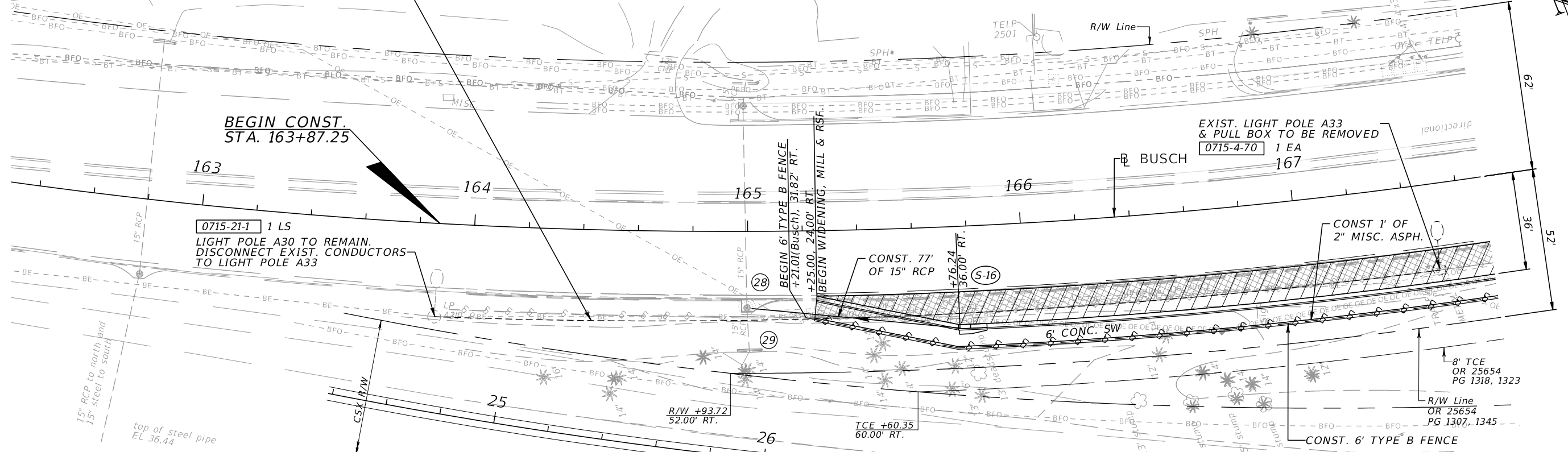
Feet



SR 580\BUSCH BLVD.

0715-1-60 1110 LF

REMOVE EXIST. CONDUIT, CONDUCTORS, & PULL BOXES FROM EXIST. LIGHT POLE A30 TO EXIST. LIGHT POLE A33 (A33 TO BE REMOVED)



BEGIN CONST. STA. 163+87.25

0715-21-1 1 LS  
LIGHT POLE A30 TO REMAIN. DISCONNECT EXIST. CONDUCTORS TO LIGHT POLE A33

BEGIN 6' TYPE B FENCE +21.01(BUSCH), 31.82 RT. +25.00, 24.00 RT.

EXIST. LIGHT POLE A33 & PULL BOX TO BE REMOVED 0715-4-70 1 EA 167

CONST. 77' OF 15" RCP +76.24 36.00 RT. (S-16)

CONST. 1' OF 2" MISC. ASPH.

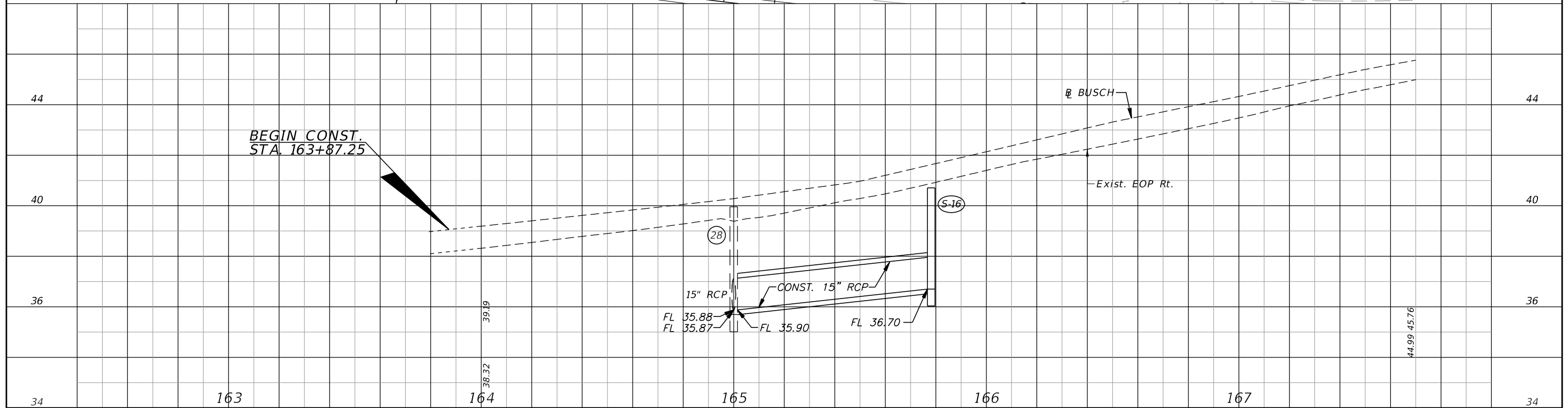
8' TCE OR 25654 PG 1318, 1323

R/W Line OR 25654 PG 1307, 1345

15" RCP to north and 15" steel to south top of steel pipe EL 36.44

R/W +93.72 52.00 RT.

TCE +60.35 60.00 RT.



BEGIN CONST. STA. 163+87.25

15" RCP CONST. 15" RCP FL 35.88 FL 35.87 FL 35.90 FL 36.70

BUSCH

Exist. EOP Rt.

44.99 45.76

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

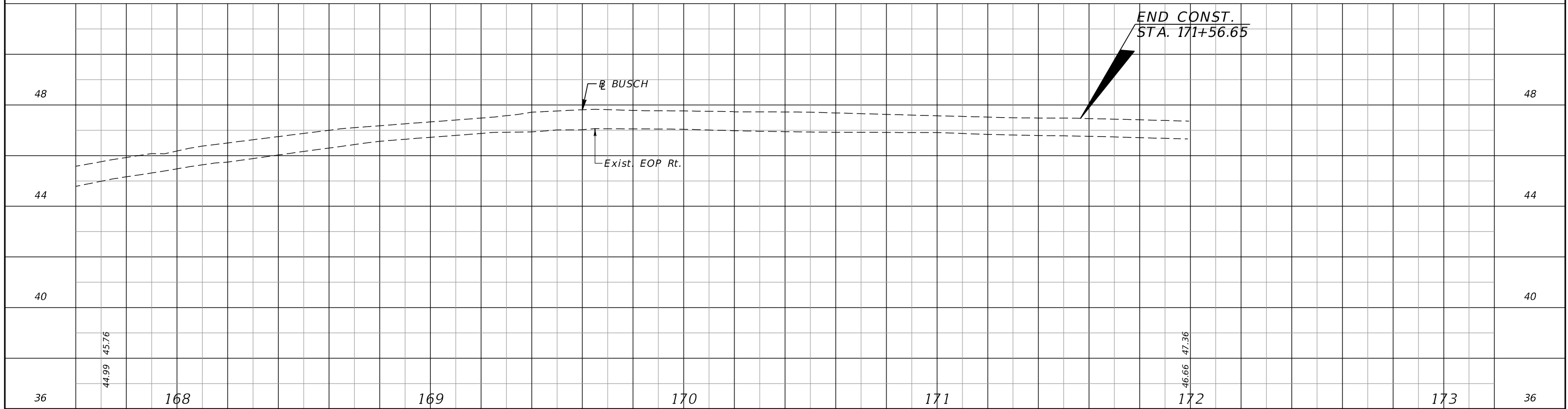
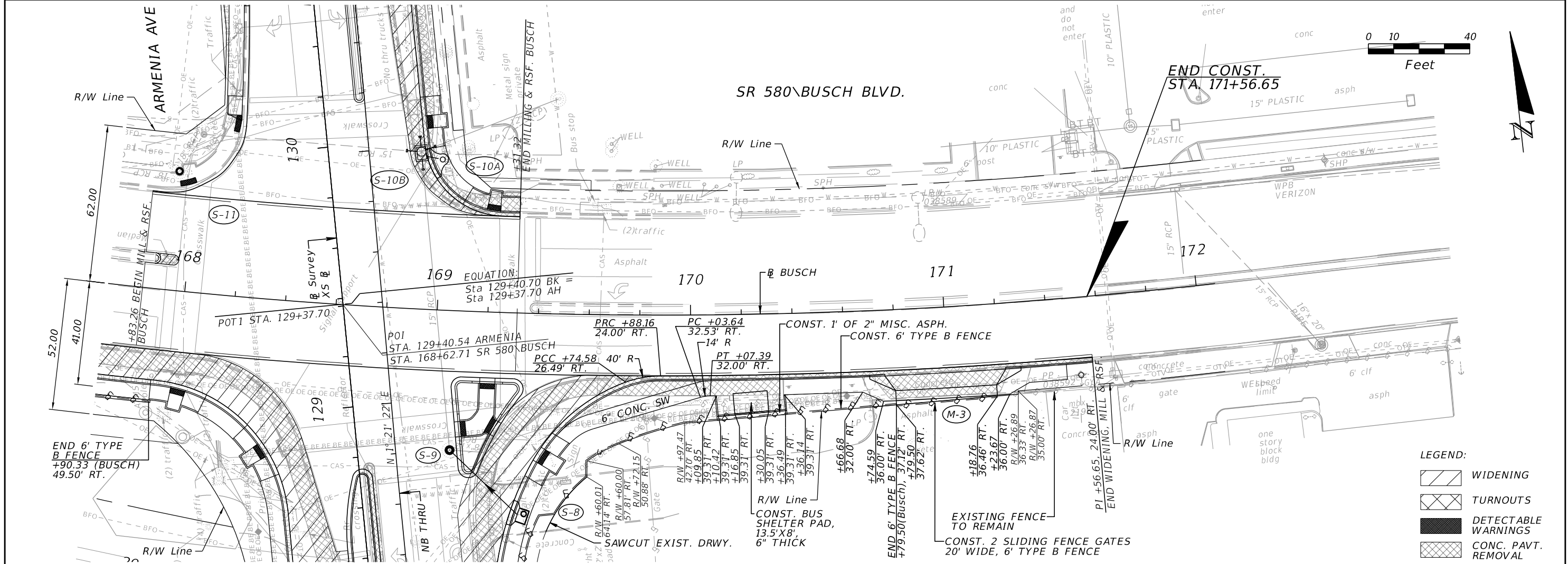
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**ROADWAY PLAN-PROFILES**

SHEET NO. 25

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

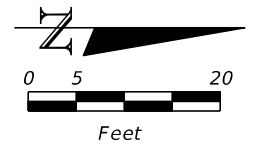
**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**ROADWAY PLAN-PROFILES**

SHEET NO. 26

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

ARMENIA AVENUE



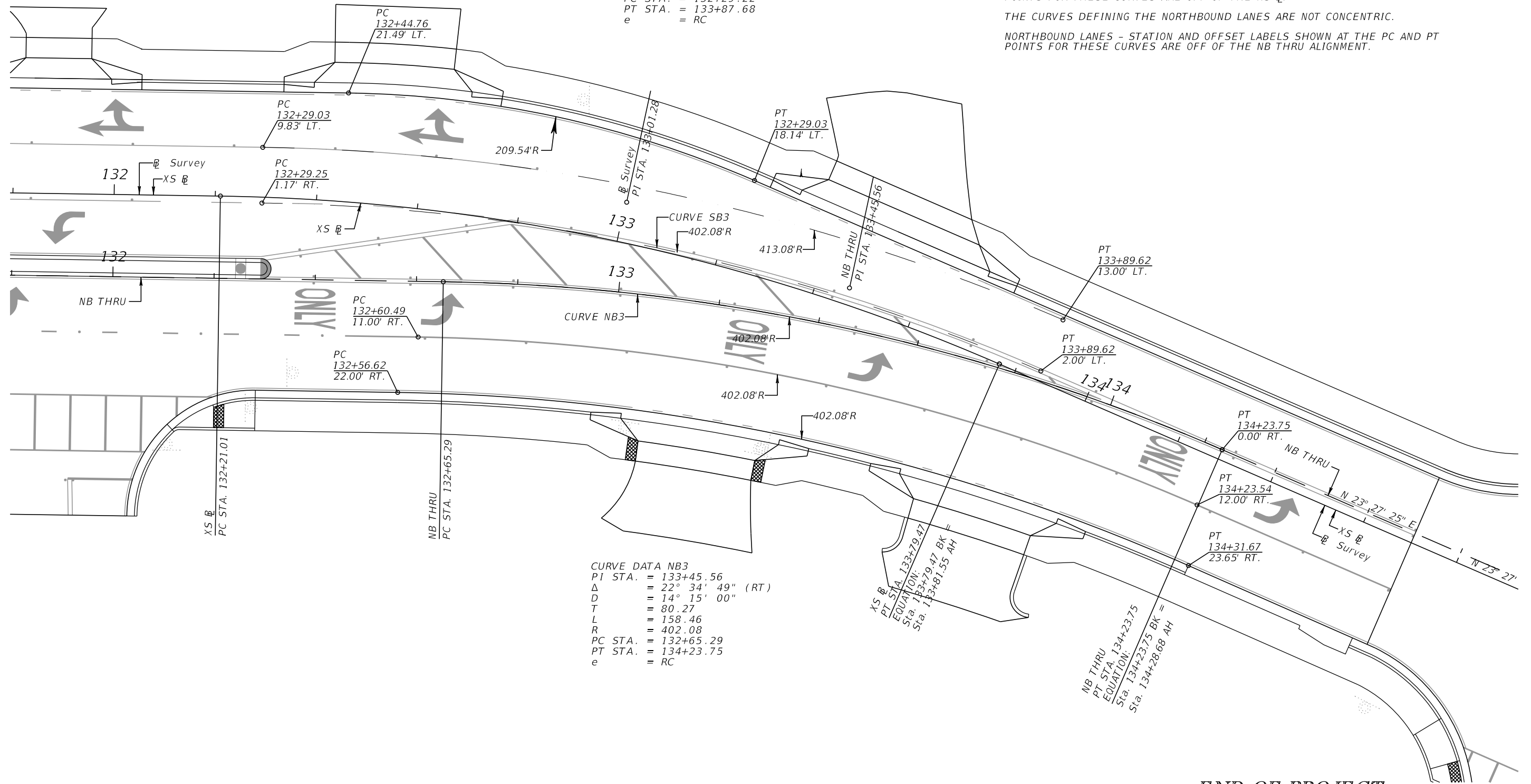
CURVE DATA SB3  
 PI STA. = 133+09.49  
 $\Delta$  = 22° 34' 49" (RT)  
 D = 14° 15' 00"  
 T = 80.27  
 L = 158.46  
 R = 402.08  
 PC STA. = 132+29.22  
 PT STA. = 133+87.68  
 e = RC

NOTE:

SOUTHBOUND LANES - STATION AND OFFSET LABELS SHOWN AT THE PC AND PT POINTS FOR THESE CURVES ARE OFF OF THE XS @.

THE CURVES DEFINING THE NORTHBOUND LANES ARE NOT CONCENTRIC.

NORTHBOUND LANES - STATION AND OFFSET LABELS SHOWN AT THE PC AND PT POINTS FOR THESE CURVES ARE OFF OF THE NB THRU ALIGNMENT.



CURVE DATA NB3  
 PI STA. = 133+45.56  
 $\Delta$  = 22° 34' 49" (RT)  
 D = 14° 15' 00"  
 T = 80.27  
 L = 158.46  
 R = 402.08  
 PC STA. = 132+65.29  
 PT STA. = 134+23.75  
 e = RC

END OF PROJECT

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

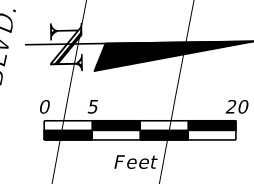
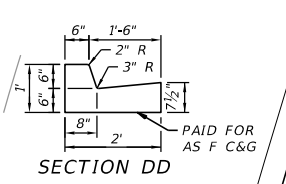
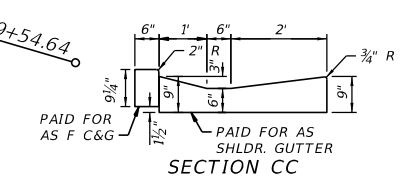
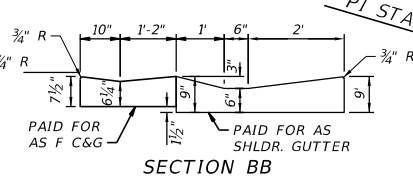
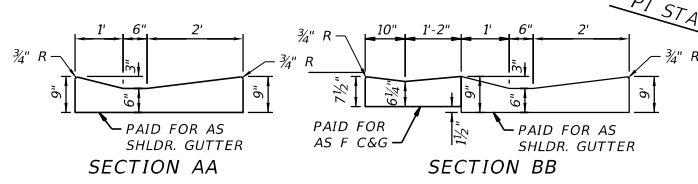
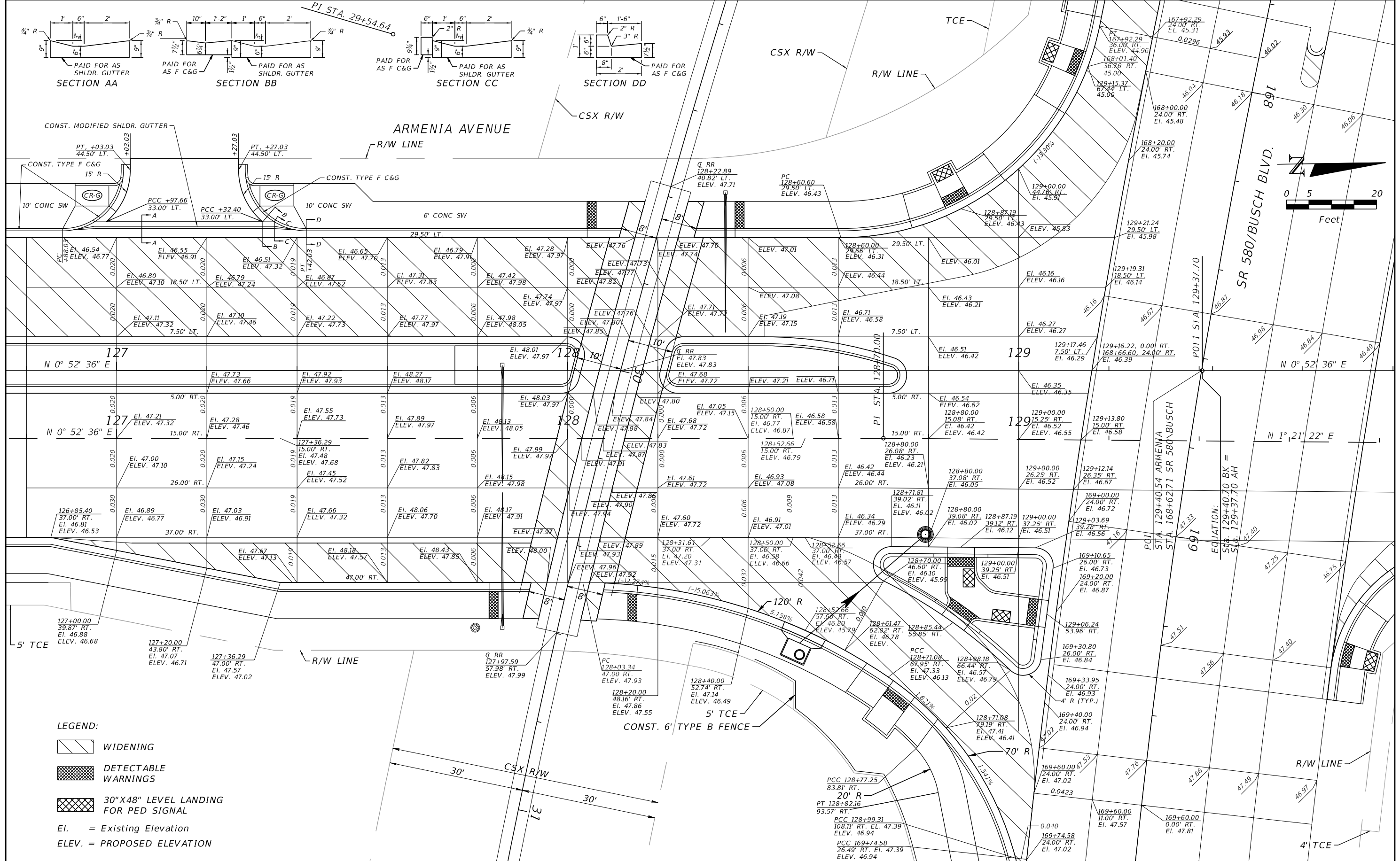
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

ALIGNMENT DETAIL

SHEET NO.  
 27

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



- LEGEND:**
- WIDENING
  - DETECTABLE WARNINGS
  - 30"X48" LEVEL LANDING FOR PED SIGNAL
  - EI. = Existing Elevation
  - ELEV. = PROPOSED ELEVATION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**INTERSECTION DETAIL**

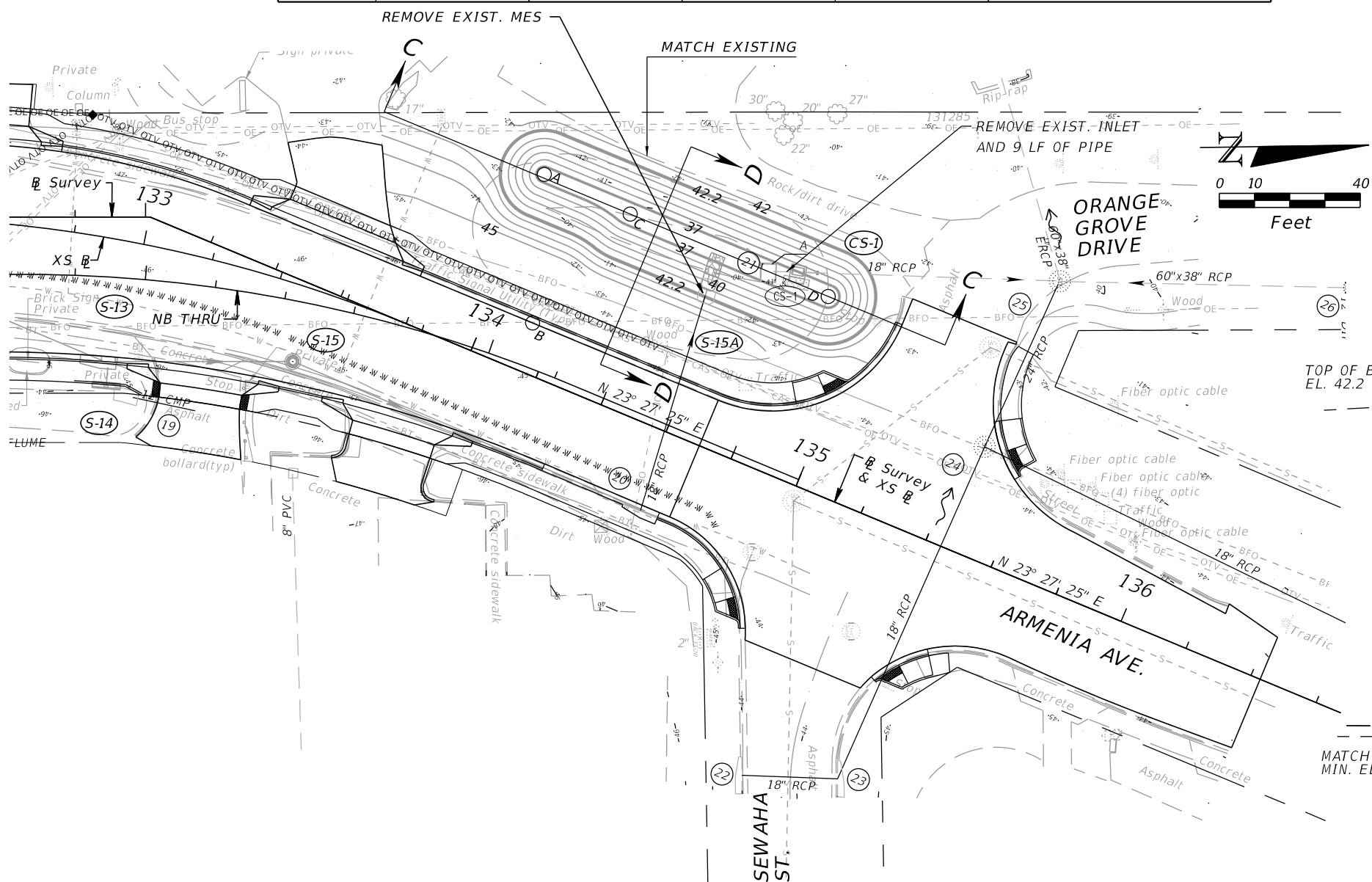
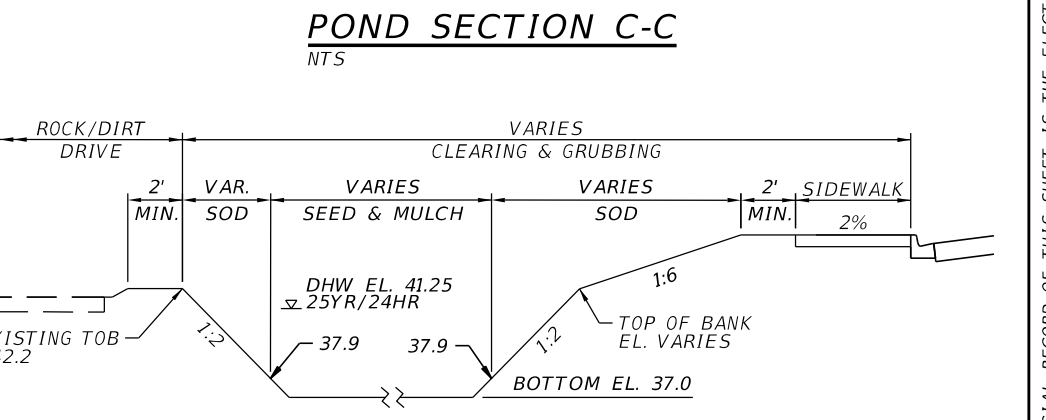
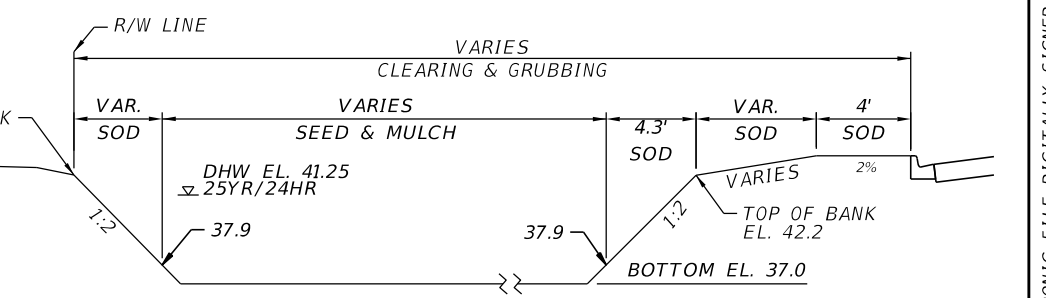
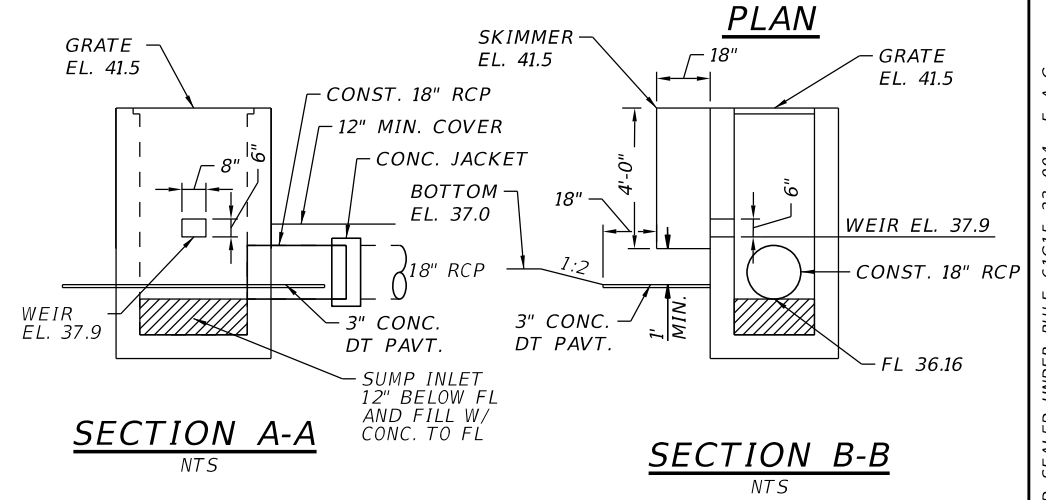
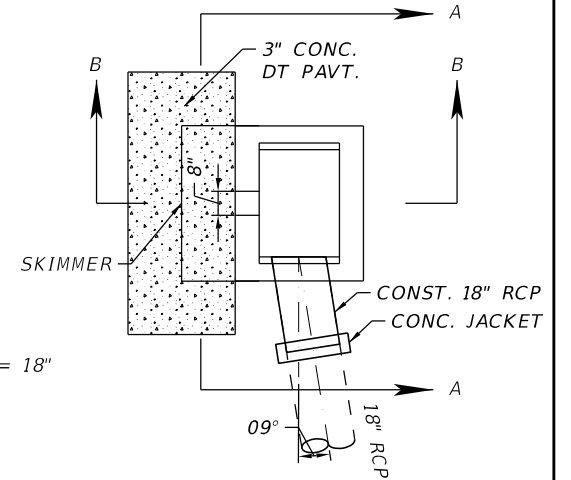
SHEET NO.  
**28**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

POND - CENTER POINT OF CURVES					
POINT	STATION	OFFSET	RADIUS	ELEVATION	REMARKS
A	134+00.00	54.2	12.6	42.2	TOP OF BANK
			2.2	37.0	POND BOTTOM
B	134+13.15	14.0	27.6	42.2	TOP OF BANK
			38.0	37.0	POND BOTTOM
C	134+26.86	53.2	20.4	42.2	TOP OF BANK
			10.0	37.0	POND BOTTOM
D	134+87.77	53.2	13.6	42.2	TOP OF BANK
			3.2	37.0	POND BOTTOM

(CS-1)

STA. 134+77.16, 56.49' LT.  
 CONST. MODIFIED TYPE "T" DBI  
 WITH SKIMMER, INDEX 425-070  
 MOUNTING BOLT SPACING (DESIGNATED S) = 18"  
 CONNECT TO EXISTING 18" PIPE



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

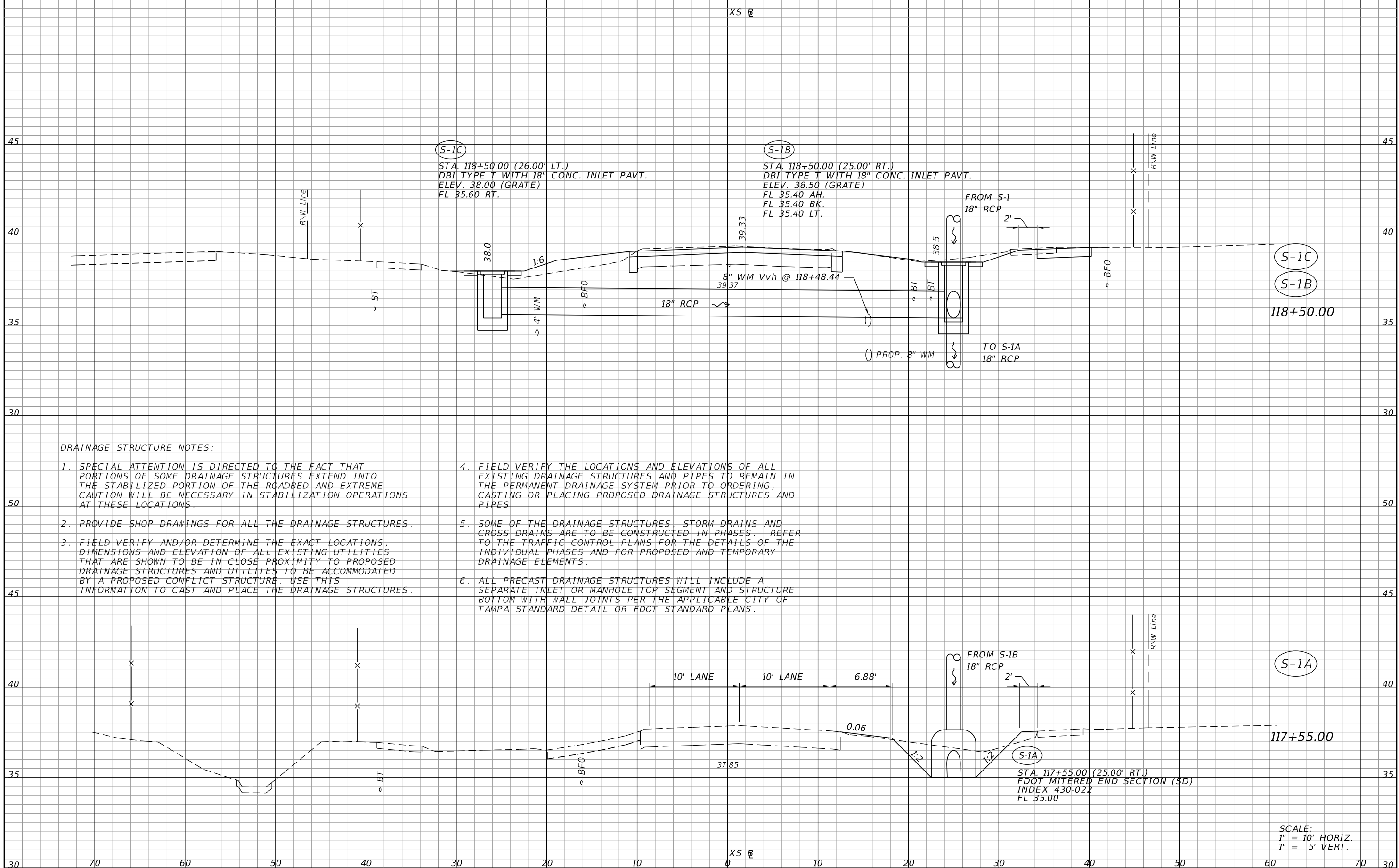
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE DETAILS**

SHEET NO.
29

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



**DRAINAGE STRUCTURE NOTES:**

1. SPECIAL ATTENTION IS DIRECTED TO THE FACT THAT PORTIONS OF SOME DRAINAGE STRUCTURES EXTEND INTO THE STABILIZED PORTION OF THE ROADBED AND EXTREME CAUTION WILL BE NECESSARY IN STABILIZATION OPERATIONS AT THESE LOCATIONS.
2. PROVIDE SHOP DRAWINGS FOR ALL THE DRAINAGE STRUCTURES.
3. FIELD VERIFY AND/OR DETERMINE THE EXACT LOCATIONS, DIMENSIONS AND ELEVATION OF ALL EXISTING UTILITIES THAT ARE SHOWN TO BE IN CLOSE PROXIMITY TO PROPOSED DRAINAGE STRUCTURES AND UTILITIES TO BE ACCOMMODATED BY A PROPOSED CONFLICT STRUCTURE. USE THIS INFORMATION TO CAST AND PLACE THE DRAINAGE STRUCTURES.
4. FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING DRAINAGE STRUCTURES AND PIPES TO REMAIN IN THE PERMANENT DRAINAGE SYSTEM PRIOR TO ORDERING, CASTING OR PLACING PROPOSED DRAINAGE STRUCTURES AND PIPES.
5. SOME OF THE DRAINAGE STRUCTURES, STORM DRAINS AND CROSS DRAINS ARE TO BE CONSTRUCTED IN PHASES. REFER TO THE TRAFFIC CONTROL PLANS FOR THE DETAILS OF THE INDIVIDUAL PHASES AND FOR PROPOSED AND TEMPORARY DRAINAGE ELEMENTS.
6. ALL PRECAST DRAINAGE STRUCTURES WILL INCLUDE A SEPARATE INLET OR MANHOLE TOP SEGMENT AND STRUCTURE BOTTOM WITH WALL JOINTS PER THE APPLICABLE CITY OF TAMPA STANDARD DETAIL OR FDOT STANDARD PLANS.

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

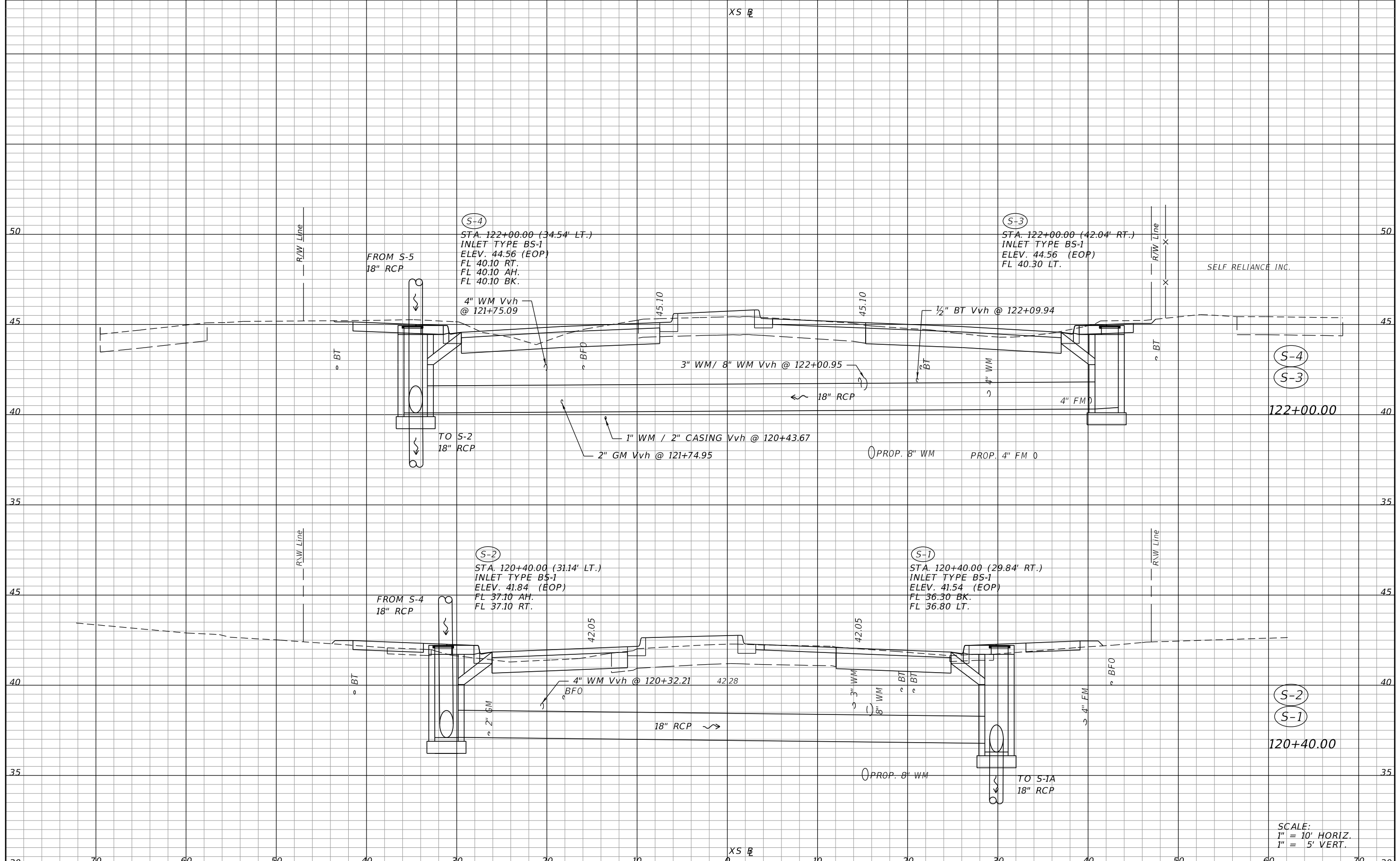
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.	30
-----------	----

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

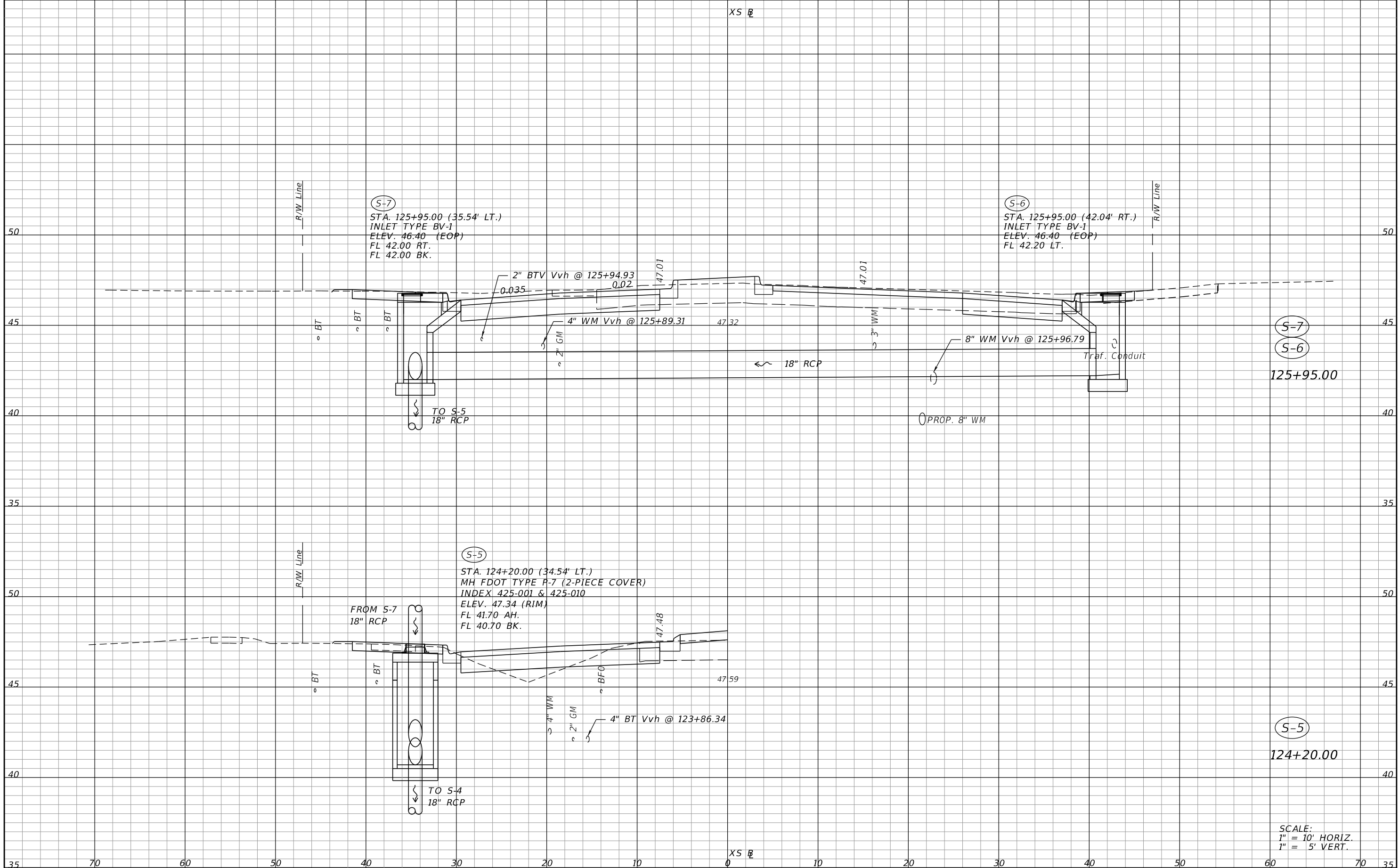
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.
31

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.





(S-7)  
 STA. 125+95.00 (35.54' LT.)  
 INLET TYPE BV-1  
 ELEV. 46.40 (EOP)  
 FL 42.00 RT.  
 FL 42.00 BK.

(S-6)  
 STA. 125+95.00 (42.04' RT.)  
 INLET TYPE BV-1  
 ELEV. 46.40 (EOP)  
 FL 42.20 LT.

(S-5)  
 STA. 124+20.00 (34.54' LT.)  
 MH FDOT TYPE P-7 (2-PIECE COVER)  
 INDEX 425-001 & 425-010  
 ELEV. 47.34 (RIM)  
 FL 41.70 AH.  
 FL 40.70 BK.

(S-7)  
 (S-6)  
 125+95.00

(S-5)  
 124+20.00

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

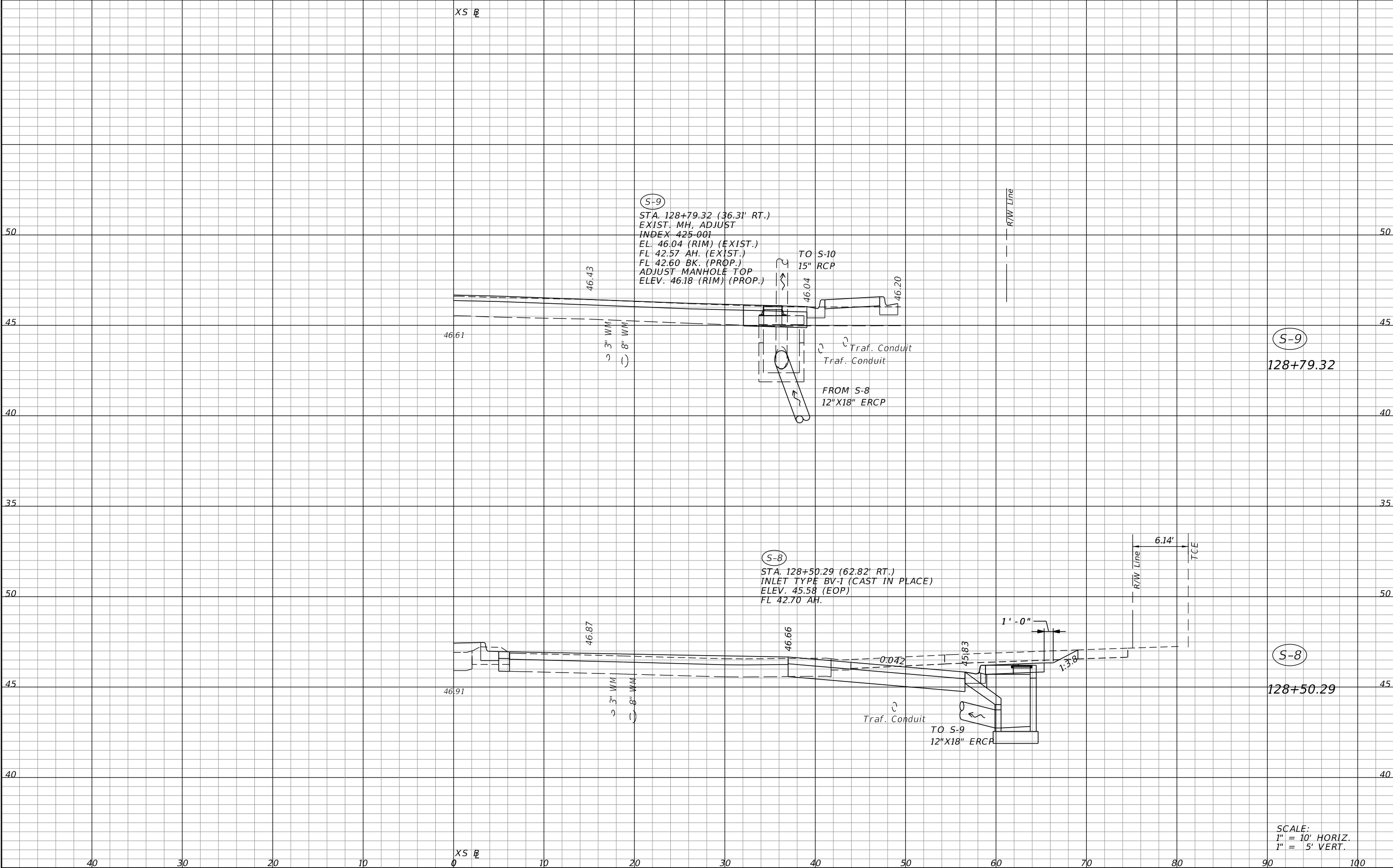
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.  
 32

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.
33

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

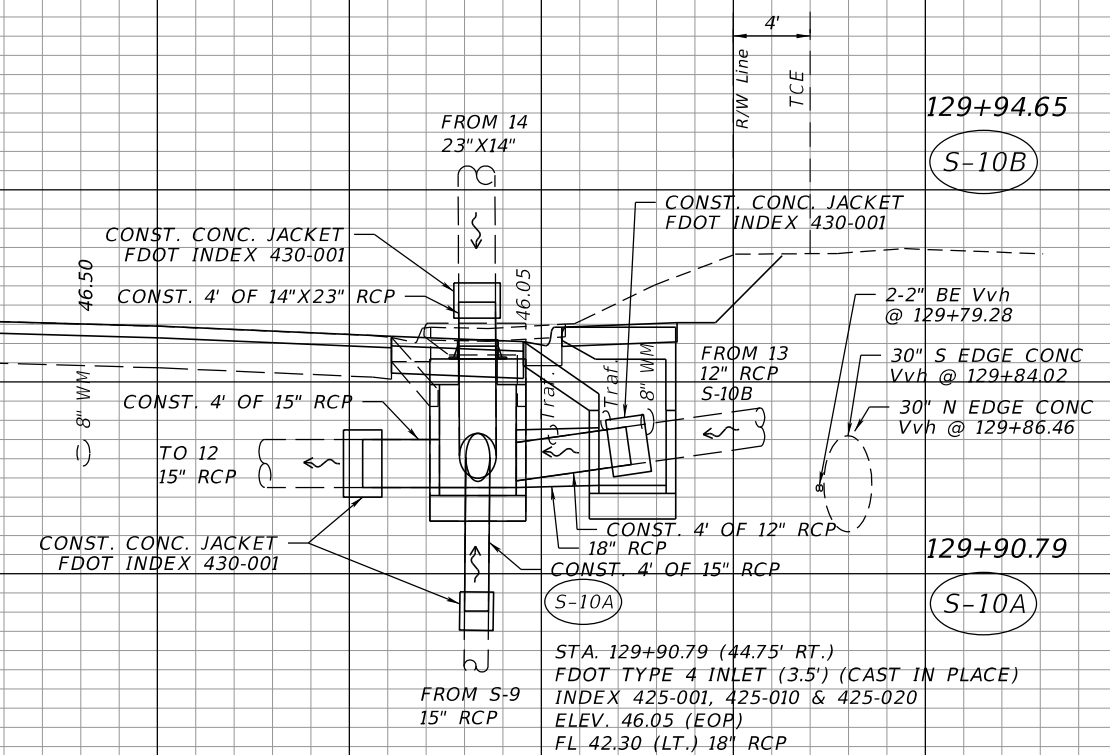
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

S-10B

STA. 129+94.65 (36.69' RT.)  
 REMOVE EXIST. CURB INLET  
 CONST. MH FDOT J-7 (4'X6' BOTTOM)  
 INDEX 425-001 & 425-010  
 CONNECTION TO EXISTING PIPES (TO REMAIN).  
 VERIFY EXISTING FLOW LINE ELEVATIONS  
 PRIOR TO REPLACING MH.  
 REMOVE PORTIONS OF EXISTING PIPES TO  
 ALLOW EXISTING PIPES TO BE FLUSH WITH  
 INSIDE WALLS OF NEW INLET BOTTOM.  
 ELEV. 46.09 (RIM) (PROP.)  
 FL 42.49 (AH.) 14"X23" RCP (EXIST.)  
 FL 42.42 (RT.) 12" RCP (EXIST.)  
 FL 42.40 (RT.) 18" RCP (PROP.)  
 FL 42.25 (LT.) 15" RCP (EXIST.)  
 FL 42.28 (BK.) 15" RCP (EXIST.)

XS E

XS E



S-10A

STA. 129+90.79 (44.75' RT.)  
 FDOT TYPE 4 INLET (3.5') (CAST IN PLACE)  
 INDEX 425-001, 425-010 & 425-020  
 ELEV. 46.05 (EOP)  
 FL 42.30 (LT.) 18" RCP

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS	
DATE	DESCRIPTION

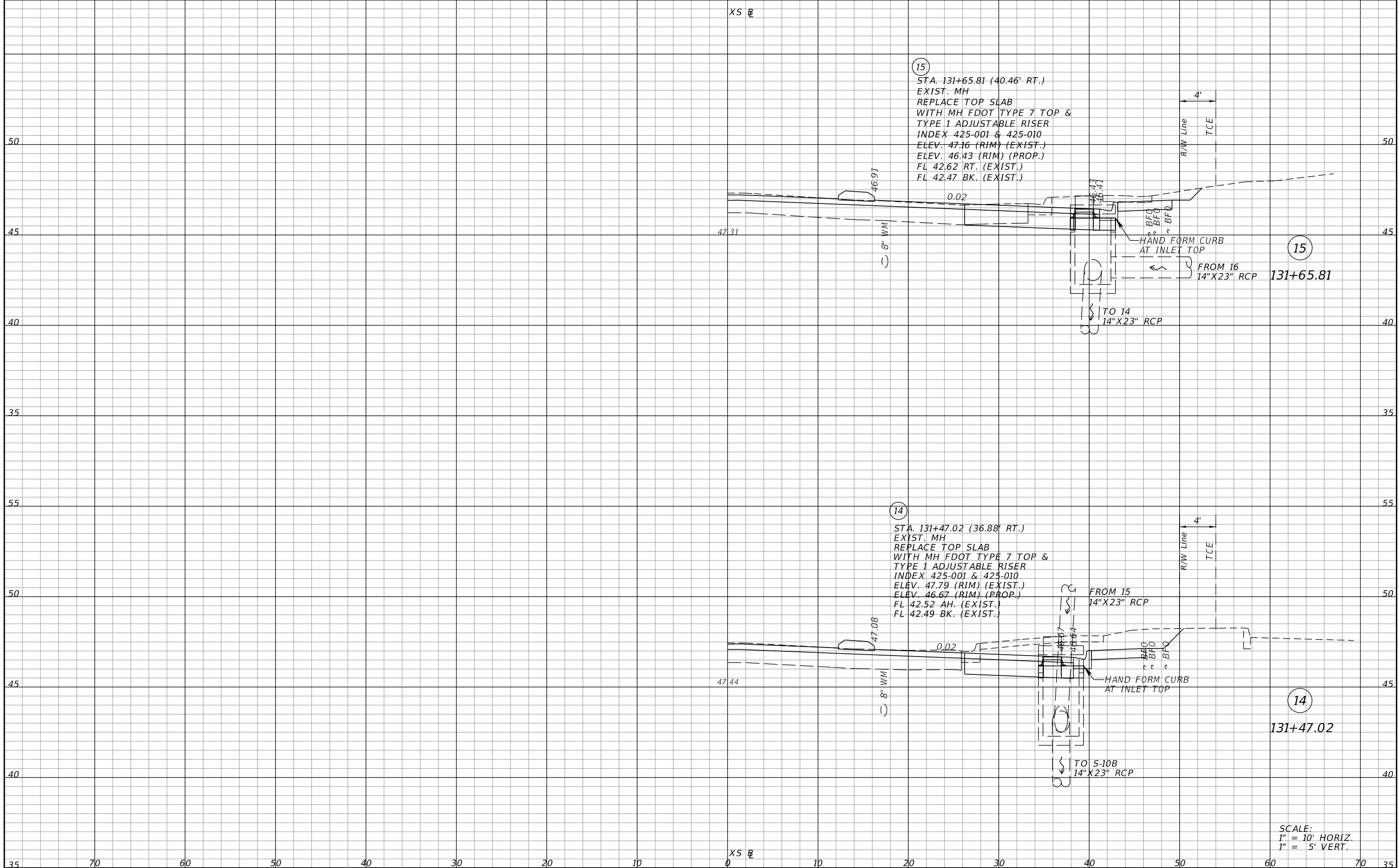
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.  
**34**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



15  
 STA. 131+65.81 (40.46' RT.)  
 EXIST. MH  
 REPLACE TOP SLAB  
 WITH MH FDOT TYPE 7 TOP &  
 TYPE 1 ADJUSTABLE RISER  
 INDEX 425-001 & 425-010  
 ELEV. 47.16 (RIM) (EXIST.)  
 ELEV. 46.43 (RIM) (PROP.)  
 FL 42.62 RT. (EXIST.)  
 FL 42.47 BK. (EXIST.)

14  
 STA. 131+47.02 (36.88' RT.)  
 EXIST. MH  
 REPLACE TOP SLAB  
 WITH MH FDOT TYPE 7 TOP &  
 TYPE 1 ADJUSTABLE RISER  
 INDEX 425-001 & 425-010  
 ELEV. 47.79 (RIM) (EXIST.)  
 ELEV. 46.67 (RIM) (PROP.)  
 FL 42.52 AH. (EXIST.)  
 FL 42.49 BK. (EXIST.)

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

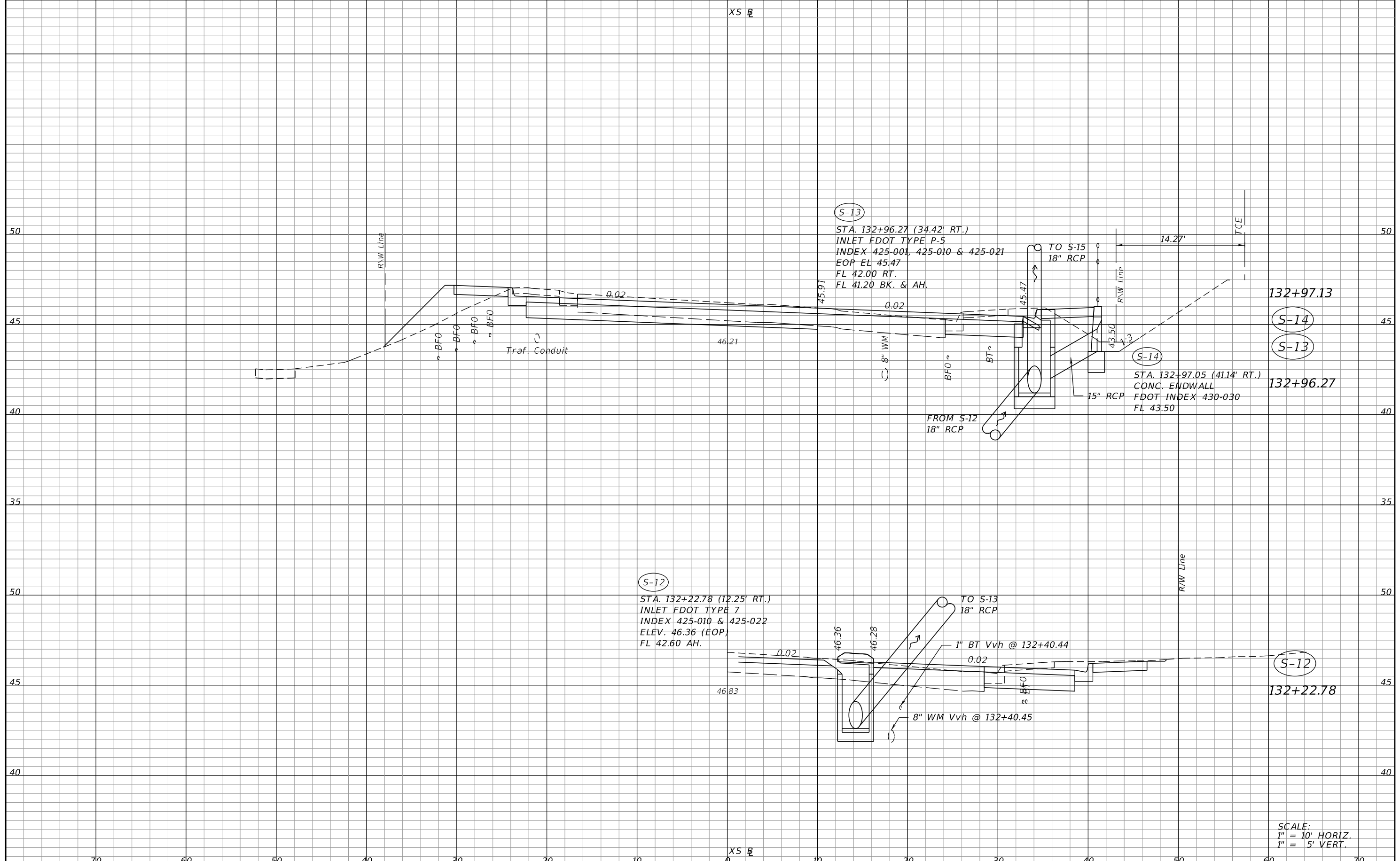
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**  
 SHEET NO.  
**35**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



(S-13)

STA. 132+96.27 (34.42' RT.)  
 INLET FDOT TYPE P-5  
 INDEX 425-001, 425-010 & 425-021  
 EOP EL 45.47  
 FL 42.00 RT.  
 FL 41.20 BK. & AH.

132+97.13

(S-14)

(S-13)

132+96.27

(S-14)

STA. 132+97.05 (41.14' RT.)  
 CONC. ENDWALL  
 FDOT INDEX 430-030  
 FL 43.50

(S-12)

STA. 132+22.78 (12.25' RT.)  
 INLET FDOT TYPE 7  
 INDEX 425-010 & 425-022  
 ELEV. 46.36 (EOP)  
 FL 42.60 AH.

(S-12)

132+22.78

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

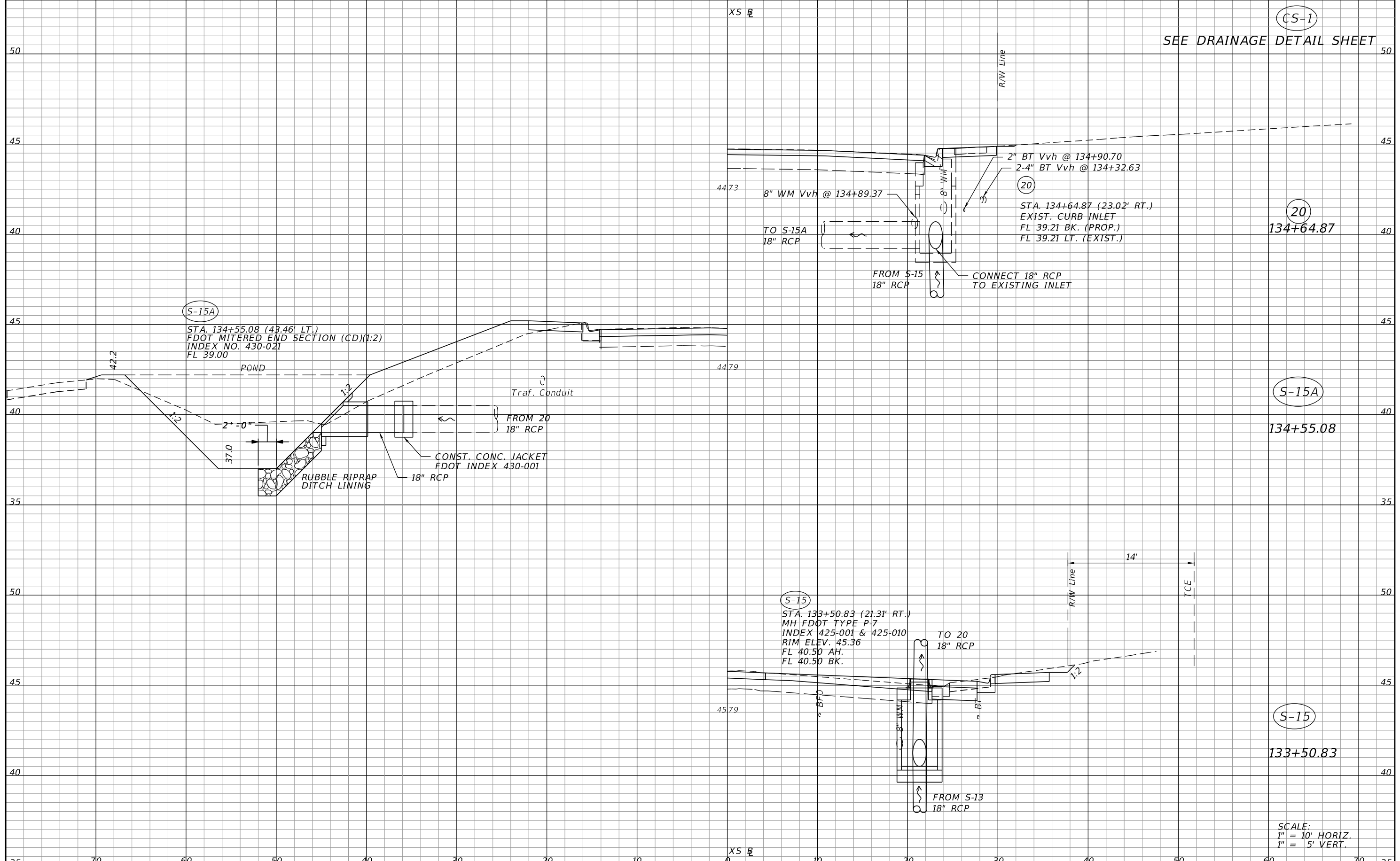
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.  
 36

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

CS-1  
SEE DRAINAGE DETAIL SHEET



20  
134+64.87

S-15A  
134+55.08

S-15  
133+50.83

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

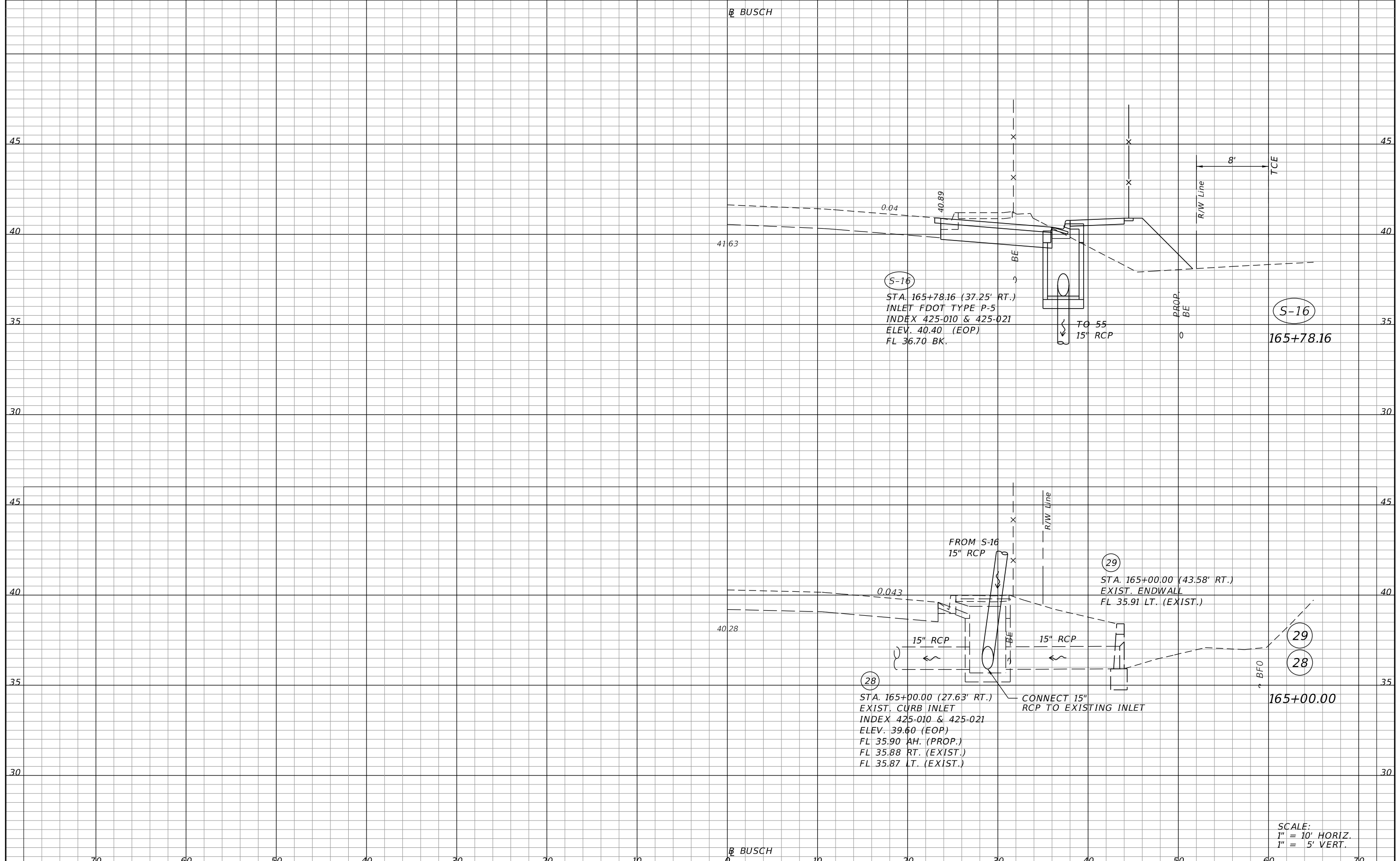
CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.  
37

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

BUSCH



REVISIONS	
DATE	DESCRIPTION

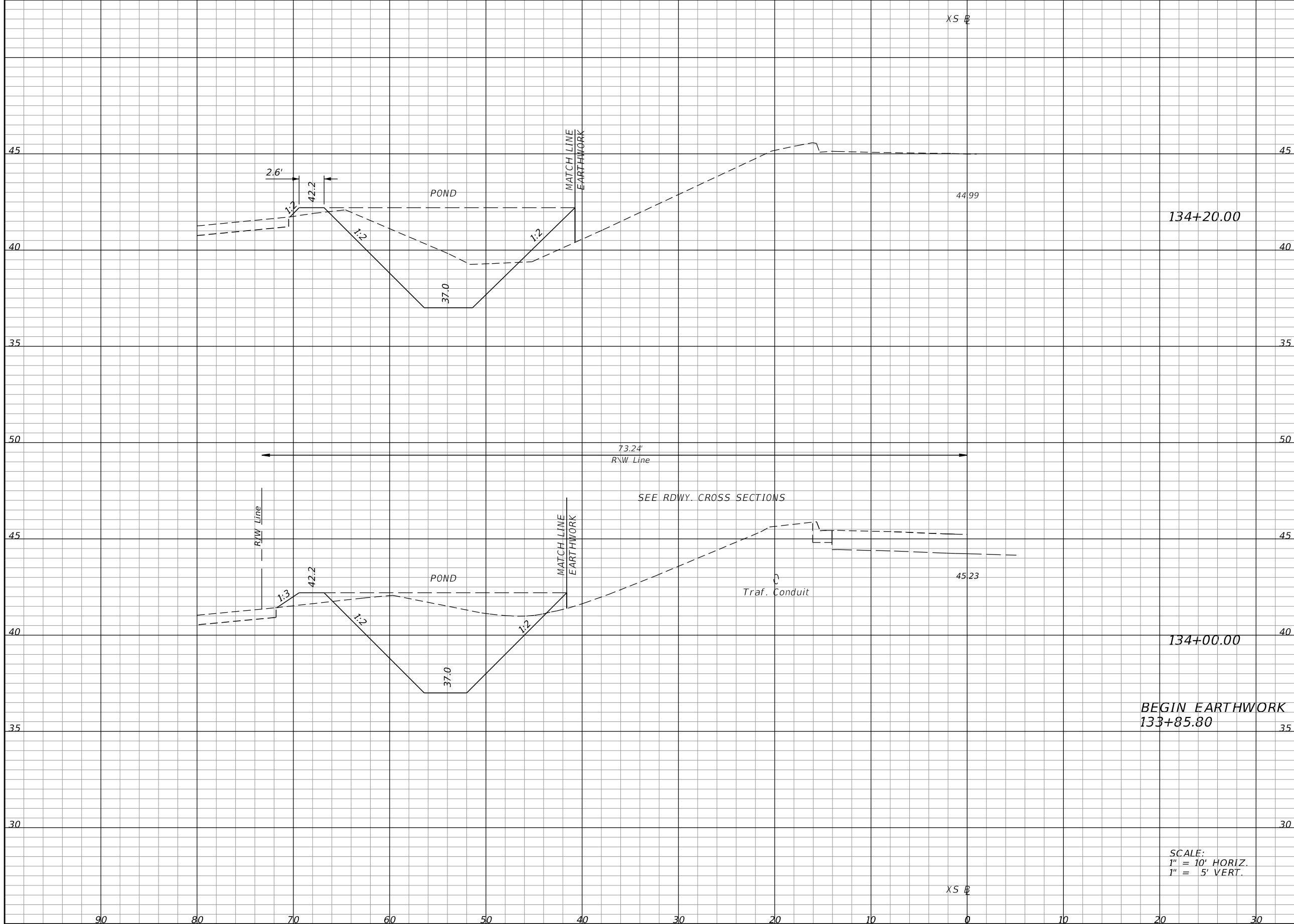
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**DRAINAGE STRUCTURES**

SHEET NO.  
**38**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
38.10			36.6	6.90	3.8
60.63		0.0		3.32	0.0

BEGIN EARTHWORK  
133+85.80

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GL, PE 54798

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**POND CROSS SECTIONS**

SHEET NO.
39

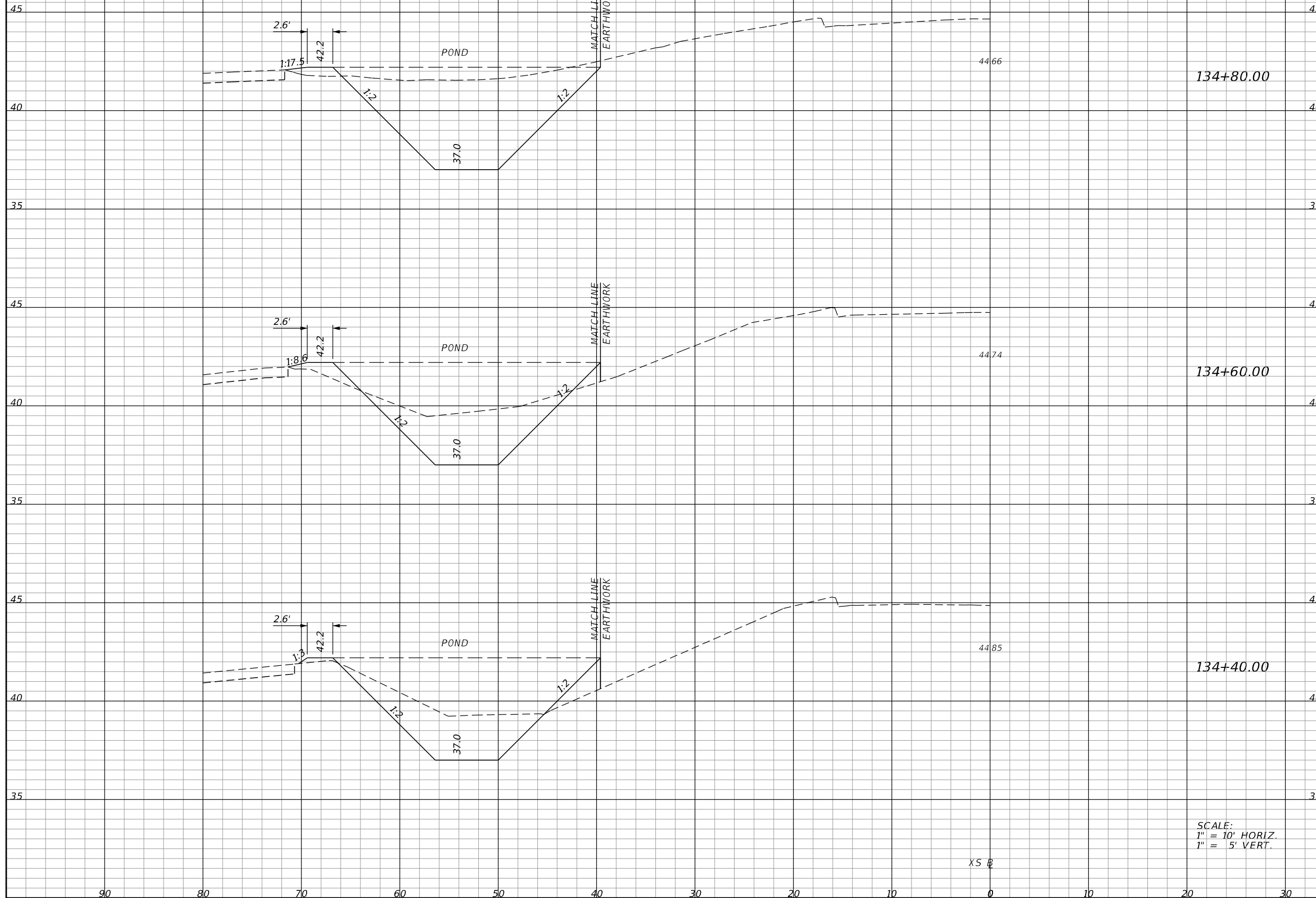
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SEE RDWY. CROSS SECTIONS

XS @

Regular		Exc.		Embankment	
A	V	A	V	A	V
75.65	41.3	1.86	2.3		
35.95	25.5	4.42	3.5		
32.91	26.3	5.04	4.4		



SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

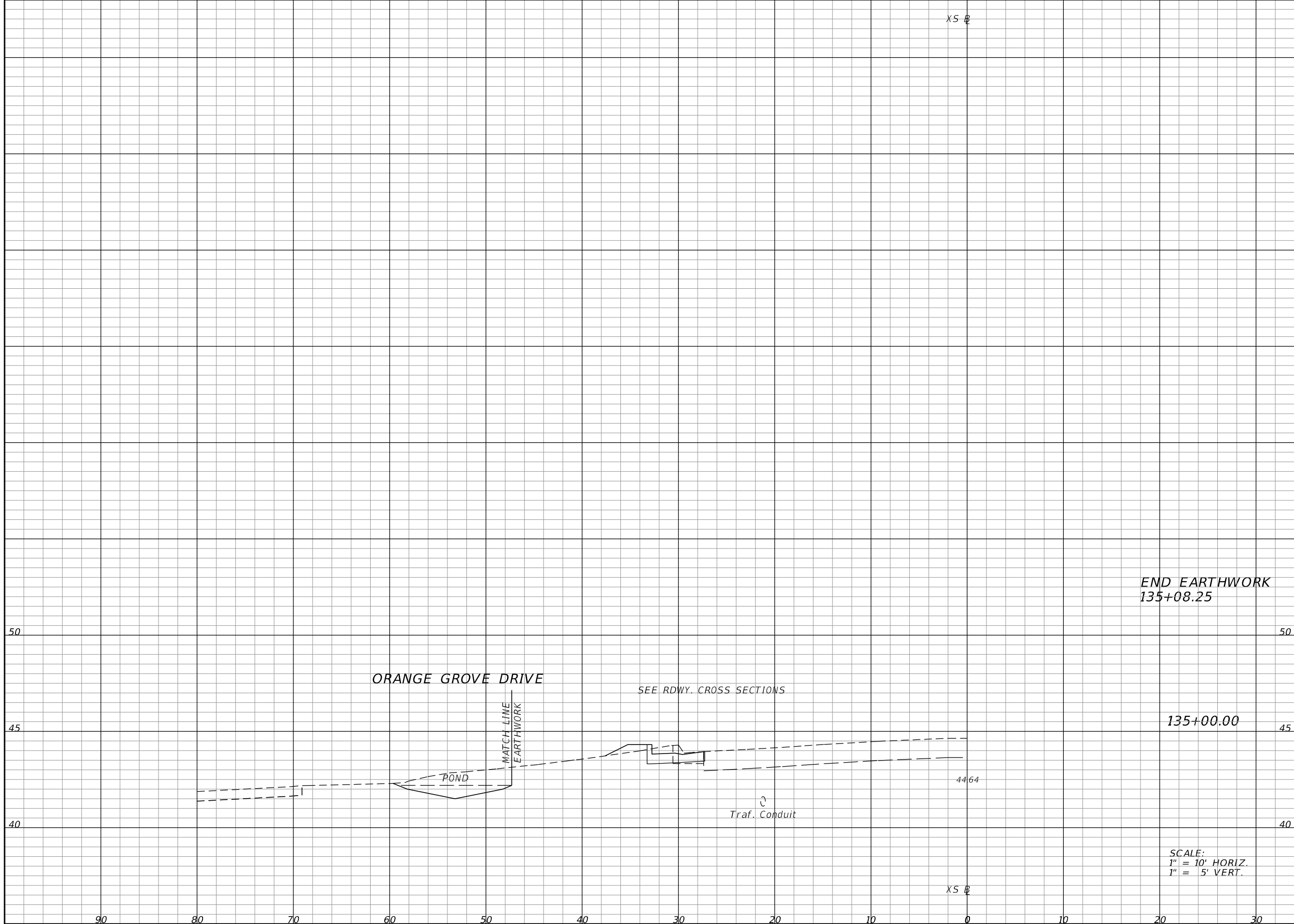
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**POND CROSS SECTIONS**

SHEET NO.
40

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



END EARTHWORK  
135+08.25

135+00.00

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.

Regular		Exc.		Embankment	
A	V	A	V	A	V
0.00			1.8	0.00	
11.78			32.4	0.00	0.7

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**POND CROSS SECTIONS**

SHEET NO.
41

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

DATE OF SURVEY: JULY 2014  
 SURVEY MADE BY: MC SQUARED  
 SUBMITTED BY: JOSEPH H. DISTEFANO

LOCATION: BUSCH BLVD AND ARMENIA AVE.  
 COUNTY: HILLSBOROUGH

**CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS**  
 BUSCH BLVD AND ARMENIA AVE

STRATUM No.	LBR VALUE (%)	ORGANIC CONTENT		MOISTURE CONTENT		SIEVE ANALYSIS RESULTS % PASS					ATTERBERG LIMITS (%)			MATERIAL DESCRIPTION	CORROSION TEST RESULTS						
		No. OF TESTS	% ORGANIC	No. OF TESTS	MOISTURE CONTENT	No. OF TESTS	10 MESH	40 MESH	60 MESH	100 MESH	200 MESH	No. OF TESTS	LIQUID LIMIT		PLASTIC INDEX	AASHTO GROUP	No. OF TESTS	RESISTIVITY ohm-cm	CHLORIDES ppm	SULFATES ppm	pH
1	—	2	1-2	18	3-19	4	99-100	99-100	95-96	53-71	3-7	—	—	—	A-3	BROWN, PALE BROWN, OR GRAY FINE SAND, SLIGHTLY SILTY FINE SAND, SLIGHTLY CLAYEY FINE SAND.	--	—	—	—	—

**200 WASH % PASS**

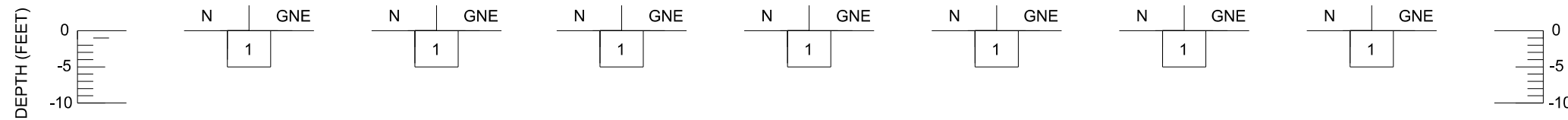
No. OF TESTS	200 MESH
18	1-5

SUBGRADE MATERIAL

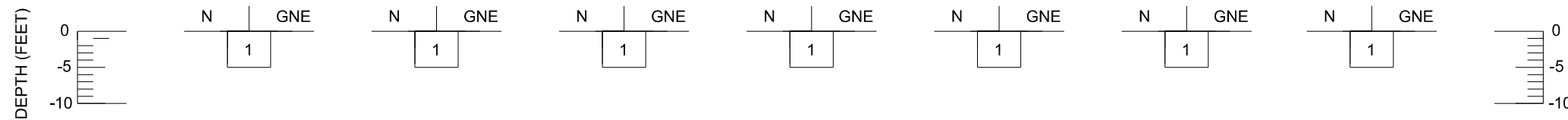
STRATA BOUNDARIES ARE APPROXIMATE AND REPRESENT SOIL STRATA AT EACH TEST HOLE LOCATION

REVISIONS				BULENT HATIOGLU, P.E. P.E. LICENSE NUMBER 89157 MC SQUARED, INC. 5808 A BRECKENRIDGE PKWY TAMPA, FLORIDA 33610	CITY OF TAMPA TRANSPORTATION DIVISION		ROADWAY SOIL SURVEY	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			

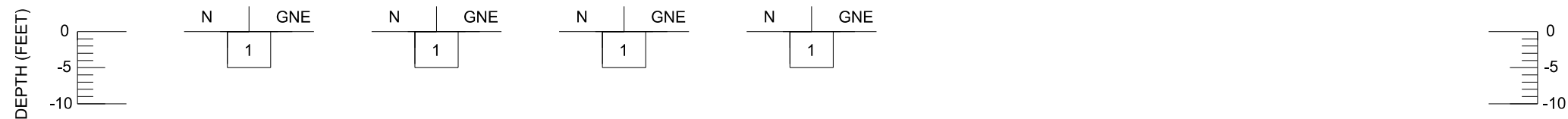
BORING NO.	AB-1	BORING NO.	AB-2	BORING NO.	AB-3	BORING NO.	AB-4	BORING NO.	AB-5	BORING NO.	AB-6	BORING NO.	AB-7
DATE	7-17-14	DATE	7-17-14	DATE	7-17-14	DATE	7-17-14	DATE	7-17-14	DATE	7-17-14	DATE	7-17-14
STA	119+00	STA	120+00	STA	121+00	STA	122+00	STA	123+00	STA	124+00	STA	125+00
OFFSET	15'LT	OFFSET	15'RT	OFFSET	20'LT	OFFSET	20'RT	OFFSET	25'LT	OFFSET	25'RT	OFFSET	25'LT



BORING NO.	AB-8	BORING NO.	AB-9	BORING NO.	AB-10	BORING NO.	AB-11	BORING NO.	AB-12	BORING NO.	AB-13	BORING NO.	AB-14
DATE	7-17-14	DATE	7-17-14	DATE	7-17-14	DATE	7-17-14	DATE	7-16-14	DATE	7-16-14	DATE	7-16-14
STA	125+45	STA	127+00	STA	128+40	STA	129+00	STA	129+95	STA	130+80	STA	132+30
OFFSET	35'RT	OFFSET	30'LT	OFFSET	55'RT	OFFSET	45'LT	OFFSET	45'RT	OFFSET	35'LT	OFFSET	35'RT



BORING NO.	AB-15	BORING NO.	AB-16	BORING NO.	AB-17	BORING NO.	AB-18
DATE	7-16-14	DATE	7-16-14	DATE	7-16-14	DATE	7-16-14
STA	133+00	STA	133+85	STA	165+20	STA	167+00
OFFSET	25'LT	OFFSET	35'RT	OFFSET	45'RT	OFFSET	45'RT



### LEGEND

① (A-3) BROWN, PALE BROWN, OR GRAY, FINE SAND, SLIGHTLY SILTY FINE SAND, SLIGHTLY CLAYEY FINE SAND.

#### NOTES:

GNE GROUNDWATER NOT ENCOUNTERED

NMC NATURAL MOISTURE CONTENT (%)

≡ WATER TABLE

-200 FINES PASSING A NO. 200 SIEVE (%)

LL LIQUID LIMIT (%)

PI PLASTIC INDEX (%)

NP NON PLASTIC SOILS

ORG ORGANIC CONTENT (%)

#### REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

BULENT HATIOGLU, P.E.  
P.E. LICENSE NUMBER 89157  
MC SQUARED, INC.  
5808 A BRECKENRIDGE PKWY  
TAMPA, FLORIDA 33610

CITY OF TAMPA  
TRANSPORTATION DIVISION

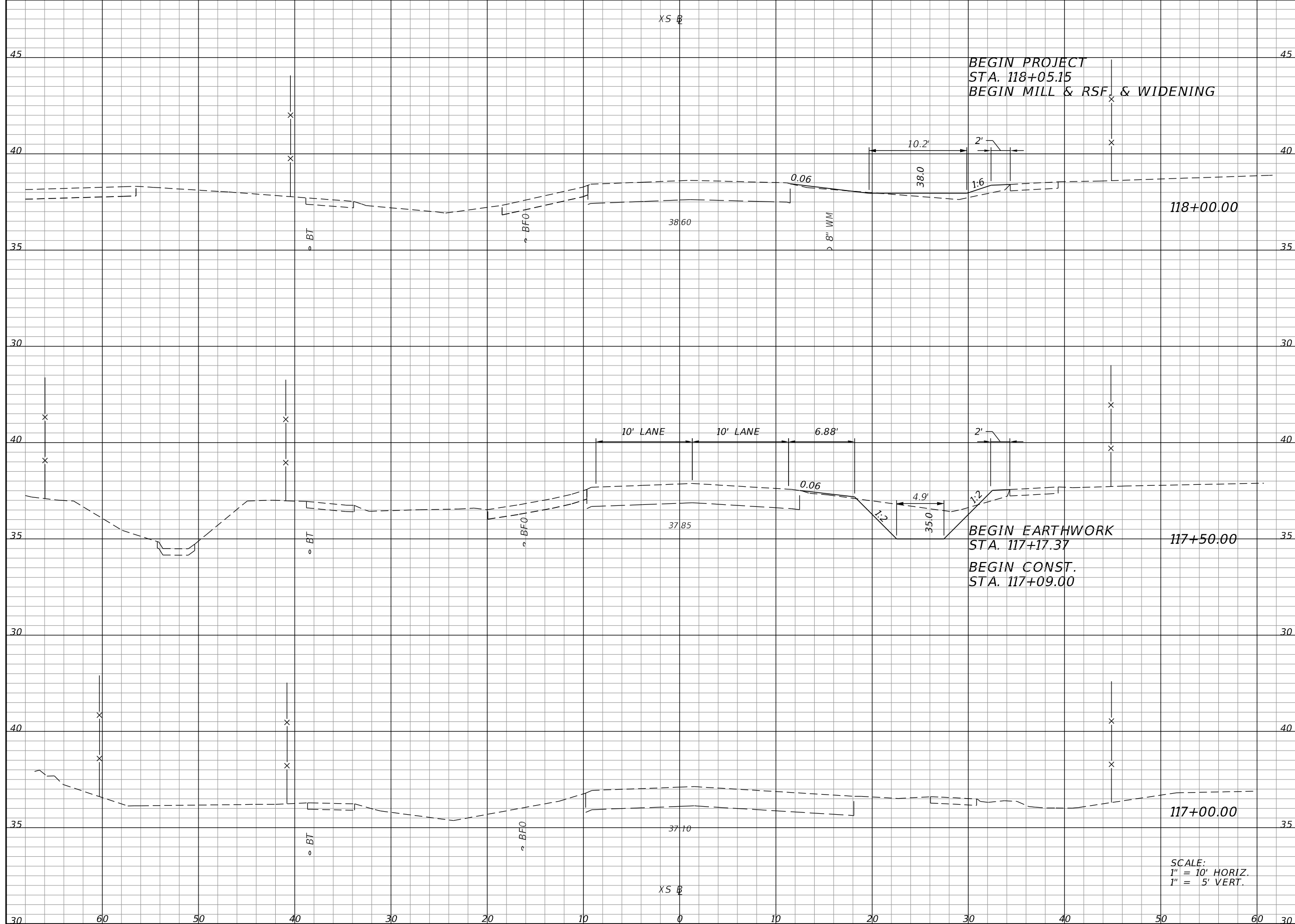
CONTRACT NO: 12-D-00057

ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

ROADWAY SOIL PROFILES

SHEET NO.

43



Regular		Exc.		Embankment	
A	V	A	V	A	V
0.06	13.3	3.25	4.4		
14.26	8.5	1.49	0.9		
0.00		0.00			

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

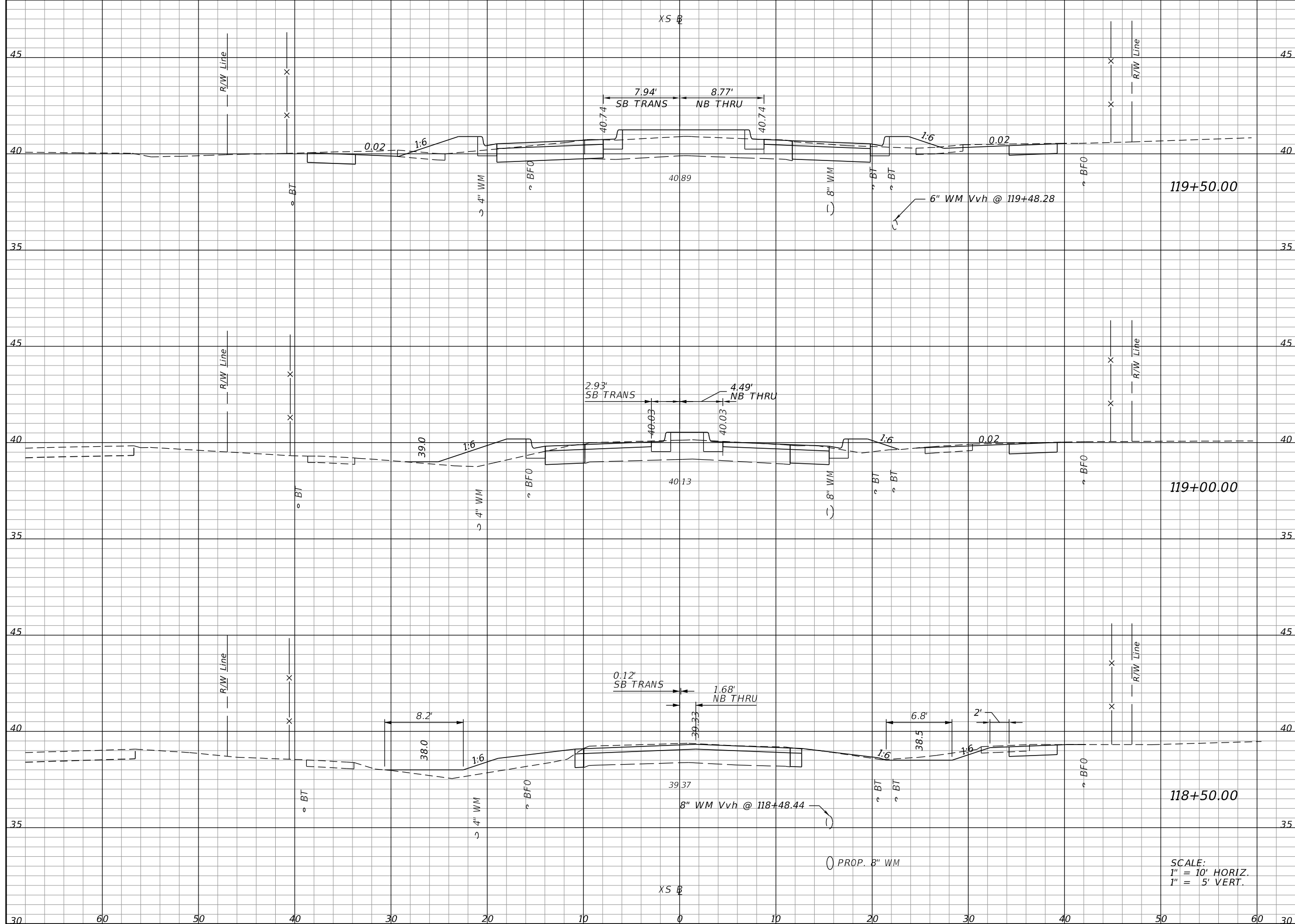
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.
44

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
27.04	37.9	13.84	24.6		
13.85	18.3	12.71	20.3		
5.96	5.6	9.24	11.6		

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

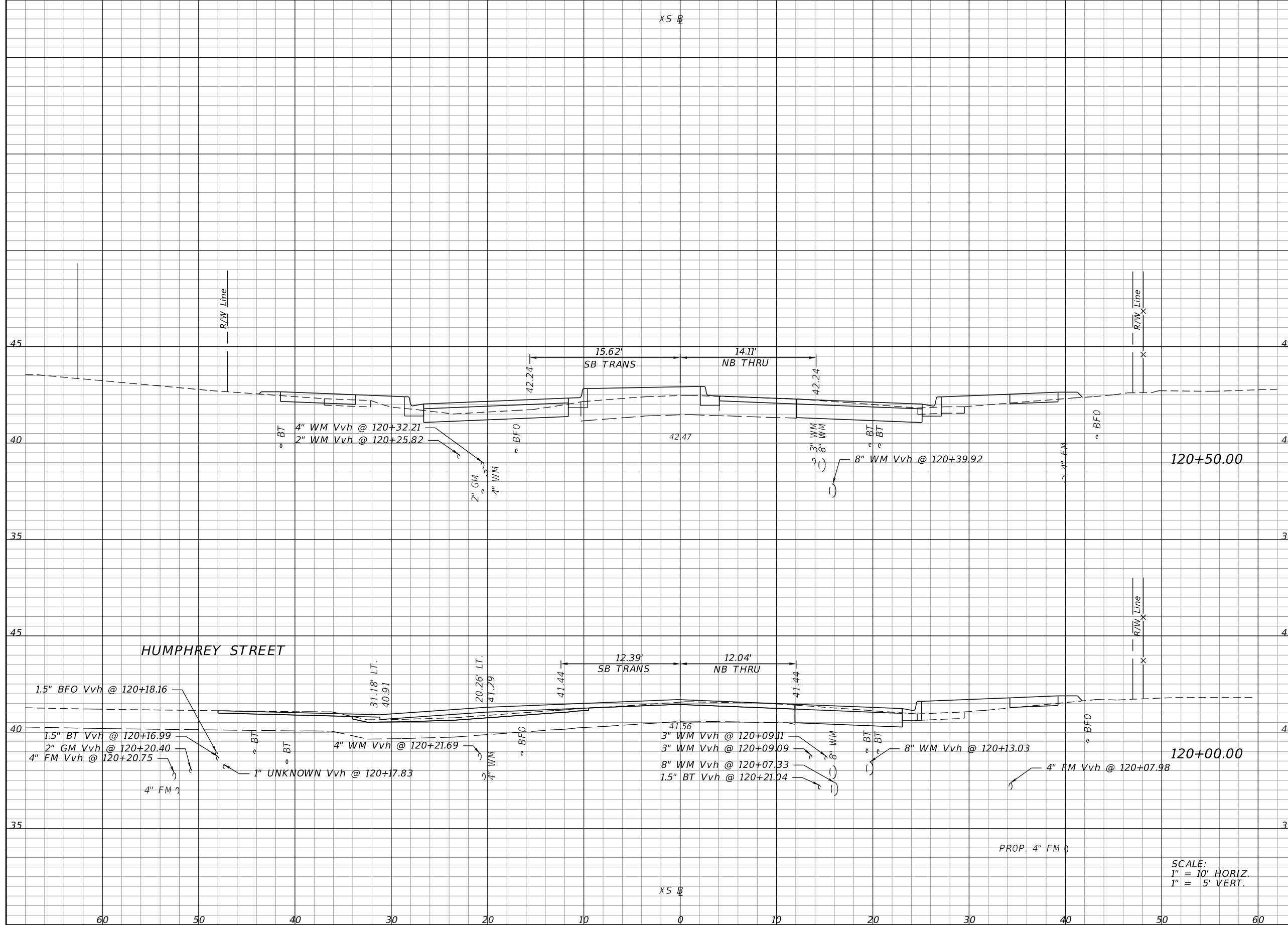
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
**45**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Regular		Exc.		Embankment	
A	V	A	V	A	V



22.04	29.7	14.67	20.9
10.05	34.3	7.87	20.1

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

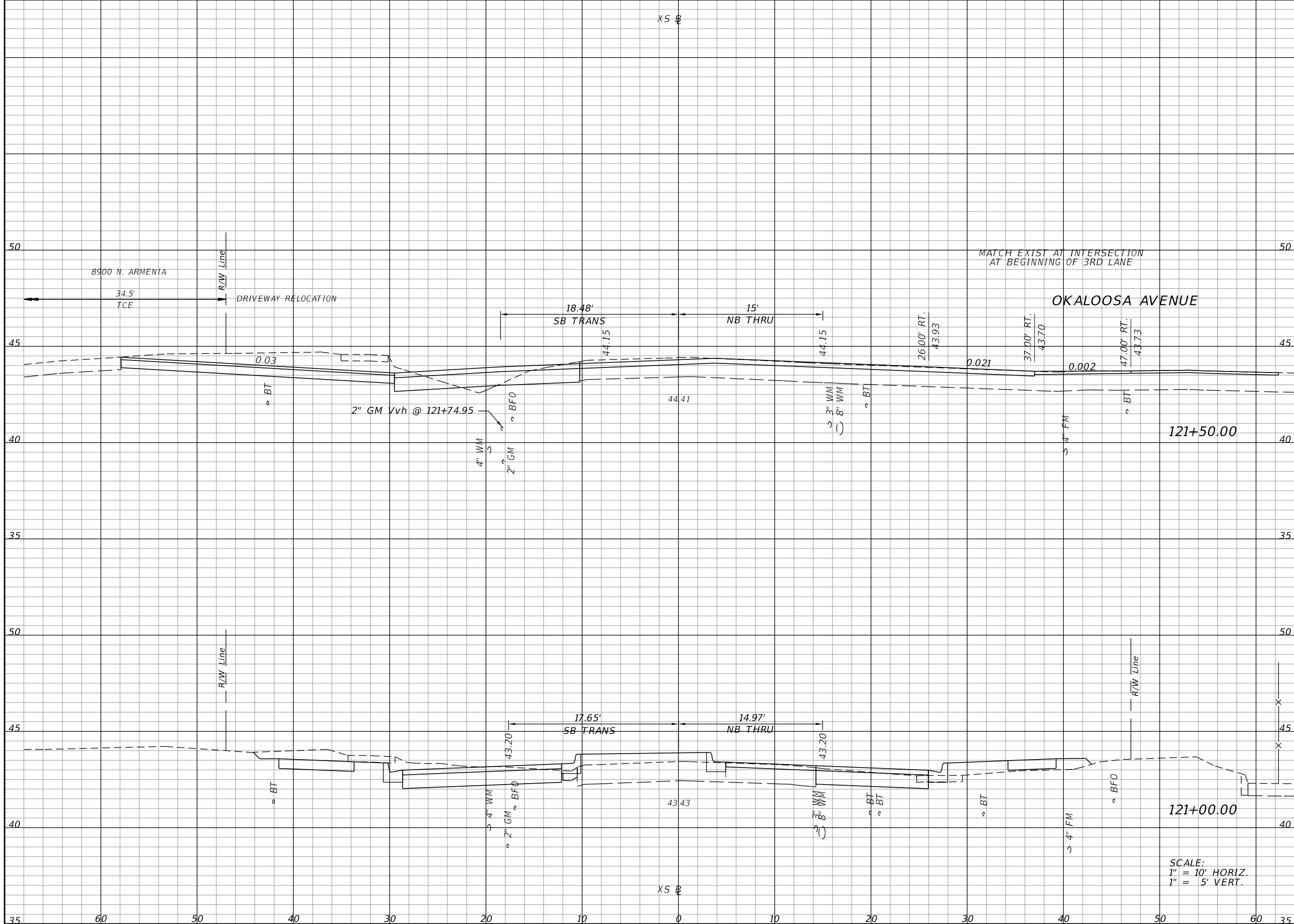
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.
46

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
40.23	70.7	0.64	13.2	36.17	53.9
				13.65	26.2

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

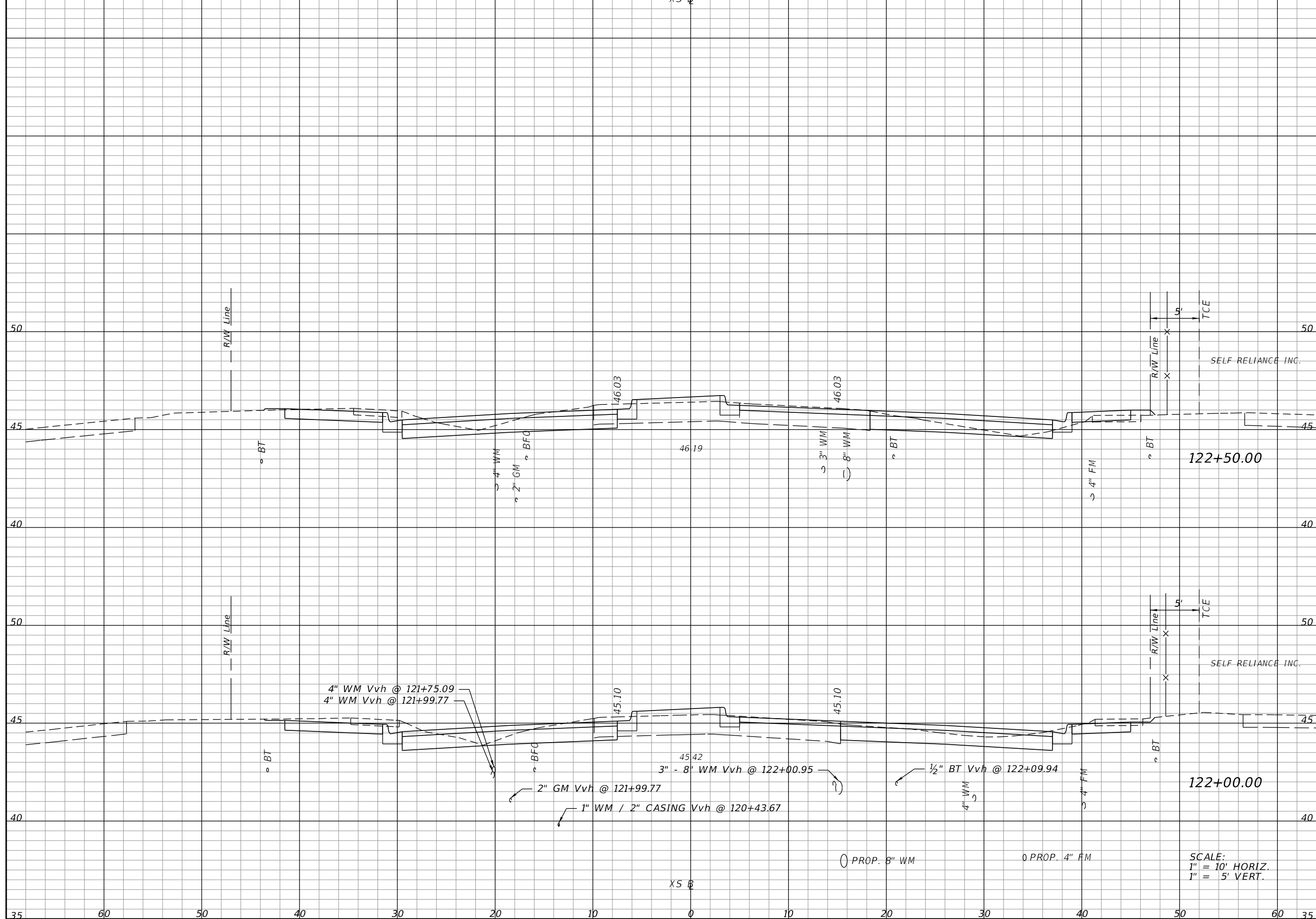
**CROSS SECTIONS**

SHEET NO.
47

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V



34.97					
-------	--	--	--	--	--

	74.6				
--	------	--	--	--	--

		3.56			
--	--	------	--	--	--

			5.9		
--	--	--	-----	--	--

45.59					
-------	--	--	--	--	--

	79.5				
--	------	--	--	--	--

		2.80			
--	--	------	--	--	--

			3.2		
--	--	--	-----	--	--

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

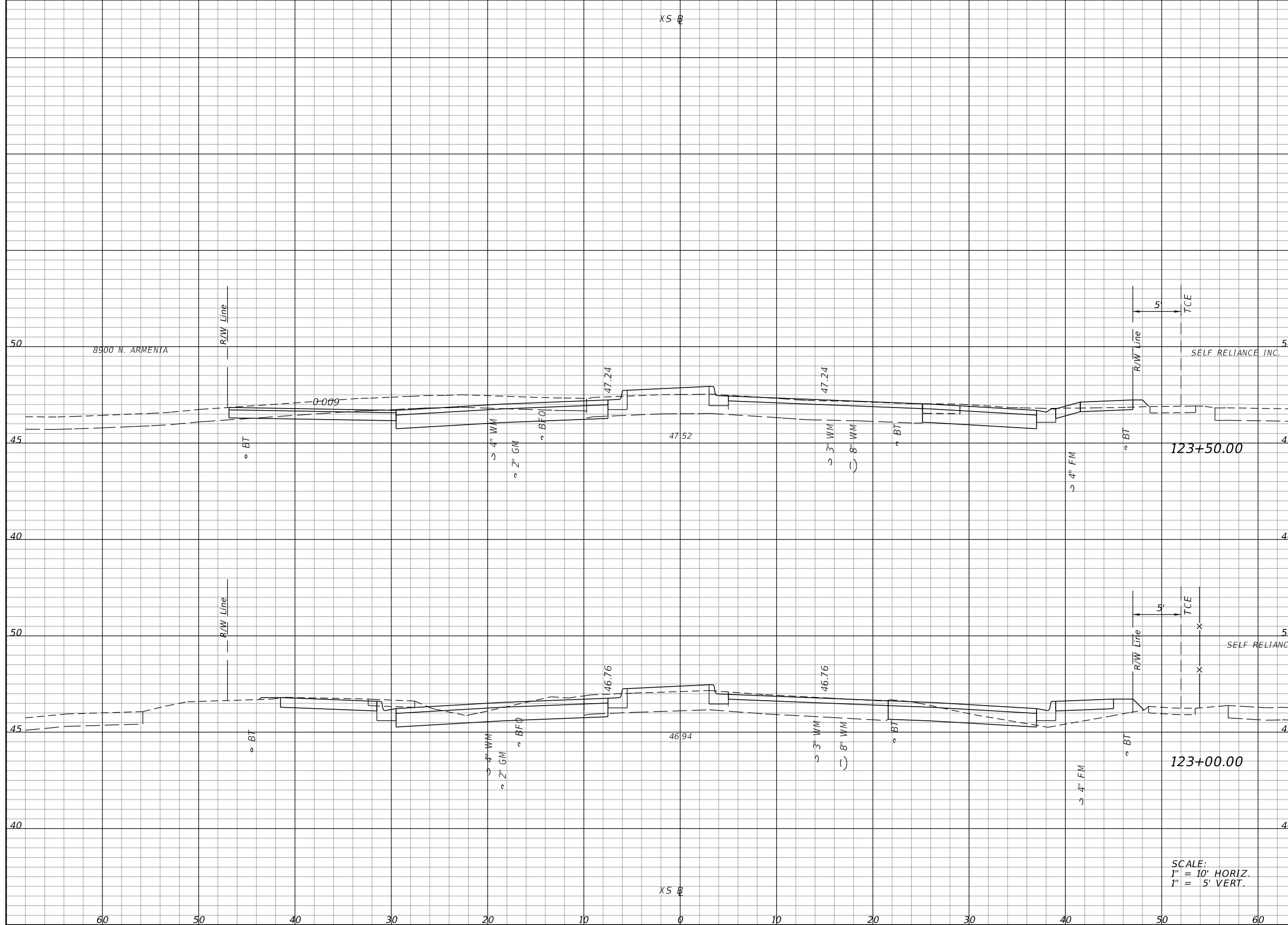
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
 48

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Regular		Exc.		Embankment	
A	V	A	V	A	V



61.97	92.0	3.32	10.8
37.42	67.0	8.39	11.1

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

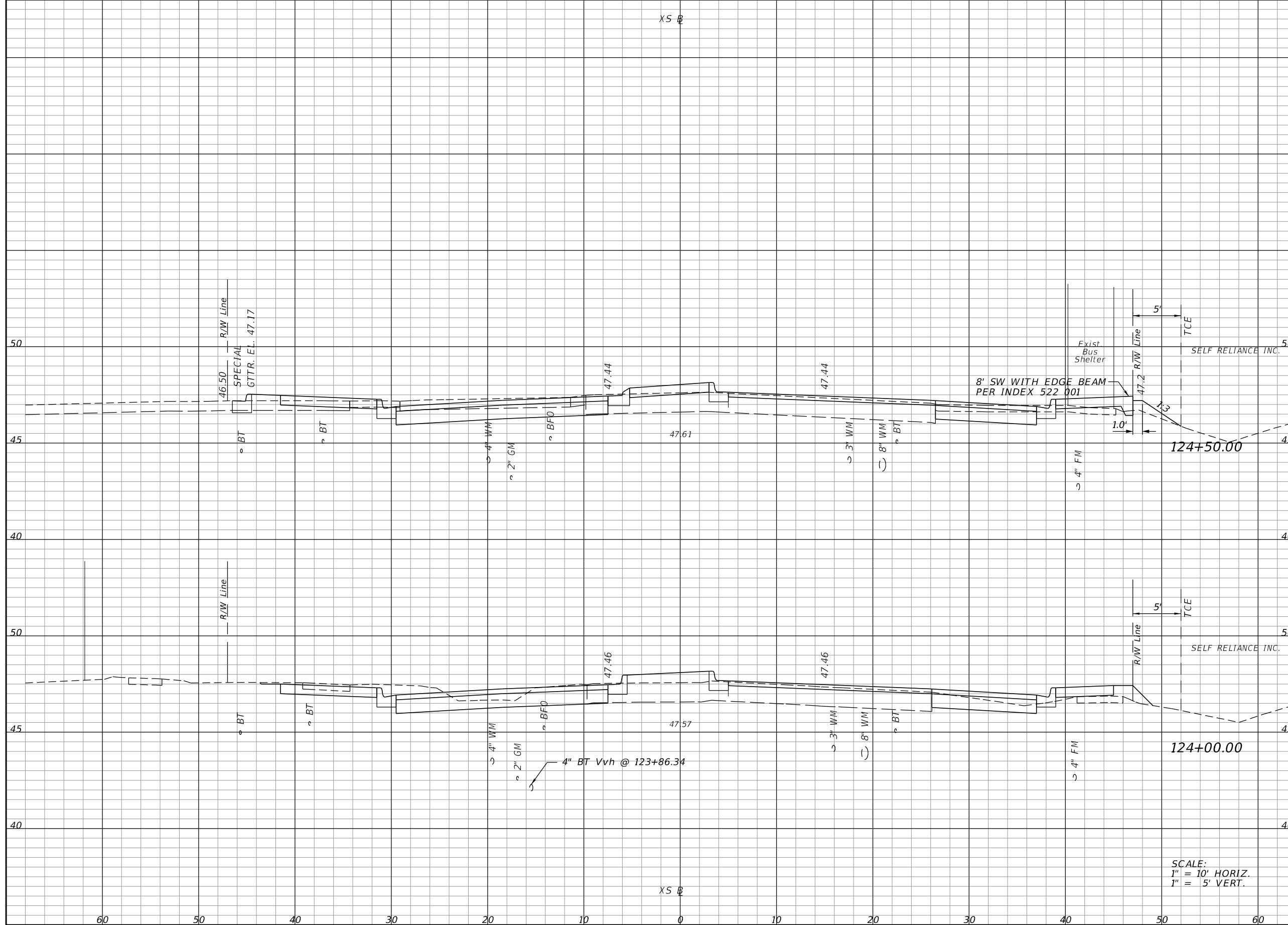
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
**49**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Regular		Exc.		Embankment	
A	V	A	V	A	V



38.32	67.5	4.56	11.9
34.62	89.4	8.26	10.7

REVISIONS	
DATE	DESCRIPTION

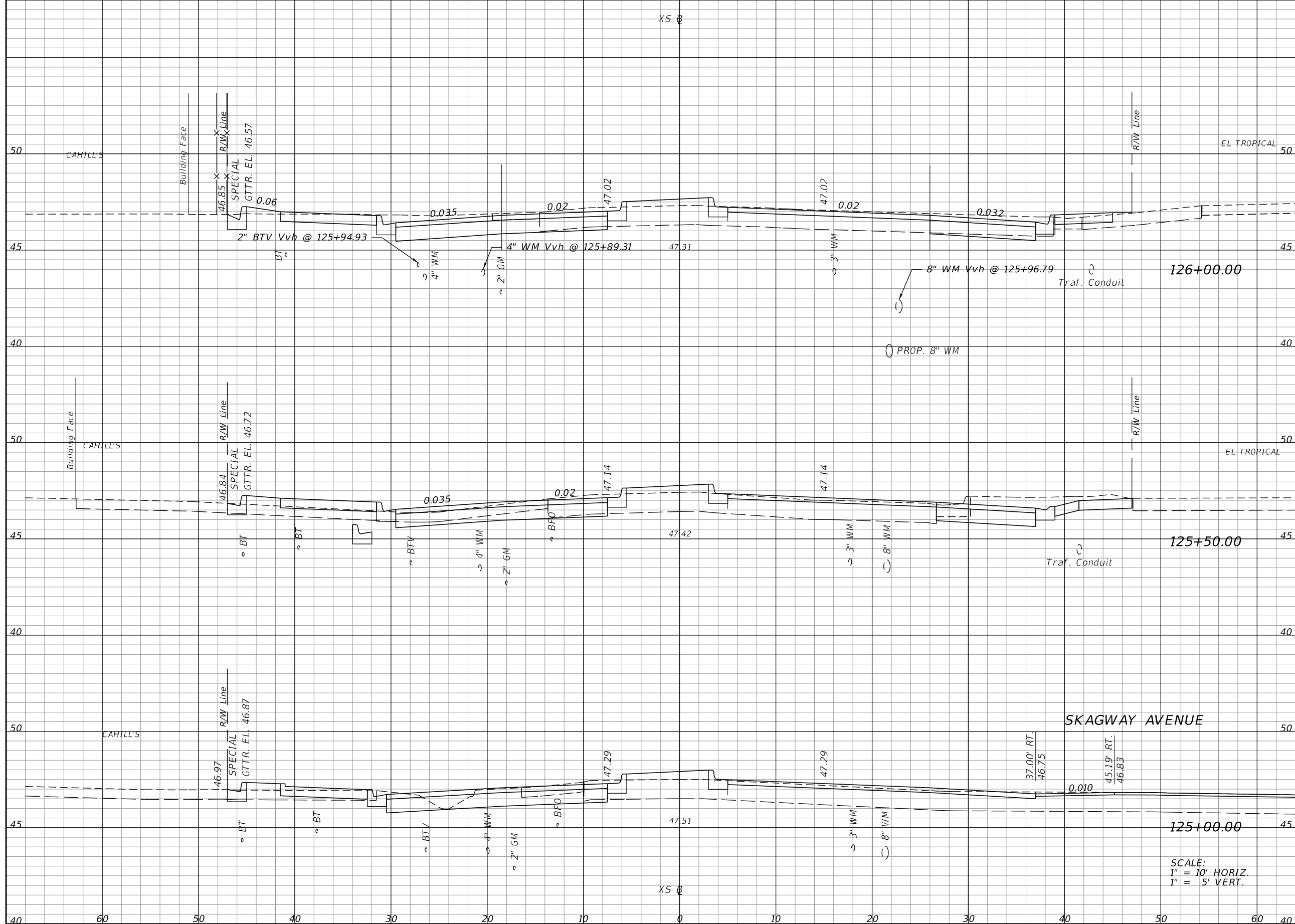
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.
50

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
48.01	84.6	4.55	8.3		
43.38	65.5	4.46	8.4		
27.36	60.8	4.66	8.5		

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

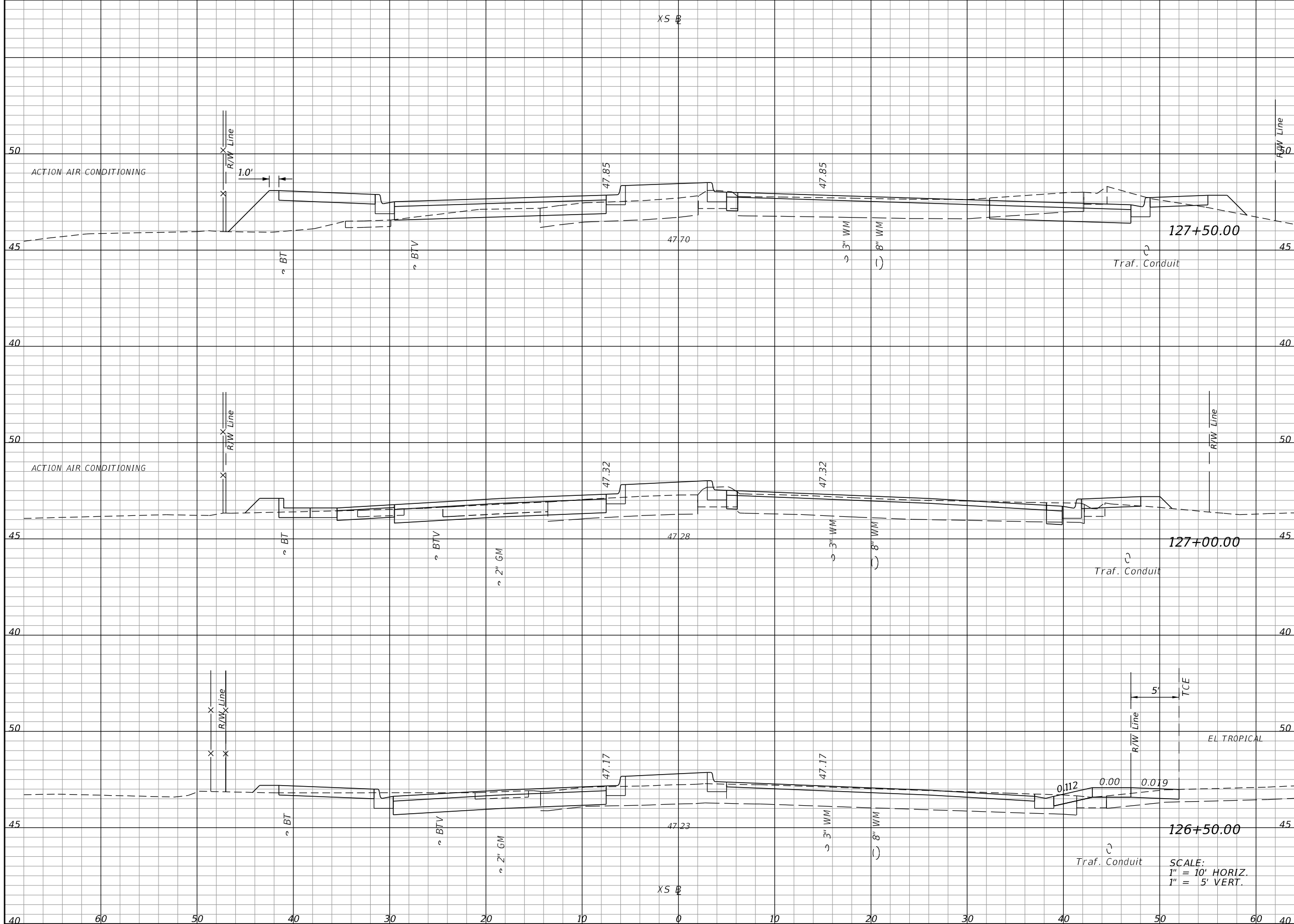
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.
51

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
31.55	45.1	31.38	39.6		
17.21	42.6	11.43	17.3		
28.81	71.1	7.22	1.9		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

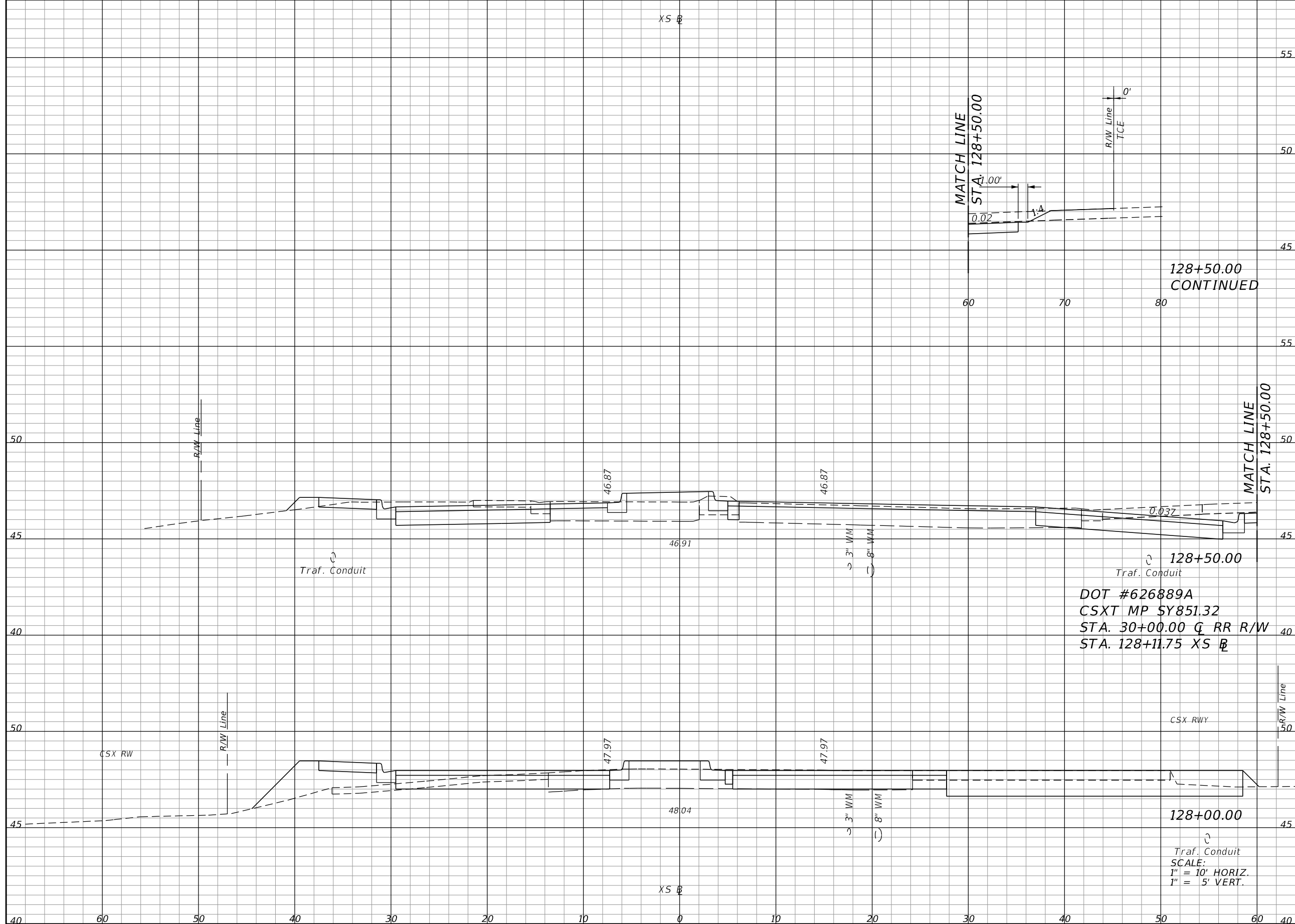
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.
52

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Station	Regular		Exc.		Embankment	
	A	V	A	V	A	V
128+50.00						
128+50.00 CONTINUED						
128+50.00	44.30		62.3		10.57	14.9
128+50.00	44.30				10.57	
128+12.00	END EARTHWORK EXCEPTION					
128+12.00	EXCEPTION					
128+03.00	BEGIN EARTHWORK EXCEPTION					
128+03.00	33.12		3.7		18.63	2.1
128+00.00	33.12		59.9		18.63	46.3

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

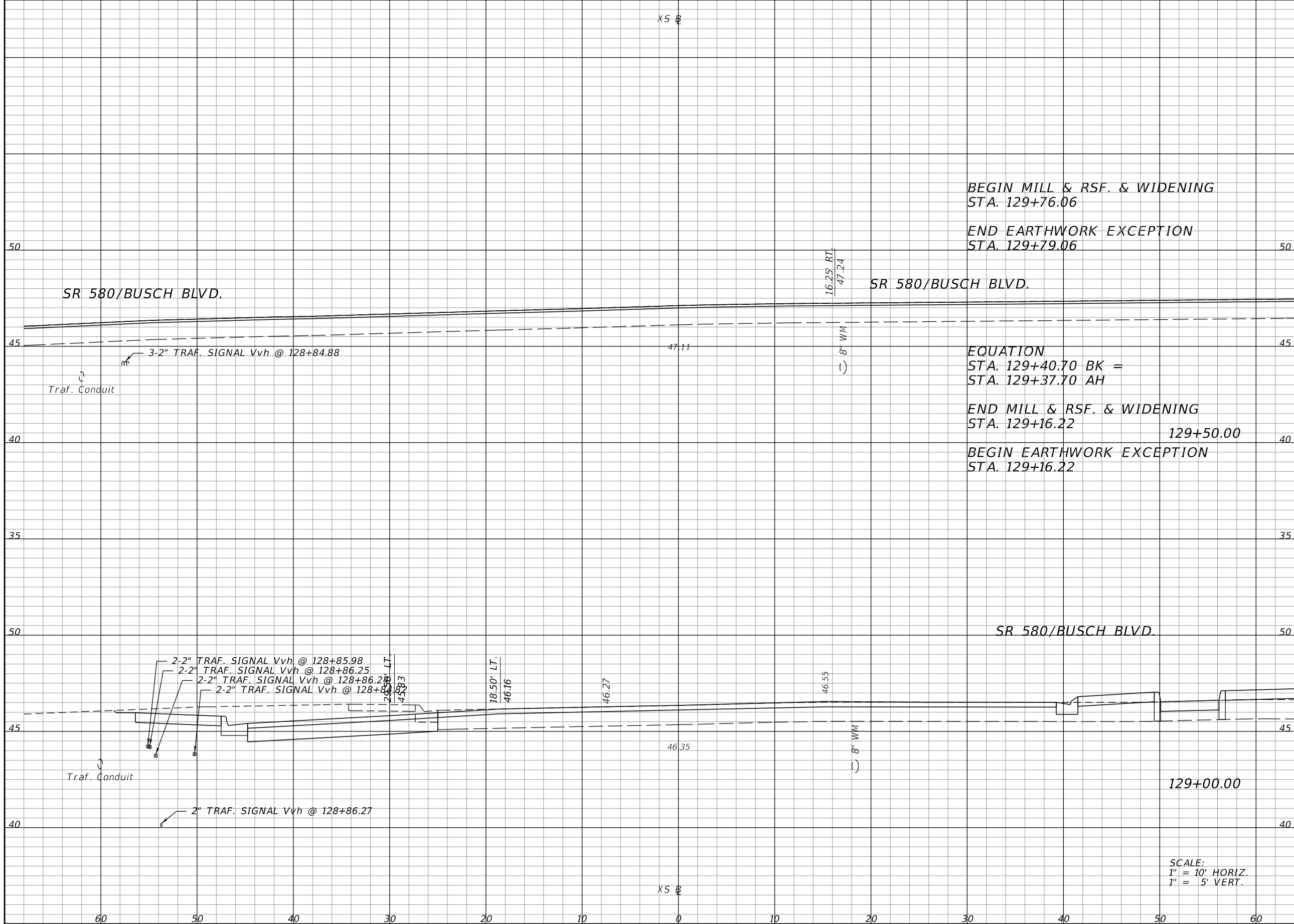
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.
53

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
15.47				0.00	
54.64		32.8		0.23	0.1
54.64		91.6		0.23	10.0

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

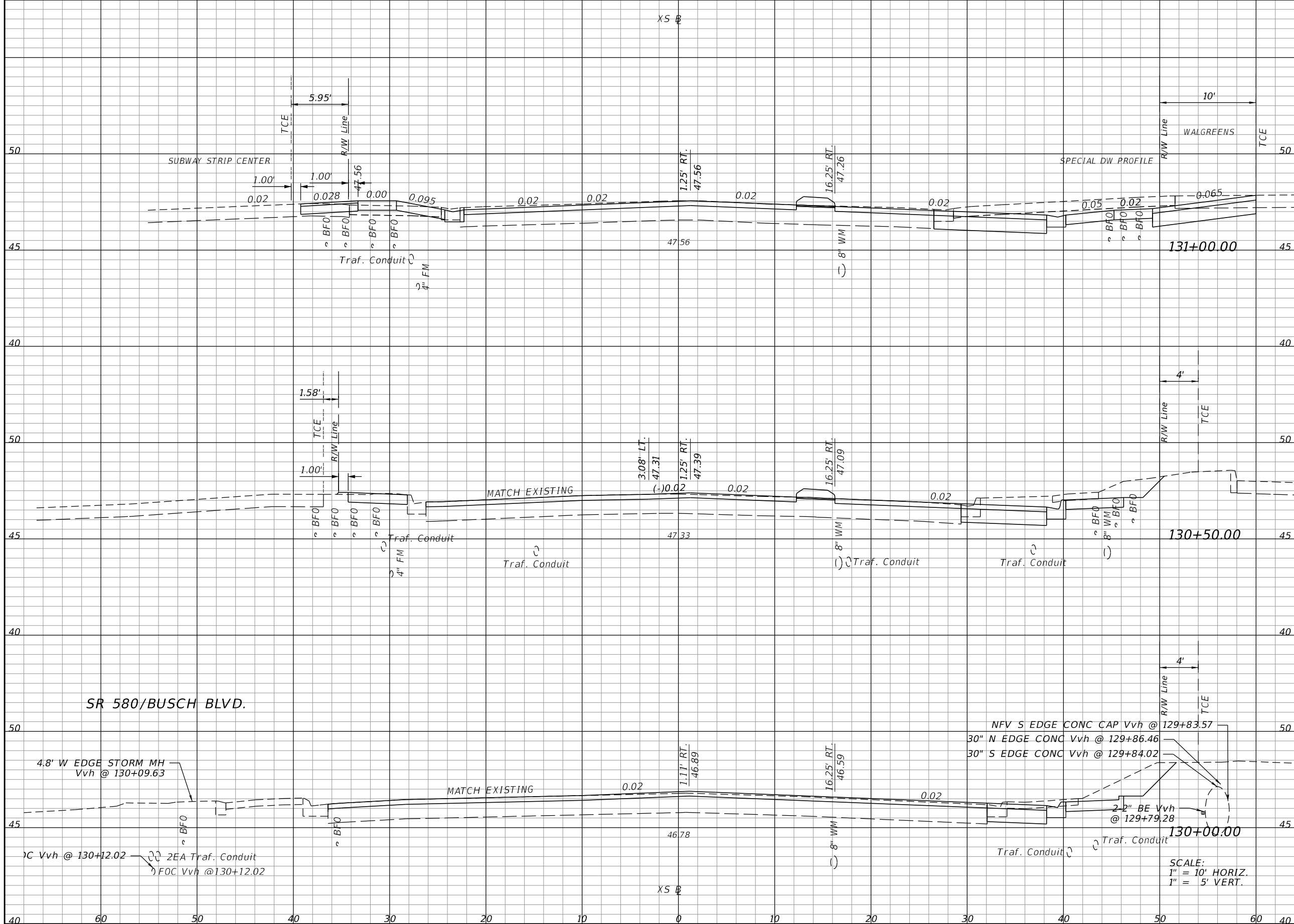
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
**54**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
33.87	52.4	1.62	1.6		
22.76	35.4	0.11	0.1		
15.47	12.0	0.00	0.0		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

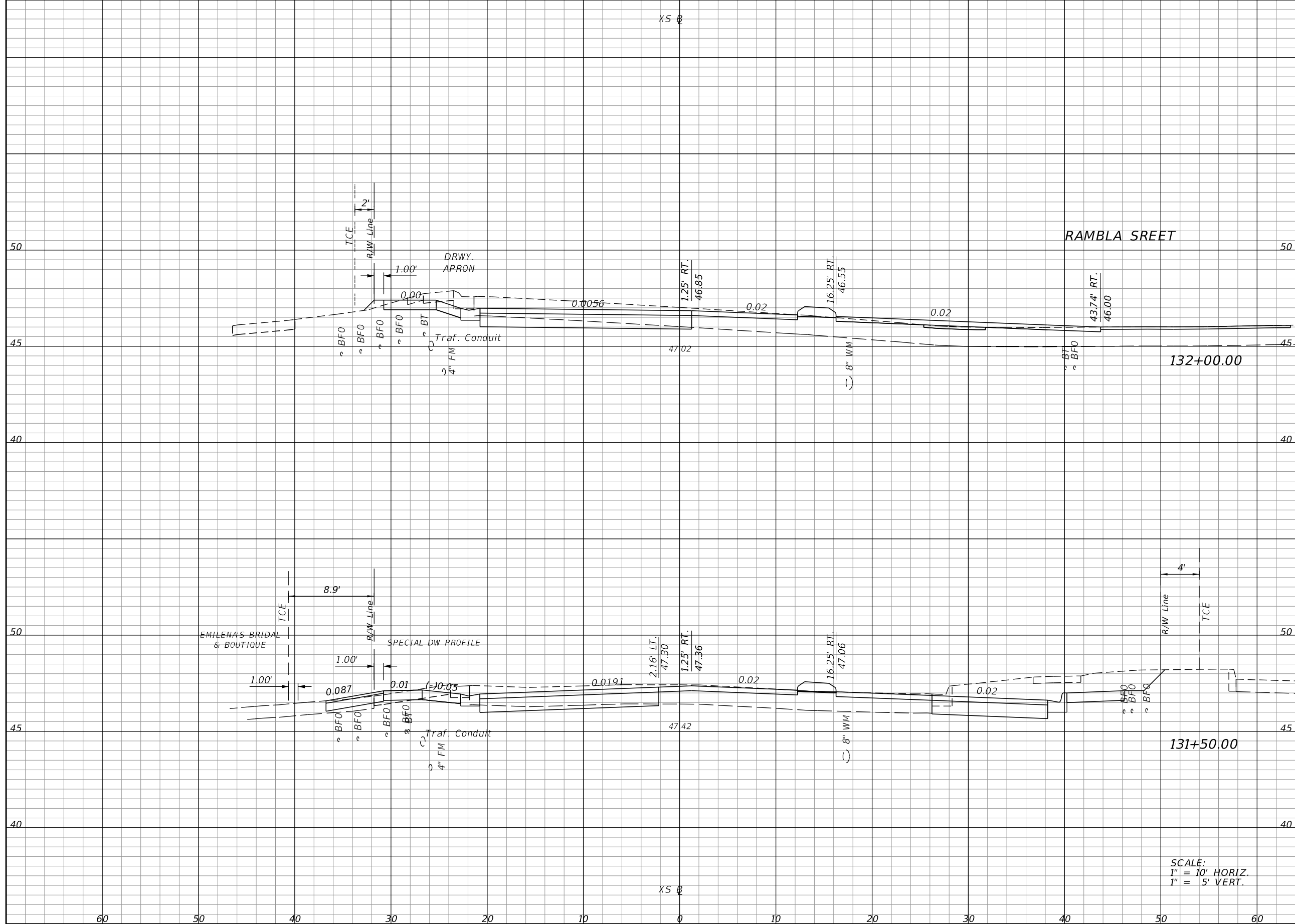
**CROSS SECTIONS**

SHEET NO.
55

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
35.79			91.1	0.57	0.9
62.64			89.4	0.45	1.9



SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

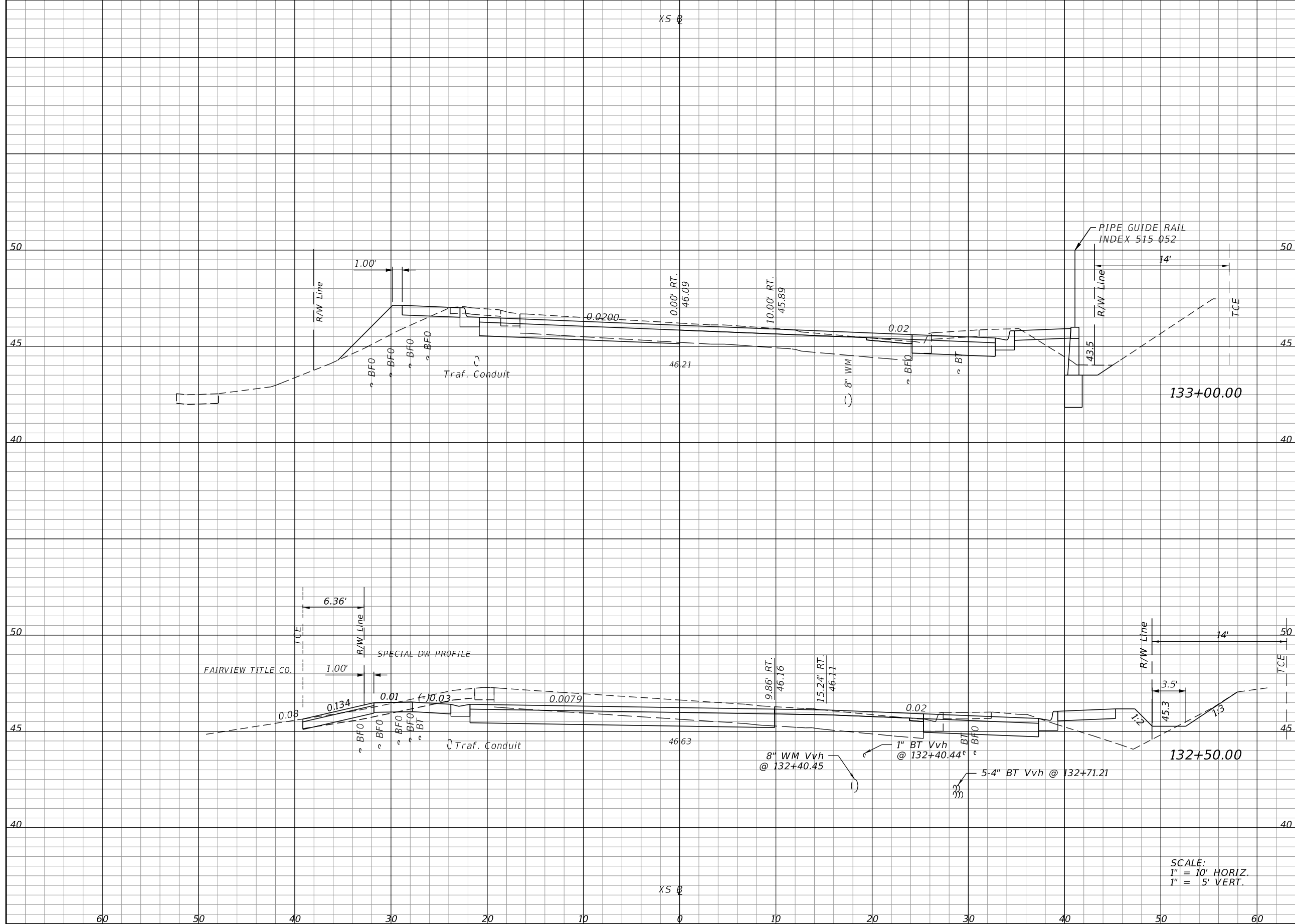
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
**56**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Regular		Exc.		Embankment	
A	V	A	V	A	V
40.59		80.1		8.65	
				19.7	
45.87		75.6		12.61	
				12.2	



SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

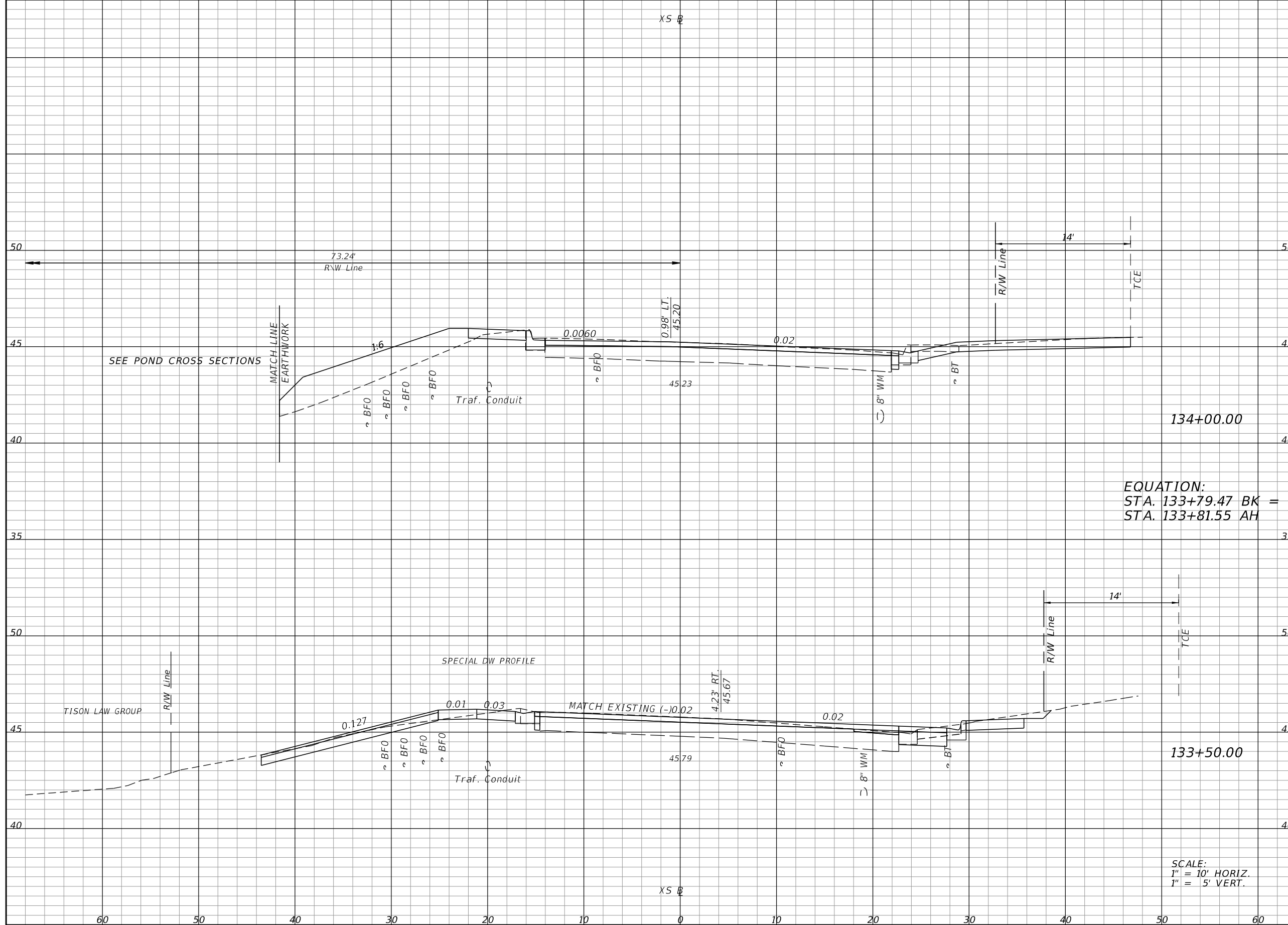
**CROSS SECTIONS**

SHEET NO.  
**57**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Regular Exc.    Embankment

A    V    A    V



EQUATION:  
 STA. 133+79.47 BK =  
 STA. 133+81.55 AH

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

11.55	25.3	26.67	27.5
15.77	52.2	3.03	10.8

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

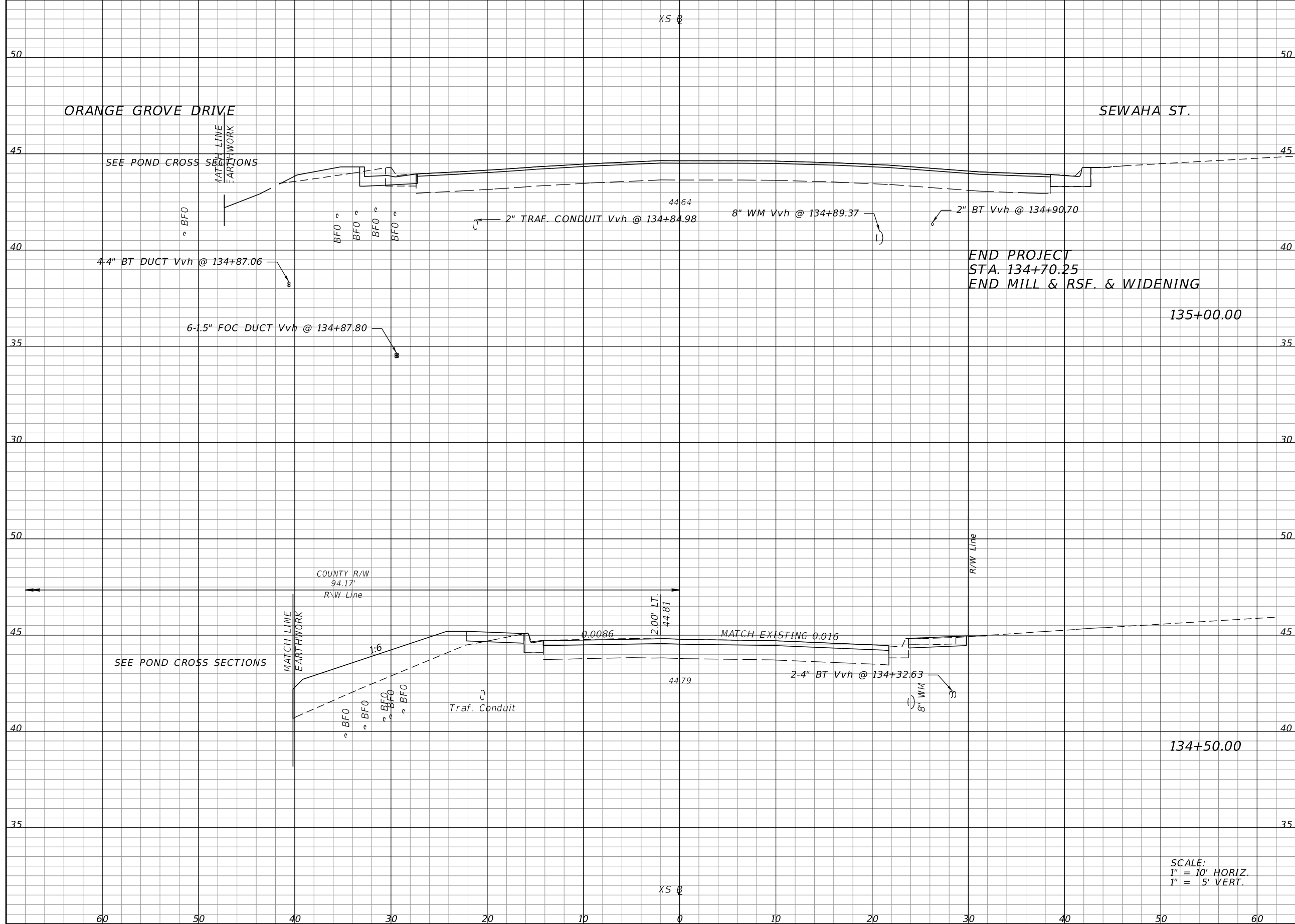
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
**58**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Regular		Exc.		Embankment	
A	V	A	V	A	V
5.23	6.9	2.91	26.1		
2.25	12.8	25.28	48.1		

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
**59**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Regular		Exc.		Embankment	
A	V	A	V	A	V
11.6	3.5	4.27	1.3		
11.6	15.6	4.27	6.6		

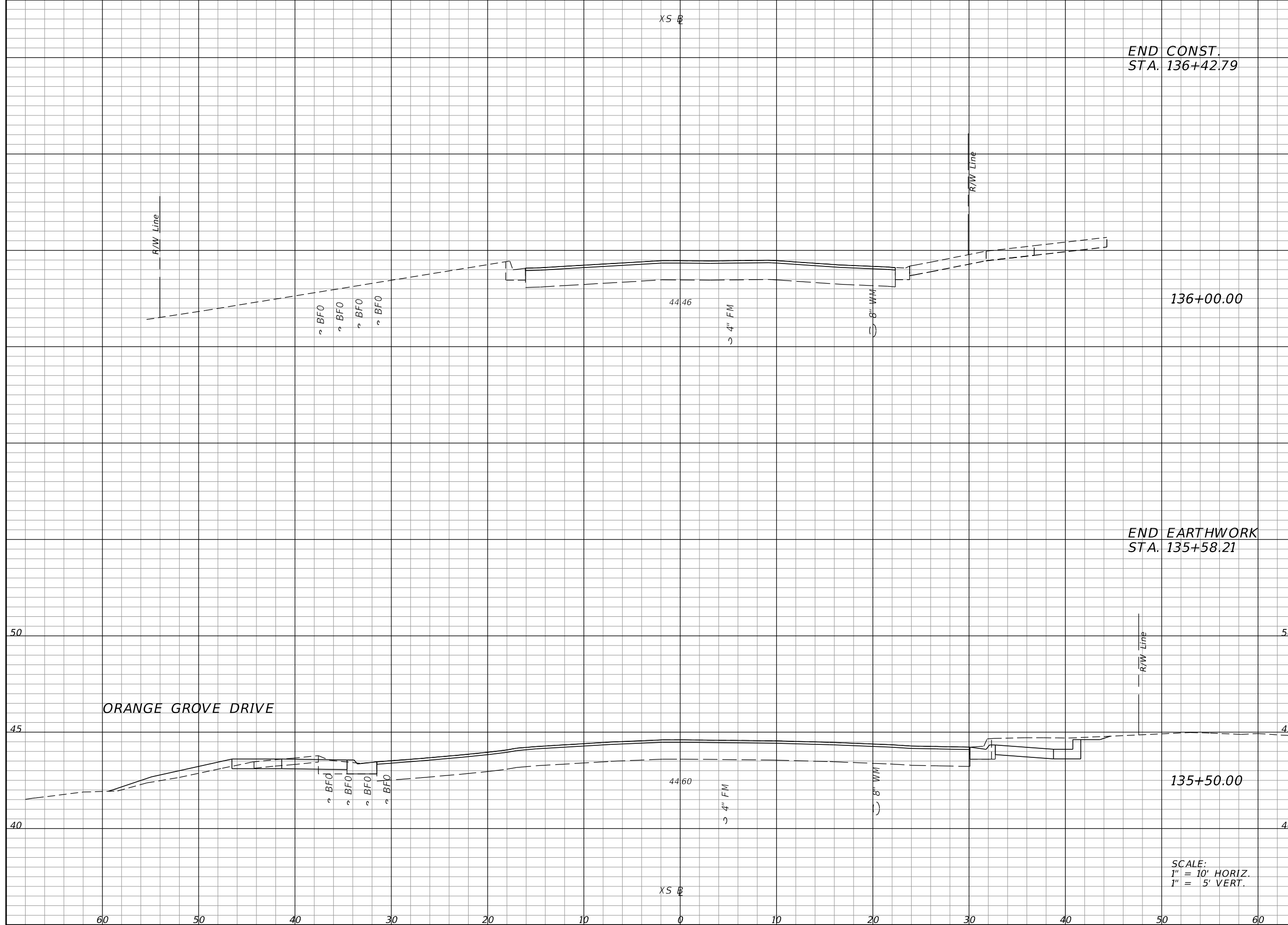
END CONST.  
STA. 136+42.79

END EARTHWORK  
STA. 135+58.21

136+00.00

135+50.00

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.



ORANGE GROVE DRIVE

XS B

XS B

REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

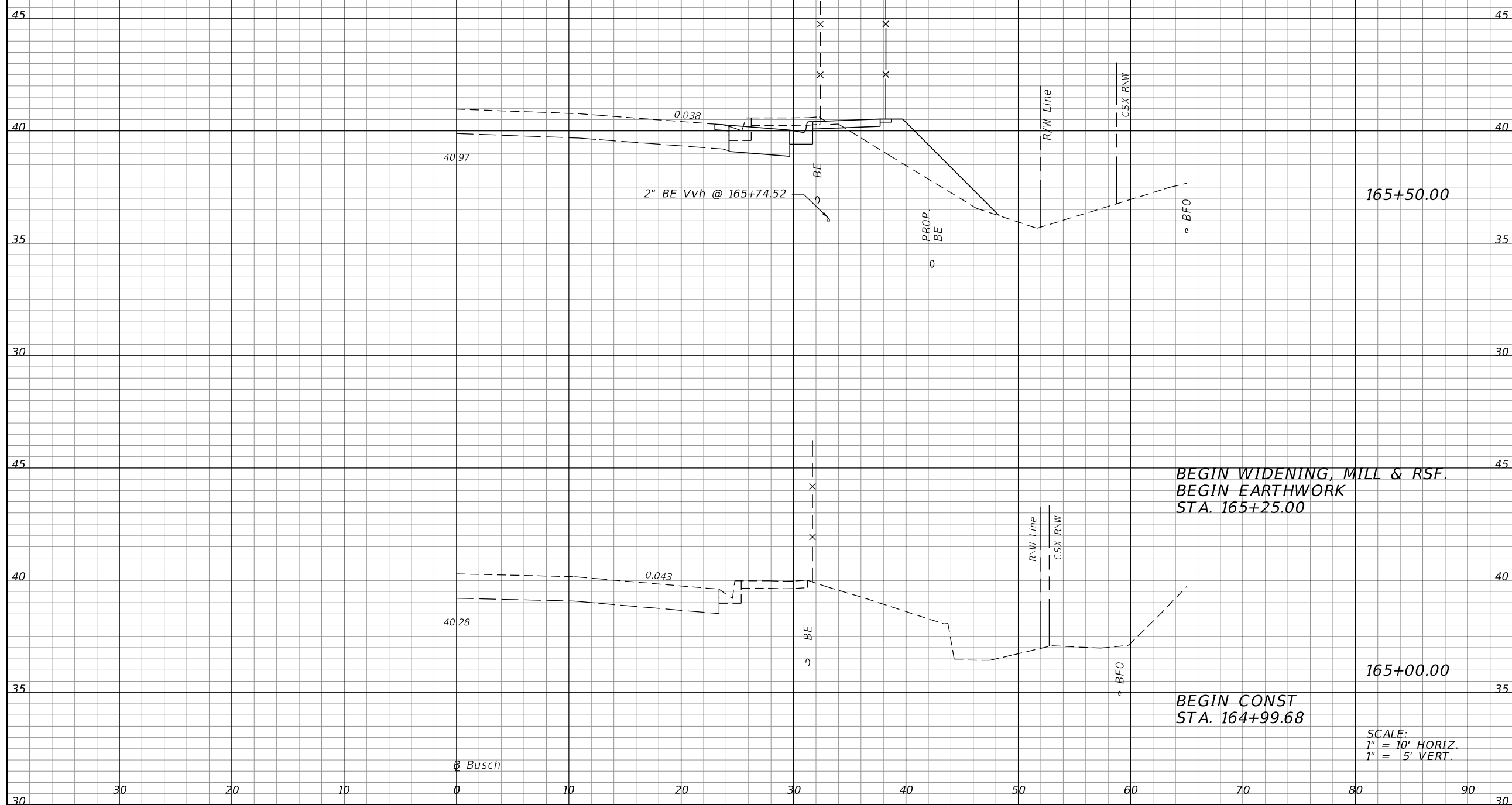
**CROSS SECTIONS**

SHEET NO.
60

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Busch

Regular		Exc.		Embankment	
A	V	A	V	A	V



7.84	7.3	14.30	13.2
------	-----	-------	------

7.84	14.30
------	-------

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

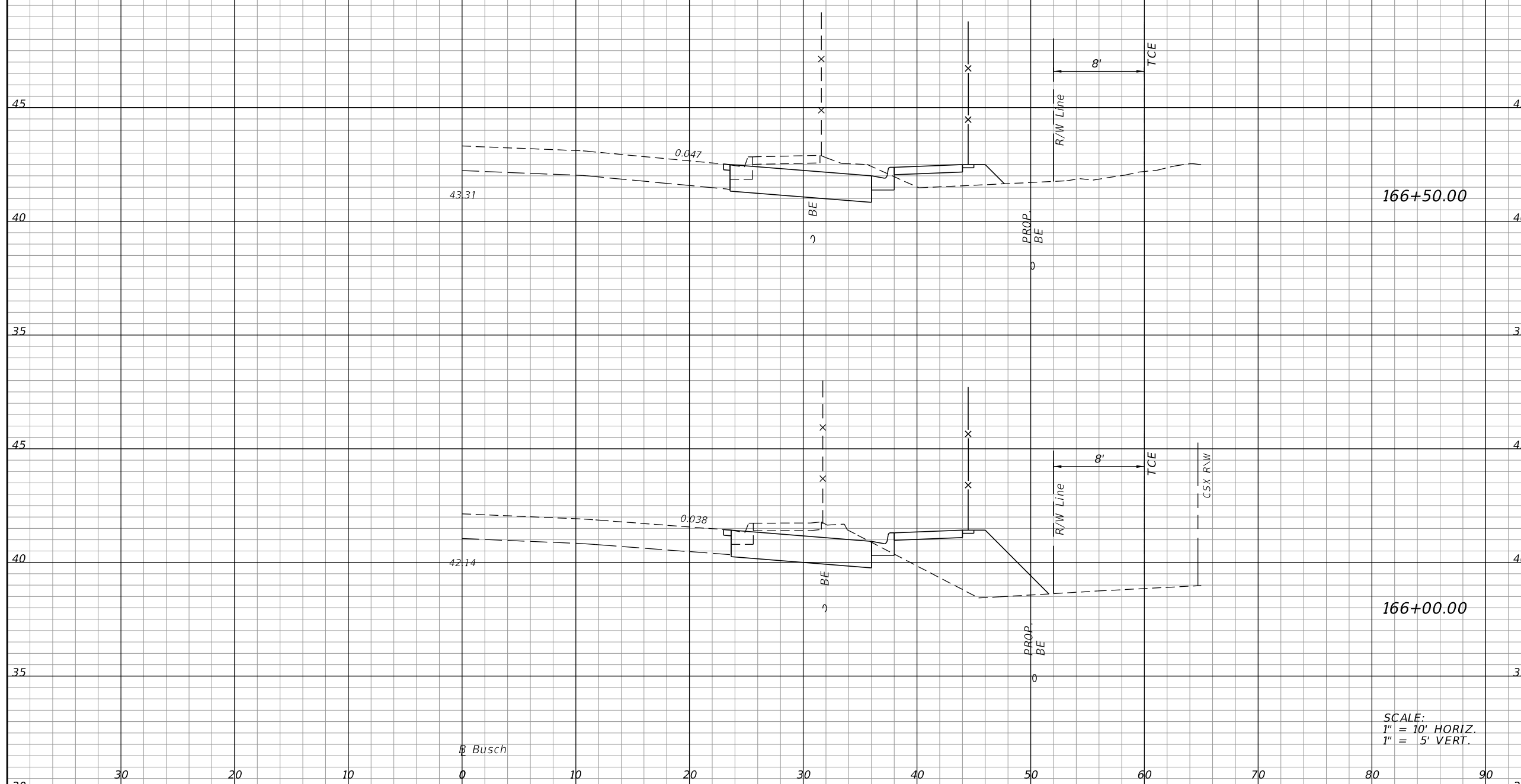
SHEET NO.  
**61**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Busch

Regular Exc. Embankment

A V A V



166+50.00

166+00.00

18.70	32.9	5.50	26.0
-------	------	------	------

16.80	22.8	22.60	34.2
-------	------	-------	------

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

Busch

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

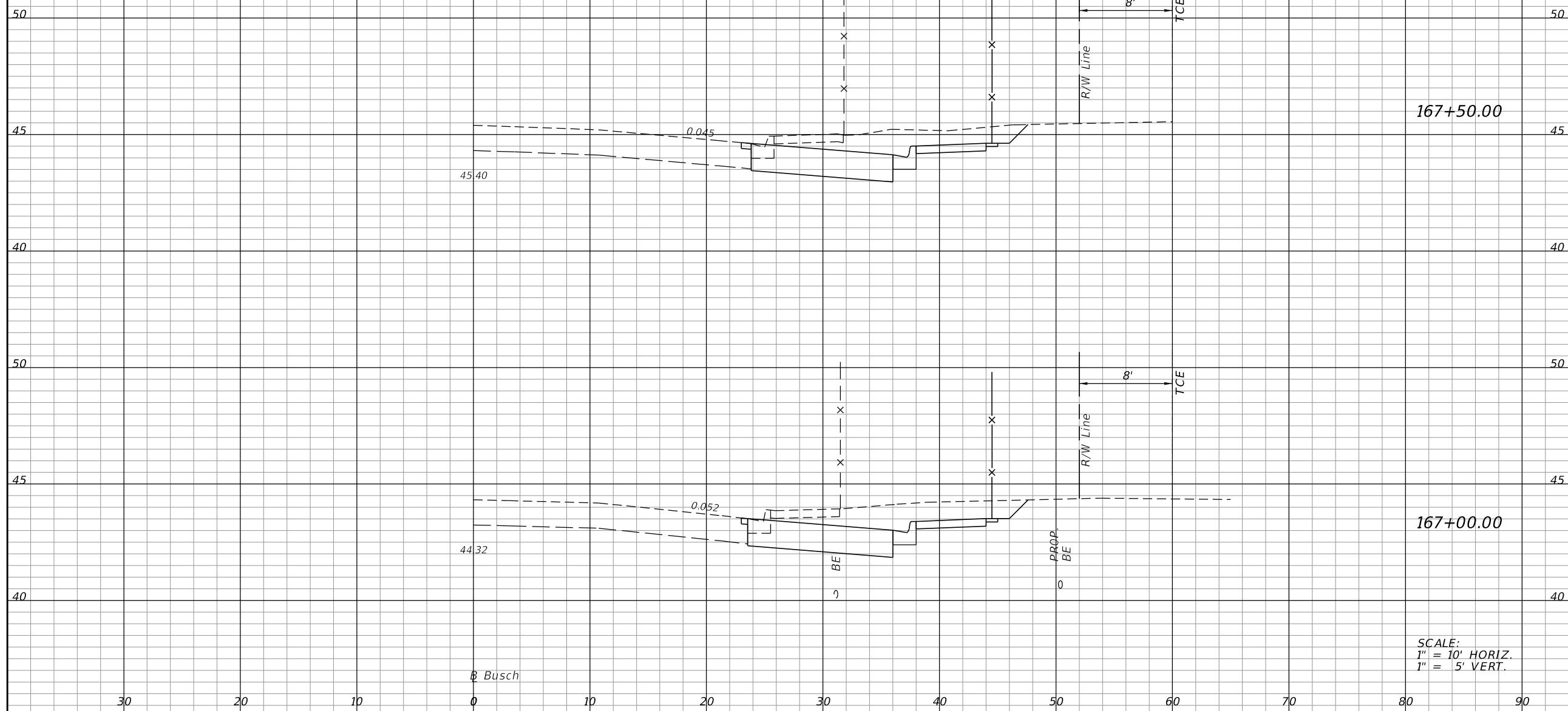
**CROSS SECTIONS**

SHEET NO.  
 62

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Busch

Regular		Exc.		Embankment	
A	V	A	V	A	V



29.50	56.5	0.00	0.0
31.50	46.5	0.00	5.1

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

Busch

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

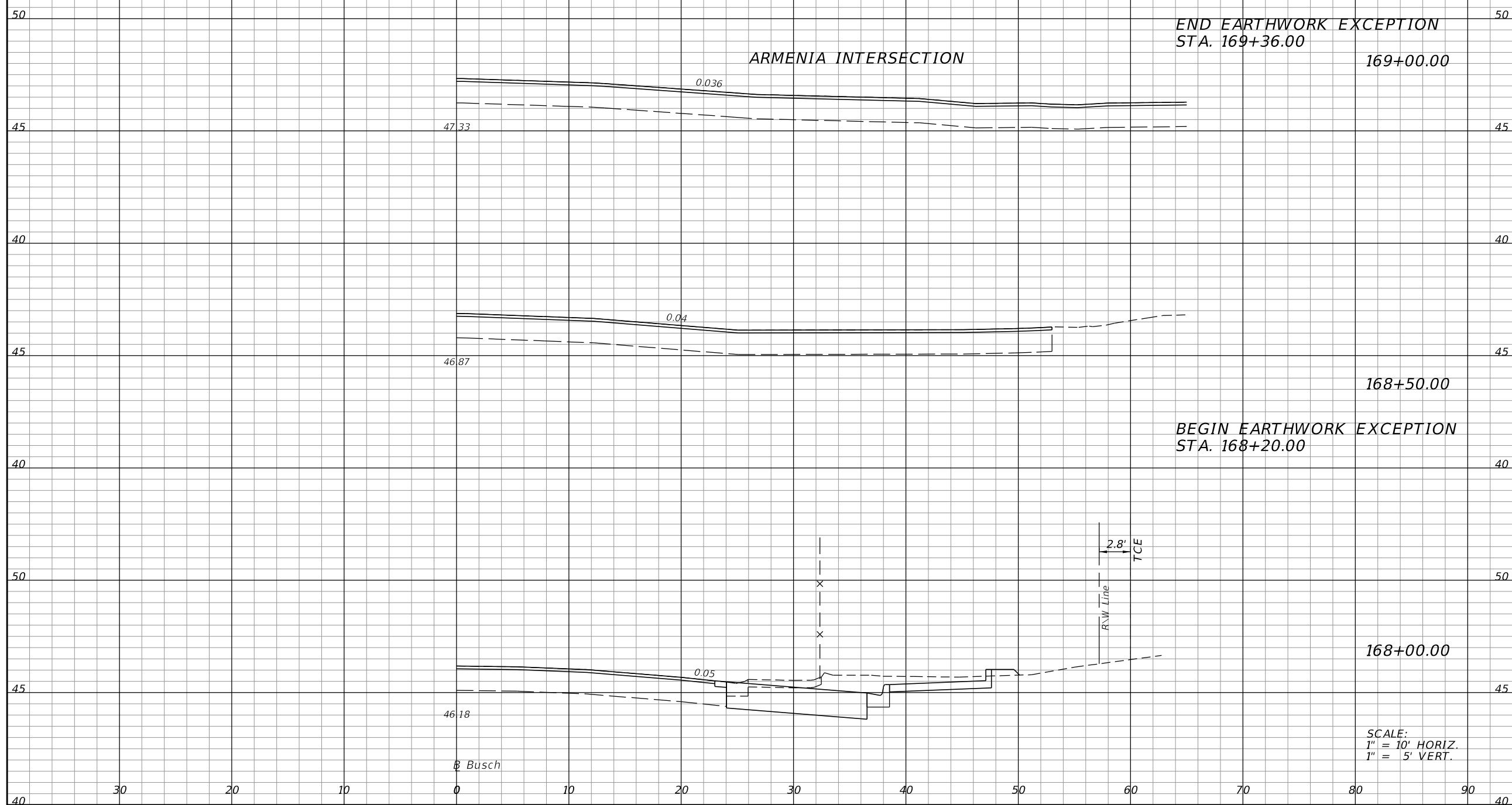
SHEET NO.  
**63**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



Busch

Regular		Exc.		Embankment	
A	V	A	V	A	V



50.90		0.30			
24.20	17.9	0.60	0.4		
24.20	49.7	0.60	0.6		

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

Busch

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

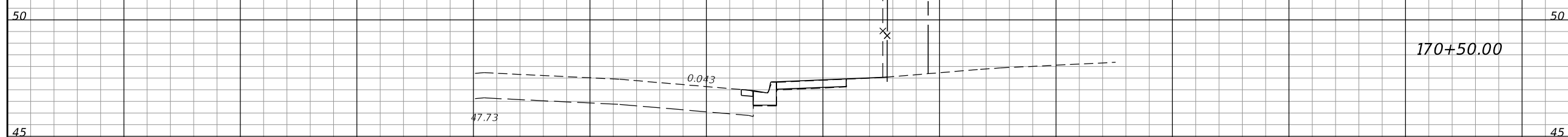
**CROSS SECTIONS**

SHEET NO.  
 64

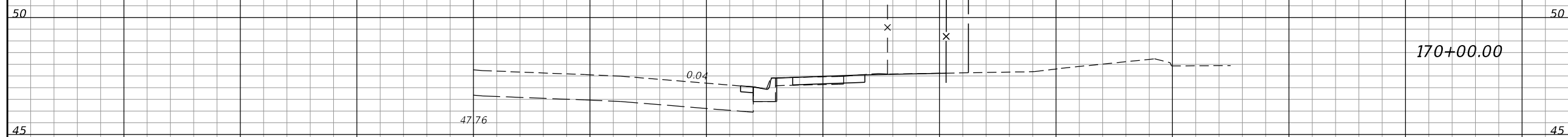
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Busch

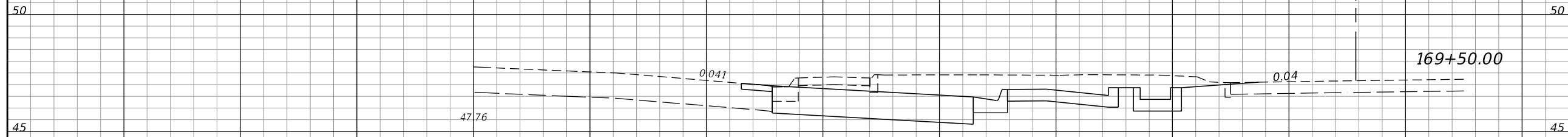
Regular		Exc.		Embankment	
A	V	A	V	A	V



0.00	0.6	0.00	0.4
------	-----	------	-----



0.70	47.8	0.40	0.6
------	------	------	-----



50.90	26.4	0.30	0.2
-------	------	------	-----

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

Busch

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

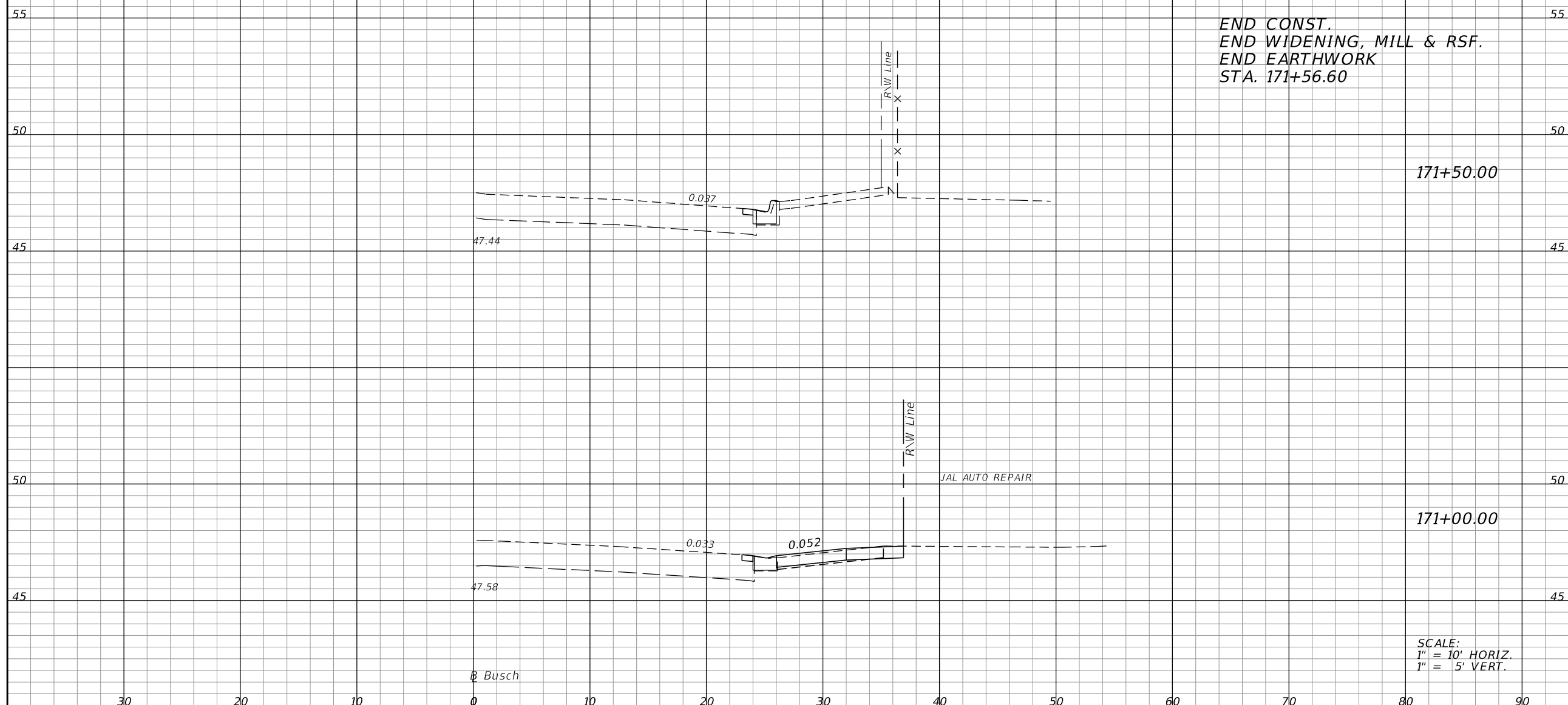
SHEET NO.
65

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Busch

Regular Exc. Embankment

A V A V



END CONST.  
END WIDENING, MILL & RSF.  
END EARTHWORK  
STA. 171+56.60

171+50.00

171+00.00

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.

Busch

0.20 0.0 0.00 0.0

0.20 4.8 0.00 0.6

5.00 4.6 0.70 0.6

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

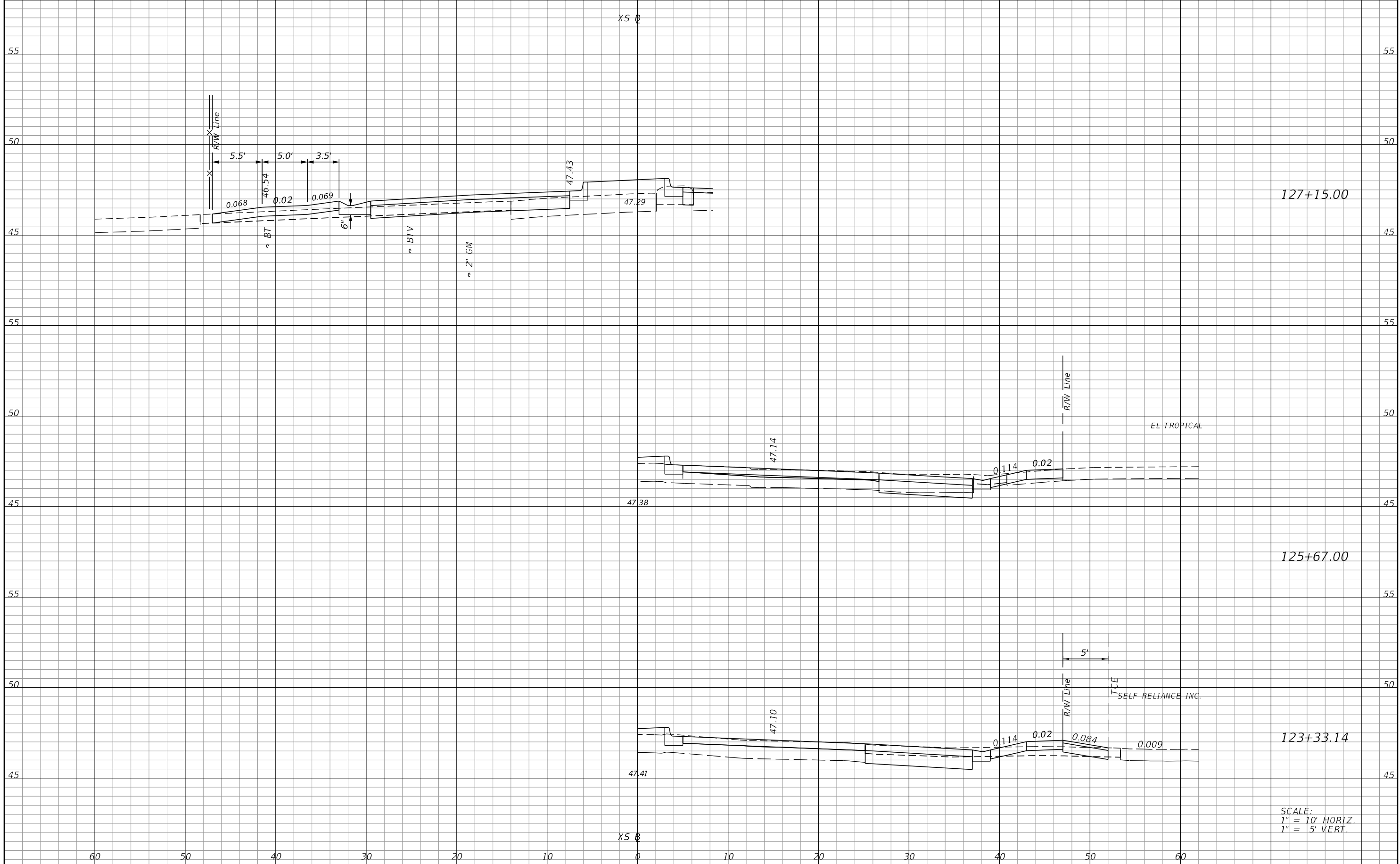
**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GL, PE 54798

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**CROSS SECTIONS**

SHEET NO.  
66

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

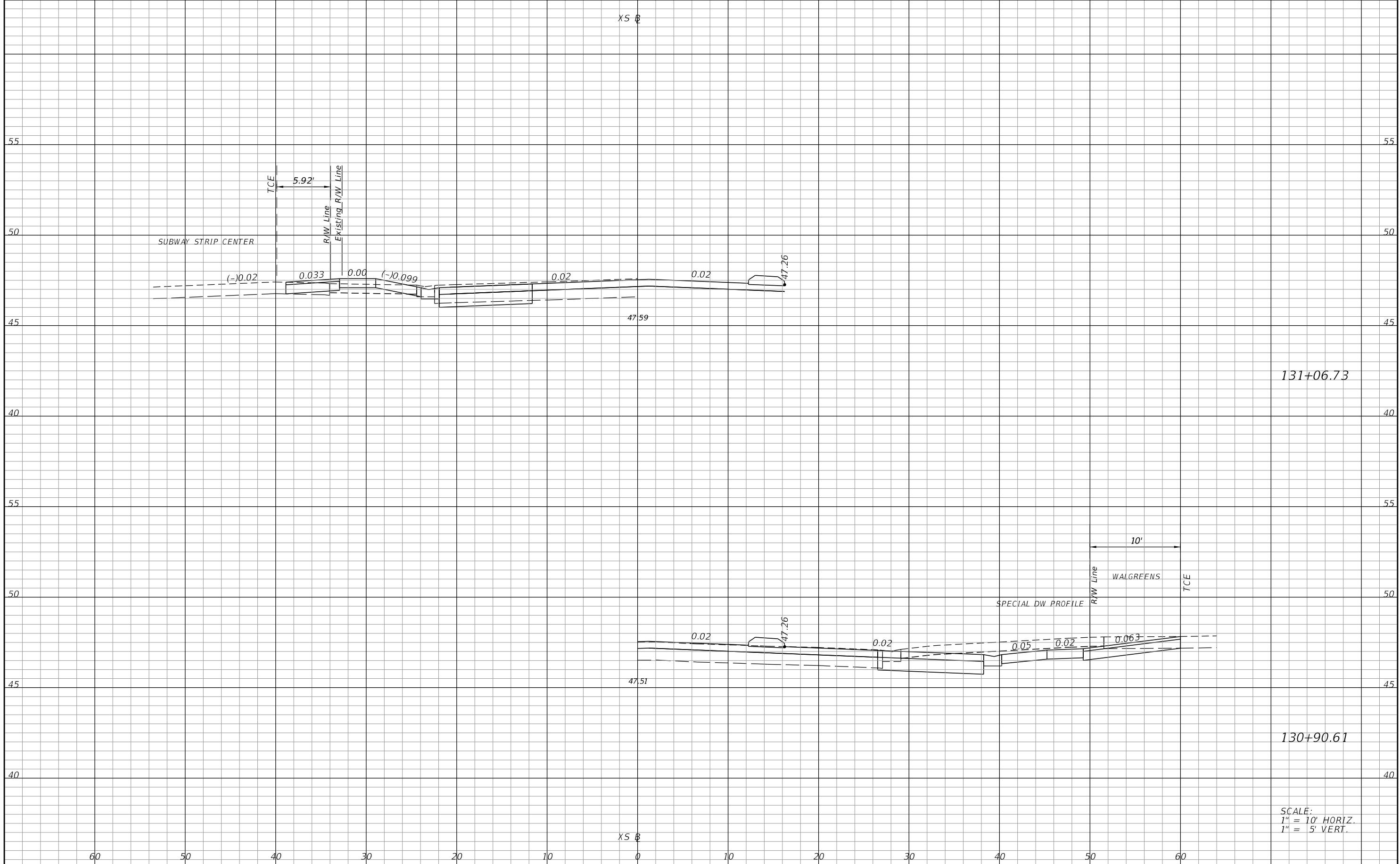
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRIVEWAY HALF SECTIONS**

SHEET NO.
67

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

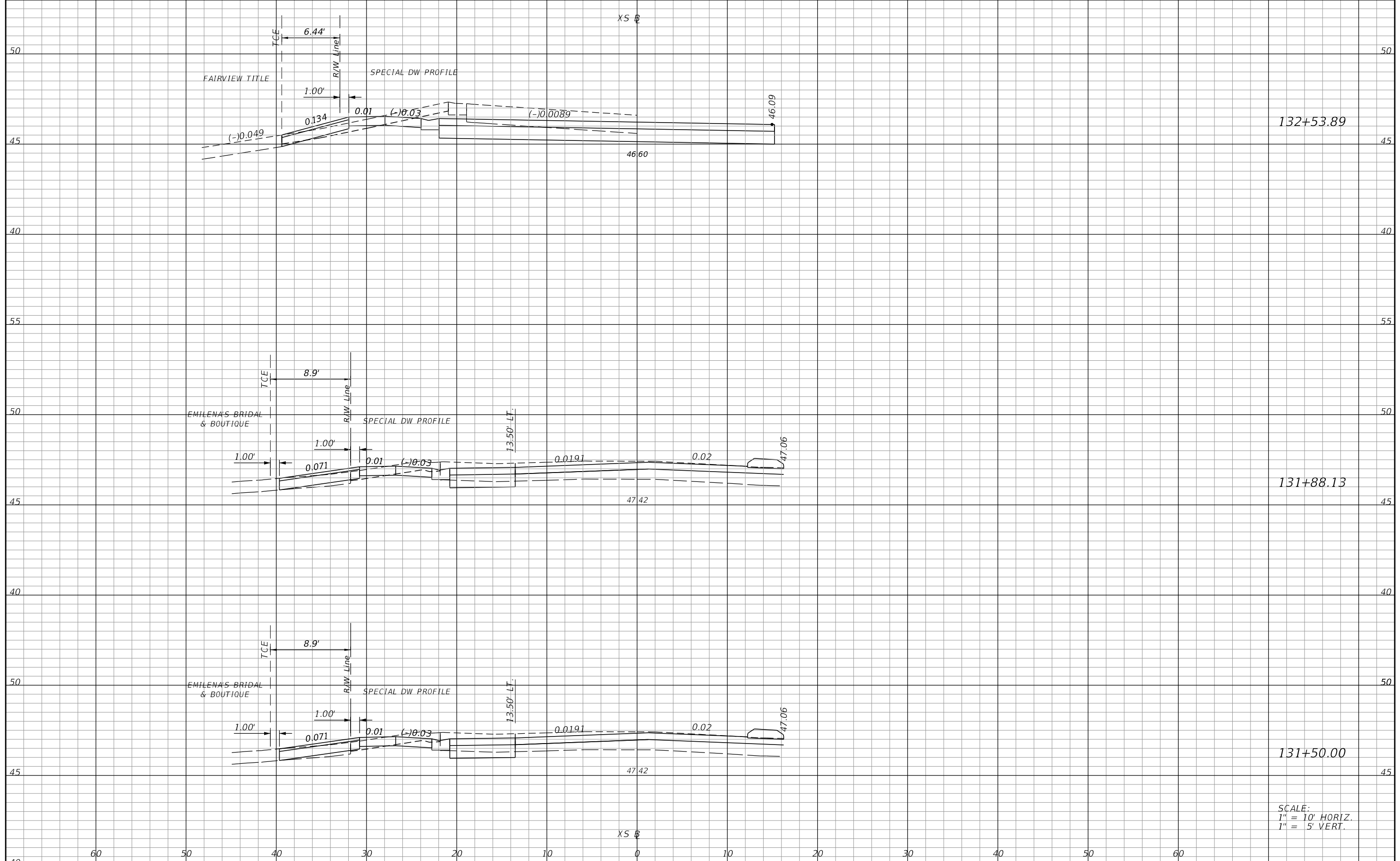
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRIVEWAY HALF SECTIONS**

SHEET NO.  
 68

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

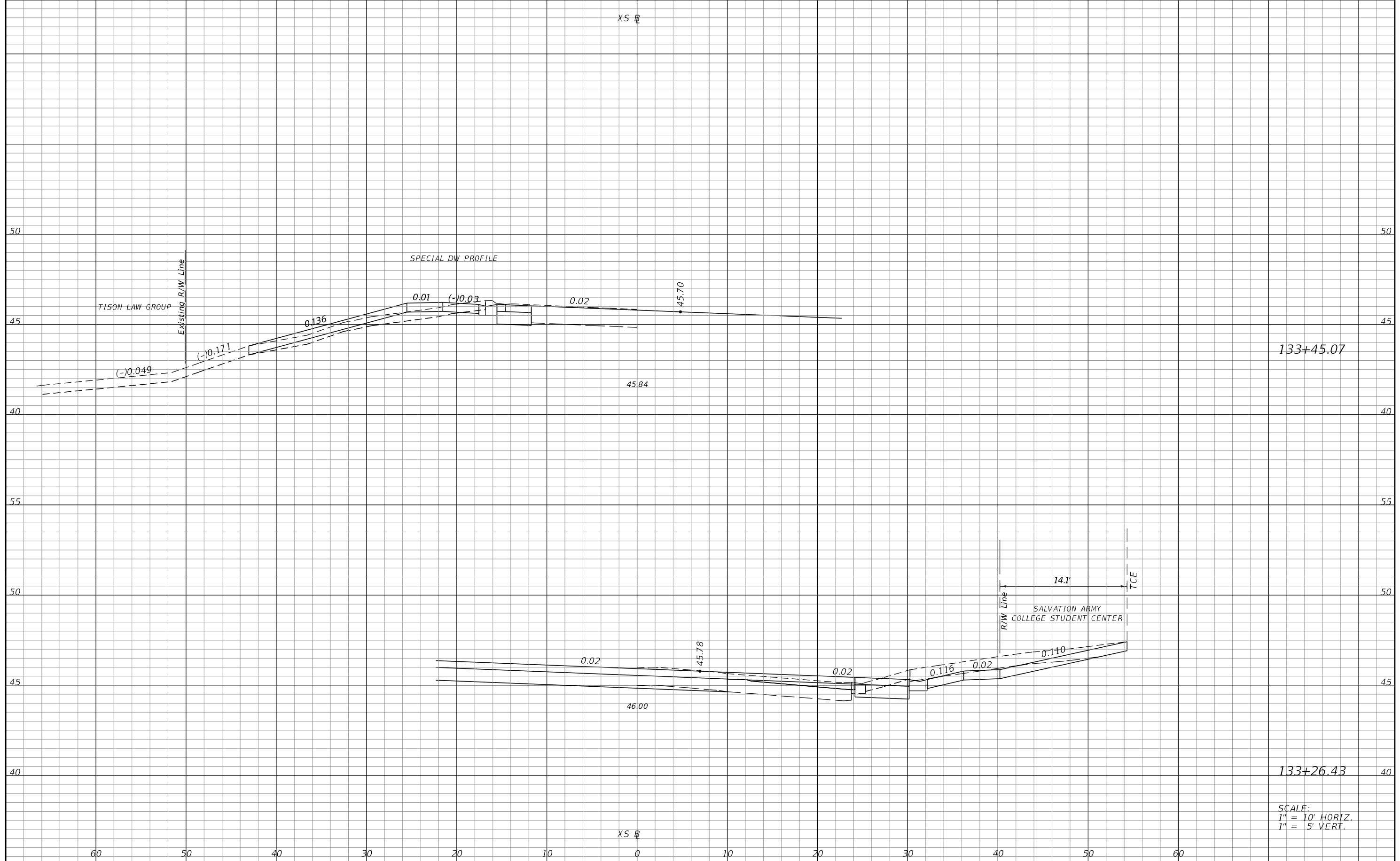
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRIVEWAY HALF SECTIONS**

SHEET NO.  
 69

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



X5 B

X5 B

SCALE:  
 1" = 10' HORIZ.  
 1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

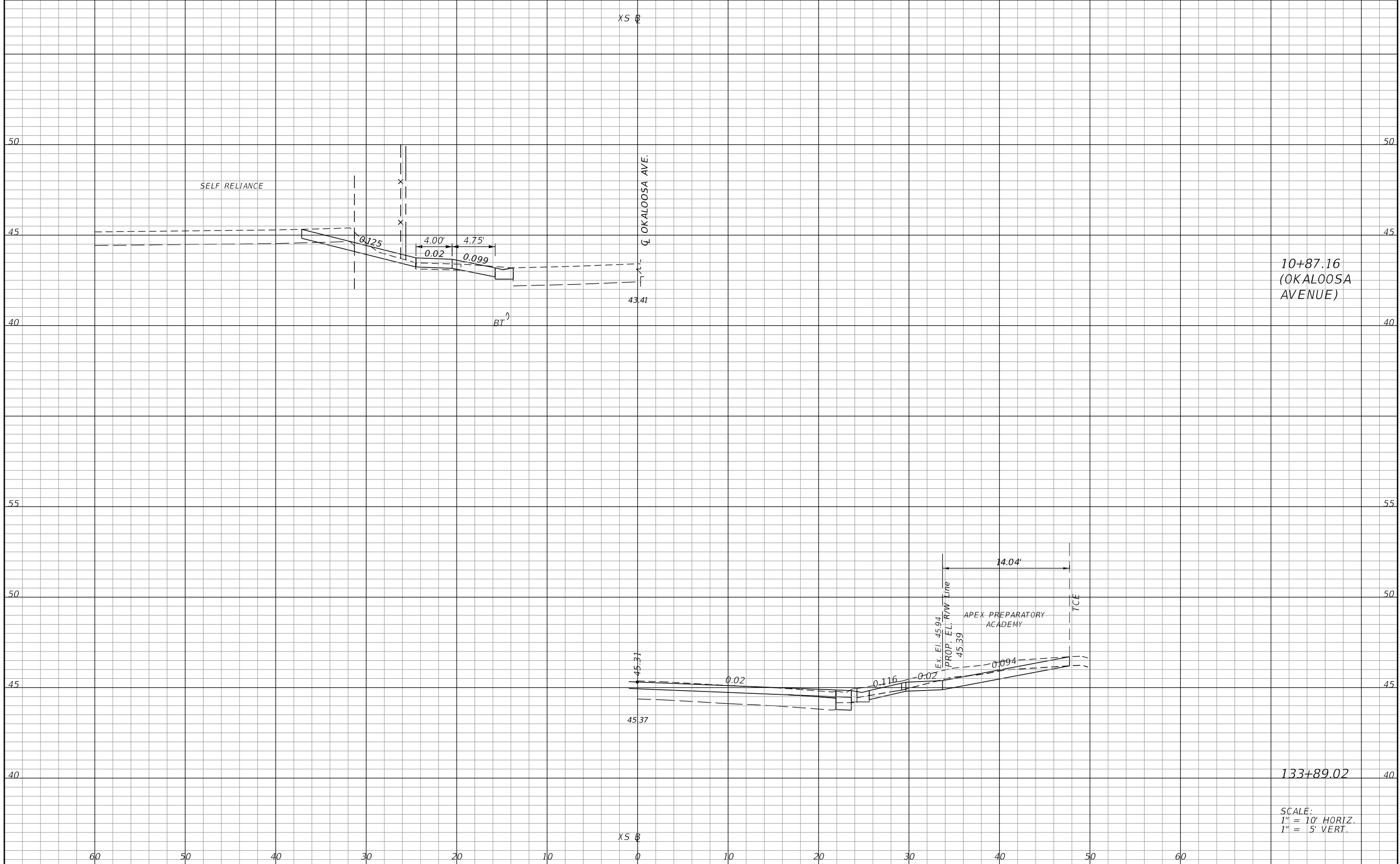
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**DRIVEWAY HALF SECTIONS**

SHEET NO.
70

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



10+87.16  
(OKALOOSA AVENUE)

133+89.02

SCALE:  
1" = 10' HORIZ.  
1" = 5' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**DRIVEWAY HALF SECTIONS**

SHEET NO.  
71

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



STORMWATER POLLUTION PREVENTION PLAN  
 ARMENIA AVENUE AT SR 580/BUSCH BOULEVARD  
 FROM JUST SOUTH OF HUMPHREY STREET TO INTERSECTION OF SEWAHA STREET  
 CITY OF TAMPA PROJECT NO.: 0000005 CONTRACT NO.: 12-D-00057

1. SITE DESCRIPTION:

1. NATURE OF CONSTRUCTION ACTIVITY:

THE PROJECT INCLUDES THE WIDENING, MILLING, AND RESURFACING OF ARMENIA AVENUE, FROM SOUTH OF W. HUMPHREY STREET (STATION 118+05.15) TO W. OF SEWAHA STREET (STATION 134+70.25), A DISTANCE OF 0.316 MILES (1668.10 FEET), TO IMPROVE THE TRAFFIC OPERATIONS OF THE INTERSECTION OF ARMENIA AVENUE AT BUSCH BOULEVARD (STATE ROAD 580). WORK ALSO INCLUDES THE PROVISION OF SIDEWALKS WITH WIDTHS VARYING FROM FIVE TO EIGHT FEET ALONG BOTH SIDES OF ARMENIA. WORK ALSO INCLUDES CONSTRUCTION OF AN EASTBOUND BUSCH BLVD. TO SOUTHBOUND ARMENIA AVENUE RIGHT TURN LANE, SIGNALIZATION MODIFICATIONS, SIGNING AND PAVEMENT MARKINGS AND LIGHTING OF THE PEDESTRIAN CROSSINGS AT INTERSECTIONS, CONSTRUCTION OF STORM DRAINS, AND MODIFICATION OF AN EXISTING DRY RETENTION STORMWATER POND.

2. SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

THE CONTRACTOR IS REQUIRED TO PREPARE A SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN ALONG WITH A DETAILED CONSTRUCTION SCHEDULE TO INDICATE DATES OF MAJOR GRADING ACTIVITIES AND DETERMINE SEQUENCES OF TEMPORARY AND PERMANENT SOIL DISTURBING ACTIVITIES ON ALL PORTIONS OF THE PROJECT.

THE CONTRACTOR WILL BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS, CONSTRUCTION ACTIVITY VARIATIONS, OR AS DIRECTED BY THE ENGINEER.

APPLICABLE EROSION CONTROL DEVICES AND IMPLEMENTATION PROCEDURES ARE SUPPLIED IN THE FDOT STANDARD PLANS 570-001 & 570-010.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF ANY MODIFICATIONS OR ADDITIONAL CONTROLS ARE REQUIRED AND TO OBTAIN DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL ADDITIONAL EROSION CONTROL DEVICES FOLLOWING THE SEQUENCE OF MAJOR ACTIVITIES DESCRIBED BELOW, UNLESS THE CONTRACTOR PROPOSES A DIFFERENT SEQUENCE THAT IS EQUAL OR BETTER AT CONTROLLING EROSION AND TRAPPING SEDIMENT AND IS APPROVED BY THE ENGINEER.

3. GENERAL NOTES:

(a) ALL EROSION AND SEDIMENT CONTROL DEVICES FOR EACH PHASE OF WORK ARE TO BE INSTALLED PRIOR TO BEGINNING WORK ON THAT PHASE.

(b) INSTALL EROSION AND SEDIMENT CONTROL DEVICES WHERE LISTED IN THE CONTRACTOR'S APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR PERIMETER CONTROLS BEFORE THE LAND IS DISTURBED.

(c) PROVIDE SEDIMENT BARRIERS WHERE LISTED IN THE CONTRACTOR'S APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR DITCH BLOCKS DURING CONSTRUCTION.

(d) PROVIDE INLET PROTECTION SYSTEMS AT INLET OPENINGS.

(e) COVER OR STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE.

(f) DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.

(g) TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT FROM SEASONAL CLIMATE CHANGES OR WEATHER EVENTS.

(h) DO NOT REMOVE PERIMETER CONTROLS UNTIL AFTER ALL UPSTREAM AREAS ARE FULLY STABILIZED AND PERMANENT VEGETATION IS ESTABLISHED.

(i) THE CONTRACTOR WILL PROVIDE POLLUTION CONTROL BY IMPLEMENTING DUST CONTROL DURING ALL PHASES OF CONSTRUCTION. THIS WILL BE ACCOMPLISHED BY USING STREET OR VACUUM SWEEPERS.

(j) OFF -SITE RUNOFF SHOULD BE DIVERTED AWAY OR THROUGH THE CONSTRUCTION AREA, IF POSSIBLE. THIS ADDITIONAL FLOW, IF NOT DIVERTED, CAN ADD VOLUME AND SIZE TO STRUCTURAL PRACTICES, REQUIRING MORE FREQUENT MAINTENANCE AND LIMITING EFFECTIVENESS OF EROSION AND SEDIMENT CONTROLS.

(k) THE CONTRACTOR SHALL PREVENT UNAUTHORIZED MATERIALS FROM ENTERING WETLANDS, WATERWAYS, OTHER SURFACE WATERS OR WATERS OF THE US. WETLAND IMPACTS ARE LIMITED TO THE AREAS DESCRIBED IN THE APPROVED PERMITS FOR THE PROJECT.

4. AREA ESTIMATES:

TOTAL PROJECT AREA: APPROXIMATELY 4.60 ACRES.  
 TOTAL AREA TO BE DISTURBED DURING CONSTRUCTION ACTIVITIES: APPROXIMATELY 4.60 ACRES.  
 TOTAL AREA DRAINED BY PROJECT: APPROXIMATELY 5.87 ACRES

5. RUNOFF COEFFICIENTS BEFORE, DURING AND AFTER CONSTRUCTION:

BEFORE: C = 0.50  
 DURING: C = 0.63  
 AFTER: C = 0.76

6. SOILS DATA:

THE PREDOMINANT SOIL TYPES WITHIN THE PROJECT LIMITS ARE:  
 CANDLER-URBAN LAND - HYDROLOGIC SOIL GROUP A; DEPTH TO SHWT >6'  
 TAVARES MILLHOPPER - HYDROLOGIC SOIL GROUP A; DEPTH TO SHWT 3.5' TO 6'

7. RECEIVING WATERS:

THIS FACILITY DOES NOT DISCHARGE TO WATERS LISTED ON THE EPA APPROVED 303(D) LIST (FOR LIST, GO TO: [HTTP://FRWEBGATE.ACCESS.GPO.GOV/CGI-BIN/GETDOC.CGI?DBNAME=2000\\_REGISTER&DOCID=00-10518-FILED.PDF](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=00-10518-filed.pdf)) FOR IMPAIRMENT DUE TO TOTAL SUSPENDED SOLIDS.

THE PROJECT DOES NOT DISCHARGE DIRECTLY TO THE RECEIVING WATERS BUT INSTEAD DISCHARGES TO EXISTING DRAINAGE STRUCTURES, WHICH DRAIN TO ROADSIDE DITCHES, WHICH DRAIN TO THE RECEIVING WATERS.

THE RECEIVING WATER FOR THE NORTH ARMENIA PORTION OF THE PROJECT IS LITTLE TWIN LAKE AT LOCATION:

LATITUDE: 29 DEGREES 02 MINUTES 6.62 SECONDS NORTH; LONGITUDE 82 DEGREES 29 MINUTES 6.83 SECONDS WEST

THE RECEIVING WATER FOR THE BUSCH BOULEVARD PORTION OF THE PROJECT IS LITTLE TWIN LAKE AT LOCATION:

LATITUDE: 29 DEGREES 02 MINUTES 6.62 SECONDS NORTH; LONGITUDE 82 DEGREES 29 MINUTES 6.83 SECONDS WEST

THE RECEIVING WATER FOR THE SOUTH ARMENIA PORTION OF THE PROJECT IS KIRBY CREEK AT LOCATION:

LATITUDE: 28 DEGREES 01 MINUTES 40.93 SECONDS NORTH; LONGITUDE 82 DEGREES 29 MINUTES 3.06 SECONDS WEST

8. OUTFALL INFORMATION (TEMPORARY AND PERMANENT): THERE ARE 3 OUTFALLS:  
 DESCRIPTION

LATITUDE  
 LONGITUDE


18" PIPE/38" X 60" PIPE JUNCTION @ EXISTING MANHOLE - LATITUDE: 28 DEGREES 2 MINUTES 6.47 SECONDS NORTH;  
 LONGITUDE: 82 DEGREES 29 MINUTES 2.84 SECONDS WEST

15" PIPE @ EXISTING CURB INLET - LATITUDE 28 DEGREES 2 MINUTES 1.23 SECONDS NORTH; LONGITUDE: 82 DEGREES 29 MINUTES 6.96 SECONDS WEST

18" PIPE/EXISTING MITERED END SECTION - LATITUDE: 28 DEGREES 1 MINUTE 49.10 SECONDS NORTH; LONGITUDE: 82 DEGREES 29 MINUTES 2.64 SECONDS WEST

9. DESCRIPTION OF STORMWATER MANAGEMENT: (EXISTING/PROPOSED)

THE CONSTRUCTION PLANS ARE BEING USED AS THE SITE MAP. THE LOCATION OF THE REQUIRED INFORMATION IS DESCRIBED BELOW ON THE FOLLOWING SHEET. THE SHEET NUMBERS FOR THE PLAN SHEETS REFERENCES ARE IDENTIFIED ON THE KEY SHEET OF THESE CONSTRUCTION PLANS.

REVISIONS				 <p>ENGINEERING GROUP            1713 E. 9th AVENUE   TAMPA, FL 33605            P 813.386.2101   TF 888.603.1942   F 813.386.2106            EOR   DEREK M. GIL, PE 54798</p>	CITY OF TAMPA TRANSPORTATION DIVISION		<p><b>STORMWATER POLLUTION PREVENTION PLAN</b></p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057			72
					ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

- (a) EXISTING DRAINAGE PATTERNS: EXISTING DRAINAGE PATTERNS WILL NOT BE ALTERED IN THE PROPOSED CONDITIONS.
- (b) APPROXIMATE SLOPES: THE SLOPES OF THE SITE ARE SHOWN ON THE CROSS SECTION SHEETS, THE PLAN-PROFILE SHEETS, AND THE POND DETAIL SHEETS.
- (c) AREAS OF SOIL DISTURBANCE: THE AREAS TO BE DISTURBED ARE INDICATED ON THE PLAN-PROFILE SHEETS, THE CROSS SECTION SHEETS AND THE POND DETAIL SHEETS. ANY AREAS WHERE PERMANENT FEATURES ARE SHOWN TO BE CONSTRUCTED ABOVE OR BELOW GROUND WILL BE DISTURBED.
- (d) LOCATIONS OF TEMPORARY CONTROLS: THESE WILL BE BASED ON THE CONTRACTOR'S ACTIVITIES AND SHALL BE PLACED IN A MANNER TO PROTECT RECEIVING WATERS.
- (e) LOCATION OF PERMANENT CONTROLS: THE CONVEYANCE SWALES, STORM DRAIN SYSTEMS, AND STORMWATER PONDS ARE THE PRIMARY PERMANENT STORMWATER MANAGEMENT CONTROLS. THESE ARE SHOWN ON THE ROADWAY PLANS AND POND DETAIL SHEETS.
- (f) AREAS TO BE STABILIZED: TEMPORARY STABILIZATION PRACTICES ARE SHOWN IN THE SAME LOCATION AS THE TEMPORARY CONTROLS MENTIONED ABOVE. PERMANENT STABILIZATION IS SHOWN ON THE TYPICAL SECTION SHEETS, THE PLAN-PROFILE SHEETS, AND THE POND DETAIL SHEETS.
- (g) SURFACE WATERS: UNNAMED OFFSITE WETLANDS TO LITTLE TWIN LAKE (NOT IMPACTED BY PROJECT CONSTRUCTION)
- (h) DISCHARGE POINTS: SEE OUTFALL INFORMATION.

II. CONTROLS:

1. EROSION AND SEDIMENT CONTROLS

\* WATER QUALITY MONITORING SHALL BE CONDUCTED BY THE CONTRACTOR UPON THE OBSERVATION THAT THE WATER QUALITY STANDARDS MAY BE VIOLATED BY THE CONTRACTOR'S ACTIVITIES. MONITORING LOCATIONS SHALL BE DESIGNATED BY THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR MONITORING ANY ACTIVITIES FOR VIOLATION OF WATER QUALITY STANDARDS AS THEY RELATE TO TURBIDITY (29 NTU'S ABOVE BACKGROUND). MONITORING OF WATER QUALITY SHALL BE CONDUCTED A MINIMUM OF TWICE DAILY FOR ANY EARTHWORK ACTIVITIES WITHIN THE STRUCTURE IMPROVEMENT AREA. MONITORING WILL BE ACCOMPLISHED BY RECORDING TURBIDITY READINGS FROM THE CENTER OF THE STREAM, ONE UPSTREAM OF THE ACTIVITY AND ONE DOWNSTREAM OF THE EROSION CONTROL DEVICES, BUT WITHIN THE PROJECT RIGHT OF WAY. IF WATER QUALITY STANDARDS ARE VIOLATED, CONSTRUCTION SHOULD BE STOPPED IMMEDIATELY AND EROSION CONTROL DEVICES REEVALUATED BY THE CITY OF TAMPA REPRESENTATIVE PRIOR TO ANY CONTINUATION OF ACTIVITY. MONITORING ACTIVITIES AND TURBIDITY READINGS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION REPORT AND CONTINUED UNTIL TURBIDITY READINGS FALL BELOW AN ACCEPTABLE LEVEL (29 NTU'S ABOVE BACKGROUND). WATER QUALITY MONITORING MAY BE CONDUCTED DURING ANY PHASE OF CONSTRUCTION AS DIRECTED BY THE CONTRACTOR.

2. STABILIZATION PRACTICES:

- (a) STABILIZATION MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO MAINTAINING, ESTABLISHING AND USING VEGETATION, APPLYING MULCHES, SODDING, SEEDING, BMP'S AND THE USE OF ROLLED EROSION CONTROLLED PRODUCTS. WHEN CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SIDE SLOPES SHALL BE STABILIZED WITH PERFORMANCE SODDING OR SEEDING OR OTHER APPROVED METHOD OF STABILIZATION INCLUDED IN THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEW MANUAL (E&SC MANUAL). SOD SHALL BE IN ACCORDANCE TO SPECIFICATION SECTION 981.
- (b) STABILIZATION SHALL TAKE PLACE AS SOON AS PRACTICAL IN PORTIONS OF THE PROJECT WHERE CONSTRUCTION ACTIVITIES HAVE CEASED, BUT NO LATER THAN SEVEN (7) DAYS AFTER ANY CONSTRUCTION ACTIVITY CEASES EITHER TEMPORARILY OR PERMANENTLY
- (c) ALL EROSION CONTROL DEVICES SHALL BE INSTALLED ACCORDING TO THE CONTRACT DOCUMENTS, AND THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN.
- (d) ANY TEMPORARY MATERIAL USED FOR POLLUTION OR EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT AND FINAL STABILIZATION OF THE PROJECT HAS BEEN ACHIEVED.

- (e) SEDIMENT BARRIERS: SILT FENCE OR SYNTHETIC BALES SHOULD BE USED ALONG THE LENGTH OF THE PROJECT ONLY WHERE THE GROUND SLOPES AWAY FROM THE RIGHT OF WAY OR WHERE THERE IS POTENTIAL FOR SEDIMENT TO BE DIRECTED OFF-SITE. PARTICULAR CARE SHOULD BE USED WHEN THERE ARE WETLANDS OR WATERS OF THE U.S.
- (f) SEDIMENT BARRIERS SHOULD BE USED AROUND THE PERIMETER OF STOCKPILE AREAS.
- (g) SPACING OF SEDIMENT BARRIERS USED AS DITCH OR SWALE CHECKS/DAMS SHOULD BE BASED UPON THE HEIGHT OF THE BARRIER AND THE SLOPE OF THE DITCH OR SWALE.
- (h) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFYING SOIL TRACKING PREVENTION SYSTEMS OR PROCEDURES AS NEEDED.

3. STRUCTURAL PRACTICES FOR EROSION AND SEDIMENT CONTROL: THESE ITEMS ARE COMMONLY USED IN AREAS WHERE CONTINUOUS CONSTRUCTION ACTIVITIES CHANGE THE NATURAL CONTOURS AND DRAINAGE RUNOFF PATTERNS.

(a) ROLLED EROSION CONTROL PRODUCTS (ARTIFICIAL COVERINGS)

PURPOSE: TO PROTECT DISTURBED SLOPE SURFACES AGAINST EROSION DUE TO RAINFALL OR FLOWING WATER.

- (1) USED FOR PAUSES IN CONSTRUCTION DUE TO INCLEMENT WEATHER OR OTHER CIRCUMSTANCES. COULD INCLUDE NATURAL OR SYNTHETIC FIBER MATS, PLASTIC SHEETING OR NETS.
- (2) USED FOR EROSION CONTROL THAT FACILITATES PLANT GROWTH WHILE PERMANENT GRASS IS ESTABLISHED; COULD INCLUDE BIODEGRADABLE EROSION CONTROL BLANKETS INSTALLED ON A SEEDED AREA, ON FILL SLOPES OR IN DITCHES.
- (3) USED TO STABILIZE DRAINAGE CHANNELS. CONSULT E&SC MANUAL TO DETERMINE CORRECT PRODUCT TYPE FOR CHANNEL STABILIZATION.

(b) RUNOFF CONTROL STRUCTURE /TEMPORARY SLOPE DRAIN:

PURPOSE: TO PROTECT HILLSIDE SURFACES AGAINST EROSION DUE TO CONCENTRATED FLOW OF RUNOFF WATER.

- (1) USED ON FILL SLOPES AND CUT SLOPES TO REDUCE SEDIMENT TRANSPORT AND COULD INCLUDE TEMPORARY SLOPE DRAINS, GRASS-LINED CHANNELS, ROCK-LINED CHANNELS AND CHECK DAMS.
- (2) RUNOFF CONTROL STRUCTURES TYPICALLY DISCHARGE TO A SEDIMENT BASIN.

(c ) SEDIMENT BASINS (TEMPORARY CONTAINMENT SYSTEMS):

PURPOSE: A CONTAINMENT SYSTEM IS DESIGNED TO DETAIN AN ADEQUATE VOLUME OF RUNOFF, REDUCE THE VELOCITY OF FLOW THROUGH THE SYSTEM, ALLOW FOR SETTLEMENT OF SUSPENDED SOLIDS AND REGULATE THE DISCHARGE RATE FROM THE SEDIMENT BASIN.

- (1) SEDIMENT BASINS MUST BE PLACED IN STRATEGIC LOCATIONS WITHIN THE ACTIVE AREAS OF CONSTRUCTION. CONTRIBUTING AREA AND SIZE OF TARGET SOIL PARTICLE WILL DICTATE WHETHER THE SEDIMENT BASIN WILL BE TYPE 1, TYPE 2 OR TYPE 3 SYSTEM.
- (2) THE USE OF SMALLER PRE-SEDIMENTATION BASINS USED IN CONJUNCTION WITH LARGER PERMANENT RETENTION/DETENTION PONDS ARE EFFECTIVE IN CAPTURING LARGER VOLUMES OF SEDIMENTS. THIS TECHNIQUE REQUIRES PERIODICALLY SCHEDULED REMOVAL OF THE ACCUMULATED SEDIMENTS.

(d) SEDIMENT BARRIERS (TEMPORARY CONSTRUCTION SITE BMP'S)

PURPOSE: SEDIMENT BARRIERS EITHER OBSTRUCT FLOW OR PREVENT THE PASSAGE OF WATER WHILE CONSTRUCTION ACTIVITIES OCCUR. SMALLER SEDIMENT BARRIERS MAY FUNCTION AS A SMALL SEDIMENT CONTAINMENT SYSTEM OR AS A METHOD TO REDUCE FLOW VELOCITY.

- (1) THESE CONSTRUCTION BMP'S CAN INCLUDE SYNTHETIC BALES, STAKED SILT FENCE, TURBIDITY BARRIER, STORM SEWER INLET BARRIERS, ROCK BARRIERS, GEOSYNTHETIC BARRIERS, ETC. IN ACCORDANCE WITH DESIGN STANDARD 104.

REVISIONS				 <p>1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	CITY OF TAMPA TRANSPORTATION DIVISION		<p><b>STORMWATER POLLUTION PREVENTION PLAN</b></p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057			73
					ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

(2) APPROPRIATE LOCATIONS INCLUDE SITE PERIMETER, BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION, BELOW THE TOE OF EXPOSED AND ERODIBLE SLOPES, ALONG THE TOE OF STREAM AND CHANNEL BANKS, AROUND DRAINS AND INLETS LOCATED IN LOW POINTS OR THE DOWNSTREAM EDGE OF AREAS UNDERGOING VERTICAL OR BOX CULVERT CONSTRUCTION ACTIVITIES.

(3) INAPPROPRIATE LOCATIONS FOR THESE SAME MEASURES INCLUDE PARALLEL TO A HILLSIDE CONTOUR, IN CHANNELS WITH CONCENTRATED FLOW /UNLESS PROPERLY REINFORCED/, UPSTREAM OR DOWNSTREAM OF CULVERTS WITH CONCENTRATED FLOW, IN FRONT OF OR AROUND INLETS ON A GRADE WITH CONCENTRATED FLOW OR IN FLOWING STREAMS.

(e) FLOATING TURBIDITY BARRIER

PURPOSE: USED IN PERMANENT BODIES OF WATER TO RETAIN SEDIMENT AND FLOATING DEBRIS FROM A CONSTRUCTION AREA SO THAT REMOVAL OR CONTAINMENT OF THE MATERIAL IS POSSIBLE. THEY ARE ALSO USED TO CONTROL MIGRATION OF SUSPENDED SEDIMENTS.

(1) TYPE I, LIGHT DUTY, IS USED WHERE THERE IS LITTLE OR NO CURRENT, NO WIND AND NO WAVE ACTION.

(2) TYPE II, MODERATE DUTY, IS USED WITH SOME CURRENT (1<3.5 FT. PER SECOND) AND SOME EXPOSURE TO WIND.

(3) TYPE III, HEAVY DUTY, IS USED WITH GREATER CURRENT (3.5-5.0 FT. PER SECOND), MODERATE WIND AND WAVE ACTION.

(4) BARRIER MUST BE ATTACHED AT BOTH ENDS AND WEIGHTED ON THE BOTTOM.

(5) MULTIPLE LINES OF BARRIER MAY BE USED IN SOME CIRCUMSTANCES FOR ADDITIONAL PROTECTION.

(6) STANDARD PANELS FOR WATER DEPTHS ARE 5.0'. ADDITIONAL PANELS CAN BE USED FOR WATER DEPTHS > 5.0'.

(f) STAKED TURBIDITY BARRIER

PURPOSE: THIS ITEM IS COMMONLY USED IN AREAS WHERE CONTINUOUS CONSTRUCTION ACTIVITIES CHANGE THE NATURAL CONTOURS AND DRAINAGE RUNOFF PATTERNS.

(1) COMMONLY USED IN LAKES AND STREAMS AS A SEDIMENT CONTAINMENT SYSTEM; SHOULD NOT BE USED WHERE WATER CURRENTS MOVE THE CURTAIN AND DISLodge COLLECTED SEDIMENTS.

(2) MAXIMUM DEPTH OF PANEL IS 3'-8".

(3) POST MUST BE A MINIMUM LENGTH OF 5.0' AND A MINIMUM OF 10" OF FABRIC MUST BE IMBEDDED IN THE GROUND.

(g) INLET PROTECTION SYSTEM

PURPOSE: ANY OF A NUMBER OF SEDIMENT BARRIERS THAT EITHER PREVENT SEDIMENT FROM ENTERING AN INLET OR TRAP THE SEDIMENTS ONCE THEY ENTER THE INLET.

(1) TYPICAL APPLICATIONS INCLUDE ROCK BARRIERS, FRAME AND FILTER BARRIERS, CURB INLET "SUMP" BARRIER, CURB INLET DIVERSION BERM, CURB AND GUTTER SEDIMENT CONTAINMENT SYSTEM OR CURB INLET INSET.

(2) SHOULD BE INSTALLED ONLY WHEN CONSTRUCTION ACTIVITIES ARE ON-GOING AND ONLY WHERE SUMP CONDITIONS EXIST.

(3) SHOULD NOT BE USED WHEN CONSTRUCTION IS COMPLETE AND SHOULD NOT BE USED IN AREAS WHERE FLOODING COULD ENCROACH INTO THE TRAVEL LANES.

(h) SOIL TRACKING PREVENTION DEVICE

PURPOSE: TEMPORARY STRUCTURES TO ASSIST WITH THE REMOVAL OF SOIL MATERIAL CAPTURED ON VEHICLE TIERS BEFORE THE VEHICLES ENTER THE ROADWAY.

(1) A SOIL TRACKING PREVENTION DEVICE WILL BE USED WHEREVER VEHICLES ENTER THE ROADWAY FROM STAGING AREAS.

(2) INGRESS/EGRESS SHALL BE MONITORED AT ALL TIMES DURING CONSTRUCTION AT NON-STAGING AREAS FOR SOIL TRACKING. WHEN SOIL TRACKING OCCURS, ROADWAY SHALL BE SWEEPED USING A BROOM TRUCK.

4. CHEMICAL TREATMENTS FOR EROSION AND SEDIMENT CONTROL:

(a) CHEMICAL TREATMENT - POLYACRYLAMIDES (PAM AND PAM BLENDS)

PURPOSE: REDUCE SOIL EROSION THROUGH SOIL BINDING, USED AS A WATER TREATMENT ADDITIVE TO REMOVE SUSPENDED SOLIDS FROM RUNOFF, PROVIDES APPROPRIATE MEDIUM FOR GROWTH OF VEGETATION FOR STABILIZATION AND INCREASES INFILTRATION BY INCREASING THE SIZE OF SOIL PARTICLE.

(1) CAN BE USED ON DISTURBED SOILS, CAN BE USED IN CONJUNCTION WITH OTHER BMP'S TO ENHANCE PERFORMANCE, CAN BE APPLIED IN DISSOLVED FORM WITH WATER, CAN BE USED AS A DRY POWDER, CAN BE USED IN GRANULAR FORM OR MAY BE USED IN THE FORM OF FLOC LOGS.

(2) HIGHER CONCENTRATIONS OF PAM'S DON'T INCREASE THE EFFECTIVENESS OF THE PRODUCT.

(3) ACTIVELY WORKED AREAS WILL REQUIRE REAPPLICATION TO REMAIN EFFECTIVE.

(4) PAM SHOULD NOT BE USED WHERE THERE IS A POTENTIAL FOR EQUIPMENT CLOGGING OR TOXICITY IS A CONCERN.

NOTE: THIS PAY ITEM IS CONSIDERED A CONTRACTOR'S OPTION FOR SEDIMENT CONTROL ISSUES THAT ARE PROJECT/SITE SPECIFIC. USE FDOT PAY ITEM 104-19 (OR APPLICABLE COT PAY ITEM) CHEMICAL TREATMENT FOR SOIL BINDERS AND POLYACRYLAMIDES (PAM AND PAM BLENDS).

(b) TEMPORARY SOIL STABILIZATION - AS AN ADDITIONAL EROSION CONTROL MEASURE, CHEMICAL ADHESIVE STABILIZER (POLYACRYLAMIDE) CAN BE USED WHERE SOIL RUNOFF WILL DRAIN TO WETLANDS OR SURFACE WATERS. SUCH USAGE SHALL BE LIMITED TO AREAS WHERE VEHICLE TRAFFIC AND OTHER DISTURBANCES WILL NOT OCCUR FOR MORE THAN 7 DAYS. POLYACRYLAMIDE CAN BE APPLIED TO EXPOSED SOILS PRIOR TO PLACEMENT OF ARTIFICIAL COVERINGS AND ROLLED EROSION CONTROL PRODUCTS. POLYACRYLAMIDE SHALL BE USED TO STABILIZE SOIL STOCKPILES WHEN THE STOCKPILE WILL REMAIN UNDISTURBED FOR MORE THAN 7 DAYS. POLYACRYLAMIDE SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

5. DEWATERING OPERATIONS (OPTIONAL - BASED ON PROJECT APPLICABILITY):

DESCRIPTION: DEWATERING OPERATIONS ARE PRACTICES THAT MANAGE THE DISCHARGE OF TURBID WATER WHEN WATERS OTHER THAN STORMWATER AND ACCUMULATED SURFACE WATERS MUST BE REMOVED FROM A LOCATION SO THAT CONSTRUCTION WORK MAY BE ACCOMPLISHED. THE WATERS CAN INCLUDE GROUNDWATER, WATER FROM COFFERDAMS, WATER DIVERSIONS, AND WATERS USED DURING CONSTRUCTION THAT MUST BE REMOVED FROM A WORK AREA.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED STATE AND LOCAL PERMITS FOR THE INSTALLATION AND OPERATION OF DEWATERING AND/OR GROUNDWATER CONTROL SYSTEMS. THIS COULD INCLUDE, BUT IS NOT LIMITED TO, THE ACQUISITION OF A WATER USE PERMIT FROM THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND/OR A GENERIC PERMIT TO DISCHARGE PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED CONSTRUCTION SITE.

(a) ENVIRONMENTAL AGENCIES ARE ESPECIALLY CONCERNED WITH THE PROTECTION OF WETLANDS FROM DRAWDOWN EFFECTS AND PROTECTING RECEIVING WATER BODIES FROM SEDIMENTATION AND POSSIBLE CAPACITY LIMITATIONS.

(b) THREE PRIMARY METHODS OF DEWATERING COMMONLY USED IN FLORIDA ARE RIM DITCHING, SOCK/PIPE/HORIZONTAL WELLS AND WELL-POINT SYSTEMS.

( c ) METHODS FOR CONTAINING SEDIMENTATION CAN INCLUDE A COMBINATION OF BMP'S AND SEDIMENT TRAPS, SEDIMENT BASINS, GRAVITY BAG FILTERS, WEIR TANKS, DEWATERING TANKS, SAND MEDIA/PRESSURIZED BAGS AND CHEMICAL TREATMENTS.

REVISIONS				 <p>ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	<p>CITY OF TAMPA TRANSPORTATION DIVISION</p> <p>CONTRACT NO: 12-D-00057</p> <p>ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.</p>		<p>STORMWATER POLLUTION PREVENTION PLAN</p>		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION						74

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

6. PERMANENT CONTROLS FOR EROSION AND SEDIMENT CONTROL:

- \*STORMWATER PONDS
- \*SOD

III. OTHER CONTROLS:

1. WASTE DISPOSAL:

THE CONTRACTOR SHALL DESCRIBE THE PROPOSED PROCEDURES TO COMPLY WITH APPLICABLE STATE AND LOCAL REGULATIONS FOR WASTE DISPOSAL (FERTILIZERS, PESTICIDES, AND TOXIC SUBSTANCES), SANITARY SEWER, OR SEPTIC SYSTEMS IN THE EROSION CONTROL PLAN. THE CONTRACTOR SHALL ADDRESS THE GENERATION, APPLICATION, MIGRATION, STORAGE, AND DISPOSAL OF THESE SUBSTANCES. THE PROPOSED PROCEDURES SHALL COMPLY WITH APPLICABLE SUBSECTIONS OF EITHER SECTION 981 OR 982 OF THE SPECIFICATIONS.

\* THE CONTRACTOR WILL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES.

\*ALL FERTILIZER AND CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.

\* NO SOLID MATERIALS INCLUDING BUILDING AND CONSTRUCTION MATERIALS SHALL BE DISCHARGED TO WETLANDS OR BURIED ON SITE.

\*ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS BY A LICENSED SANITARY WASTE COMPANY.

2. OFF-SITE VEHICLE TRACKING WILL BE CONTROLLED BY THE FOLLOWING METHODS:

- (a) LOADED HAUL TRUCKS ARE TO BE COVERED BY A TARPULIN AT ALL TIMES.
- (b) EXCESS DIRT ON ROAD SHALL BE REMOVED DAILY.
- (c) STABILIZING CONSTRUCTION ENTRANCES.
- (d) USE ROADWAY SWEEPERS DURING DUST GENERATING ACTIVITIES SUCH AS EXCAVATION AND MILLING OPERATIONS.

3. STATE AND LOCAL REGULATIONS: PERMITS WILL BE REQUIRED FROM THE FOLLOWING AGENCIES:

- \*SWFWMD-PENDING;
- \*USACOE-PENDING;
- \*NPDES-PENDING,
- \*HCEPC-PENDING
- \*FDOT-PENDING

4. NON-STORMWATER (INCLUDING SPILL REPORTING):

THE CONTRACTOR WILL PROVIDE THE CITY OF TAMPA WITH AN EROSION CONTROL PLAN THAT WILL INCLUDE SPILL CONTAINMENT, REPORTING, AND RESPONSES. THE PLAN SHALL SPECIFY WHAT MANAGEMENT PRACTICES AND CONTAINMENT METHODS WILL BE USED TO PREVENT POTENTIAL POLLUTANTS (FUEL, LUBRICANTS, HERBICIDES, ETC) FROM SPILLING INTO THE SOIL OR INTO THE SURFACE WATERS. IF A SPILL DOES OCCUR, OR IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT THE ENGINEER IMMEDIATELY.

IV. MAINTENANCE:

THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIRS OF ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES WHEN NOTICE OF TERMINATION IS MAILED. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND PROPER DISPOSAL OF SEDIMENT BUILDUP THROUGH THE LIFE OF THE INSTALLED EROSION AND SEDIMENT CONTROL DEVICES.

\* ALL CONTROL MEASURES SHALL BE MAINTAINED DAILY BY THE CONTRACTOR AND ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF NOTICE.

\* SODDING SHALL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

\* SYNTHETIC BALES SHALL BE MAINTAINED TO ENSURE THEIR USEFULNESS AND NOT BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE. REMOVE SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE BALES OR WHEN WATER PONDS IN UNACCEPTABLE AMOUNTS OR AREAS.

\* STAKED SILT FENCES SHALL NOT BLOCK OR IMPEDE STORMWATER OR DRAINAGE AND BE REPLACED EVERY TWELVE (12) MONTHS OR WHEN THEY HAVE SERVED THEIR USEFULNESS. REMOVE SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE OR WHEN WATER PONDS IN UNACCEPTABLE AMOUNTS OR AREAS.

\* STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED TO PREVENT CLOGGING OR ROCK BEDDING WHICH MAY IMPEDE THE USEFULNESS OF THE STRUCTURE.

\*SEDIMENT BASINS SHALL BE UTILIZED UNTIL THE AREAS THAT DRAIN TO PERMANENT STORMWATER MANAGEMENT FACILITIES ARE STABILIZED. REMOVE SEDIMENT FROM THE SEDIMENT BASIN WHEN IT BECOMES MORE THAN 1.5 FT IN DEPTH AT ANY TIME.

V. INSPECTION:

QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT PRODUCES 0.50 INCHES OR GREATER OF RAINFALL.

- (a) POINTS OF DISCHARGE TO WATERS OF THE U.S
- (b) POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM DRAIN SYSTEMS
- (c) DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED
- (d) AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION
- (e) STRUCTURAL CONTROLS
- (f) STORMWATER MANAGEMENT SYSTEMS
- (g) LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE

\* THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD WEEKLY RAINFALL IN ACCORDANCE WITH THE NPDES PERMIT. ALL CONTROL MEASURES WILL BE MAINTAINED DAILY BY THE CONTRACTOR.

\* ALL EROSION AND WATER POLLUTION ABATEMENT AND CONTROL MEASURES WILL BE INSPECTED DAILY BY THE CONTRACTOR'S PERSONNEL WHO ARE FDEP CERTIFIED STORMWATER MANAGEMENT INSPECTORS.

\* THE CONTRACTOR SHALL COMPLETE ALL SWPPP INSPECTION REPORT FORMS REQUIRED BY THE NPDES PERMIT.

\*WHERE SITES HAVE BEEN PERMANENTLY STABILIZED INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.

VI. TRACKING AND REPORTING:


(1) THE CONTRACTOR SHALL SUBMIT A WEEKLY REPORT TO THE CITY OF TAMPA DOCUMENTING THE DAILY INSPECTIONS AND MAINTENANCE OR REPAIRS TO THE SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL MAINTAIN ALL REQUIRED REPORTS AND COMPLETE ALL SWPPP INSPECTION FORMS.

(2) PREPARATION OF ALL THE CONTRACTOR'S REPORTS OF INSPECTION, MAINTENANCE AND REPAIRS REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION, SHALL BE INCLUDED IN THE INDIVIDUAL COSTS OF THE EROSION AND SEDIMENT CONTROL DEVICES OF THE PROJECT.

(3) THE CONTRACTOR SHALL USE THE MOST RECENT CONSTRUCTION INSPECTION REPORT (#650-040-03), FOR DAILY INSPECTIONS.

VII. NON-STORMWATER DISCHARGES

THE CONTRACTOR SHALL IDENTIFY ALL ANTICIPATED NON-STORMWATER DISCHARGES (EXCEPT FLOWS FROM FIRE FIGHTING ACTIVITIES). THE CONTRACTOR SHALL DESCRIBE THE PROPOSED MEASURES TO PREVENT POLLUTION OF THESE NON-STORMWATER DISCHARGES. IF THE CONTRACTOR ENCOUNTERS CONTAMINATED SOIL OR GROUNDWATER, CONTACT THE ENGINEER IMMEDIATELY.

REVISIONS				 <p>ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	<p>CITY OF TAMPA TRANSPORTATION DIVISION</p>		<p><b>STORMWATER POLLUTION PREVENTION PLAN</b></p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		<p>CONTRACT NO: 12-D-00057</p>			75
					<p>ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.</p>			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

1. NOTICE OF SPECIAL CIRCUMSTANCES WITH THIS PROJECT:  
 CSX RAILROAD WILL GIVE THE CITY APPROXIMATELY TWO WEEKS NOTICE PRIOR TO COMMENCING THEIR WORK. THIS NOTIFICATION PERIOD IS APPROXIMATE AND MAY VARY. COMPLETE ALL PRELIMINARY WORK AS REQUIRED BY CSX AND THE PLANS PRIOR TO CSX'S WORK. THIS WORK INCLUDES, BUT IS NOT LIMITED TO, SAW-CUTTING AND REMOVING PAVEMENT AND CONCRETE ABUTTING THE RAILROAD CROSSING AND SETTING UP AND IMPLEMENTING THE TCP.

SEE THE CSX SPECIAL PROVISIONS FOR FLAGGING REQUIREMENTS PRIOR TO WORKING ON CSX R/W.

2. UNPROTECTED TRAFFIC LANES ARE PROHIBITED FROM CONVEYING TRAFFIC ACROSS THE CSXT CROSSING DURING THE PHASED CONSTRUCTION OF THE ROADWAY. COORDINATE WITH CSX TO PROVIDE FOR RR CROSSING ARM PROTECTION AT ALL TIMES.
3. THE EXISTING POSTED SPEED (35 MPH FOR ARMENIA AVE., 45 MPH FOR BUSCH BLVD.) WILL BE MAINTAINED DURING CONSTRUCTION.
4. TRAFFIC WILL BE CONTROLLED IN ACCORDANCE WITH THE 102-600 SERIES OF THE STANDARD PLANS FOR ROAD CONSTRUCTION INDICES AS APPLICABLE. MAINTAIN AT LEAST ONE NORTH-SOUTH PEDESTRIAN WALKWAY THROUGH THE WORK ZONE AT ALL TIMES.
5. COORDINATE THE TTCP WITH FDOT AND ADJACENT PROJECTS.
6. SEVEN (7) DAYS PRIOR TO START OF CONSTRUCTION, PLACE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) AT THE FOLLOWING LOCATIONS:

EASTBOUND BUSCH BOULEVARD (SR 580) EAST OF HIMES AVENUE  
 WESTBOUND BUSCH BOULEVARD (SR 580) WEST OF NORTH BOULEVARD  
 NORTHBOUND ARMENIA AVENUE NORTH OF WATERS AVENUE  
 SOUTHBOUND ARMENIA AVENUE SOUTH OF LINEBAUGH AVENUE

MESSAGES ARE AS FOLLOWS (OR AS DIRECTED BY THE ENGINEER):

MESSAGE 1:	MESSAGE 2:	
ARMENIA CONST BEGINS	XXXXXXXX XX XX -----	(DAY OF WEEK) e.g. TUESDAY (DATE) e.g. APR 17

ONCE CONSTRUCTION BEGINS, MESSAGES ARE AS FOLLOWS (OR AS DIRECTED BY THE ENGINEER):

MESSAGE 1:	MESSAGE 2:
ARMENIA AT BUSCH CONST	EXPECT DELAYS -----

7. FOR THE DURATION OF THE DETOUR, PLACE ONE PCMS AT A VISIBLE LOCATION APPROXIMATELY AT EACH LOCATION INDICATED IN THE DETOUR PLANS TO DIRECT MOTORISTS TO FOLLOW THE SIGNED DETOUR.

MESSAGE PROVIDED SHALL BE (OR AS DIRECTED BY THE ENGINEER):

MESSAGE 1:	MESSAGE 2:
ARMENIA AT BUSCH CLOSED	FOLLOW DETOUR -----

8. AS AN INTEGRAL PART OF ANY LANE CLOSURE, PLACE A PCMS APPROXIMATELY 800 FEET IN ADVANCE OF THE LANE CLOSURE.

DISPLAY PROVIDED ON BUSCH BOULEVARD SHALL BE (OR AS DIRECTED BY THE ENGINEER):

MESSAGE 1:	MESSAGE 2:	
LANES CLOSED AHEAD	MERGE LEFT -----	(OR RIGHT AS APPROPRIATE)

DISPLAY PROVIDED ON ARMENIA AVENUE SHALL BE (OR AS DIRECTED BY THE ENGINEER):

MESSAGE 1:	MESSAGE 2:
LANES CLOSED AHEAD	PREPARE TO STOP -----

9. NOTIFY:

THE ENGINEER A MINIMUM OF 7 DAYS PRIOR TO A LANE CLOSURE.

MR. MIKE WILLIAMS, COUNTY ENGINEER, AT (813)307-1767,  
 14 DAYS PRIOR TO A LANE CLOSURE.

SADE TOLBERT (SCHOOL BOARD OF HILLSBOROUGH COUNTY-TRANSPORTATION/BUS GARAGE) AT  
 (813) 982-5524, ONE WEEK PRIOR TO A LANE CLOSURE.

GREGORY BRACKIN OR RALPH LAVADO (HART LINE) AT (813) 623-5835,  
 ONE WEEK PRIOR TO A LANE CLOSURE.

THE CITY, FDOT AND LOCAL EMERGENCY AGENCIES (POLICE AND FIRE),  
 24 HOURS PRIOR TO A LANE CLOSURES.

VIK BHIDE, CITY OF TAMPA TRAFFIC DESIGN ENGINEER, AT (813) 274-8066, A MINIMUM OF  
 7 DAYS IN ADVANCE OF A LANE CLOSURE TO COORDINATE TRAFFIC SIGNAL TIMING ADJUSTMENTS.

10. SINGLE LANE CLOSURE RESTRICTIONS:

ARMENIA AVENUE: LANE CLOSURES WILL NOT BE ALLOWED BETWEEN THE HOURS OF 7:00 AM AND 9:00 PM  
 SR 580\BUSCH BLVD.: LANE CLOSURES WILL NOT BE ALLOWED BETWEEN THE HOURS OF 6:00 AM AND 10:30 PM

11. ALL LANES ON SR 580\BUSCH BLVD. AND ARMENIA AVENUE MUST BE OPEN TO TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT, AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT AS DIRECTED BY THE ENGINEER.
12. DO NOT EXCAVATE ANY AREAS THAT CANNOT BE SAFELY REOPENED TO TRAFFIC WITHIN THE SAME WORK PERIOD.
13. ESTABLISH A WORK SCHEDULE SO THAT ANY LOCATION UNDER CONSTRUCTION WILL NOT BE LEFT IN A HAZARDOUS CONDITION AT COMPLETION OF ANY WORK PERIOD.

PROVIDE ALL MATERIALS AND EQUIPMENT NEEDED TO MEET THE DROP-OFF REQUIREMENT OF FDOT INDEX 102-600. PAYMENT FOR ALL MATERIALS AND EQUIPMENT SHALL BE INCLUDED WITH MAINTENANCE OF TRAFFIC. IN THE EVENT THAT THE CONTRACTOR'S OPERATIONS ARE STOPPED DUE TO WEATHER OR OTHER CONDITIONS, PROTECT DROP-OFFS IN ACCORDANCE WITH INDEX 102-600.

14. MAINTAIN AND KEEP STREET NAME IDENTIFICATION VISIBLE DURING CONSTRUCTION OPERATIONS TO FACILITATE EMERGENCY VEHICLE TRAFFIC.
15. PROVIDE TEMPORARY PAVEMENT MARKINGS INDICATING LANE LINES, STOP BARS, AND PAVEMENT MESSAGES TO COMPLETELY DEFINE TRAFFIC FLOW DURING THE CURING PERIOD FOR THE NEW PAVEMENT. PLACE TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE WITH THE LOCATIONS SHOWN ON THE SIGNING AND PAVEMENT MARKING PLAN SHEETS.
16. TEMPORARY THROUGH TRAVEL LANES SHALL BE A MINIMUM OF 11 FEET IN WIDTH. AUXILIARY LANES SHALL BE A MINIMUM OF 10 FEET IN WIDTH.
17. MAINTAIN SIGNAL CONTROL AND PAVEMENT MARKINGS DURING CONSTRUCTION. ALL SIGNAL HEADS SHALL BE SHIFTED TO MATCH THE PROPOSED LANE CONFIGURATIONS OF EACH PHASE.
18. COORDINATE SIGNALIZATION AND TEMPORARY CONTROLS WITH THE CITY OF TAMPA, MR. WILLIAM HALL, TRAFFIC SIGNAL SUPERVISOR, 3802 E. 26TH AVENUE, TAMPA, FLORIDA 33605, PHONE: (813) 622-1966, EMAIL: bill.hall@tampagov.net.
19. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETAIL THE PHASING OF THE PROJECT TO BEST FIT THE MEANS AND METHODS NECESSARY TO CONSTRUCT THE PROJECT IN AN EFFICIENT MANOR WHILE MAINTAINING THE SAFETY OF THE PUBLIC. GENERAL CONSTRUCTION PHASING IS PROVIDED ON THE NEXT SHEET.

REVISIONS				 <p>ENGINEERING GROUP                      1713 E. 9th AVENUE   TAMPA, FL 33605                      P 813.386.2101   TF 888.603.1942   F 813.386.2106                      EOR   DEREK M. GIL, PE 54798</p>	CITY OF TAMPA TRANSPORTATION DIVISION		TEMPORARY TRAFFIC CONTROL PLAN	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057			
					ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			76

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

TRAFFIC CONTROL GENERAL PHASING NOTES

UTILIZING STANDARD PLANS INDEX 102- SERIES, AND OTHER INDICES THAT MAY BE APPLICABLE IN ACCORDANCE WITH THE CONTRACTOR'S OPERATIONS:

PHASE I (STORM DRAIN CROSSINGS AND RAILROAD CROSSING)

COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE I AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.

INSTALL PCMS'S PER PLANS AND TTCP GENERAL NOTES.

INSTALL ADVANCE WARNING CONSTRUCTION SIGNS, BARRICADES AND TEMPORARY EROSION CONTROL DEVICES AS NEEDED OR INDICATED ON THE PLANS.

CONSTRUCT THE STORM DRAIN CROSSINGS UTILIZING LANE CLOSURES. CONSTRUCT S-1, S-1A, S-1B AND S-1C.

REMOVE THE EXISTING TRAFFIC SEPARATOR FROM STA. 126+74.96 TO STA. 128+77.38. PATCH ASPHALT TO CREATE A RIDEABLE SURFACE.

PLACE SIGNS AND PCMS'S FOR DETOUR. SHIFT TRAFFIC USING LANE CLOSURES AS NECESSARY IN ACCORDANCE WITH STANDARD PLANS INDICES AND DETOUR PLAN AS SHOWN IN THESE PLANS.

ACTIVATE DETOUR. CLOSE THE RAILROAD CROSSING. CSX TO CONSTRUCT RAILROAD CROSSING IMPROVEMENTS.

COMPLETE THE ROAD WORK REQUIRED BY CSX RAILROAD AS DESCRIBED IN THE TEMPORARY TRAFFIC CONTROL GENERAL NOTES.

CONSTRUCT TEMPORARY PAVING WEDGE AT THE CROSSING.

RE-OPEN RAILROAD CROSSING AND REMOVE DETOUR.

PHASE II (WEST SIDE WIDENING) -

COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE II AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.

INSTALL TEMPORARY SIGNING AND PAVEMENT MARKINGS FOR PHASE II.

INSTALL BARRICADES AND TEMPORARY EROSION CONTROL DEVICES AS NEEDED FOR PHASE II.

SHIFT SOUTHBOUND LANE 4 FEET TO THE EAST, ADJACENT TO NORTHBOUND LANES.

SAWCUT EXISTING PAVEMENT ALONG THE WEST SIDE OF THE LOCATION OF THE PROPOSED MEDIAN SEPARATOR. CONSTRUCT THE POND, STORM SEWER TRUNK LINE, CURB AND GUTTER AND PAVEMENT WIDENING, GRADING, SIDEWALK AND OTHER ITEMS BEHIND THE CURB ALONG THE WEST SIDE OF ARMENIA.

CONSTRUCT EASTBOUND RIGHT TURN LANE, CURB AND GUTTER, AND SIDEWALK ALONG BUSCH BOULEVARD WEST OF ARMENIA AVENUE AND ADJUST THE LENGTH OF THE TRAFFIC SEPARATOR.

CONSTRUCT TEMPORARY PAVEMENT IN THE PROPOSED ISLAND AREA FROM STA. 120+35 TO 121+10 LEFT.

INSTALL SOD AND PERMANENT EROSION CONTROL FEATURES.

PHASE III (EAST SIDE WIDENING) -

COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE III AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.

INSTALL TEMPORARY SIGNING AND PAVEMENT MARKINGS FOR PHASE III.

INSTALL BARRICADES AND TEMPORARY EROSION CONTROL DEVICES AS NEEDED FOR PHASE III.

ADJUST SIGNAL HEADS AND SHIFT SOUTHBOUND LANE TO THE WEST ONTO NEWLY CONSTRUCTED PAVEMENT.

CONSTRUCT THE STORM SEWER, CURB AND GUTTER AND PAVEMENT WIDENING, GRADING, SIDEWALK AND OTHER ITEMS BEHIND THE CURB ALONG THE EAST SIDE OF ARMENIA.

CONSTRUCT PAVEMENT, CURB AND GUTTER, AND SIDEWALK ALONG EASTBOUND BUSCH BOULEVARD EAST OF ARMENIA AVENUE.

INSTALL SOD AND PERMANENT EROSION CONTROL FEATURES.

PHASE IV (RESURFACING AND MEDIAN CONSTRUCTION) -

COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE IV AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.

INSTALL TEMPORARY SIGNING AND PAVEMENT MARKINGS FOR PHASE IV.

SHIFT SOUTHBOUND AND NORTHBOUND TRAFFIC TO THE OUTSIDE.

UNDER LANE CLOSURES MILL AND RESURFACE THE REMAINING PAVEMENT. INSTALL TEMPORARY PAVEMENT MARKINGS AFTER EACH DAY'S WORK.

CONSTRUCT THE MEDIAN SOUTH OF BUSCH BOULEVARD AND THE TRAFFIC SEPARATOR NORTH OF BUSCH BOULEVARD.

CONSTRUCT THE ISLAND IN THE SOUTHEAST QUADRANT OF THE INTERSECTION.

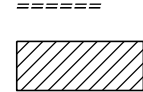
PHASE V (FRICTION COURSE AND PAVEMENT MARKING) -

APPLY FRICTION COURSE AND FINAL PAVEMENT MARKINGS UTILIZING TRAFFIC SHIFTS.

REVISIONS				 <p>1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	<p>CITY OF TAMPA TRANSPORTATION DIVISION</p> <p>CONTRACT NO: 12-D-00057</p> <p>ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.</p>		<p>TEMPORARY TRAFFIC CONTROL PLAN</p>		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION						77

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

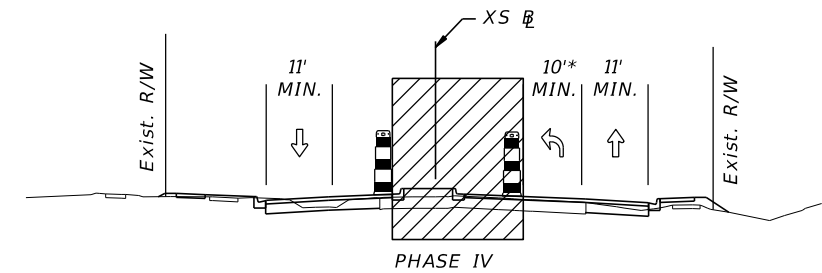
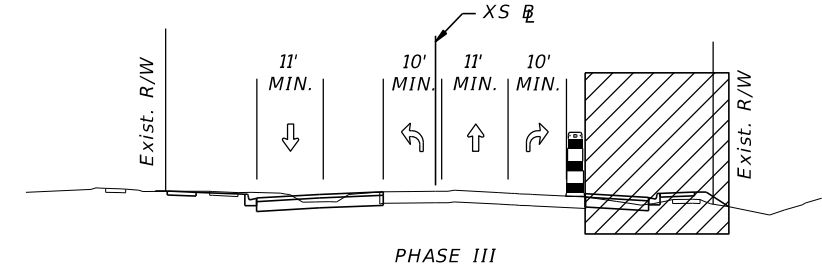
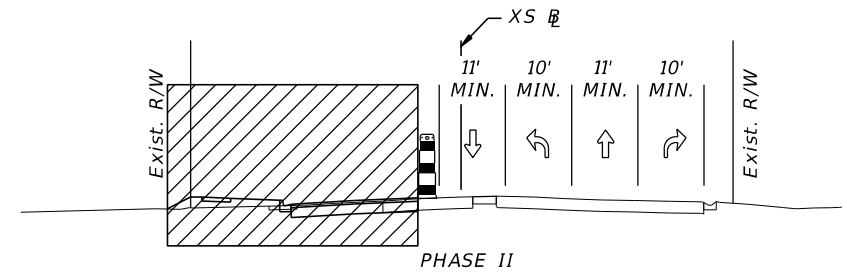
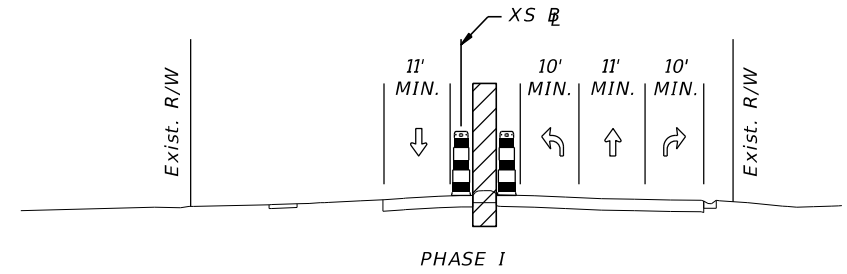
LEGEND



WORK AREA



TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH STEADY BURN LIGHT AT NIGHT ONLY)



\* NOTE: THE CONTRACTOR SHALL MAINTAIN A 10' MIN. LEFT TURN LANE WITHIN THE WORK ZONE AT ALL TIMES EXCEPT DURING LANE CLOSURE.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
TRANSPORTATION DIVISION

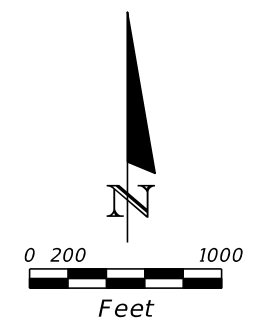
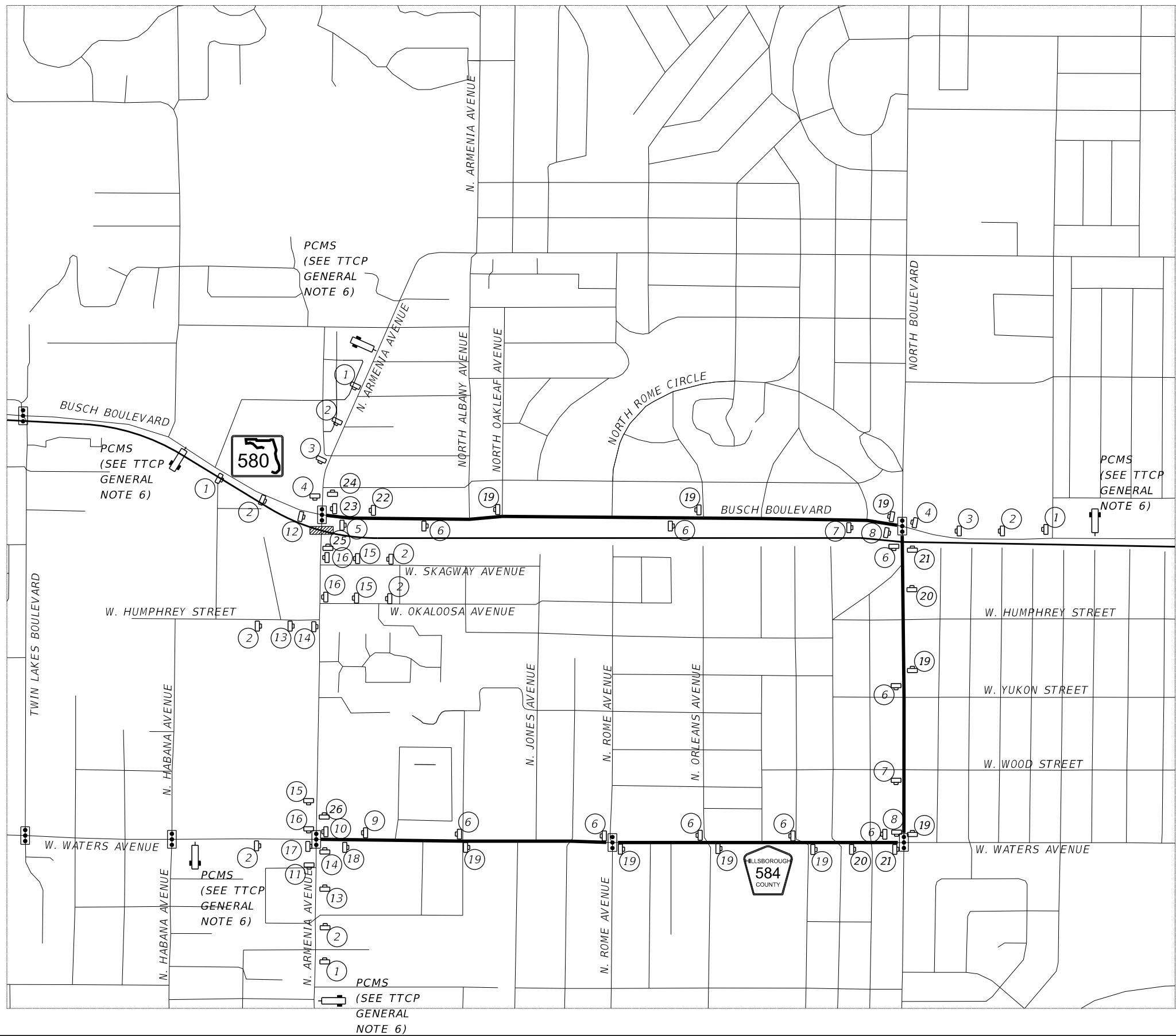
CONTRACT NO: 12-D-00057

ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

TEMPORARY TRAFFIC  
CONTROL PLAN

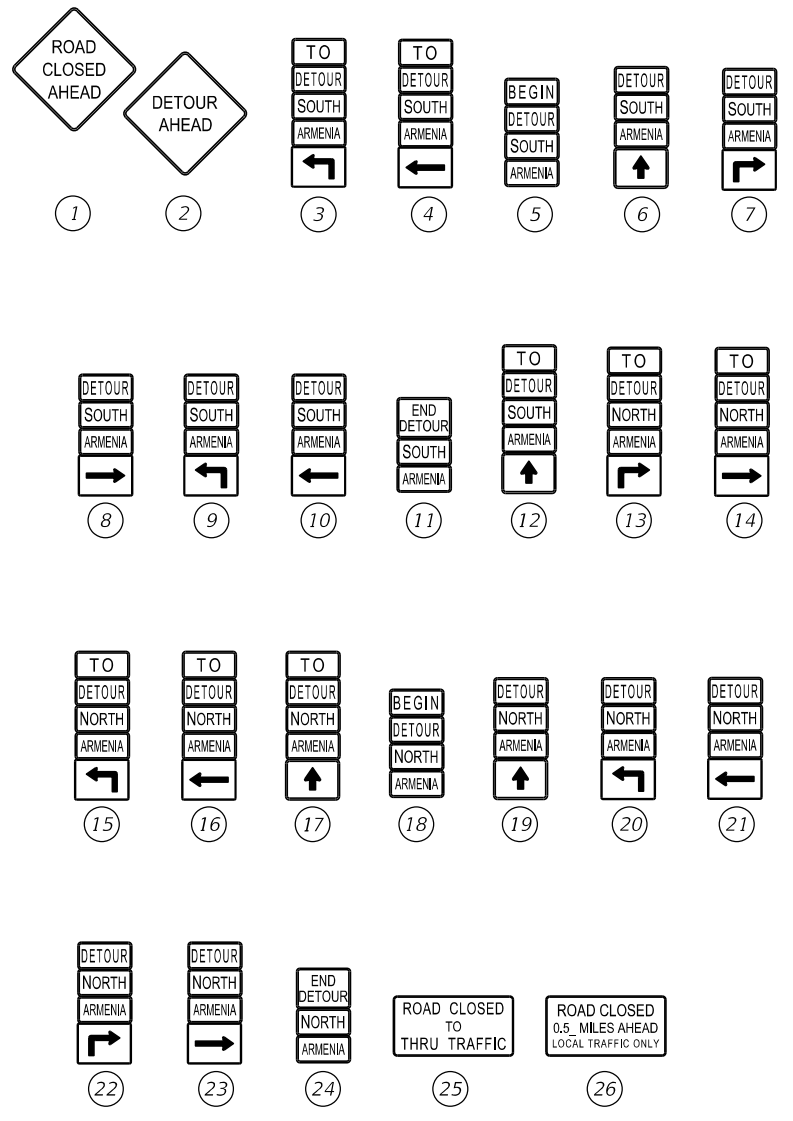
SHEET  
NO.

78



**LEGEND**

- Work Area
- Traffic Signal
- Work Zone Sign  
Distance Between Signs 200'
- Portable Changeable (Variable) Message Sign



**FULL CLOSURE DETOUR**

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**TEMPORARY TRAFFIC CONTROL PLAN**

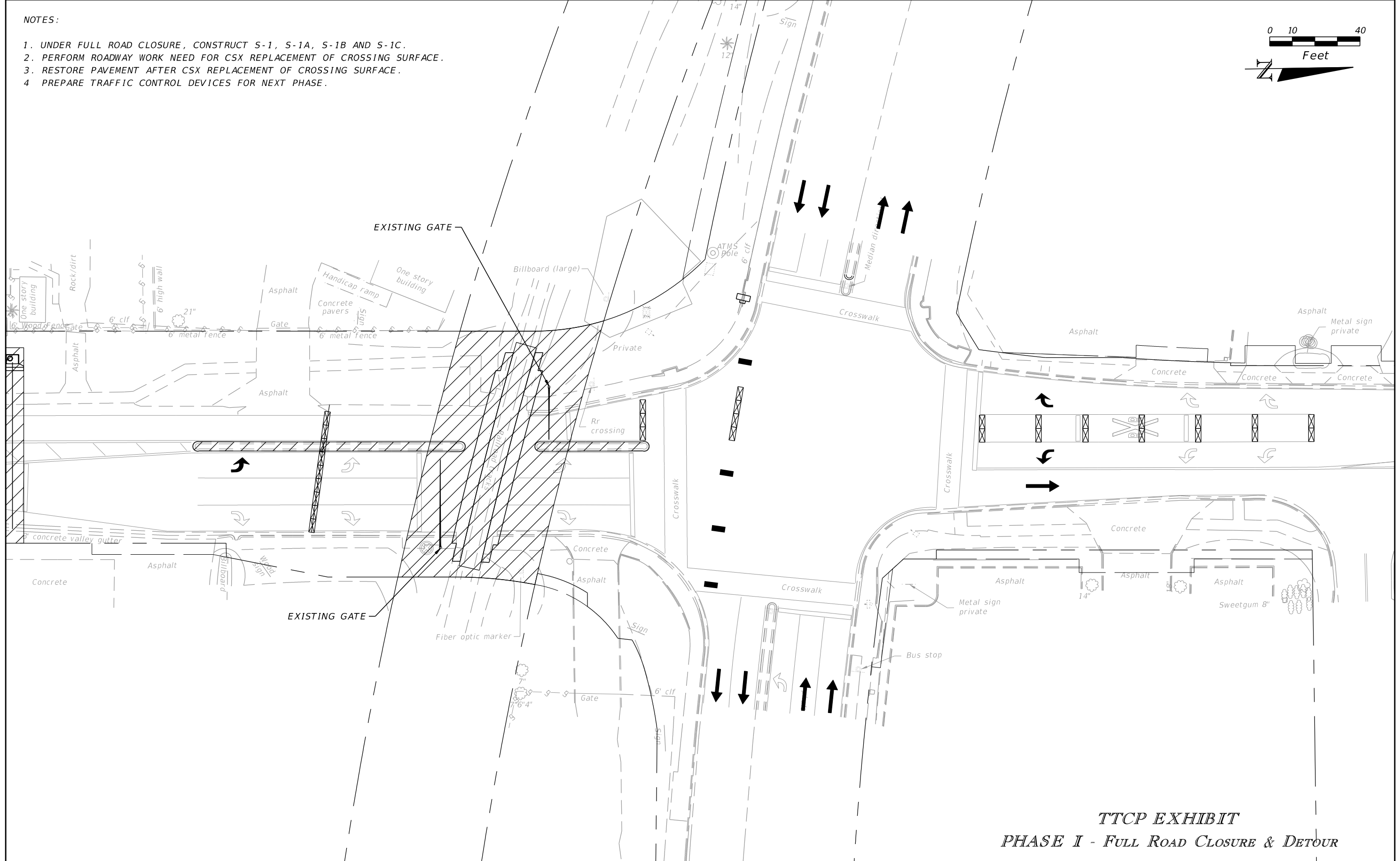
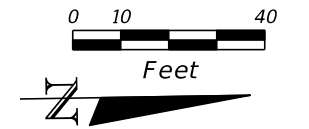
SHEET NO.
79

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



NOTES:

1. UNDER FULL ROAD CLOSURE, CONSTRUCT S-1, S-1A, S-1B AND S-1C.
2. PERFORM ROADWAY WORK NEED FOR CSX REPLACEMENT OF CROSSING SURFACE.
3. RESTORE PAVEMENT AFTER CSX REPLACEMENT OF CROSSING SURFACE.
4. PREPARE TRAFFIC CONTROL DEVICES FOR NEXT PHASE.



**TTCP EXHIBIT**  
**PHASE I - Full Road Closure & Detour**

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
**TRANSPORTATION DIVISION**  
CONTRACT NO: 12-D-00057  
**ARMENIA AVENUE INTERSECTION PROJECT**  
**AT SR 580/BUSCH BLVD.**

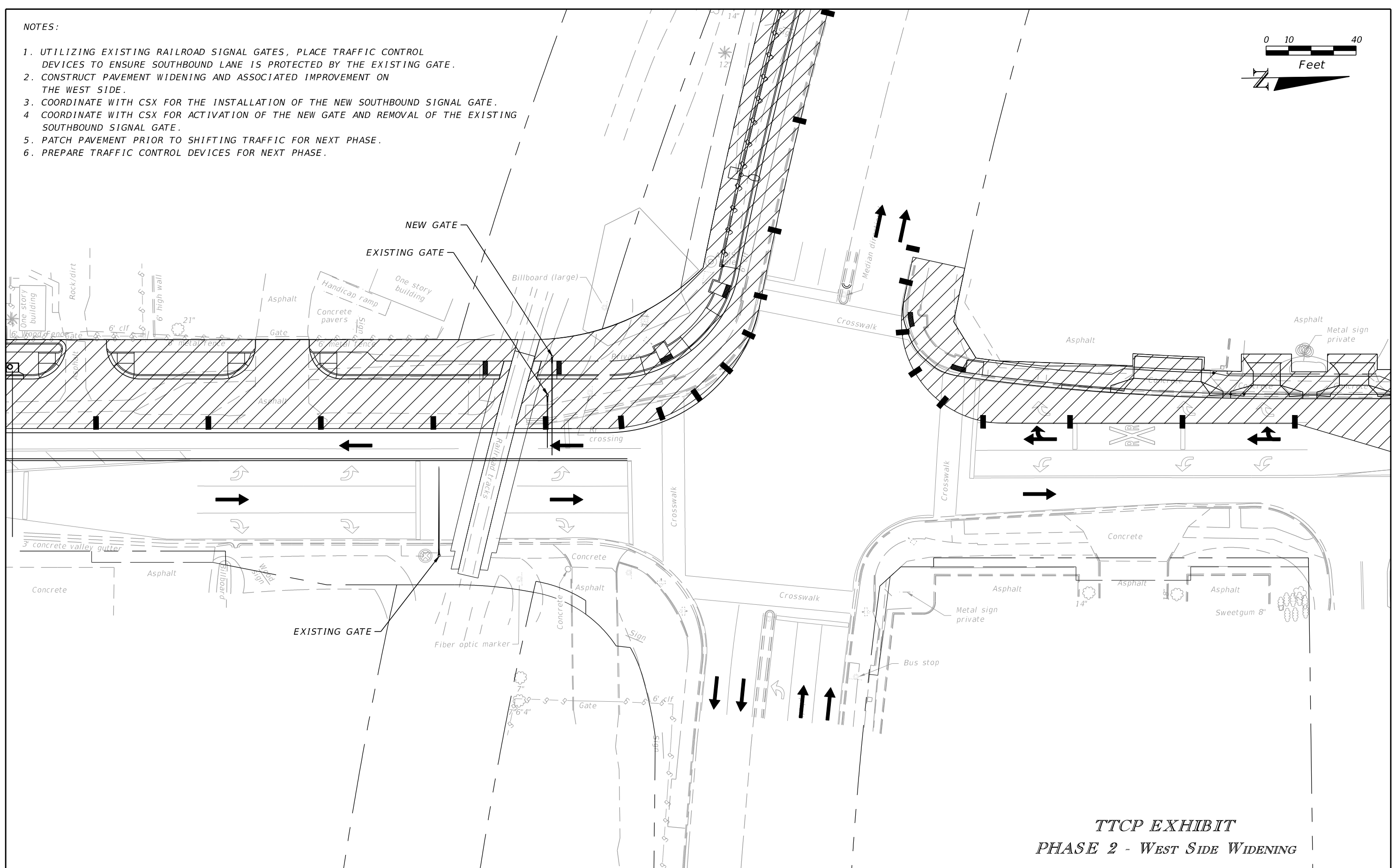
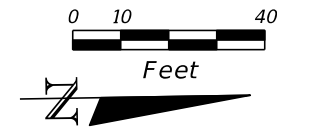
**TEMPORARY TRAFFIC**  
**CONTROL PLAN**

SHEET NO.	80
-----------	----

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

NOTES:

1. UTILIZING EXISTING RAILROAD SIGNAL GATES, PLACE TRAFFIC CONTROL DEVICES TO ENSURE SOUTHBOUND LANE IS PROTECTED BY THE EXISTING GATE.
2. CONSTRUCT PAVEMENT WIDENING AND ASSOCIATED IMPROVEMENT ON THE WEST SIDE.
3. COORDINATE WITH CSX FOR THE INSTALLATION OF THE NEW SOUTHBOUND SIGNAL GATE.
4. COORDINATE WITH CSX FOR ACTIVATION OF THE NEW GATE AND REMOVAL OF THE EXISTING SOUTHBOUND SIGNAL GATE.
5. PATCH PAVEMENT PRIOR TO SHIFTING TRAFFIC FOR NEXT PHASE.
6. PREPARE TRAFFIC CONTROL DEVICES FOR NEXT PHASE.



TTCP EXHIBIT  
PHASE 2 - WEST SIDE WIDENING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

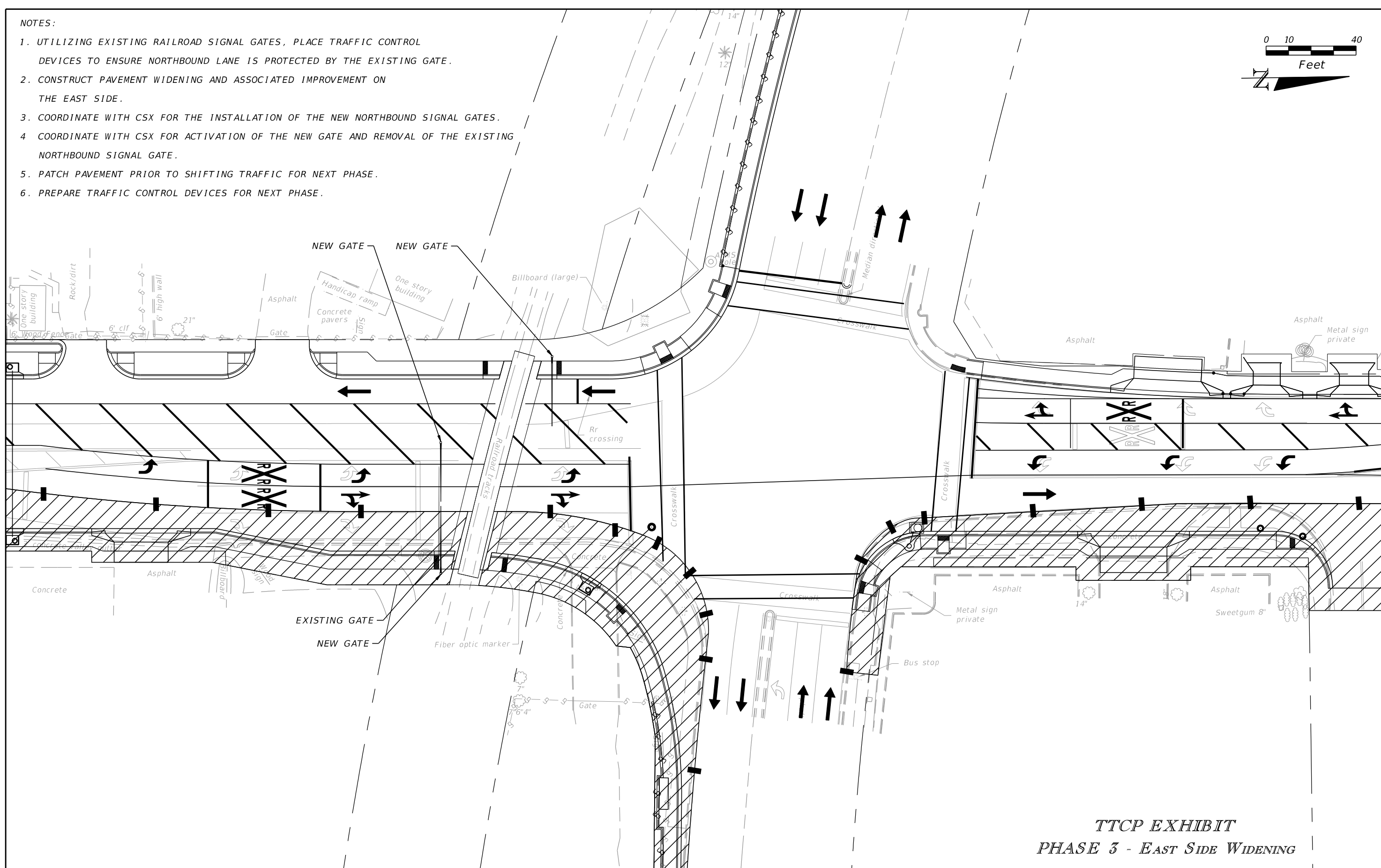
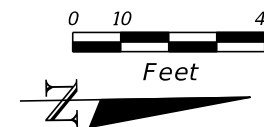
TEMPORARY TRAFFIC  
CONTROL PLAN

SHEET NO.  
81

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

NOTES:

1. UTILIZING EXISTING RAILROAD SIGNAL GATES, PLACE TRAFFIC CONTROL DEVICES TO ENSURE NORTHBOUND LANE IS PROTECTED BY THE EXISTING GATE.
2. CONSTRUCT PAVEMENT WIDENING AND ASSOCIATED IMPROVEMENT ON THE EAST SIDE.
3. COORDINATE WITH CSX FOR THE INSTALLATION OF THE NEW NORTHBOUND SIGNAL GATES.
4. COORDINATE WITH CSX FOR ACTIVATION OF THE NEW GATE AND REMOVAL OF THE EXISTING NORTHBOUND SIGNAL GATE.
5. PATCH PAVEMENT PRIOR TO SHIFTING TRAFFIC FOR NEXT PHASE.
6. PREPARE TRAFFIC CONTROL DEVICES FOR NEXT PHASE.



TTCP EXHIBIT  
PHASE 3 - EAST SIDE WIDENING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

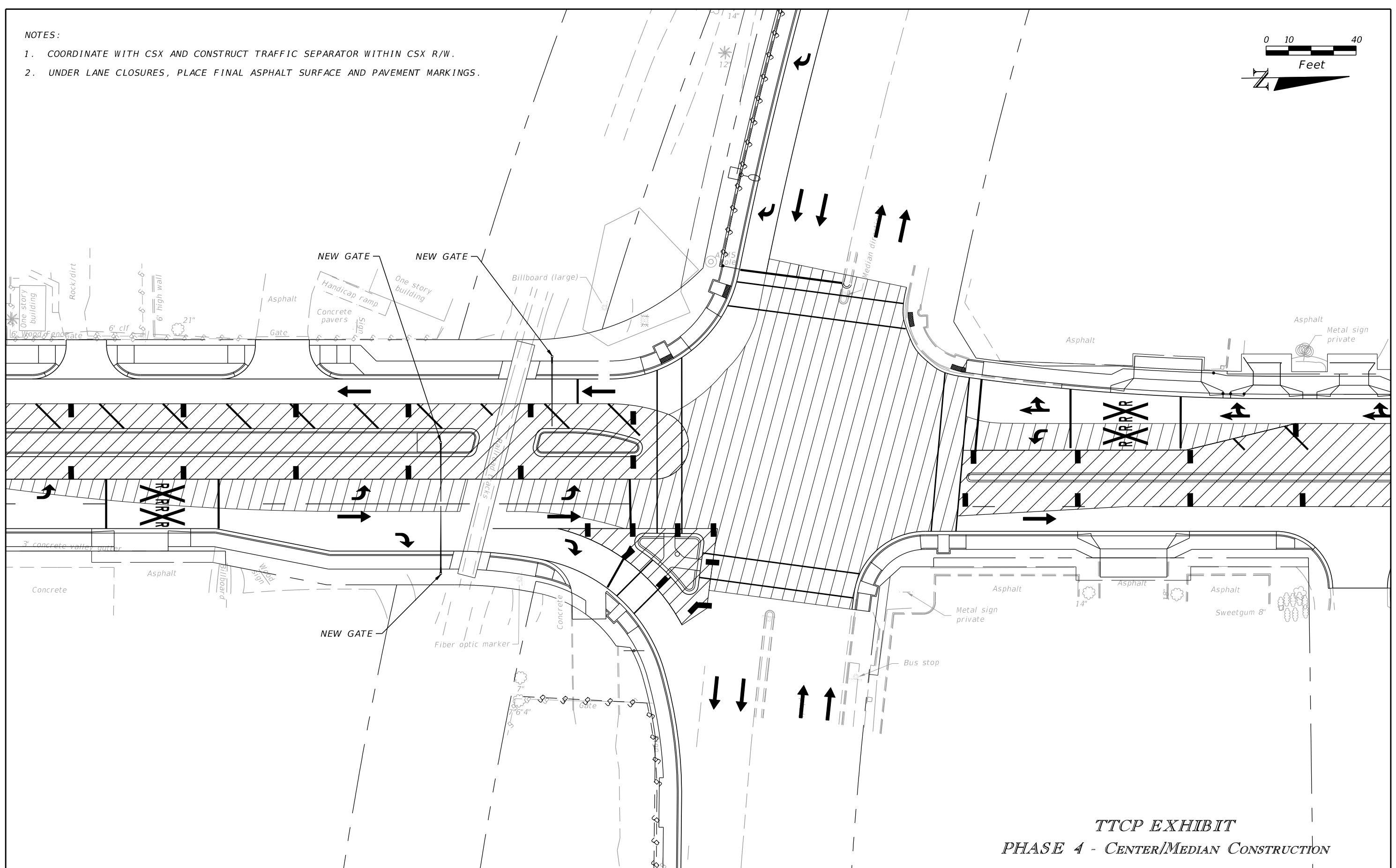
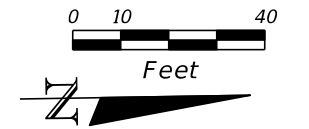
TEMPORARY TRAFFIC  
CONTROL PLAN

SHEET NO.  
82

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

NOTES:

- COORDINATE WITH CSX AND CONSTRUCT TRAFFIC SEPARATOR WITHIN CSX R/W.
- UNDER LANE CLOSURES, PLACE FINAL ASPHALT SURFACE AND PAVEMENT MARKINGS.



TTCP EXHIBIT  
PHASE 4 - CENTER/MEDIAN CONSTRUCTION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

TEMPORARY TRAFFIC  
CONTROL PLAN

SHEET NO.
83

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

SUMMARY OF VERIFIED UTILITIES

Vvh #	UTILITY DESCRIPTION (Owner, type)		SIZE	MATERIALS	Survey			EXISTING GROUND ELEVATION	TOP ELEVATION	COMMENTS
					STATION	OFFSET	LT. /RT.			
TH1	FRONTIER	TEL	1 1/2"	DB CABLE	120+16.99	-48.04	LT	41.16	38.75	
TH2	FRONTIER	FOC	1 1/2"	PE	120+18.16	-48.15	LT	41.33	38.97	
TH3	FRONTIER	UNK	1"	DB CABLE	120+17.83	-47.36	LT	41.29	38.32	
TH4	TECO PEOPLES GAS	GAS	2"	STEEL	120+20.40	-50.84	LT	41.61	38.11	
TH5	CITY OF TAMPA	FORCE MAIN	4"	STEEL	120+20.75	-52.54	LT	41.58	37.89	
TH6	CITY OF TAMPA	WATER	8"	DIP	120+07.33	16.02	RT	41.33	37.39	
TH7	CITY OF TAMPA	WATER	3"	STEEL	120+09.11	15.14	RT	41.24	38.76	
TH8	CITY OF TAMPA	WATER	3"	STEEL	120+09.09	13.56	RT	41.12	38.82	
TH9	CITY OF TAMPA	WATER	8"	DIP	120+13.03	19.68	RT	41.40	38.45	
TH10	CITY OF TAMPA	FORCE MAIN	4"	STEEL	120+07.98	34.30	RT	41.71	37.36	
TH11	CITY OF TAMPA	WATER	4"	STEEL	120+32.21	-20.53	LT	41.29	39.01	
TH12	TECO PEOPLES GAS	GAS	2"	STEEL	121+74.95	-18.33	LT	43.93	40.83	
TH13	CITY OF TAMPA	WATER	4"	STEEL	121+75.09	-20.14	LT	43.84	42.78	
TH14	FRONTIER	TEL	1/2"	LEAD DB CABLE	122+09.94	21.05	RT	44.99	42.02	
TH15	CITY OF TAMPA	WATER	1" / 2"	PE / STEEL CASING	120+43.67	-13.49	LT	41.95	39.90	
TH16	HILLSBOROUGH COUNTY	TRAFFIC SIGNAL	2"	PVC	134+84.98	-21.22	LT	44.62	41.57	
TH17	FBL, ATT, LVL3, MCI	FOC DUCT-SYSTEM	6 - 1 1/2"	PE	134+87.80	-29.41	LT	44.20	34.65	
TH18	FRONTIER	TEL DUCT-SYSTEM	4 - 4"	PVC	134+87.06	-40.60	LT	43.20	38.34	
TH19	CITY OF TAMPA	WATER	8"	STEEL	134+89.37	-20.78	RT	44.42	40.97	
TH20	FRONTIER	TEL	2"	STEEL	134+90.70	26.27	RT	44.21	41.43	
TH21	CITY OF TAMPA	WATER	4"	STEEL	120+21.69	-20.82	LT	41.15	38.90	
TH22	CITY OF TAMPA	WATER	2"	STEEL	120+25.82	-23.01	LT	41.20	39.41	
TH23	CITY OF TAMPA	WATER	4"	STEEL	125+89.31	-20.41	LT	46.85	44.01	
TH24	CITY OF TAMPA	WATER	8"	CIP	118+48.44	15.56	RT	39.01	35.61	
TH25	CITY OF TAMPA	WATER	6"	DIP	119+48.28	22.36	RT	40.59	36.56	
TH26	FRONTIER	TEL	1 1/2"	DB CABLE	120+21.04	14.45	RT	41.43	37.25	
TH27	CITY OF TAMPA	WATER	8"	STEEL	120+39.92	15.83	RT	41.72	37.86	
TH28	CITY OF TAMPA	WATER	3" - 8"	STEEL - CIP	122+00.95	15.16	RT	45.04	42.04	
TH29	BRIGHTHOUSE	CATV	2"	PVC	125+94.93	-27.18	LT	47.24	44.34	
TH30	TECO PEOPLES GAS	GAS	2"	STEEL	121+99.77	-18.42	LT	44.59	41.17	
TH31	CITY OF TAMPA	WATER	4"	STEEL	121+99.77	-20.24	LT	44.37	42.53	
TH32	HILLSBOROUGH COUNTY	ELECTRIC	2"	PVC	129+73.95	-290.01	LT	39.31	36.11	
TH33	FRONTIER	TEL	4" x2	PVC	134+32.63	28.37	RT	44.98	42.08	
TH34	FRONTIER	TEL	4"	STEEL CASING	123+86.34	-15.46	LT	47.51	42.29	
TH35	SOUTH LIMITS	EXPLORATORY	NUF	NUF	128+61.42	84.81	RT	47.18	N/A	
TH36	WEST LIMITS	EXPLORATORY	NUF	NUF	128+66.48	79.51	RT	47.61	N/A	
TH37	NORTH LIMITS	EXPLORATORY	NUF	NUF	128+71.28	84.87	RT	47.55	N/A	
TH38	EAST LIMITS	EXPLORATORY	NUF	NUF	128+66.46	89.98	RT	47.72	N/A	
TH39	CENTER	EXPLORATORY	NUF	NUF	128+66.28	84.77	RT	47.69	N/A	
TH40	HILLSBOROUGH COUNTY	TRAFFIC SIGNAL	2" x3	PVC	128+84.88	-57.45	LT	46.81	44.22	
TH41	SOUTH LIMITS	EXPLORATORY	NUF	NUF	130+07.80	-54.43	LT	46.93	N/A	
TH42	EAST LIMITS	EXPLORATORY	NUF	NUF	130+09.49	-51.42	LT	47.17	N/A	
TH43	NORTH LIMITS	EXPLORATORY	NUF	NUF	130+12.40	-53.30	LT	46.88	N/A	
TH44	WEST LIMITS	EXPLORATORY	NUF	NUF	130+10.42	-56.23	LT	46.88	N/A	
TH45	CENTER	EXPLORATORY	NUF	NUF	130+10.00	-53.80	LT	46.96	N/A	
TH46	FRONTIER	FOC	4"	PVC	130+12.02	-54.54	LT	46.87	42.89	
TH47	UNKNOWN	W EDGE STORM MH	4.8'	STRUCTURE	130+09.63	-50.50	LT	47.11	46.36	
TH48	SOUTH LIMITS	ELECTRIC	2" x2	NFV	129+79.01	55.04	RT	47.85	N/A	
TH49	EAST LIMITS	EXPLORATORY	NUF	NUF	129+80.40	58.73	RT	48.24	N/A	
TH50	NORTH LIMITS	S EDGE CONC CAP	NFV	CONC	129+83.57	57.09	RT	48.33	46.38	
TH51	WEST LIMITS	EXPLORATORY	NUF	NUF	129+82.57	54.17	RT	48.36	N/A	
TH52	CENTER	EXPLORATORY	NUF	NUF	129+81.55	56.13	RT	48.40	N/A	
TH53	HILLSBOROUGH COUNTY	ELECTRIC	2" x2	PVC	129+79.28	54.49	RT	47.75	45.85	
TH54	UNKNOWN	S EDGE CONC	30"	CONC	129+84.02	55.97	RT	48.51	47.13	
TH55	UNKNOWN	N EDGE CONC	30"	CONC	129+86.46	56.33	RT	48.63	47.25	
TH56	CITY OF TAMPA	WATER	8"	CIP	125+96.79	22.79	RT	46.96	42.41	
TH57	FRONTIER	TEL	1"	LEAD DB CABLE	132+40.44	19.20	RT	45.98	43.86	
TH58	CITY OF TAMPA	WATER	8"	CIP	132+40.45	18.18	RT	46.00	42.51	
TH59	FRONTIER	TEL	4" x5	PVC/DB CABLE	132+71.21	28.92	RT	45.85	42.21	
TH60	HILLSBOROUGH COUNTY	TRAFFIC SIGNAL	2" x2	PVC	128+84.82	-50.26	LT	46.64	43.90	
TH61	HILLSBOROUGH COUNTY	TRAFFIC SIGNAL	2"	PVC	128+86.27	-53.71	LT	46.74	40.22	
TH62	HILLSBOROUGH COUNTY	TRAFFIC SIGNAL	2" x2	PVC	128+86.24	-54.29	LT	46.75	43.82	
TH63	HILLSBOROUGH COUNTY	TRAFFIC SIGNAL	2" x2	PVC	128+86.25	-54.91	LT	46.74	44.27	
TH64	HILLSBOROUGH COUNTY	TRAFFIC SIGNAL	2" x2	PVC	128+85.98	-55.11	LT	46.82	44.30	

NUF = NO UTILITY FOUND  
NFV = NOT FIELD VERIFIED

REVISIONS				 <p>1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	CITY OF TAMPA TRANSPORTATION DIVISION		<p>UTILITY ADJUSTMENTS</p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057			
				ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			84	

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

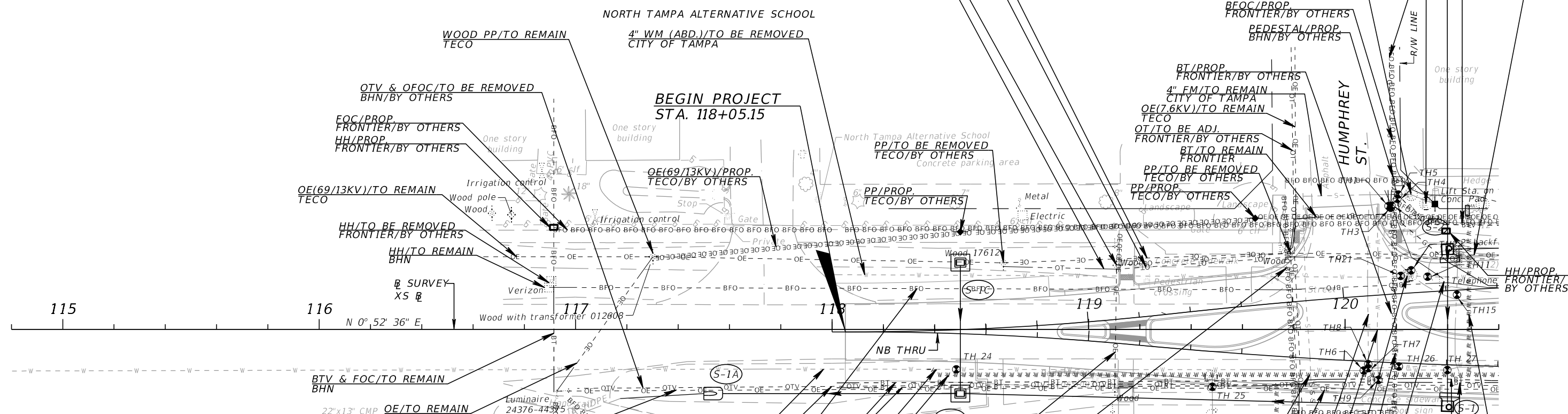
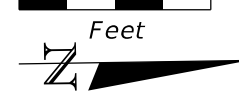
UTILITY AGENCY/OWNERS:

COMPANY  
 AT&T TRANSMISSION  
 BRIGHT HOUSE NETWORKS  
 CITY OF TAMPA WATER DEPT  
 CITY OF TAMPA WASTEWATER DEPT  
 CROWN CASTLE / FIBERNET DIRECT  
 FIBERLIGHT, LLC  
 LEVEL 3 COMMUNICATIONS / CENTURYLINK  
 MCI / VERIZON BUSINESS / XO COMMUNICATIONS  
 TAMPA ELECTRIC COMPANY  
 TECO PEOPLES GAS  
 FRONTIER

CONTACT PHONE NUMBER  
 MICHAEL GOMBOA 813-342-0512  
 MARK GLURBINO 813-546-7633  
 ROY MCKENZIE 813-436-6431  
 ROBERT KESZLER 813-274-8957  
 VENESIA HORNE 470-235-6368  
 TIM GREEN 813-877-7183  
 LAMAR ISBEL 813-787-3913  
 JAMES BARRA 813-928-9881  
 HEATHER LOVETT 813-275-3433  
 CHRIS URIA 813-275-3731  
 RANDY JAMES 813-892-9692

ARMENIA AVE.

0 10 40  
 Feet



GENERAL NOTES FOR UTILITY ADJUSTMENTS

1. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED VV, VH, AND VVH) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATION BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.
2. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED. ANY EXISTING MANHOLES AND VALVE COVERS SHALL BE ADJUSTED, IN ELEVATION AND CROSS SLOPE, TO CONFORM TO THE FINISHED GRADE USING ADJUSTING RINGS. COORDINATE WITH THE UTILITY OWNERS FOR DELIVERY LOCATION OF THE ADJUSTMENT RINGS. WORK TO BE INCLUDED UNDER PAY ITEMS 425-5-1 AND 425-6.
3. CALL SUNSHINE STATE ONE CALL OF FLORIDA, INC., AT 811 OR 1 (800)432-4778 AND THE UTILITY OWNERS 48 HOURS IN ADVANCE OF BEGINNING WORK. ALL UTILITY OWNERS MAY NOT BE A MEMBER, THUS DIRECT CONTACT IS REQUIRED.
4. ALL OVERHEAD WIRELINE(S) AND/OR THEIR FOUNDATION(S) SHALL MEET ALL CLEARANCE REQUIREMENTS OUTLINED IN THE CSXT DESIGN AND CONSTRUCTION STANDARD SPECIFICATIONS - WIRELINES OCCUPANCIES AND SHALL NOT CONFLICT WITH ANY OFFSETS OR CLEARANCES REQUIRED FOR THE INSTALLATION AND OPERATION OF THE TRAIN WARNING DEVICES. CSXT REAL ESTATE AND FACILITIES MANAGEMENT SHALL BE NOTIFIED BY THE UTILITY OWNER OF ALL UTILITY RELOCATIONS AND SHALL HAVE TO OPPORTUNITY TO REVIEW ALL PROPOSED CLEARANCES, HORIZONTAL AND VERTICAL, PRIOR TO RELOCATION.
5. ANY UTILITY ADJUSTMENTS OR ADDITIONS WITHIN CSXT ROW SHALL BE APPLIED FOR THROUGH THE CSXT PROPERTY PORTAL. THE PORTAL IS LOCATED ONLINE AT <https://www.csx.com/index.cfm/customers/value-added-services/property-real-estate/permitting-utility-installations-and-rights-of-entry/>.

REVISIONS		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION

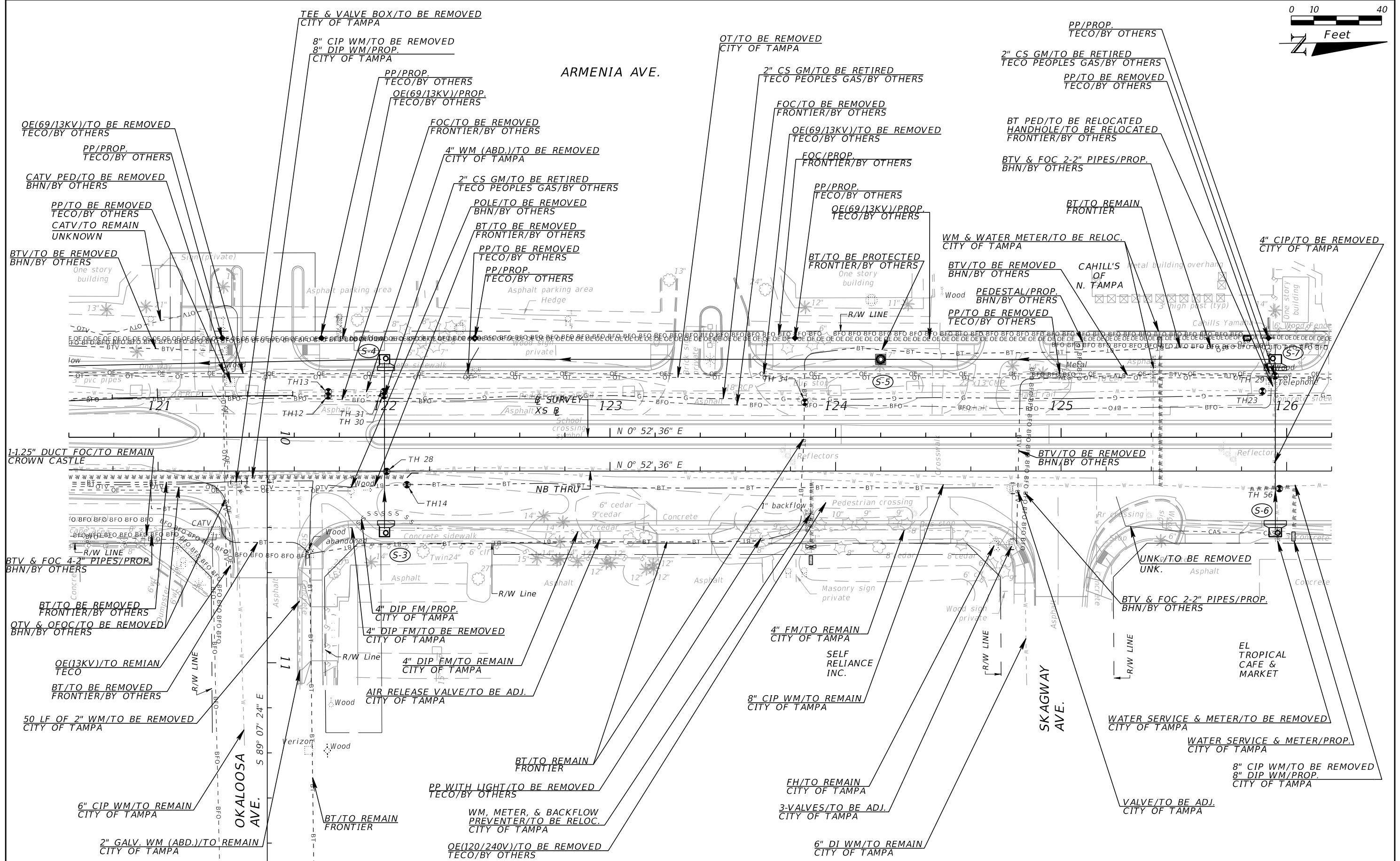
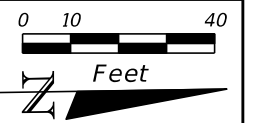
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY ADJUSTMENTS**

SHEET NO.  
 85

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

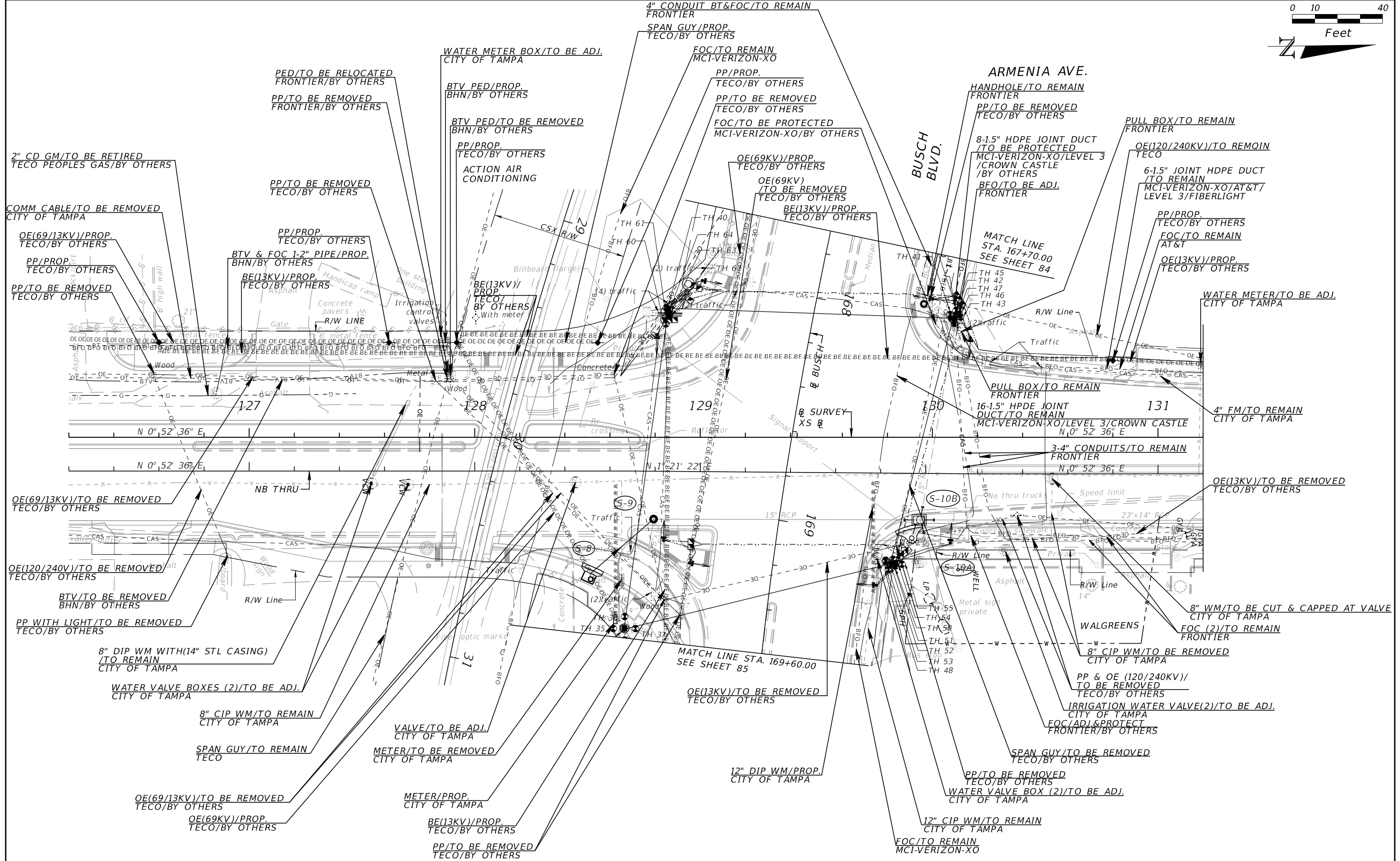
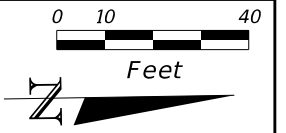
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY ADJUSTMENTS**

SHEET NO. 86

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

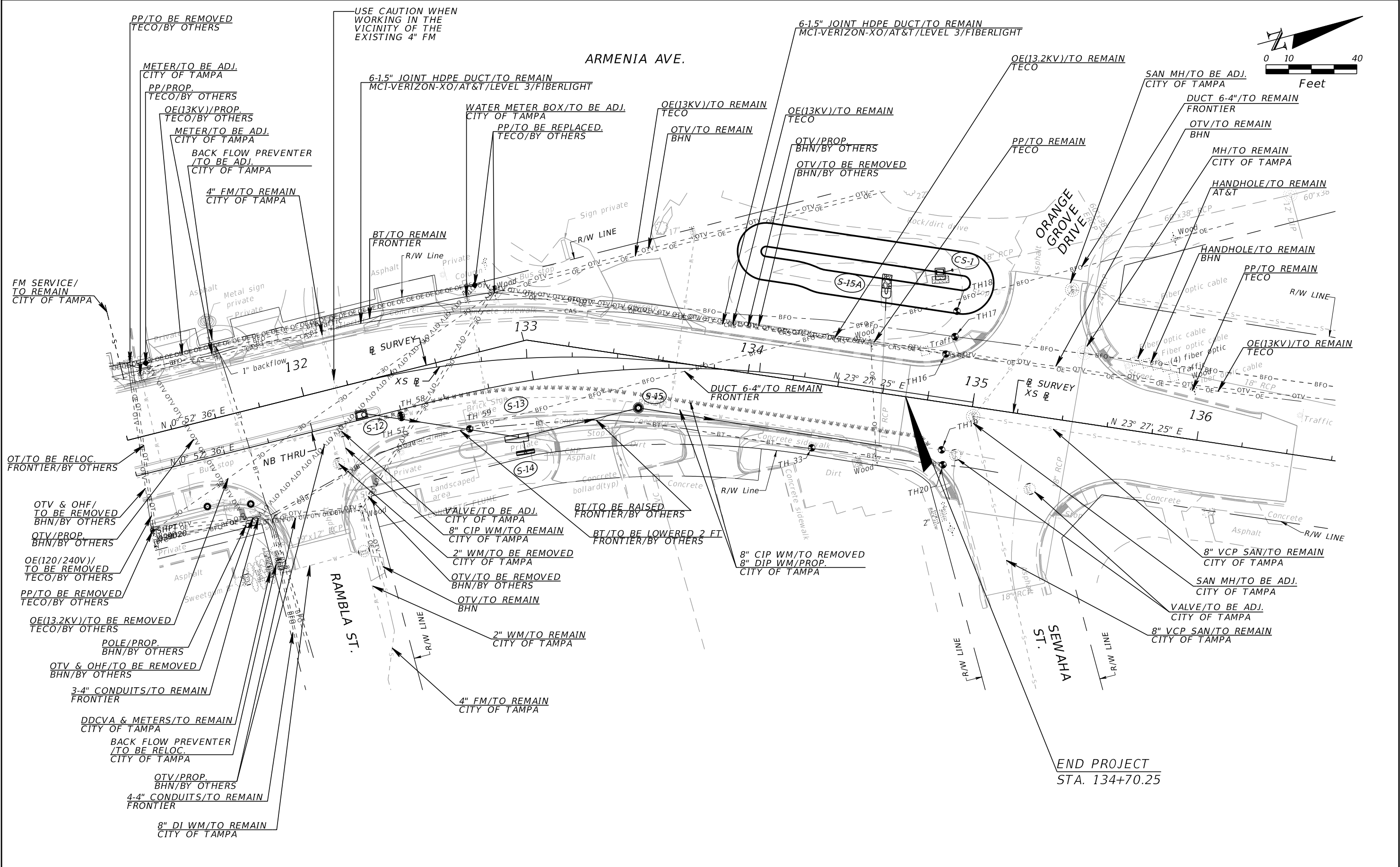
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY ADJUSTMENTS**

SHEET NO. 87

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

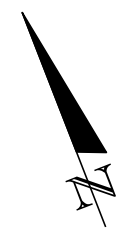
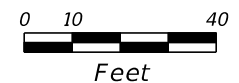
**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

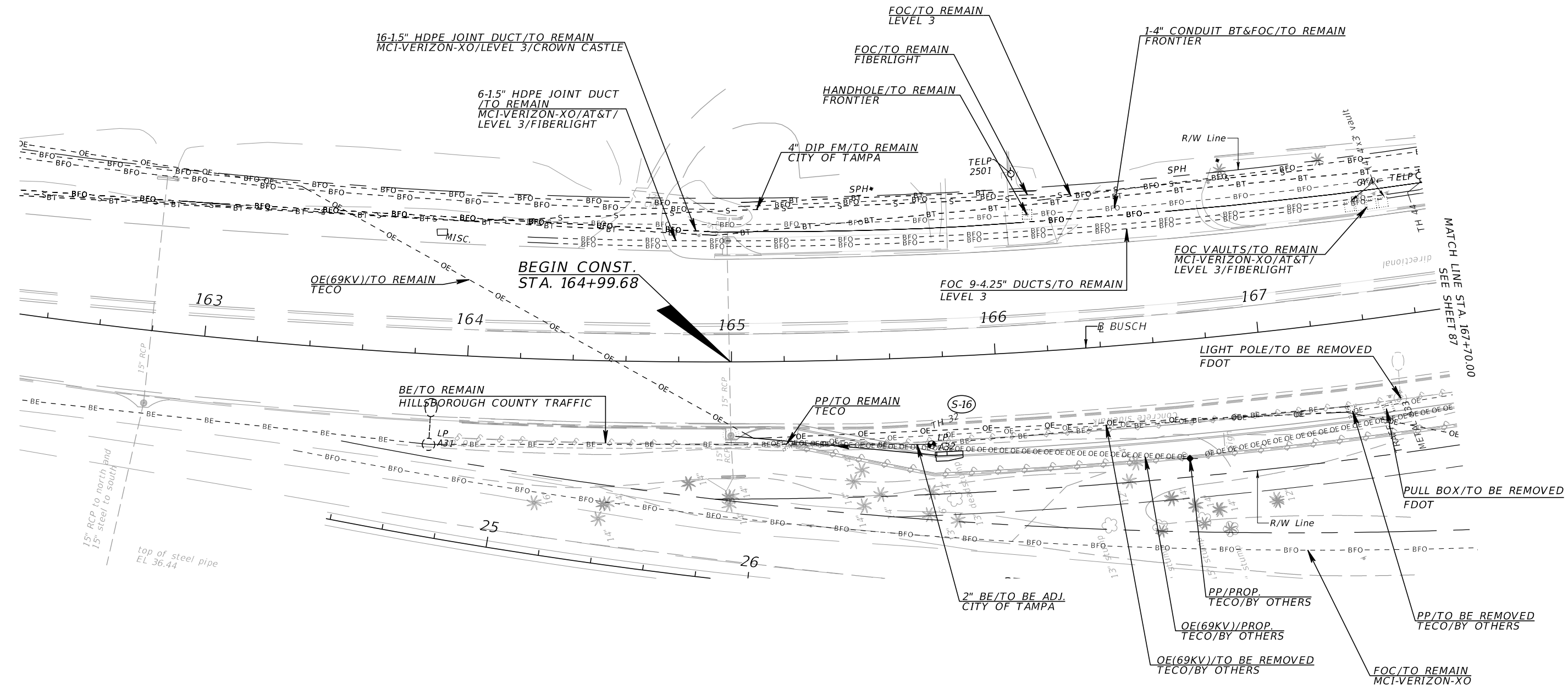
**UTILITY ADJUSTMENTS**

SHEET NO.	88
-----------	----

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SR580\BUSCH BLVD.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

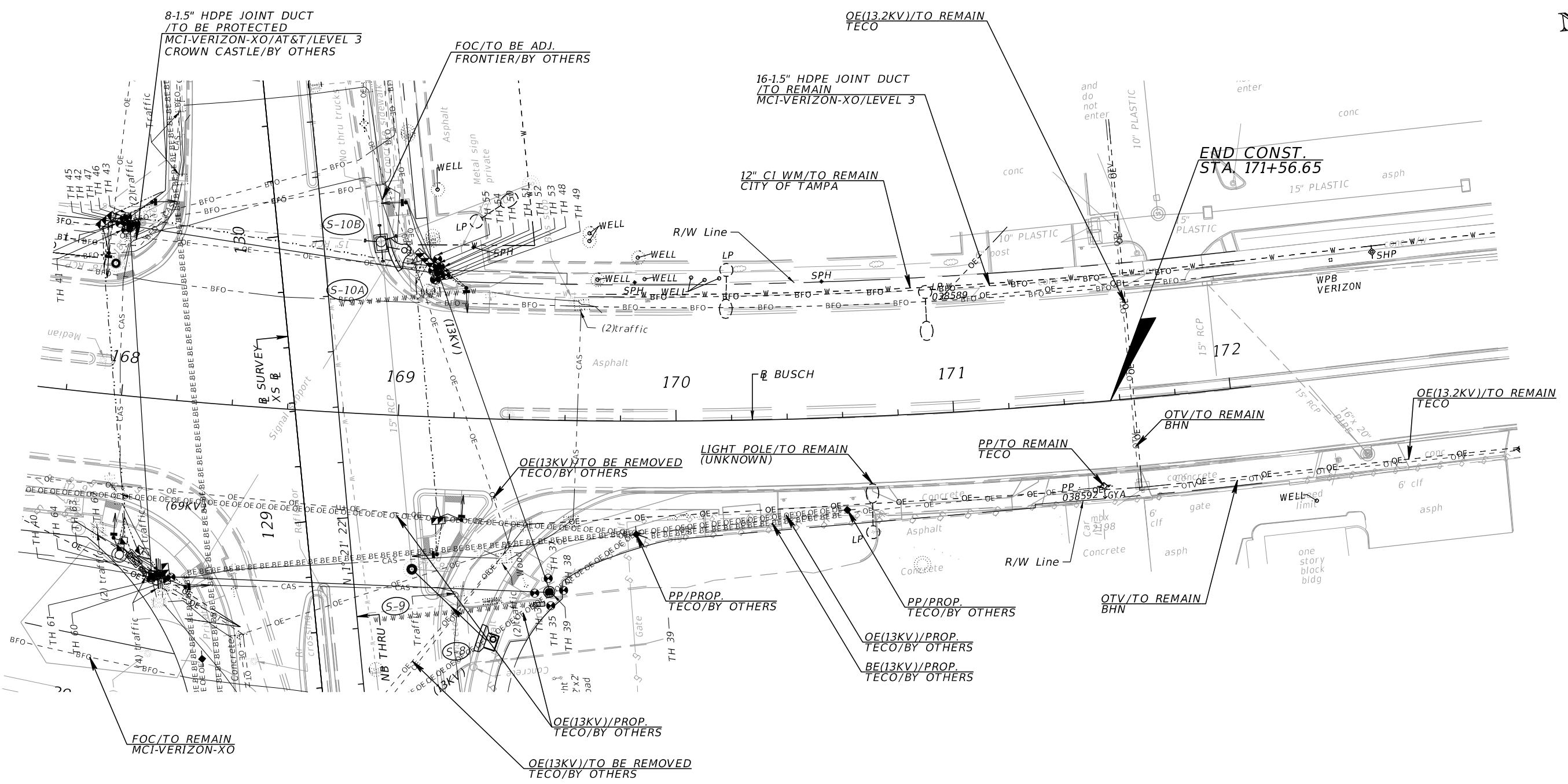
**UTILITY ADJUSTMENTS**

SHEET NO.  
**89**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SR580\BUSCH BLVD.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY ADJUSTMENTS**

SHEET NO.	90
-----------	----

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.


WASTEWATER GENERAL NOTES

1. AT LEAST THREE (3) WEEKS PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR'S REPRESENTATIVE SHALL CONTACT THE WASTEWATER DEPARTMENT PLANNING SECTION'S FIELD INSPECTOR, ALEX GONZALEZ, 2545 GUY N VERGER BOULEVARD, TAMPA, FLORIDA 33605 (PHONE 813-274-1293), AND SUPPLY HIM WITH FURTHER CONSTRUCTION INFORMATION. THIS INFORMATION SHOULD INCLUDE ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE, AND OTHER INFORMATION REQUIRED BY THE PLANNING SECTIONS. THE PLANNING SECTION OFFICE MUST ALSO BE CONTACTED BY TELEPHONE FIVE (5) DAYS PRIOR TO THE ACTUAL START OF FIELD OPERATIONS IN ORDER TO ENSURE AVAILABILITY OF INSPECTION PERSONNEL. IT IS IMPERATIVE THAT ANY SUB-CONTRACTOR BE FULLY INFORMED OF THE NOTIFICATION AND SUBMITTAL REQUIREMENTS. FAILURE TO COMPLY WITH THESE REQUIREMENTS WILL DELAY THE APPROVAL AND ACCEPTANCE OF THE CONSTRUCTED FACILITIES AND THE RELEASE OF THE CERTIFICATE OF OCCUPANCY FOR THE PROJECT.
2. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS AND A PRESSURE TEST ON ALL FORCE MAINS (AS APPLICABLE) IN ACCORDANCE WITH CITY OF TAMPA REGULATIONS. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE CITY OF TAMPA WASTEWATER DEPARTMENT FOR APPROVAL.
3. ONE OR MORE OF THE FOLLOWING CERTIFICATES/SHOP DRAWINGS, DEPENDING ON THE TYPE OF CONNECTIONS, WILL BE REQUIRED:
  - A. DUCTILE IRON PIPE (DIP) OR POLY-VINYLYL CHLORIDE (PVC) CERTIFICATE OF MANUFACTURE
  - B. MANHOLE SHOP DRAWINGS AND CONCRETE STRENGTH REPORT
  - C. FRAME AND COVER SHOP DRAWINGS
  - D. FLEXIBLE COUPLING SHOP DRAWINGS
  - E. CASING PIPE CERTIFICATE
  - F. JACKING PIT DETAIL
  - G. CRUSHED STONE SUBMITTAL
  - H. VALVE SHOP DRAWINGS
  - I. MANHOLE DROP CONNECTION DETAIL

THESE ITEMS MUST BE SUBMITTED, REVIEWED, AND APPROVED PRIOR TO STARTING CONSTRUCTION.
4. THE CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THE FOLLOWING HAS BEEN COMPLETED:
  - A. FINAL INSPECTION IN CONJUNCTION WITH DEPARTMENT PERSONNEL
  - B. AS-BUILTS HAVE BEEN SUBMITTED AND ACCEPTED
  - C. ALL NECESSARY TESTING COMPLETED AND CERTIFIED
  - D. PAYMENT OF ALL CAPACITY FEES
  - E. ISSUANCE OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) CERTIFICATION OF COMPLETION APPROVAL (IF APPLICABLE)
5. ALL FORCE MAINS LOCATED IN THE RIGHT OF WAY SHALL BE CONSTRUCTED OF C-900, DR 18, GREEN PVC FOR FORCE MAINS LESS THAN 14-INCHES IN DIAMETER. FOR FORCE MAINS WITH DIAMETERS 14-INCHES OR GREATER, THE FORCE MAIN SHALL BE CONSTRUCTED OF C-905, DR 18, GREEN PVC.
6. THE FORCE MAIN SHALL BE INSTALLED WITH A METALLIC LOCATING WIRE IN ACCORDANCE WITH THE CITY'S PVC PIPE LOCATING WIRE DETAIL.
7. ALL FORCE MAIN BENDS, FITTINGS, AND VALVES SHALL HAVE RESTRAINED MECHANICAL JOINTS AS MANUFACTURED BY "MEGA-LUG", OR APPROVED EQUAL. ADDITIONAL PIPE JOINTS UPSTREAM AND DOWNSTREAM OF EACH FITTING, BEND, OR VALVE SHALL ALSO BE RESTRAINED IN ACCORDANCE WITH THE CITY'S STANDARD PIPE JOINT RESTRAINT TABLE INCLUDED IN THE PLAN SET.
8. THE FORCE MAIN SHALL BE CONSTRUCTED IN A STRAIGHT ALIGNMENT BETWEEN THE SPECIFIED POINTS OF HORIZONTAL OR VERTICAL DEFLECTION. THERE SHALL BE NO INTERMEDIATE HIGH OR LOW POINTS BETWEEN THE VERTICAL POINTS OF DEFLECTION. AIR RELEASE VALVES SHALL BE INSTALLED AT ALL HIGH POINTS SPECIFIED ON THE PLANS. FINAL LOCATION OF THE AIR RELEASE VALVE SHALL BE ADJUSTED SO THAT IT IS LOCATED AT THE ACTUAL HIGH POINT OF THE COMPLETED INSTALLATION.
9. THE FORCE MAIN SHALL BE INSTALLED USING "CLASS C" BEDDING UNLESS OTHERWISE SPECIFIED.
10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SERVICE TO THE PROPERTY OWNERS DURING CONSTRUCTION. THE CONTRACTOR MAY BE REQUIRED TO PERFORM THE WORK DURING LOW-FLOW PERIODS AT NIGHT AND/OR COORDINATE SHUT DOWNS WITH THE PRIVATE PUMP STATION OWNERS.
11. ALL PROPOSED FORCE MAIN CONSTRUCTION TO BE INSTALLED BY OPEN TRENCH METHODS.

LEGEND:

- R.J. RESTRAIN ALL JOINTS AND FITTINGS
- HB HORIZONTAL BEND
- VB VERTICAL BEND
- ⊥ ⊥ PROPOSED VERTICAL BENDS

REVISIONS					CITY OF TAMPA TRANSPORTATION DIVISION	<b>UTILITY RELOCATION SHEETS</b>  <b>NOTES</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057		91
				ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.


WATER LINE CONSTRUCTION NOTES

1. WATER VALVE BOXES TO REMAIN SHALL BE ADJUSTED TO FINISH ELEVATION ADJACENT TO THE BOX.
2. WATER METER BOXES SHALL BE RELOCATED TO THE ROW LINE. REPLACEMENT WATER METERS SERVICE LINES SHALL BE INSTALLED FROM THE WATER MAIN TO THE RELOCATED METER - EXISTING SERVICE LINES SHALL NOT BE REUSED.
3. CONTRACTOR SHALL CONTACT CITY OF TAMPA WATER DEPARTMENT CONSTRUCTION ENGINEER A MIN. OF 10 WORKING DAYS PRIOR TO START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING FOR REVIEW OF INSTALLATION METHODS AND COORDINATION REQUIRED WITH THE CITY OF TAMPA WATER DEPARTMENT.
4. ALL WORKMANSHIP AND MATERIALS USED IN THE CONSTRUCTION OF WATER PUBLIC FACILITIES FOR THIS PROJECT SHALL CONFORM TO WATER DEPARTMENT SPECIFICATIONS AS PROVIDED IN CONTRACT 12-D-57 BID DOCUMENTS, ANY ASPECT OF SAID CONSTRUCTION REQUIRED BUT NOT ADDRESSED IN THE BID DOCUMENTS SHALL BE IN ACCORDANCE WITH CURRENT WATER DEPARTMENT SPECIFICATIONS.
5. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION. CALL "SUNSHINE ONE CALL" AT 1-800-432-4770.
6. ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS.
7. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS, PERMIT REQUIREMENTS, AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
8. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO THEIR ORIGINAL OR BETTER CONDITION.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS (ELEV.), CENTER LINES, AND STATIONING AS REQUIRED TO PERFORM HIS WORK.
10. CONNECTIONS TO EXISTING WATER MAINS SHALL BE DONE IN A TIMELY MANNER. AT NO TIME SHALL THE FLOW OF WATER RUNNING THE LENGTH OF THE PROJECT BE STOPPED EXCEPT TO TIE-IN WATER MAINS THAT HAVE BEEN TESTED AND CLEARED FOR POTABLE WATER USE.
11. CONNECTIONS TO EXISTING SYSTEMS: THE CITY WATER DEPARTMENT REQUIRES THAT ITS CUSTOMERS BE KEPT IN SERVICE AT ALL TIMES. THE CONTRACTOR MUST PROVIDE TEMPORARY SERVICE TO CUSTOMERS WHOSE SERVICE WILL BE AFFECTED BY A SHUTDOWN.
12. WHEN A SHUTDOWN IS AUTHORIZED BY THE CITY WATER DEPARTMENT AND CUSTOMERS WILL HAVE THEIR WATER SHUT OFF, THE CONTRACTOR MUST HAVE PRE-ASSEMBLED ALL NEW PIPING EXCEPT AT THE POINT OF TIE-IN, INCLUDING SERVICE LINES BEING TRANSFERRED TO THE NEW MAIN. THE ENTIRE PRE-ASSEMBLY SHALL BE SUCCESSFULLY PRESSURE TESTED AND BACTERIOLOGICAL TESTED PRIOR TO THE SHUTDOWN FOR CONNECTION(S). SHUTDOWNS SHALL BE LIMITED TO NO MORE THAN 4-HOURS. THE CONTRACTOR SHALL HAVE SUFFICIENT CREWS ON SITE TO ACCOMPLISH ANY SHUTDOWN IN LESS THAN FOUR HOURS.
13. CONTRACTOR SHALL INSTALL LINESTOPS IF AND AS REQUIRED TO KEEP CUSTOMERS IN SERVICE DURING SHUTDOWNS, WITH THE CONCURRENCE OF THE CITY WATER DEPARTMENT. SEVERAL REQUIRED LINESTOPS HAVE BEEN SHOWN IN THE PLANS, BASED ON KNOWN EXISTING CONDITIONS. HOWEVER, OTHERS MAY BE REQUIRED.
14. THE CONTRACTOR'S SCHEDULE PROPOSED FOR WATER MAIN RELOCATION CONSTRUCTION AND REMOVALS SHALL BE SUBMITTED TO, AND MUST BE APPROVED BY, THE CITY WATER DEPARTMENT.
15. ALL ELEVATIONS ARE BASED ON NAVD 1988 DATUM UNLESS OTHERWISE NOTED. STATIONING OF THE WATER MAIN AND FITTINGS AS SHOWN HEREON REFERS TO BASELINE OF CONSTRUCTION UNLESS OTHERWISE INDICATED.
16. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES UNLESS OTHERWISE NOTED.
17. ALL WATER MAINS SHALL BE CONSTRUCTED IN A MANNER SUCH AS TO MAINTAIN A MINIMUM OF THREE (3) FEET HORIZONTAL SEPARATION FROM OTHER UTILITIES, EXCEPT STORM, SANITARY AND GAS.
18. ALL WATER PIPE MATERIAL AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CITY OF TAMPA SPECIFICATIONS. ALL DUCTILE IRON PIPE (DIP) SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C-151/A21.51. PIPE SHALL BE LINED WITH A STANDARD THICKNESS CEMENT-MORTAR LINING AND SEAL COATED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C104/A21.4 AND NSF 61. PIPE SHALL BE PRESSURE CLASS 350.
19. ALL DUCTILE IRON PIPE SHALL BE PUSH-ON JOINT AND SHALL CONFORM TO AWWA STANDARD C-111/A21.11.
20. ALL FITTINGS SHALL BE DUCTILE IRON AND MECHANICAL JOINT. FITTINGS SHALL BE CONNECTED TO PIPES WITH WEDGE ACTION RESTRAINT SUCH AS EBBA MEGA-LUG OR APPROVED EQUAL.
21. RESTRAINT OF DIP PIPE AND MECHANICAL JOINT PIPE FITTINGS SHALL BE WITH MECHANICAL RESTRAINTS IN ACCORDANCE WITH THE APPROPRIATE CITY OF TAMPA RESTRAINT TABLE AND AS INDICATED ON THE PLANS. CONCRETE BLOCKS SHALL NOT BE USED FOR THRUST RESTRAINT. MECHANICAL RESTRAINT OF PUSH-ON DIP, OTHER THAN FOR FITTINGS, SHALL BE WITH APPROVED PUSH-ON JOINT GASKET-TYPE (GRIPPER) RESTRAINTS SUCH AS AMERICAN "FAST-GRIP GASKET" OR US PIPE "FIELD-LOK GASKET".

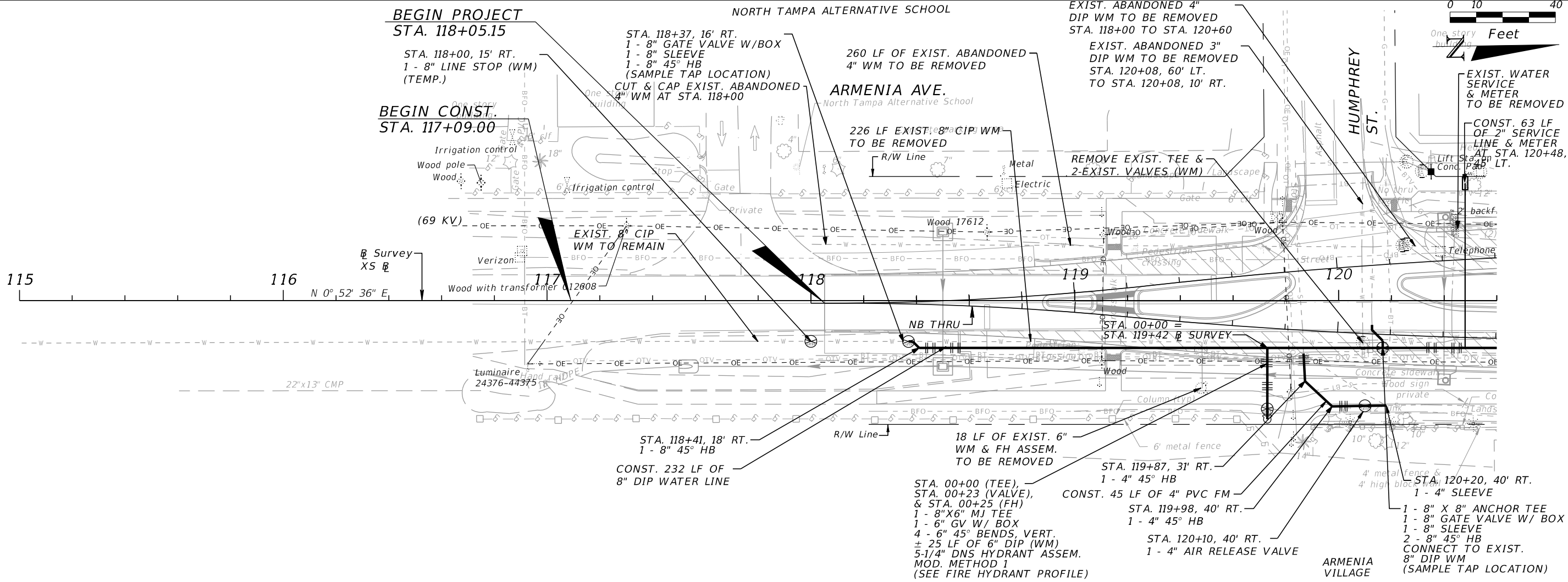
22. BENDS SHALL BE INSTALLED ON DIP WATER MAIN, AS NECESSARY, TO MAINTAIN PROPER ALIGNMENT. DIP JOINT DEFLECTION SHALL BE IN ACCORDANCE WITH AWWA C-600, LATEST EDITION, EXCEPT DEFLECTION ALLOWED SHALL BE 80% OR LESS THAN THE DEFLECTION VALUES GIVEN IN THE AWWA DEFLECTION TABLES.
23. FIRE HYDRANT AND GATE VALVE ASSEMBLIES SHALL CONSIST OF ALL PIPE, VALVES, TEES, FITTINGS AND ANY AND ALL OTHER APPURTENANCES COMPRISING A COMPLETE, WORKING UNIT AS REQUIRED BY THE CITY OF TAMPA SPECIFICATIONS. FIRE HYDRANTS SHALL BE 5-1/4" DNS, WITH BOTTOM FLANGE ELEVATION LOCATED 3"-5" ABOVE FINISHED GRADE. (SEE COT STANDARD DETAILS 4.01 AND 4.02).
24. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED IN A MANNER THAT MAINTAINS AT LEAST SIX (6) FEET OF CLEARANCE BETWEEN ROADWAY BACK OF CURB (OR EDGE OF PAVEMENT) AND THE HYDRANT.
25. DIP WATER MAIN AND APPURTENANCES SHALL BE INSTALLED IN A LOOSE POLYETHYLENE ENCASEMENT NOT LESS THAN 8 MILS THICK IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE SPECIFICATION A21.5 AND CITY OF TAMPA STANDARD DETAIL 2.05.
26. ALL PROPOSED WATER LINE CONSTRUCTION TO BE INSTALLED BY OPEN TRENCH METHODS.

WATER SYSTEM TESTING AND INSPECTION REQUIREMENT NOTES

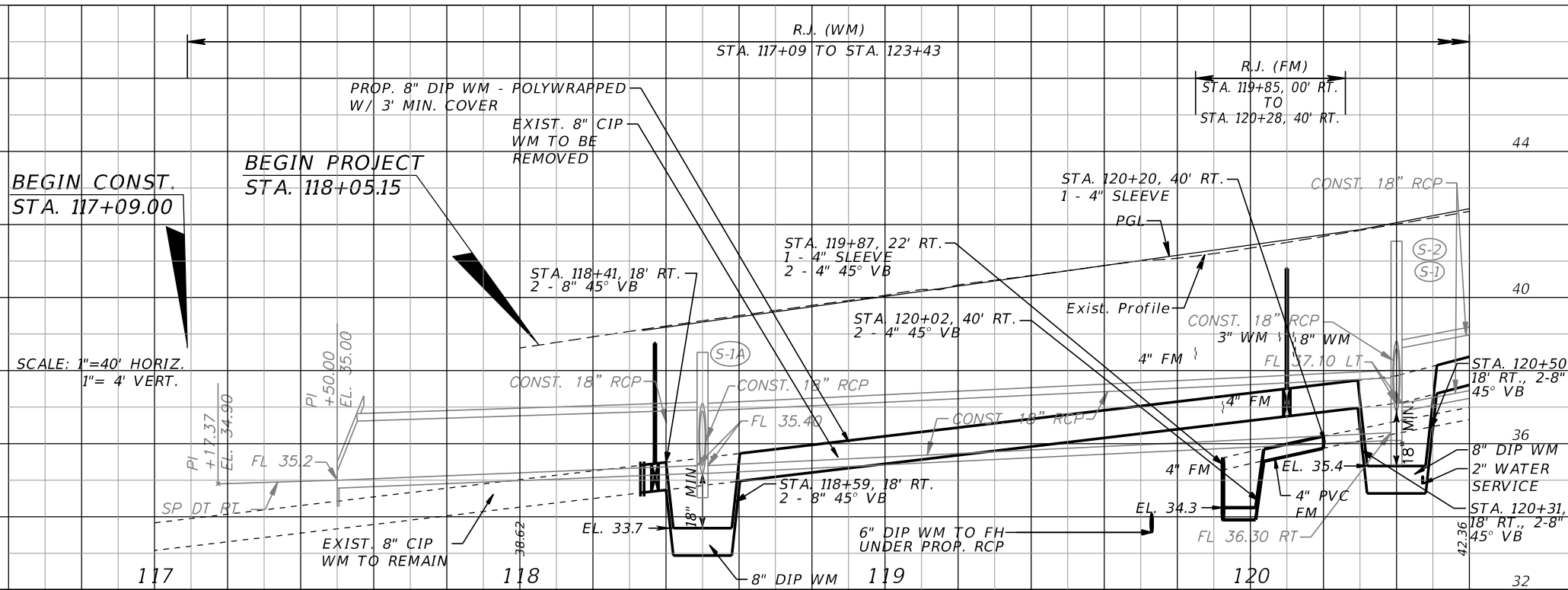
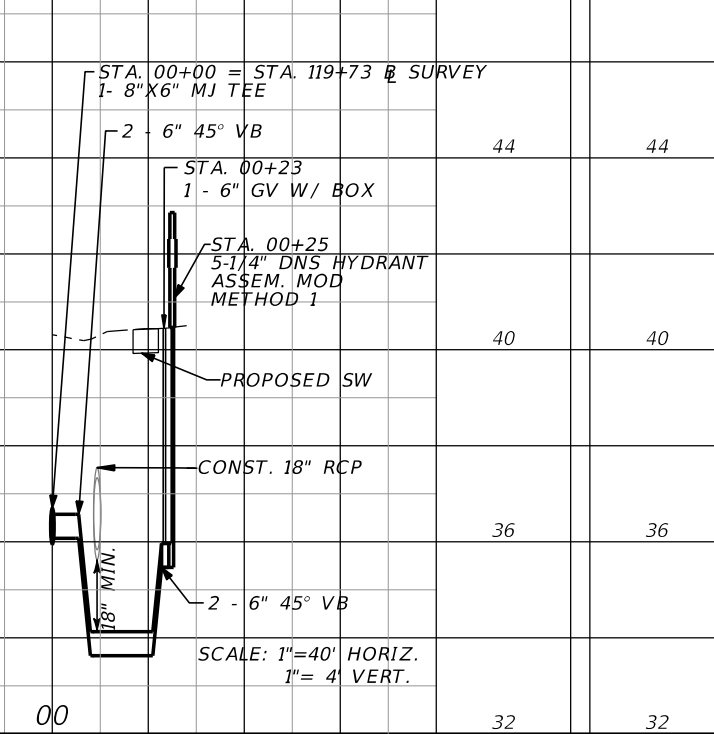
1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND CITY INSPECTORS 3 WORKING DAYS IN ADVANCE OF PERFORMING TESTS.
2. CONTRACTOR SHALL PRESSURE TEST WATER MAINS AT 150 PSI FOR A PERIOD OF 2 HOURS IN ACCORDANCE WITH AWWA C600-87 STANDARDS. CONTRACTOR SHALL NOTIFY ENGINEER AND THE CITY OF TAMPA AT LEAST 72 HOURS PRIOR TO START OF ANY TEST. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS.
3. CONTRACTOR TO PERFORM CHLORINATION AND COORDINATE BACTERIOLOGICAL SAMPLING WITH THE CITY OF TAMPA CONSTRUCTION INSPECTION SECTION IN ACCORDANCE WITH TAMPA WATER DEPARTMENT TECHNICAL MANUAL AND AWWA SPECIFICATION C651. CONTRACTOR TO OBTAIN SAMPLE CLEARANCE ON DOMESTIC WATER SYSTEM.
4. ALL TEST POINTS AND CHLORINATION POINTS PIPING SHALL BE COMPLETELY REMOVED PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP SHALL BE REMOVED AND THE MAIN PLUGGED AFTER OPERATION (SEE CITY OF TAMPA STANDARD DETAIL 2.18A).

REVISIONS				 <p>ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	CITY OF TAMPA TRANSPORTATION DIVISION		<p><b>UTILITY RELOCATION SHEETS</b></p> <p><b>NOTES</b></p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		CONTRACT NO: 12-D-00057			92
					ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.			

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



**FIRE HYDRANT PROFILE**



REVISIONS	
DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY RELOCATION SHEETS**  
**SEWER & WATER**

SHEET NO. **93**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

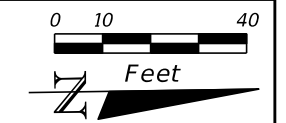
STA. 121+39, 21' RT.  
 1 - 8" X 6" ANCHOR TEE (WM)  
 1 - 6" GATE VALVE W/ BOX  
 2 - 6" 45° HB  
 ± 10 LF OF 6" DIP WM  
 1 - 6" SLEEVE  
 (SAMPLE TAP LOCATION)  
 CONNECT TO EXIST. 6" CIP WM

CONST. 162 LF OF  
 8" DIP WM

ARMENIA AVE.

EXIST. ABANDONED 4" CIP  
 WM TO BE REMOVED  
 STA. 120+60 TO STA. 126+20  
 (±560 LF)

CAHILL'S  
 OF  
 N. TAMPA



CONST. 64 LF OF 2" WATER  
 SERVICE AND METER  
 STA. 125+44, 43' LT.

48 LF OF EXIST. WATER  
 SERVICE & METER  
 TO BE REMOVED

43 LF OF EXIST. 4" WM  
 TO BE REMOVED

STA. 122+15, 16' RT. (WM)  
 1 - 8" GATE VALVE W/ BOX  
 1 - 8" SLEEVE  
 2 - 8" 45° HB  
 (CHLORINE INJECTION POINT)

EXIST. 3" ABANDONED  
 WM TO BE REMOVED  
 STA. 120+60, 14' RT. Jdng  
 TO STA. 125+17, 80' RT.  
 (±516 LF)

EXIST. 8" TEE VALVE &  
 8 LF OF 6" CIP WM  
 TO BE REMOVED

156 LF OF EXIST. 8" CIP  
 WM TO BE REMOVED

EXIST. 6" CIP  
 WM TO REMAIN

R.J. STA. 121+34, 18' RT.  
 TO 121+35, 49' RT.

EXIST. 4" PVC  
 FM TO REMAIN

CONST. 32 LF OF 4" PVC FM  
 & R.J. STA. 121+61 TO STA. 122+39

STA. 122+22, 40' RT.  
 1 - 4" AIR RELEASE VALVE

STA. 122+08, 34' RT.  
 1 - 4" 45° HB

STA. 121+93, 34' RT.  
 1 - 4" 45° HB

31 LF OF EXIST. 4" FM  
 TO BE REMOVED

16 LF OF EXIST. WATER  
 SERVICE & METER TO  
 BE REMOVED

CONST. 20 LF OF 1" WATER  
 SERVICE & METER  
 STA. 123+89, 46.5' RT.

SELF  
 RELIANCE  
 INC.

EXIST. FH ASSEM.  
 TO REMAIN

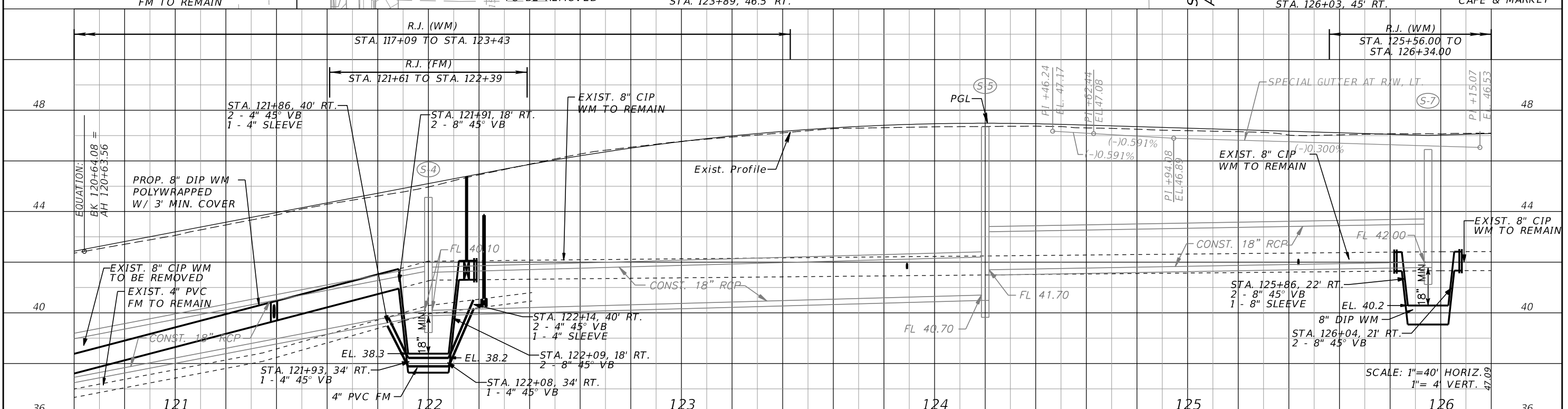
EXIST. 6" DIP  
 WM TO REMAIN

CONST. 24 LF OF 8" DIP WM  
 (SEE PROFILE)

20 LF OF WATER SERVICE  
 & METER TO BE REMOVED

CONST. 22 LF OF 1" WATER  
 SERVICE AND METER  
 STA. 126+03, 45' RT.

EL TROPICAL  
 CAFE & MARKET



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

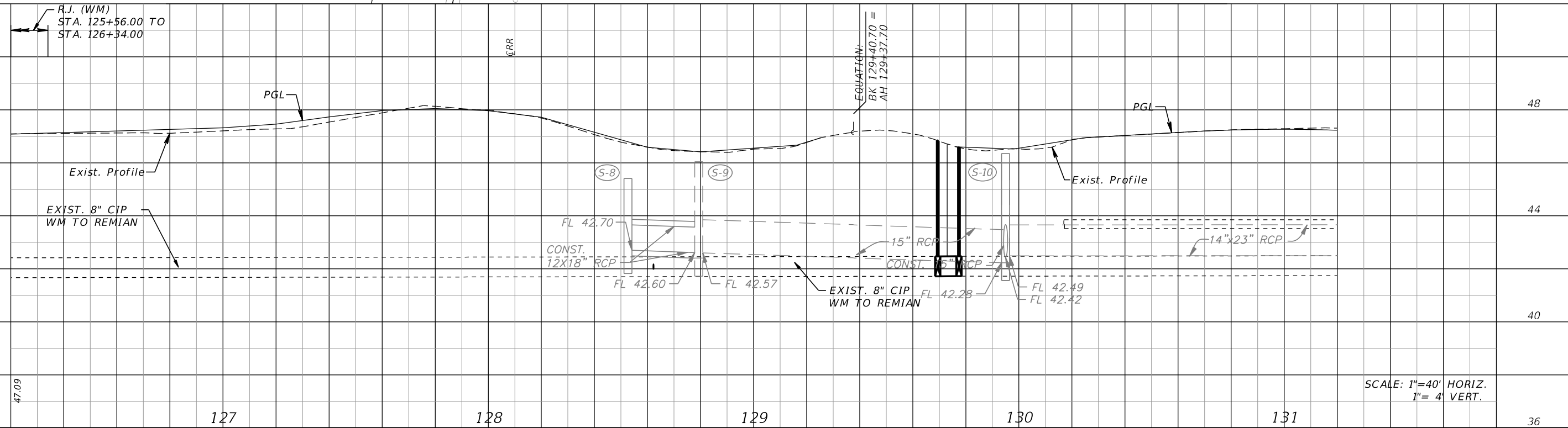
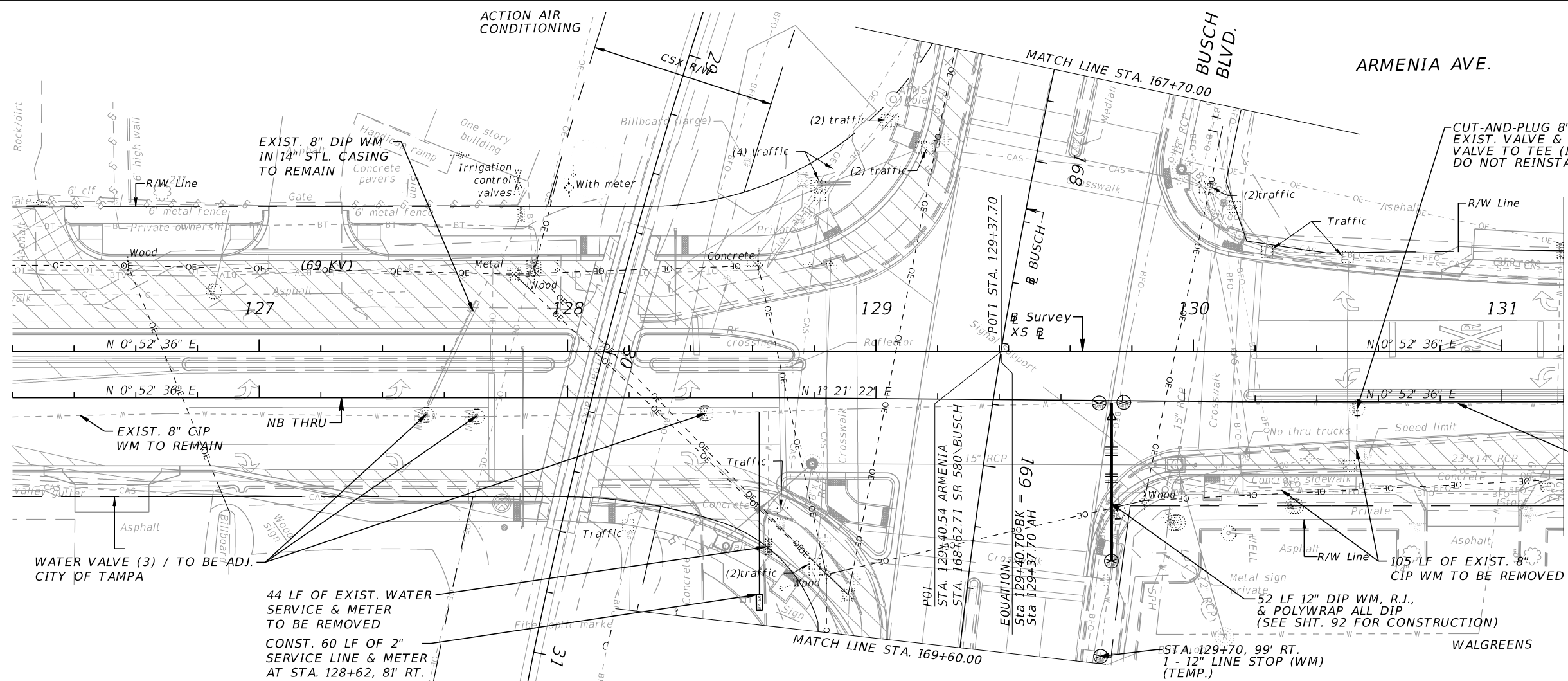
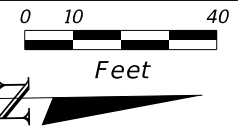
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY RELOCATION SHEETS**  
**SEWER & WATER**

SCALE: 1"=40' HORIZ.  
 1"= 4' VERT.

SHEET NO. **94**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



SCALE: 1"=40' HORIZ.  
1"= 4' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

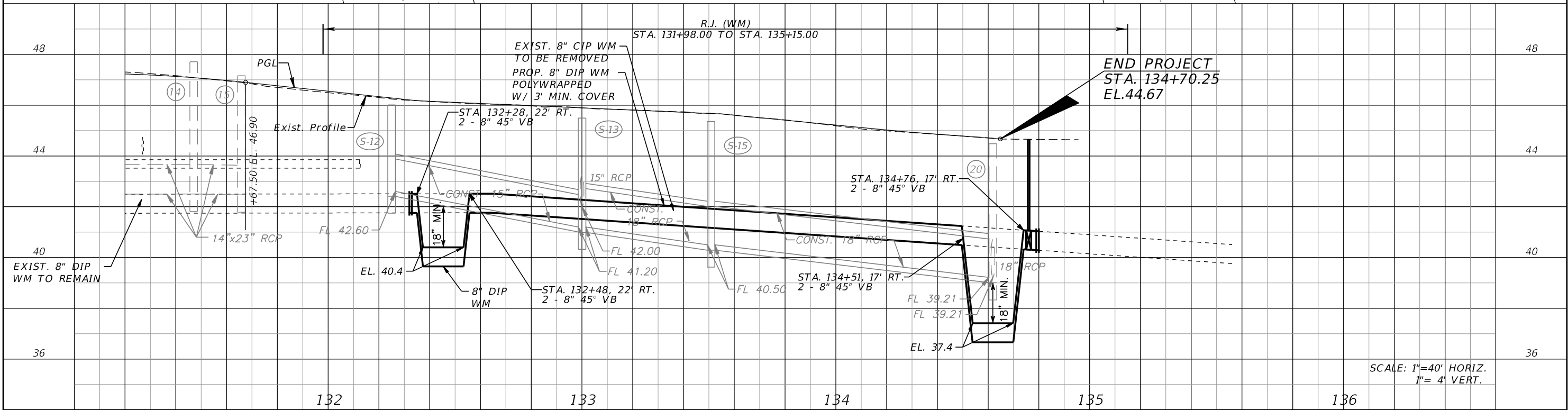
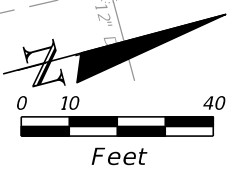
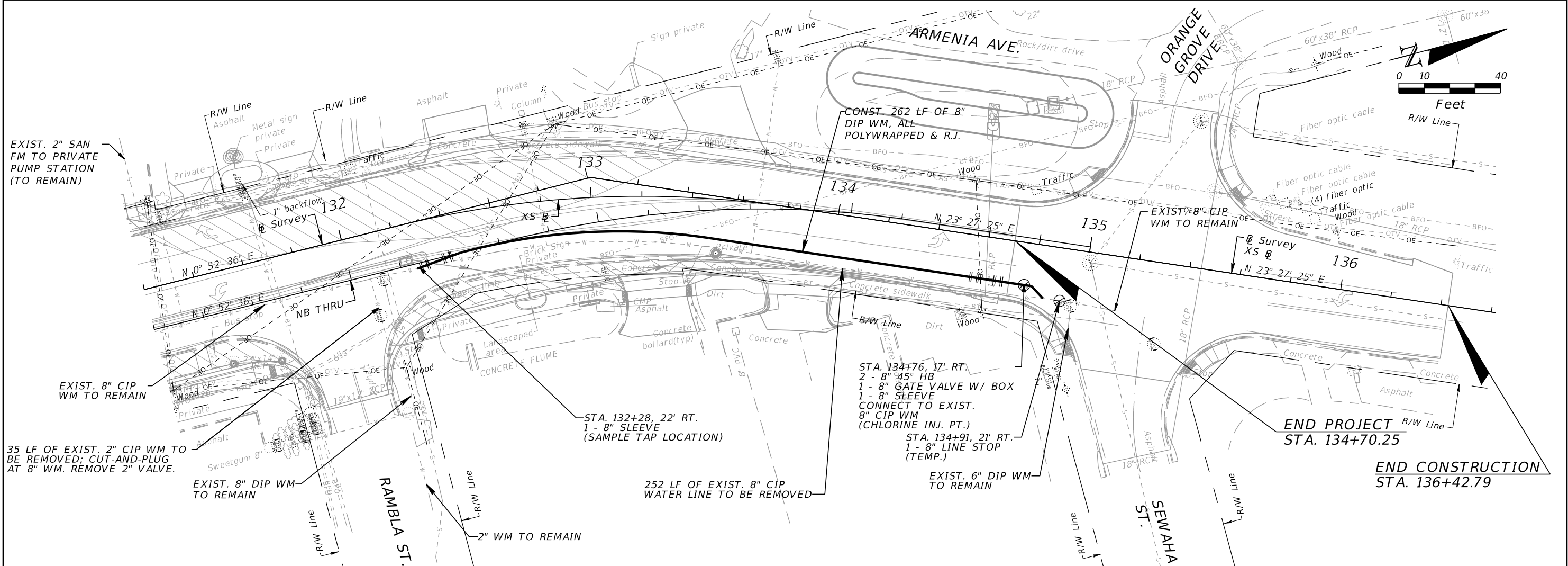
**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**UTILITY RELOCATION SHEETS**  
**SEWER & WATER**

SHEET NO.  
**95**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

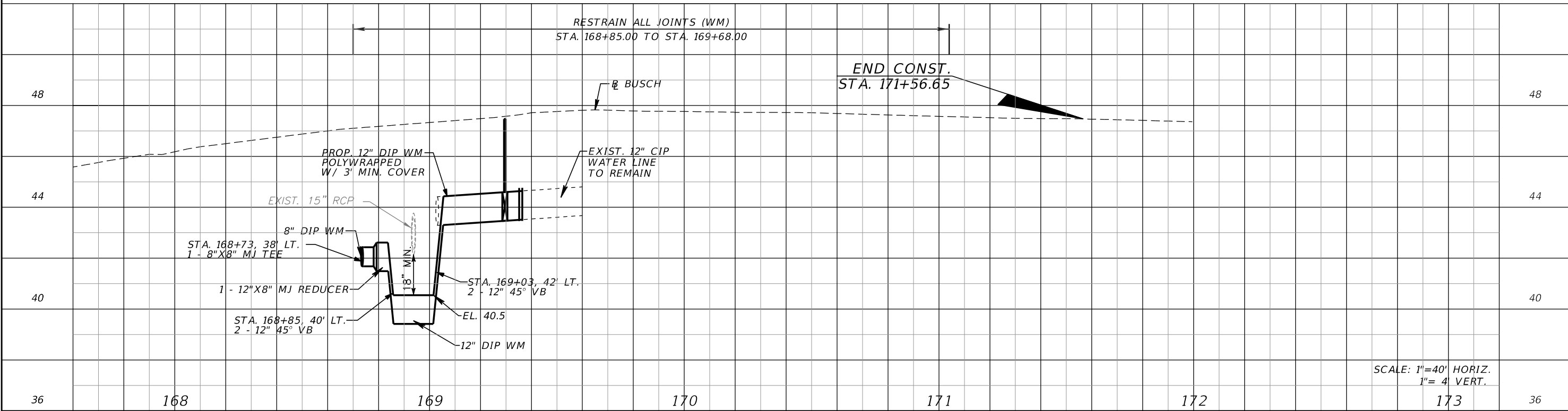
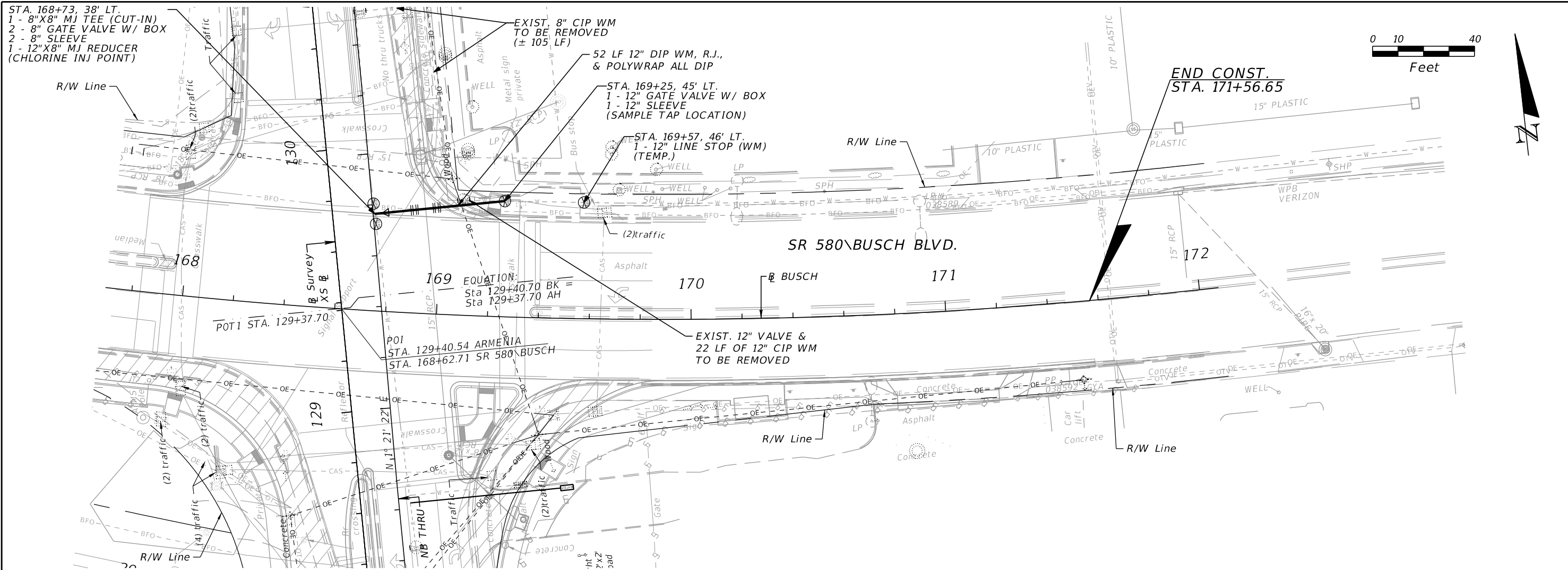
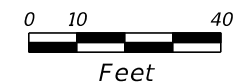
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY RELOCATION SHEETS**  
**SEWER & WATER**

SHEET NO.  
**96**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

STA. 168+73, 38' LT.  
 1 - 8"X8" MJ TEE (CUT-IN)  
 2 - 8" GATE VALVE W/ BOX  
 2 - 8" SLEEVE  
 1 - 12"X8" MJ REDUCER  
 (CHLORINE INJ POINT)



SCALE: 1"=40' HORIZ.  
 1"= 4' VERT.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

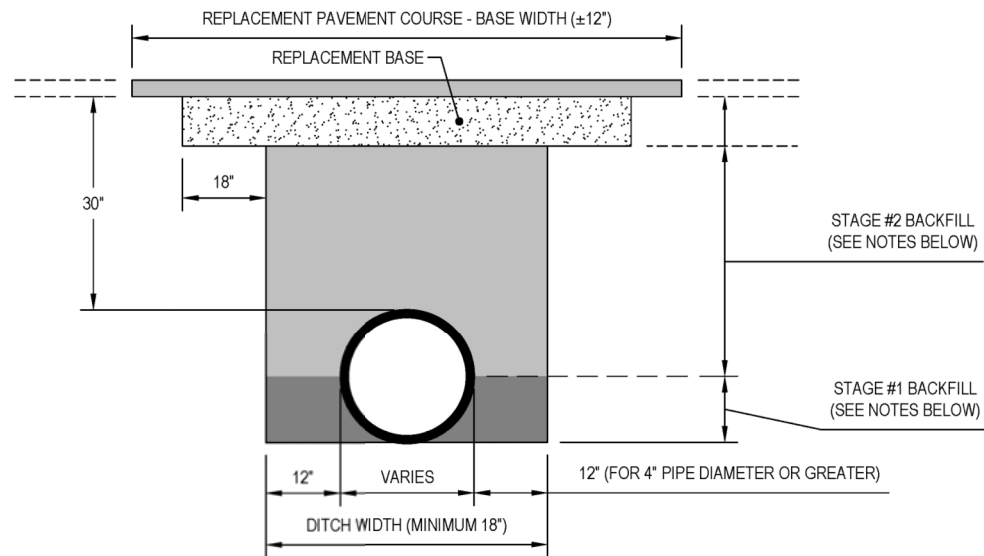
**UTILITY RELOCATION SHEETS**  
**SEWER & WATER**

SHEET NO.  
**97**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**DETAIL FOR RESTORATION WITHIN FDOT ROADWAY**

(DETAILS MODIFIED FROM FDOT DESIGN STANDARDS INDEX 307, LATEST EDITION)



**FLEXIBLE PAVEMENT NOTES:**

**PAVEMENT SHALL BE MECHANICALLY SAWED.**

PAVEMENT, BASE, AND BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH **CITY OF TAMPA PAVEMENT RESTORATION REQUIREMENTS, LATEST STANDARD SPECIFICATIONS.**

IN STAGE #1, CONSTRUCT COMPACTED FILL BENEATH THE HAUNCHES OF THE PIPE, USING MECHANICAL TAMPS SUITABLE FOR THIS PURPOSE. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING.

IN STAGE #2, CONSTRUCT COMPACTED FILL ALONG SIDES OF THE PIPE AND UP TO THE BOTTOM OF THE BASE. COMPACT MATERIAL USING MECHANICAL TAMPS SUITABLE TO ACHIEVE DENSITY MEETING 98% OF AASHTO T-180, LIFTS NOT TO EXCEED 12" COMPACTED.

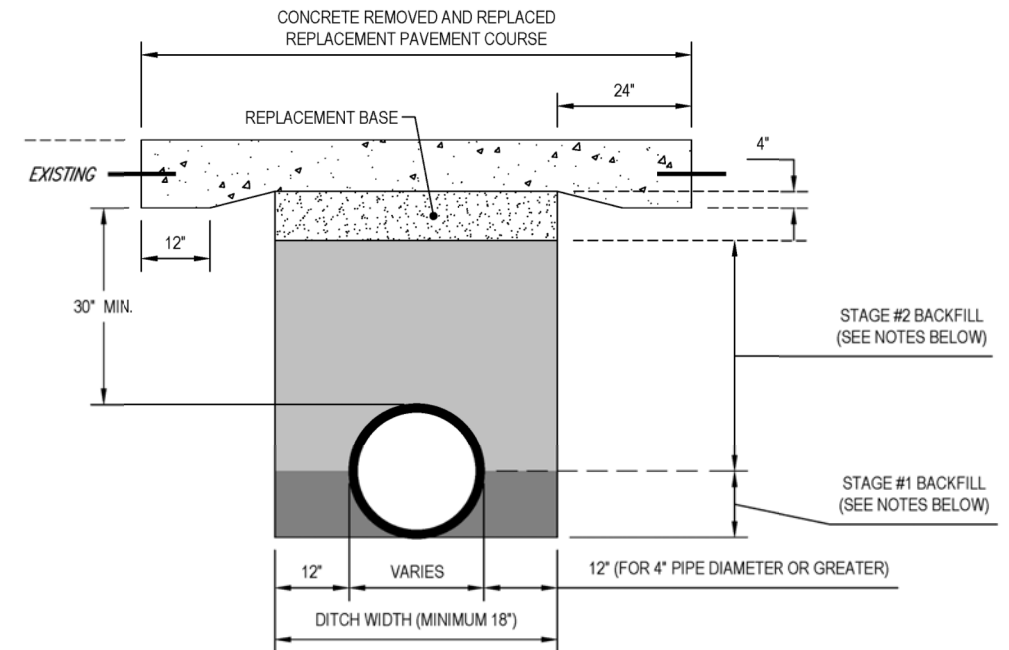
IF MECHANICAL COMPACTION IS DIFFICULT TO ACHIEVE, THEN FLOWABLE FILL MAY BE USED. IN STAGE #1, PLACE FLOWABLE FILL MIDWAY UP ON BOTH SIDES OF THE UTILITY. ALLOW TO HARDEN BEFORE PLACING STAGE #2. IF A METHOD IS PROVIDED TO PREVENT FLOATATION FROM OCCURRING, STAGE #1 AND #2 CAN BE COMBINED, IF APPROVED BY CITY ENGINEER.

NOTE: SPECIFICATION STANDARDS AND REQUIREMENTS NOT ILLUSTRATED SHALL MEET LATEST FDOT STANDARD SPECIFICATIONS.

	REVISION DATE	STANDARD DETAIL FOR RESTORATION WITHIN FDOT ROADWAY - FLEXIBLE PAVEMENT	2.00A
	JUL 2018		

**DETAIL FOR RESTORATION WITHIN FDOT ROADWAY**

(DETAILS MODIFIED FROM FDOT DESIGN STANDARDS INDEX 307, LATEST EDITION)



**RIGID PAVEMENT NOTES:**

PAVEMENT SHALL BE MECHANICALLY SAWED AND RESTORED TO CONFORM WITH EXISTING PAVEMENT JOINTS.

**HIGH EARLY STRENGTH CEMENT CONCRETE (3000 PSI) MEETING WITH REQUIREMENTS OF FDOT STANDARD SPECIFICATION 346, LATEST EDITION SHALL BE USED FOR RIGID PAVEMENT REPLACEMENT.**

PAVEMENT, BASE, AND BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH **CITY OF TAMPA PAVEMENT RESTORATION REQUIREMENTS, LATEST STANDARD SPECIFICATIONS.**

IN STAGE #1, CONSTRUCT COMPACTED FILL BENEATH THE HAUNCHES OF THE PIPE, USING MECHANICAL TAMPS SUITABLE FOR THIS PURPOSE. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING.

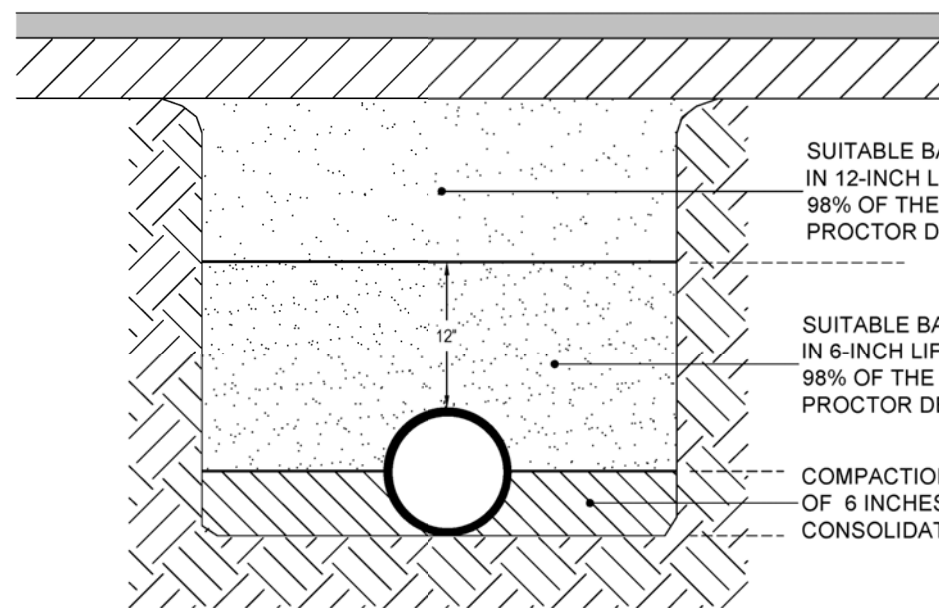
IN STAGE #2, CONSTRUCT COMPACTED FILL ALONG SIDES OF THE PIPE AND UP TO THE BOTTOM OF THE BASE. COMPACT MATERIAL USING MECHANICAL TAMPS SUITABLE TO ACHIEVE DENSITY MEETING 98% OF AASHTO T-180, LIFTS NOT TO EXCEED 12" COMPACTED.

IF MECHANICAL COMPACTION IS DIFFICULT TO ACHIEVE, THEN FLOWABLE FILL MAY BE USED. IN STAGE #1, PLACE FLOWABLE FILL MIDWAY UP ON BOTH SIDES OF THE UTILITY. ALLOW TO HARDEN BEFORE PLACING STAGE #2. IF A METHOD IS PROVIDED TO PREVENT FLOATATION FROM OCCURRING, STAGE #1 AND #2 CAN BE COMBINED, IF APPROVED BY CITY ENGINEER.

NOTE: SPECIFICATION STANDARDS AND REQUIREMENTS NOT ILLUSTRATED SHALL MEET LATEST FDOT STANDARD SPECIFICATIONS.

	LAST REVISION	STANDARD DETAIL FOR RESTORATION WITHIN FDOT ROADWAY - RIGID PAVEMENT	2.00B
	JUL 2018		

<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				DATE	DESCRIPTION	DATE	DESCRIPTION					<p><b>ELEMENT</b> ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798</p>	<p>CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO: 12-D-00057 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.</p>	<p>UTILITY RELOCATION SHEETS DETAILS</p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION												
<p>98</p>															



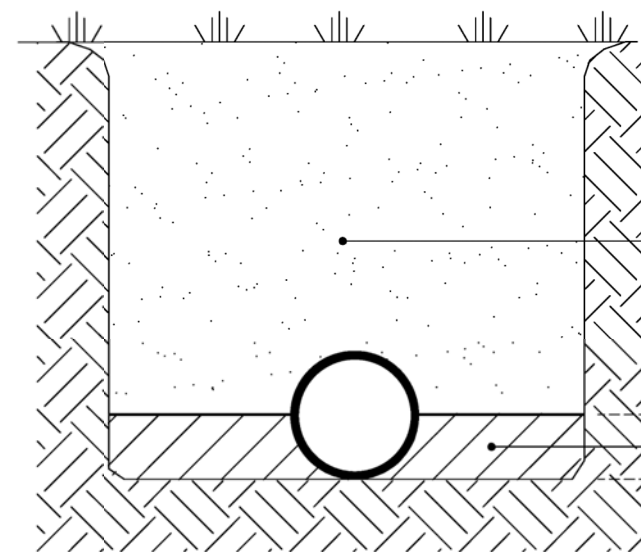
SUITABLE BACKFILL COMPACTED IN 12-INCH LIFTS TO A MINIMUM 98% OF THE MAXIMUM MODIFIED PROCTOR DENSITY

SUITABLE BACKFILL COMPACTED IN 6-INCH LIFTS TO A MINIMUM 98% OF THE MAXIMUM MODIFIED PROCTOR DENSITY

COMPACTION BY HAND IN LAYERS OF 6 INCHES, LIGHTLY CONSOLIDATED TO CENTERLINE

**NOTES:**

1. TYPE 2 TRENCH IS DEFINED AS A FLAT-BOTTOM TRENCH. LIGHTLY CONSOLIDATE BACKFILL TO CENTERLINE OF PIPE.
2. THIS STANDARD SHALL BE UTILIZED IN THE ABSENCE OF SPECIFIC STANDARDS. THE STANDARD OF THE AGENCY CONTROLLING THE RIGHT-OF-WAY SHALL GOVERN UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
3. SUITABLE BACKFILL SHALL BE DEFINED AS MATERIAL FREE FROM CINDERS, ASHES, REFUSE, CLAY, ORGANIC MATTER, BOULDERS, ROCKS OR STONES, OR OTHER MATERIAL THAT IN THE OPINION OF THE CITY ENGINEER IS UNSUITABLE.
4. NON-PERVIOUS AREAS SHALL MEAN ANY CONCRETE OR ASPHALT CURB, SIDEWALK, TRAIL, DRIVEWAY, OR ROADWAY.



SUITABLE BACKFILL COMPACTED IN 12-INCH LIFTS TO A MINIMUM 95% OF THE MAXIMUM MODIFIED PROCTOR DENSITY

COMPACTION BY HAND IN LAYERS OF 6 INCHES, LIGHTLY CONSOLIDATED TO CENTERLINE

**NOTES:**

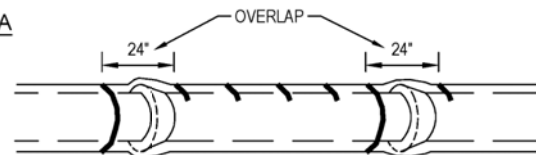
1. TYPE 2 TRENCH IS DEFINED AS A FLAT-BOTTOM TRENCH. LIGHTLY CONSOLIDATE BACKFILL TO CENTERLINE OF PIPE.
2. THIS STANDARD SHALL BE UTILIZED IN THE ABSENCE OF SPECIFIC STANDARDS. THE STANDARD OF THE AGENCY CONTROLLING THE RIGHT-OF-WAY SHALL GOVERN UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
3. SUITABLE BACKFILL SHALL BE DEFINED AS MATERIAL FREE FROM CINDERS, ASHES, REFUSE, CLAY, ORGANIC MATTER, BOULDERS, ROCKS OR STONES, OR OTHER MATERIAL THAT IN THE OPINION OF THE CITY ENGINEER IS UNSUITABLE.
4. NON-PAVED AREA IS A PERVIOUS AREA. IF ANY PART OF THE TRENCH IS WITHIN A CONCRETE OR ASPHALT CURB, SIDEWALK, DRIVEWAY, OR ROADWAY, THEN STANDARD DETAIL 2.01 APPLIES.

	LAST REVISION	TRENCHING, BEDDING AND BACKFILL DETAIL FOR NON-PERVIOUS (PAVED) AREAS	2.01A
	JAN 2018		

	LAST REVISION	TRENCHING, BEDDING, AND BACKFILL DETAIL FOR PERVIOUS (NON-PAVED) AREAS	2.02
	JUL 2018		

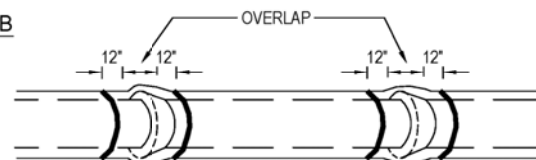
REVISIONS				 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798	CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO: 12-D-00057 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.	UTILITY RELOCATION SHEETS DETAILS	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				99

**METHOD A**



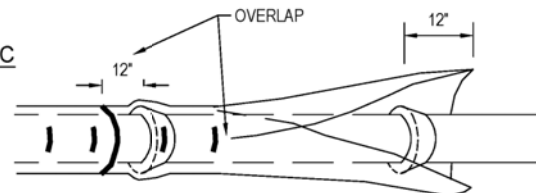
POLYETHYLENE TUBE IS CUT INTO LENGTHS APPROXIMATELY TWO FEET LONGER THAN THE PIPE SECTION AND PLACED AROUND IT. AFTER THE PIPE JOINT IS ASSEMBLED, THE POLYETHYLENE TUBE IS MADE TO OVERLAP THE JOINT AND THE OVERLAP SECURED IN PLACE. SINCE THE TUBE IS CONSIDERABLY LARGER THAN THE BARREL OF PIPE, IT IS MADE TO FIT SNUGLY BY FOLDING OVER AT THE TOP AND SECURING WITH TAPE EVERY 24" ALONG THE PIPE SECTION.

**METHOD B**



POLYETHYLENE TUBE IS CUT ONE FOOT SHORTER THAN THE LENGTH OF THE PIPE SECTION. AFTER PLACEMENT OF THE PIPE, IT IS FOLDED AND SECURED SNUGLY OVERALL. A THREE FOOT LENGTH OF POLYETHYLENE TUBE PLACED OVER THE END OF THE PRECEEDING SECTION IS THEN PULLED IN PLACE OVER THE JOINT AFTER ASSEMBLY AND SECURED.

**METHOD C**

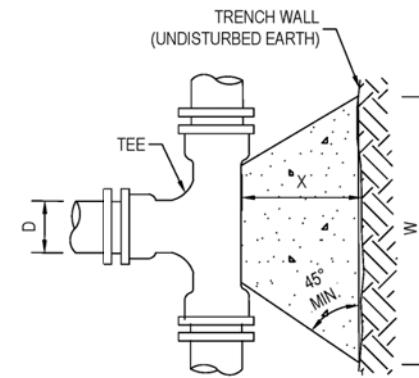


POLYETHYLENE SHEET IS CUT TO A LENGTH TWO FEET LONGER THAN THE PIPE SECTION. THE SHEET IS WRAPPED AROUND THE PIPE SO THAT IT OVERLAPS CIRCUMFERENTIALLY OVER THE TOP QUADRANT OF THE PIPE, THEN SECURED. AFTER JOINT ASSEMBLY, THE SURPLUS LENGTH OF POLYETHYLENE FILM IS SECURED AROUND THE JOINT, PROVIDING AN OVERLAP OF EACH JOINT. TAPE AT EACH JOINT AND AT 3' INTERVALS IN BETWEEN.

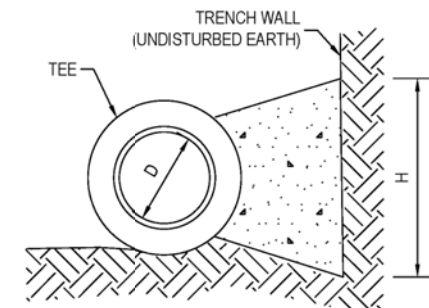
**NOTES:**

1. USE BLUE POLYETHYLENE FILM AND TAPE ONLY.
2. POLYETHYLENE FILM SHALL BE A MINIMUM OF 8 MIL. THICKNESS.
3. SPIRAL WRAP NOT REQUIRED WITH POLYWRAP.

	LAST REVISION	<p align="center"><b>POLYETHYLENE ENCASEMENT INSTALLATION DETAIL</b></p>	<p align="center">2.05</p>
	<p align="center">JUL 2018</p>		



**PLAN VIEW**



**SECTION**

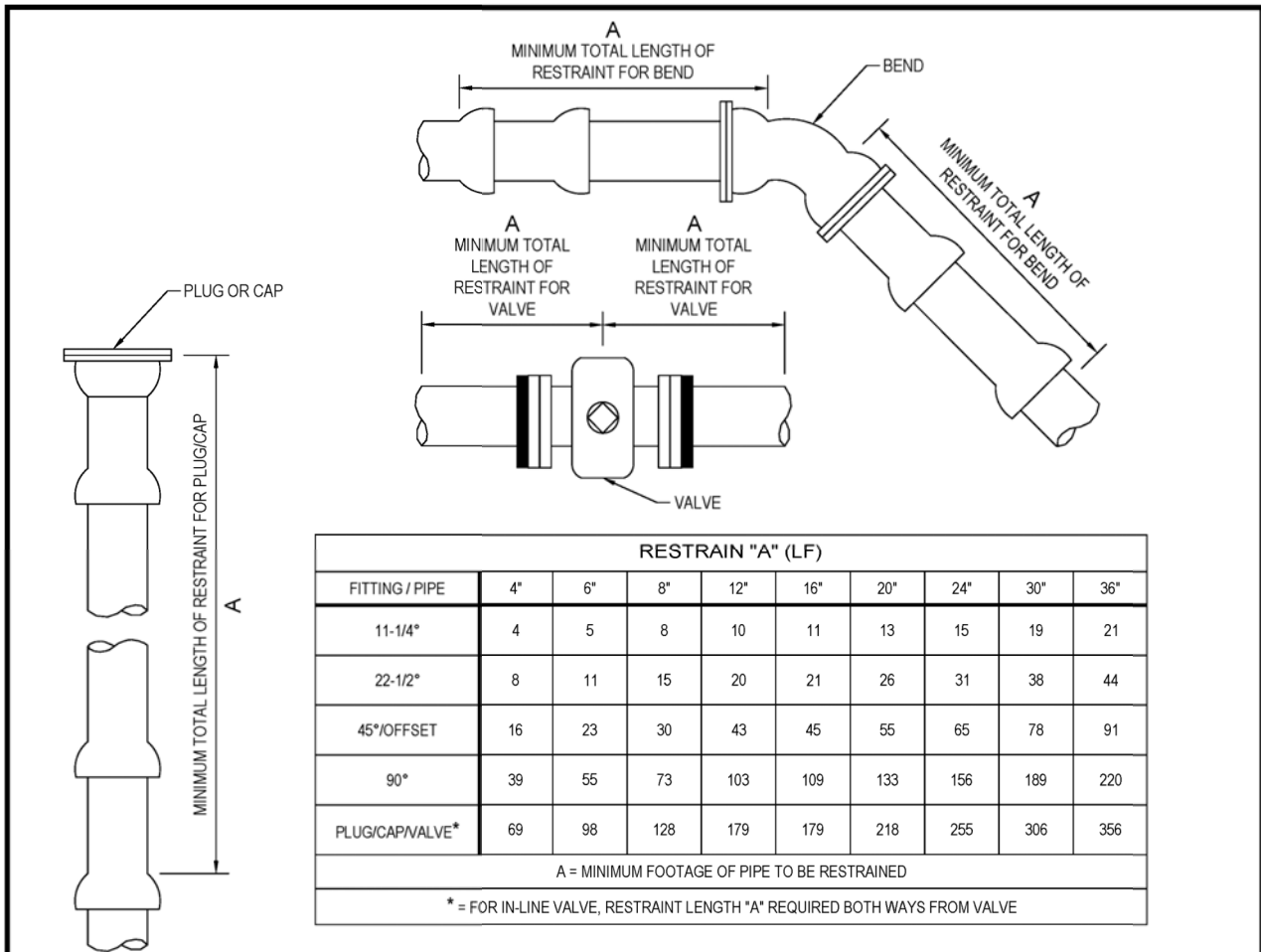
DIMENSIONS OF THRUST BLOCKS FOR GOOD SOIL								
TEES	SIZE (D)	4"	6"	8"	12"	16"	20"	24"
	THRUST (LBS.)	3,439	7,104	12,223	26,002	45,180	69,624	99,330
	BEARING AREA (FT. <sup>2</sup> )	2.58	5.33	9.17	19.50	33.89	52.22	74.50
	CONCRETE (YDS. <sup>3</sup> )	0.042	0.126	0.285	0.891	1.811	3.005	4.594
	H (FT.)	1.3	1.9	2.5	3.6	4.8	5.9	7.0
	W (FT.)	2.0	2.8	3.7	5.4	7.1	8.9	10.6
X (FT.)	1.0 MIN.	1.4 MIN.	1.9 MIN.	2.7 MIN.	3.0 MIN.	3.0 MIN.	3.0 MIN.	

**NOTES:**

1. SIZE (D), SHALL BE THE BRANCH SIZE OF TEES.
2. CONCRETE SHALL BE KEPT AT SUFFICIENT DISTANCE FROM JOINT FOR REMOVAL OF ALL JOINT ACCESSORIES INCLUDING BOLTS.
3. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
4. THIS TABLE SHOWS THE MINIMUM SIZE THRUST BLOCKS FOR SOIL BEARING PRESSURE OF 2000 PSF AND AN INTERNAL PRESSURE OF 150 PSI.
5. TEES SHALL BE COMPLETELY POLYWRAPPED PRIOR TO POURING THRUST BLOCKS.

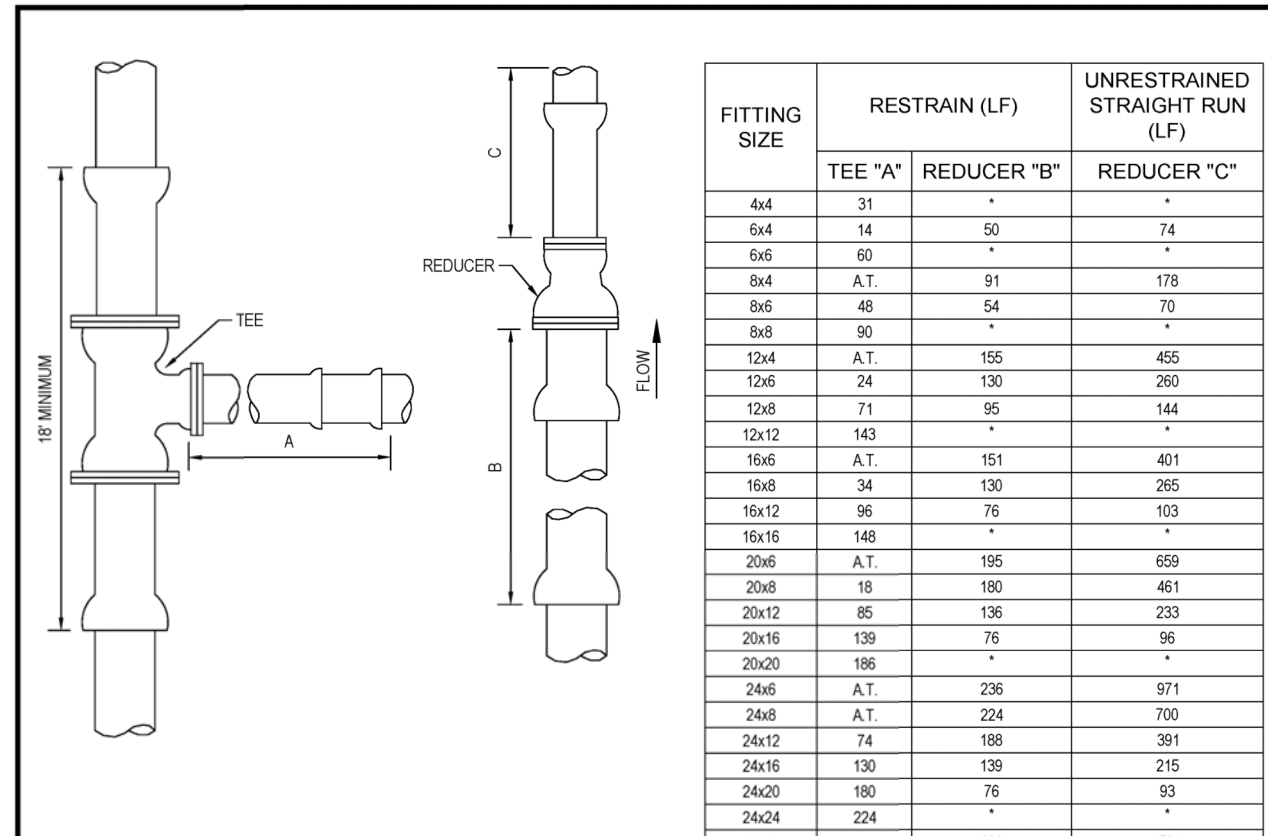
**WARNING** - COVER TO T.O.P. IS 3 FEET FOR 12" AND SMALLER MAINS; 4 FEET FOR 16" AND LARGER MAINS. POOR AND WET SOIL (SILTY SOILS, CLAY, MUCK AND PEAT) WILL REQUIRE LARGER THRUST BLOCKS.

	LAST REVISION	<p align="center"><b>THRUST BLOCKS FOR TEES</b></p>	<p align="center">2.09</p>
	<p align="center">JUL 2018</p>		



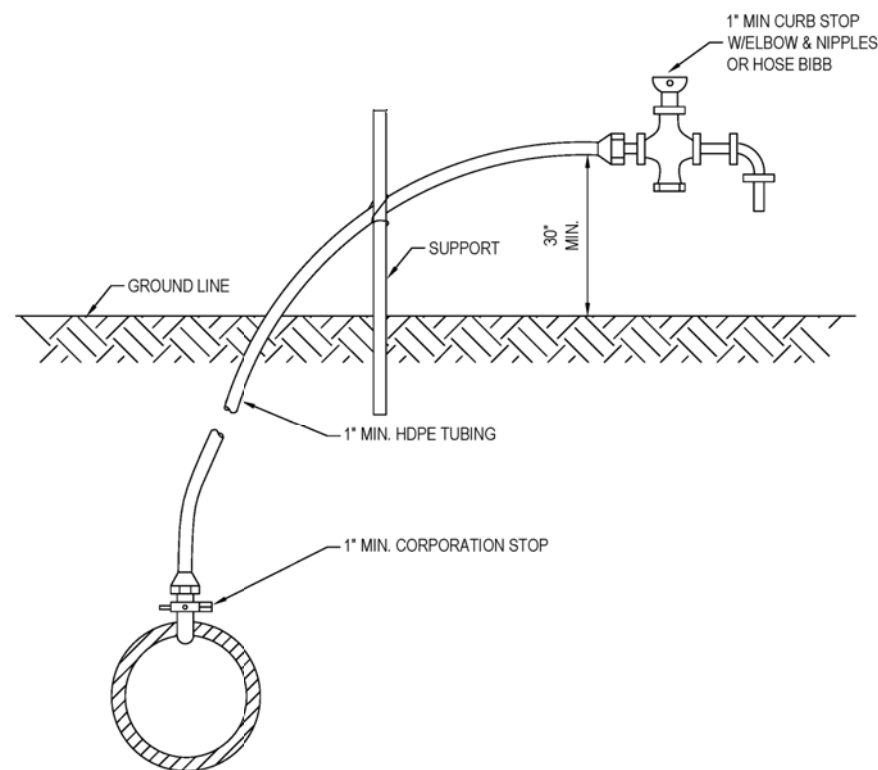
- NOTES:
- THIS TABLE IS BASED ON:
    - MAXIMUM TEST PRESSURE OF 190 PSI
    - LAYING CONDITION TYPE 2 (SEE DETAILS 2.01 AND 2.02)
    - POOR SOIL CONDITIONS
    - USING D.I.P.
    - 3 FEET OF COVER FOR 12" AND SMALLER MAINS; 4 FEET OF COVER FOR 16" AND LARGER MAINS
    - HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
  - "RESTRAINED" PIPE SHALL BE MANUFACTURED RESTRAINED JOINT PIPE, PUSH-ON JOINT PIPE RESTRAINED W/GASKET-TYPE "GRIPPER RESTRAINTS", OR MECHANICAL JOINT PIPE RESTRAINED BY MEGALUG (OR APPROVED EQUIVALENT).
  - ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

	LAST REVISION	<b>RESTRAINED JOINT STANDARD FOR BENDS, PLUGS, CAPS, AND VALVES</b>	<b>2.11</b>
	JUL 2018		



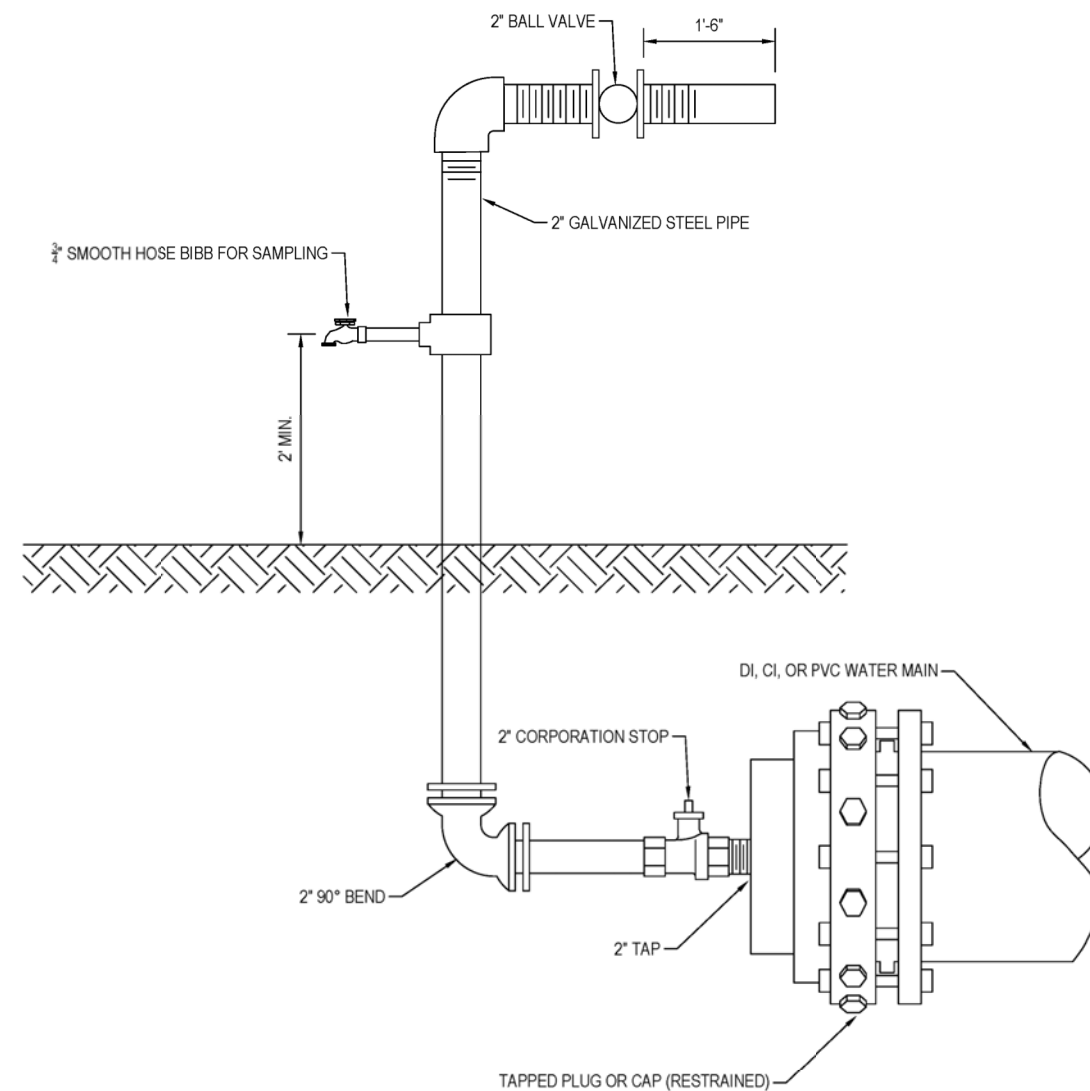
- NOTES:
- THIS TABLE IS BASED ON:
    - MAXIMUM TEST PRESSURE OF 190 PSI
    - LAYING CONDITION TYPE 2 (SEE DETAILS 2.01 AND 2.02)
    - POOR SOIL CONDITIONS
    - USING D.I.P.
    - 3 FEET OF COVER FOR 12" AND SMALLER MAINS; 4 FEET OF COVER FOR 16" AND LARGER MAINS
    - HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
  - RESTRAINT FOR REDUCERS: IF "C" STRAIGHT RUN OF PIPE DOWNSTREAM OF REDUCER NOT AVAILABLE, THE RESTRAIN "B" UPSTREAM OF REDUCER.
  - "RESTRAINED" PIPE SHALL BE MANUFACTURED RESTRAINED JOINT PIPE, PUSH-ON JOINT PIPE RESTRAINED W/GASKET-TYPE "GRIPPER RESTRAINTS", OR MECHANICAL JOINT PIPE RESTRAINED BY MEGALUG (OR APPROVED EQUIVALENT).
  - ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

	LAST REVISION	<b>RESTRAINED JOINT STANDARD FOR TEES AND REDUCERS</b>	<b>2.12A</b>
	JUL 2018		



**NOTES:**

1. WATER OUTLET SHALL BE HELD UP OFF THE GROUND SO AS NOT TO INTERFERE WITH THE SAMPLING PROCESS.
2. CORPORATION STOP TO BE REMOVED AND BRASS PLUG INSTALLED IN TAPPED MAIN AFTER OPERATION.



**NOTES:**

1. FOR DEAD-END MAINS, SAMPLE TAP TO BE INSTALLED ON A 2" TAPPED CAP/PLUG.
2. FLUSHING/SAMPLING ARRANGEMENT TO BE REMOVED AFTER DISINFECTION OF MAIN LINE.
3. AFTER OPERATION COMPLETE, INSTALL BRASS PLUG AT CORPORATION STOP.

	LAST REVISION	<b>TEMPORARY SAMPLE TAP INSTALLATION W/DI, CI, OR PVC PIPE</b>	<b>2.18A</b>
	JUL 2018		

	LAST REVISION	<b>TEMPORARY SAMPLE TAP INSTALLATION FOR END OF LINE W/DI, CI, OR PVC PIPE</b>	<b>2.19A</b>
	JUL 2018		

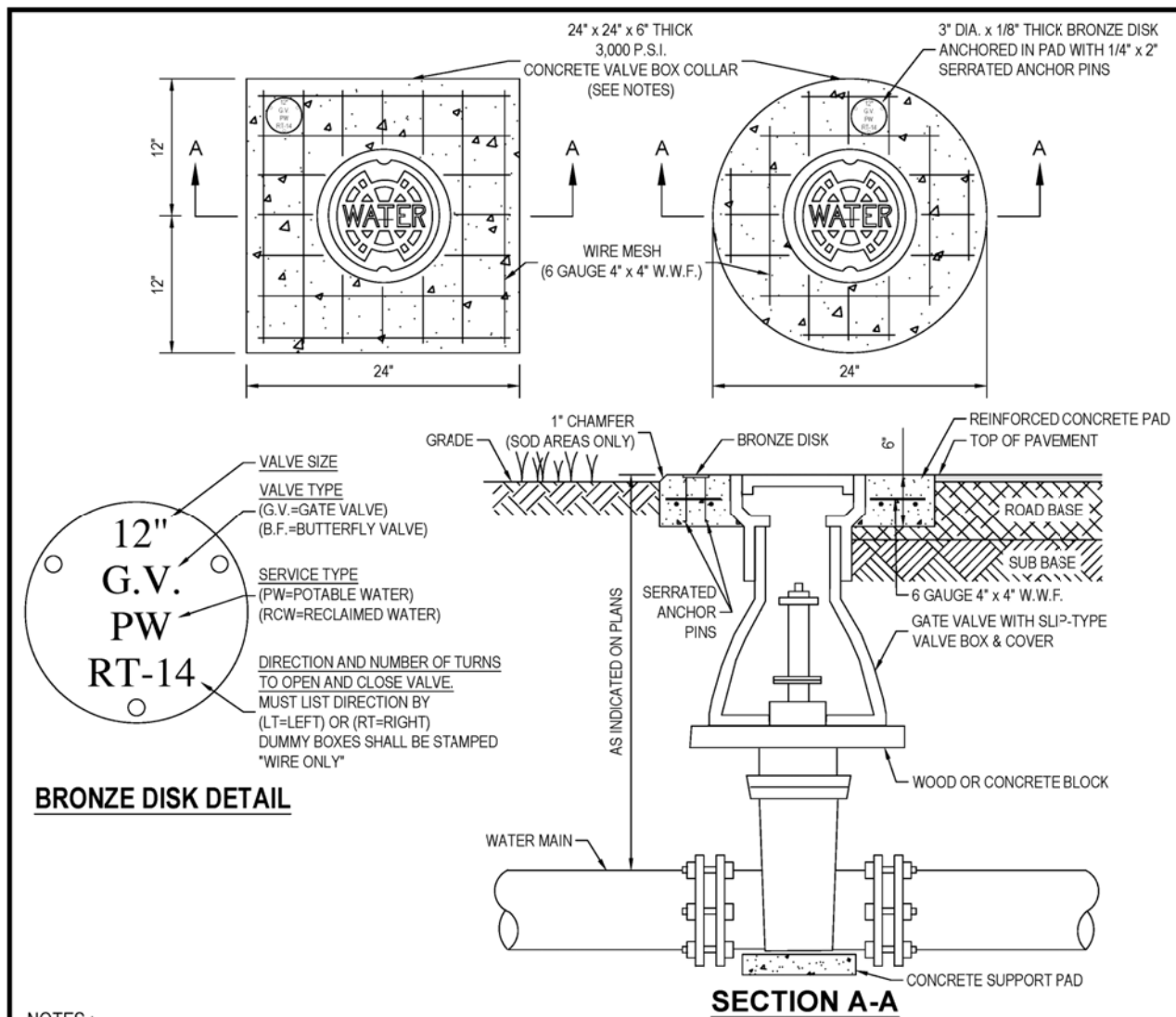
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
ENGINEERING GROUP  
1713 E. 9th AVENUE | TAMPA, FL 33605  
P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

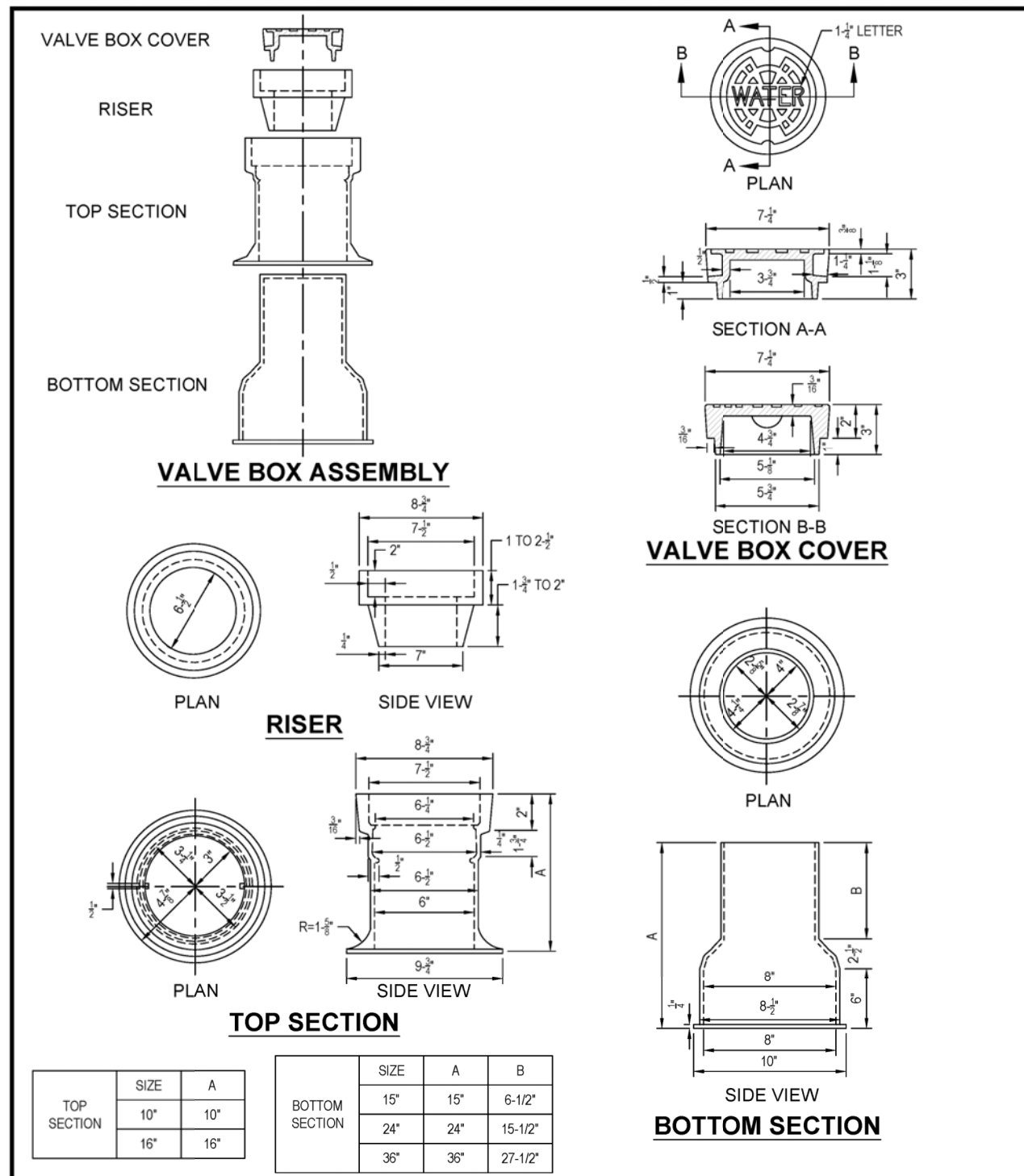
**UTILITY RELOCATION SHEETS  
DETAILS**

SHEET NO.  
**102**



- NOTES:
1. CIRCULAR OR SQUARE CONCRETE PAD REQUIRED FOR ALL VALVE BOX INSTALLATIONS.
  2. CAST IRON VALVE BOXES SHALL BE FIRMLY SUPPORTED AND CENTERED AND PLUMB OVER THE OPERATING NUT OF THE VALVE. VALVE BOX COVER SHALL BE FLUSH WITH THE SURFACE OF THE FINISHED PAVEMENT, OR GRADE OR AT SUCH OTHER LEVEL AS MAY BE DIRECTED BY THE DEPARTMENT.
  3. "BLUE" WATER VALVE LOCATE MARKERS REQUIRED FOR ALL VALVE INSTALLATIONS.
  4. EMBED BRONZE VALVE INFO DISK INTO CONCRETE VALVE BOX COLLAR.
  5. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST T.W.D. APPROVED MATERIAL SPECIFICATIONS.
  6. IF VALVE IS LOCATED WITHIN A SIDEWALK CONCRETE COLLAR MAY BE ELIMINATED AND DISK SET FLUSH DIRECTLY IN SIDEWALK.
  7. BRONZE DISK REQUIRED FOR ALL VALVES AND DUMMY BOXES.

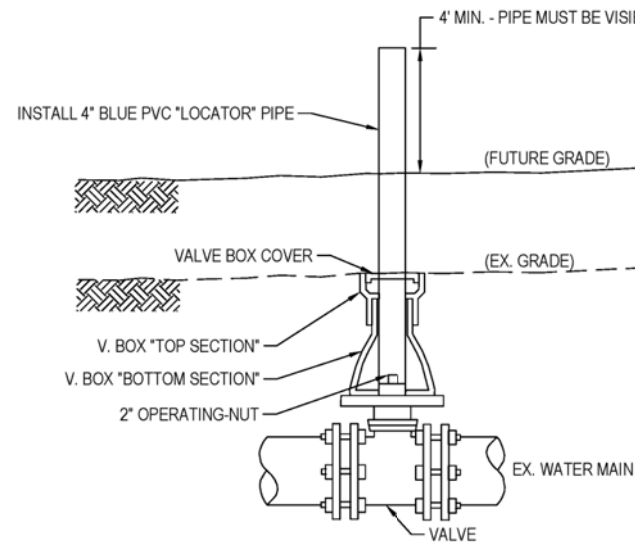
	LAST REVISION	<b>VALVE INSTALLATION W/VALVE BOX &amp; PAD FOR DI OR CI PIPE</b>	<b>3.01</b>
	JUL 2018		



	LAST REVISION	<b>VALVE BOX, SLIP TYPE</b>	<b>3.04</b>
	JUL 2018		

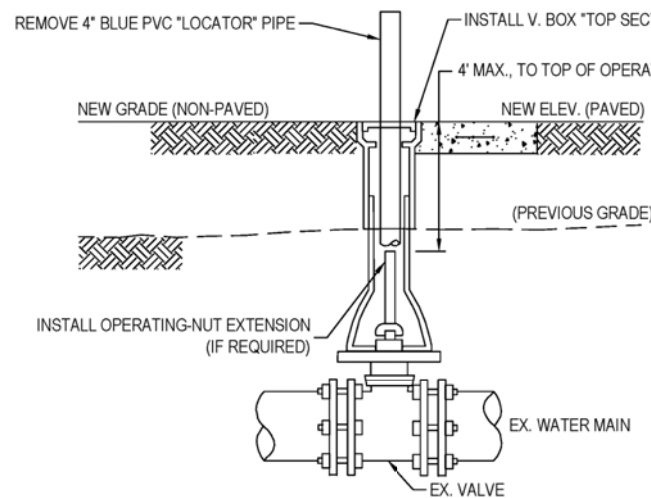


**TO PROTECT VALVE BOX LOCATION DURING CLEARING & GRUBBING**



1. REMOVE (OR DO NOT INSTALL) V. BOX COVER & "TOP SECTION".
2. INSTALL 4" BLUE PVC PIPE INTO V. BOX "BOTTOM SECTION", OVER 2" OPERATING- NUT, & TO 4' MIN. ABOVE FUTURE GRADE.
3. PACK ANNULAR SPACE TO PREVENT BACKFILL SOILS ENTERING V. BOX "BOTTOM SECTION".

**TO ADJUST HEIGHT OF VALVE BOX FOR CHANGED GRADE**

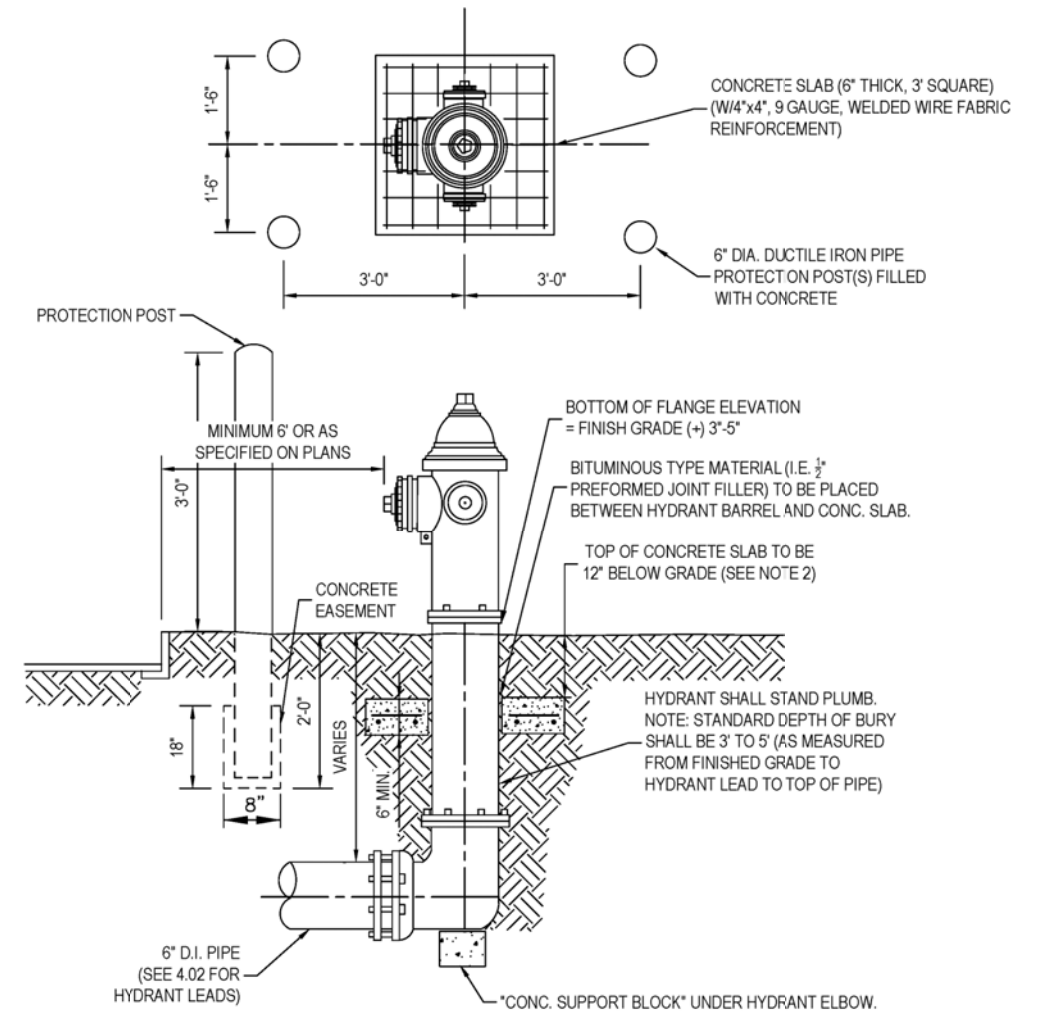


1. REMOVE PVC LOCATOR PIPE.
2. INSTALL APPROVED V. BOX "TOP SECTION" AND/OR RISER & COVER, SUCH THAT TOP OF COVER MATCHES NEW GRADE ELEVATION.
3. INSTALL STD CI OPERATING-NUT EXTENSION IF TOP OF OPERATING-NUT (T.O.N.) > 4' BELOW GRADE. FINAL T.O.N. TO BE < 4' DEEP.
4. IN NON-PAVED AREAS, CONSTRUCT 2'X2' (OR 2' DIA.) REINFORCED CONCRETE PAD, PER STD. DETAIL 3.01 (3000 P.S.I. CONCRETE, 6-GAUGE 4"X4" W.W.F.)

**NOTES:**

1. MATERIALS FOR & INSTALLATION OF VALVE BOXES & PADS SHALL CONFORM TO TAMPA WATER DEPT. SPECIFICATIONS & STD. CONSTRUCTION DETAILS (DETAILS 3.01 & 3.03)

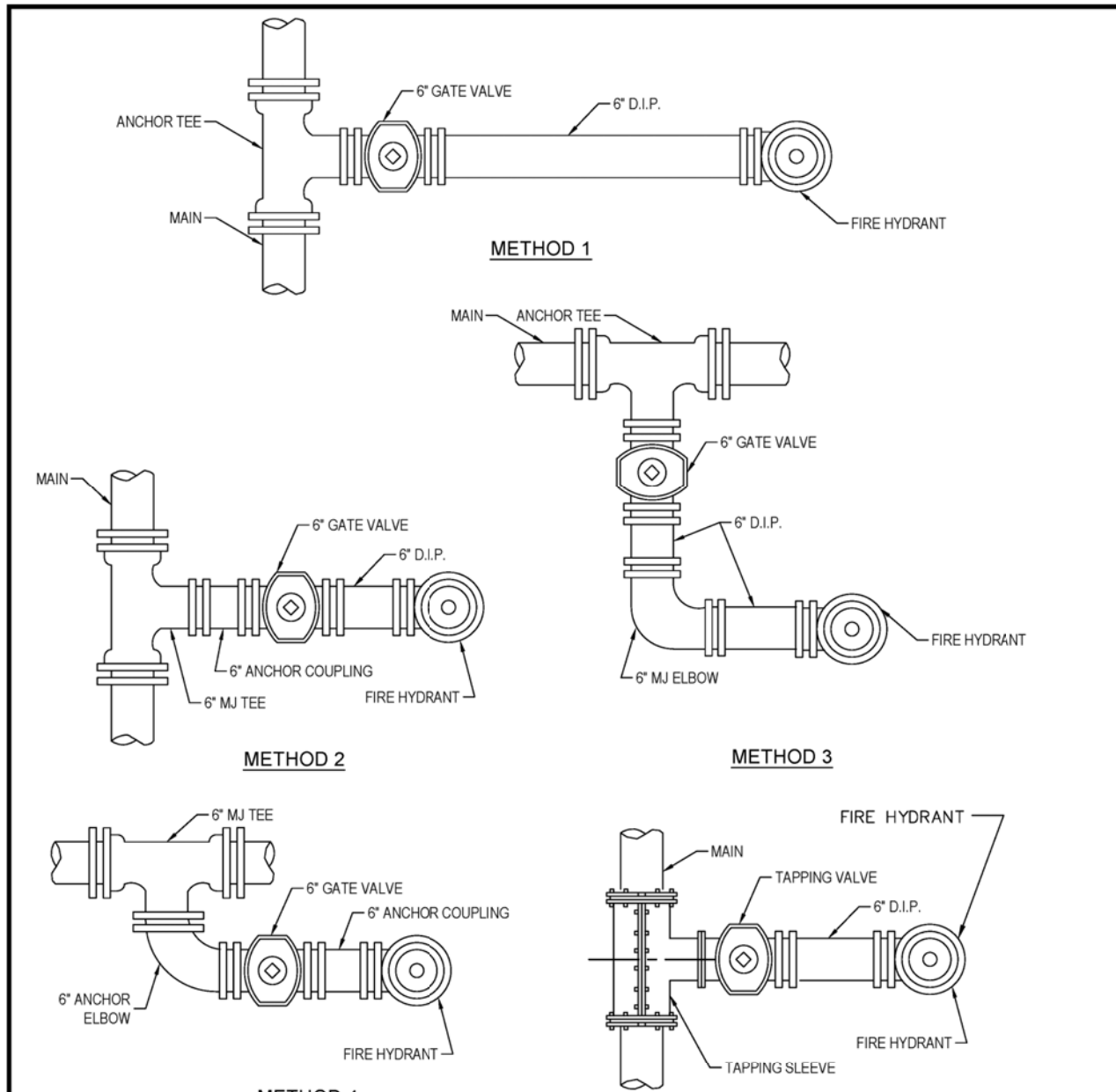
	LAST REVISION	<b>VALVE BOX (V. BOX) ADJUSTMENTS FOR GRADE CHANGE</b>	<b>3.05</b>
	JAN 2018		



**NOTES:**

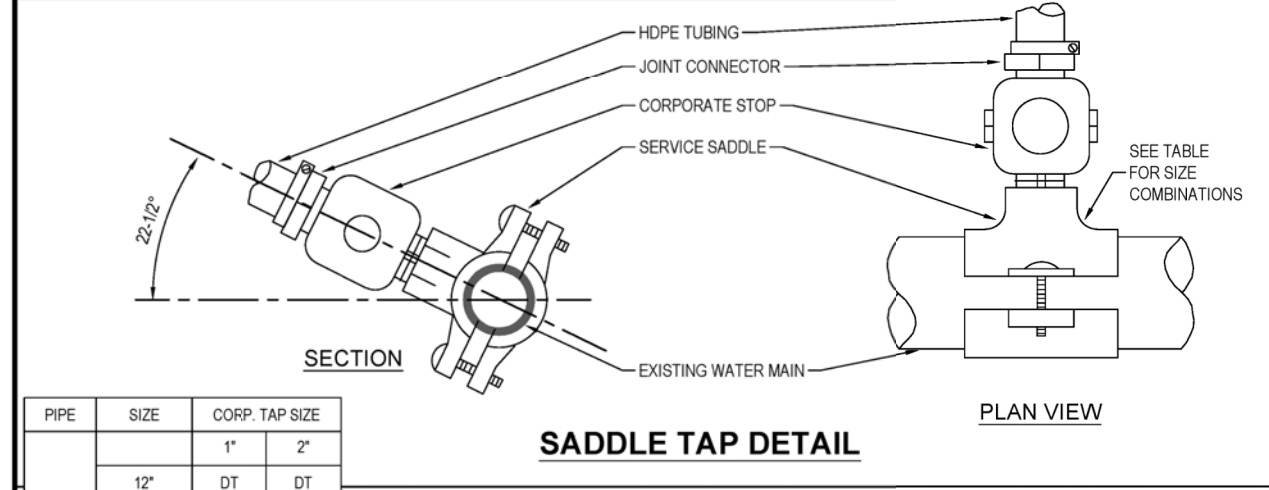
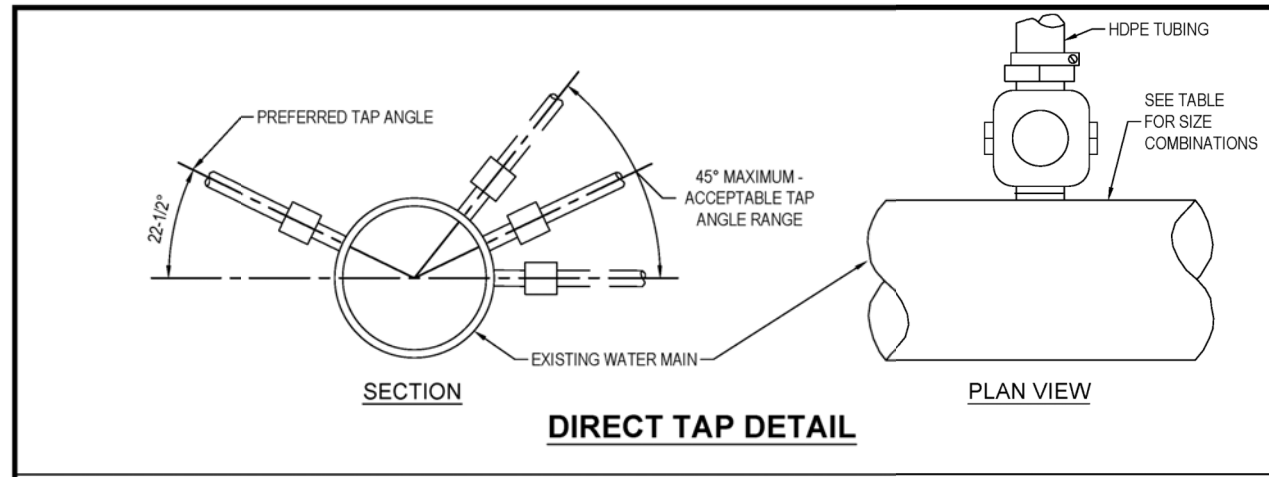
1. FIRE HYDRANT BARREL ABOVE THE GROUND LINE SHALL BE PAINTED WITH A HIGH-GRADE ENAMEL PAINT, FEDERAL SAFETY YELLOW (OSHA APPROVED), AND THE HYDRANT BONNET SHALL BE PAINTED OSHA GREEN.
2. CONCRETE SLAB MAY BE ELIMINATED IN AREAS WHERE HYDRANT IS SET IN SIDEWALK AND SIDEWALK HAS BEEN INSTALLED PRIOR TO FINAL ACCEPTANCE OF THE HYDRANT.
3. THRUST RESTRAINT FOR HYDRANT:
  - a) HYDRANT SHALL BE FIRMLY SUPPORTED UNDER ELBOW IN ALL METHODS BY SUPPORT BLOCK
  - b) ALL BACKFILL SHALL BE THOROUGHLY COMPACTED UNDER SUPPORT BLOCK AND UNDER THRUST COLLAR
  - c) ALL HYDRANT LEADS SHALL BE RESTRAINED BY MEGALUGS OR EQUIVALENT MECHANICAL RESTRAINTS
4. PROTECTION POSTS ARE REQUIRED WHEN HYDRANT IS LESS THAN 6 FEET FROM EDGE OF PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
5. FOR PVC MAINS, INSTALL CONCRETE SUPPORT BLOCK UNDER ALL HYDRANT TEES.

	LAST REVISION	<b>FIRE HYDRANT INSTALLATION</b>	<b>4.01</b>
	JUL 2018		



- NOTES:**
1. VALVE SHALL BE SET IN ACCORDANCE WITH DETAIL 3.01. FOR HYDRANT SET, SEE DETAIL 4.01.
  2. ALL VALVES SHALL BE ANCHORED TO BRANCH OF TEE ON ALL HYDRANT INSTALLATIONS.
  3. ALL HYDRANT LEADS SHALL BE RESTRAINED BY MEGALUGS OR EQUIVALENT.
  4. FOR PVC MAINS, INSTALL CONCRETE SUPPORT BLOCK UNDER HYDRANT TEES.

	LAST REVISION	<b>FIRE HYDRANT METHODS OF INSTALLATION</b>	<b>4.02</b>
	JUL 2018		



PIPE	SIZE	CORP. TAP SIZE	
		1"	2"
D/CI	12"	DT	DT
	8"	DT	SS
	6"	DT	SS
	4"	SS	SS
PVC	2", 2-1/2"	SS	NA
	8", C-900	SS	SS
	6", C-900	SS	SS
	2"-SDR21	SS	NA
OTHER*	12"	SS	SS
	10"	SS	SS
	8"	SS	SS
	6"	SS	SS
	4"	SS	NA
	3"	SS	NA
2", 2-1/2"	SS	NA	

**LEGEND**  
 DT- DIRECT TAP CAN BE ALLOWED SS- SERVICE SADDLE IS REQUIRED NA- NOT ALLOWED  
 \*ASBESTOS CEMENT, STEEL, GALVANIZED IRON PIPE, NON STD PVC, ETC.

	LAST REVISION	<b>TAPPING DETAIL FOR 3/4", 1", 1-1/2" &amp; 2" W/DI, CI, OR PVC PIPE</b>	<b>5.01A</b>
	JUL 2018		

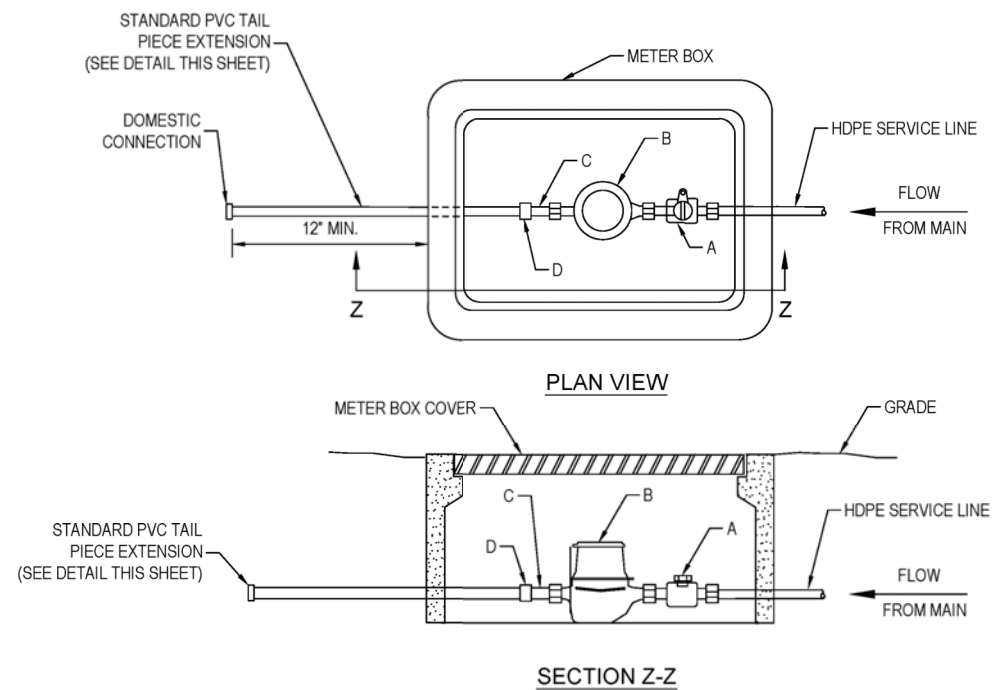
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

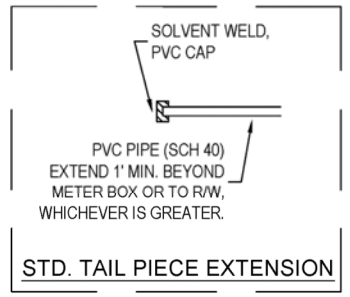
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY RELOCATION SHEETS**  
**DETAILS**

SHEET NO.  
**105**

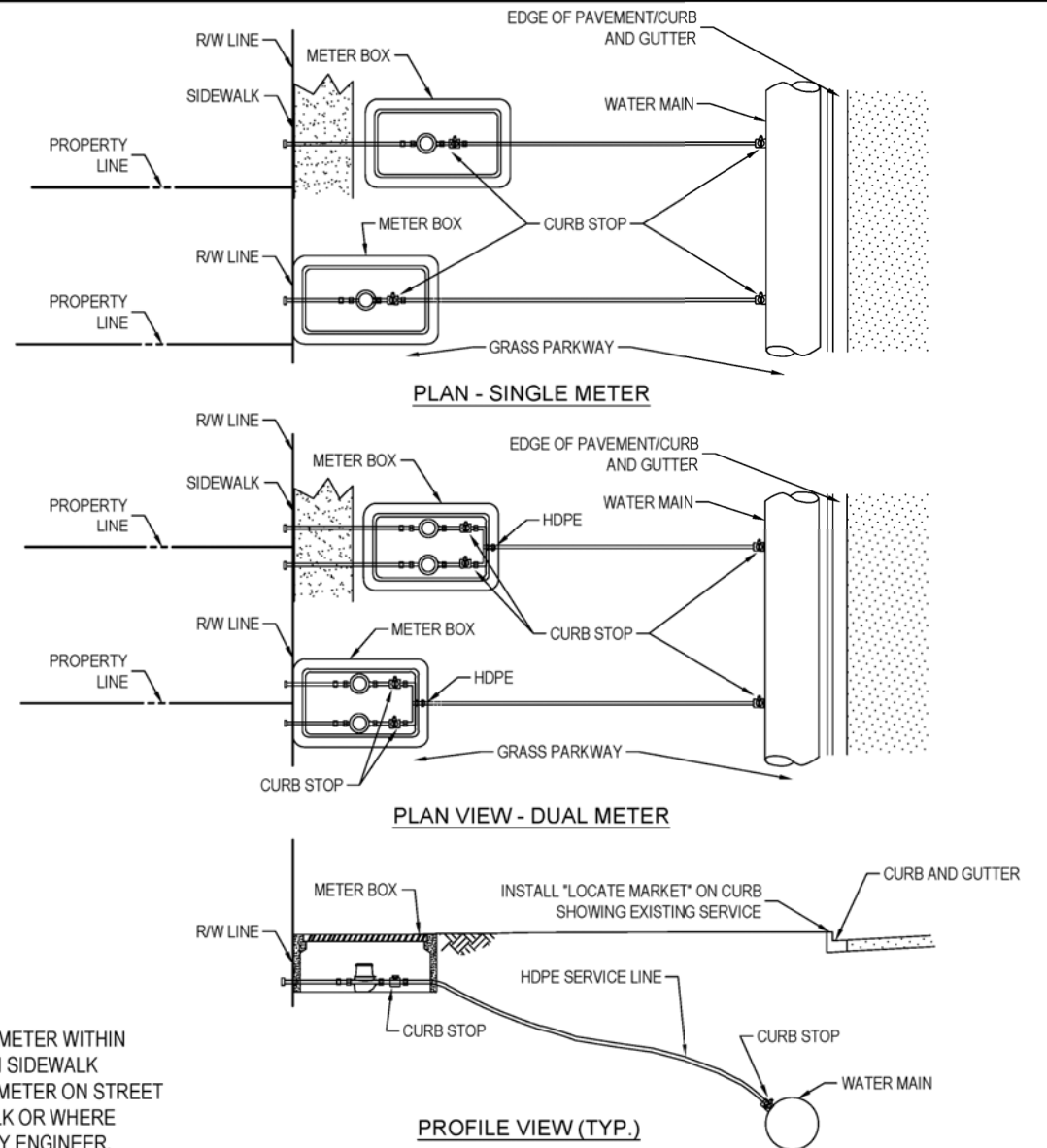


METER INSTALLATION PARTS LIST	
ITEM	DESCRIPTION
A	HDPE CJ X METER, SWIVEL NUT (CURB STOP)
B	METER
C	BRASS METER COUPLING
D	*PVC FIP X WELD COUPLING



\* ALL PVC PIPE AND FITTINGS SHALL BE SCH 80 EXCEPT FOR STANDARD TAIL PIECE SECTION WHICH WILL BE SCH 40.  
 NOTE: PARTS LIST IS FOR STANDARD INSTALLATION; ACTUAL PARTS REQUIRED MAY VARY AS DIRECTED BY THE ENGINEER.

	LAST REVISION	<b>SINGLE METER SET DETAIL</b> 3/4", 1", 1-1/2", 2"	<b>5.02</b>
	JUL 2018		



DO NOT INSTALL METER WITHIN SIDEWALK. WHEN SIDEWALK EXISTS, INSTALL METER ON STREET SIDE OF SIDEWALK OR WHERE DIRECTED BY CITY ENGINEER.

* LINE SIZE APPLICABLE FOR DDCVA			
SINGLE METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES) (0-15')	DUAL METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES) (0-15')
3/4	1	3/4	2
1	1	1	2
1 1/2	2	1 1/2	N/A
2*	2	2*	N/A

(FEET REFER TO DISTANCE FROM WATER MAIN TO METER)

	LAST REVISION	<b>SINGLE &amp; DUAL METERED SERVICE - SHORT SIDE</b> 3/4", 1", 1-1/2" & 2"	<b>5.04A</b>
	JUL 2018		

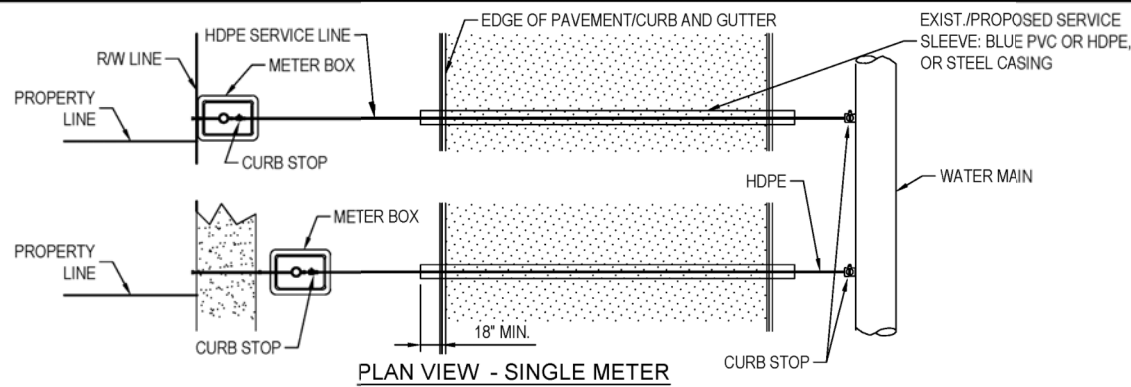
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

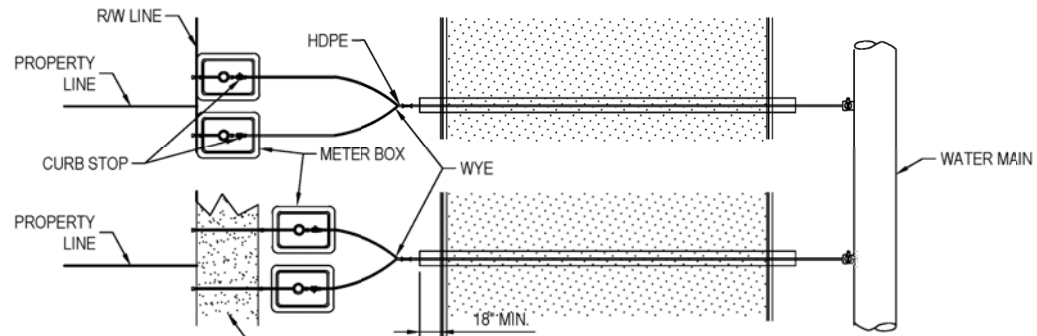
CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

UTILITY RELOCATION SHEETS  
 DETAILS

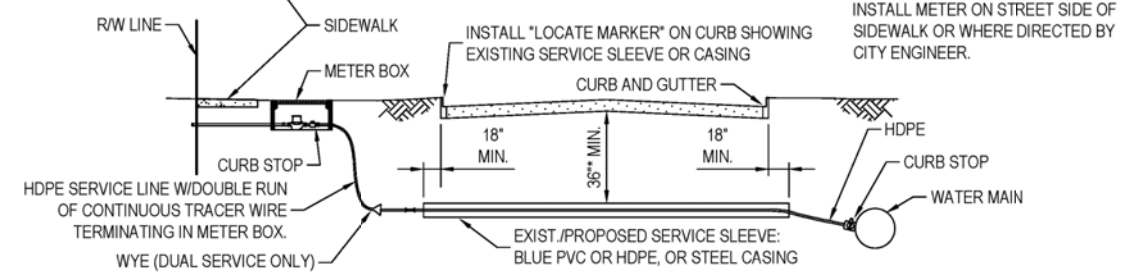
SHEET NO.  
**106**



PLAN VIEW - SINGLE METER



PLAN VIEW - DUAL METER



PROFILE VIEW (TYP.)

DO NOT INSTALL METER WITHIN SIDEWALK. WHEN SIDEWALK EXISTS, INSTALL METER ON STREET SIDE OF SIDEWALK OR WHERE DIRECTED BY CITY ENGINEER.

- CASING SPECIFICATION:
1. IF PUSHED-SCH 40 STEEL PIPE (MIN.)
  2. IF LAYED IN OPEN TRENCH-SCH 40 STEEL PIPE OR SCH 80 PVC SOLVENT WELD PIPE.

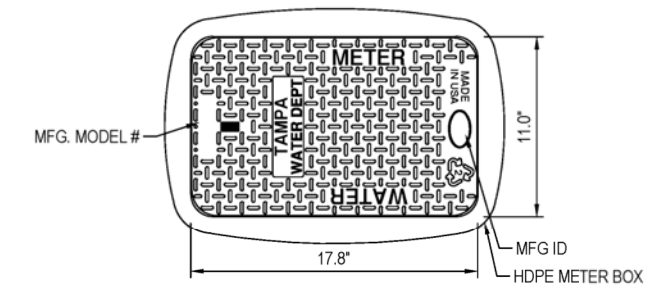
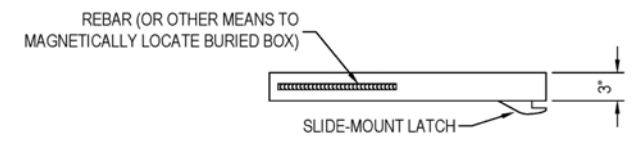
\* OR GREATER, IF REQUIRED BY ROW CONTROLLING AGENCY  
 \*\* LINE SIZES APPLICABLE FOR 2" DDCV

SINGLE METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES)		CASING SIZE (INCHES)
	(15'-80')	(80'-150')	
3/4	1	2	2 1/4
1	1	2	4
1 1/2	2	2	4
2**	4" D.I.P.	4" D.I.P.	12

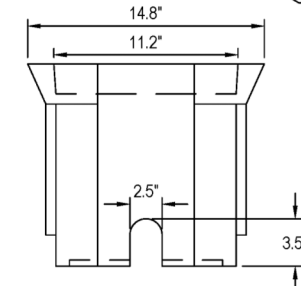
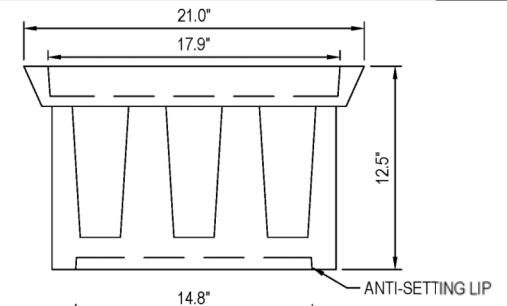
DUAL METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES)		CASING SIZE (INCHES)
	(15'-80')	(80'-150')	
3/4	2	2	4
1	2	4" D.I.P.	4 / 12
1 1/2	N/A	N/A	N/A
2*	N/A	N/A	N/A

(FEET REFER TO DISTANCE FROM WATER MAIN TO METER)

	LAST REVISION	<b>SINGLE &amp; DUAL METERED SERVICE - LONG SIDE</b> 3/4", 1", 1-1/2" & 2"	5.05A
	JUL 2018		



ANTI-FLOAT LID W/REBAR & AMR SNAP-LOCK SLIDE MOUNT



HDPE METER BOX w/LIP

#37 HDPE METER BOX W/COVER

N.T.S.

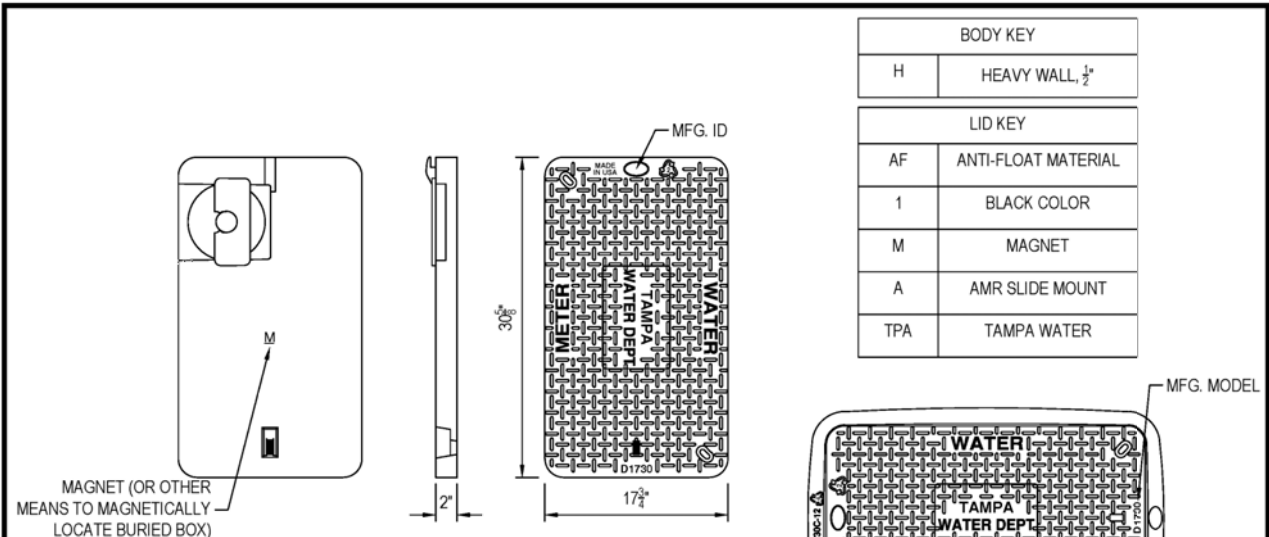
	LAST REVISION	<b>3/4" OR 1" SINGLE SERVICE HDPE METER BOX</b>	5.10
	JUL 2018		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

UTILITY RELOCATION SHEETS  
 DETAILS

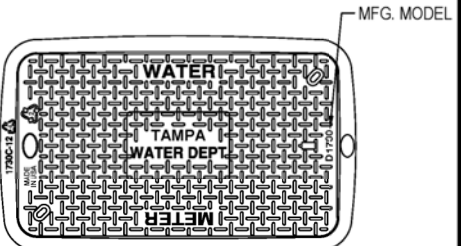


1730C-AF1MA TPA-LID

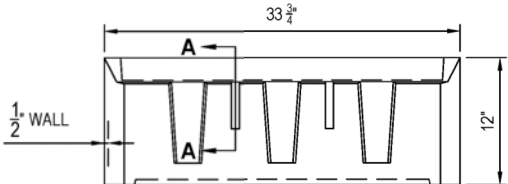
BODY KEY	
H	HEAVY WALL, 1/2"

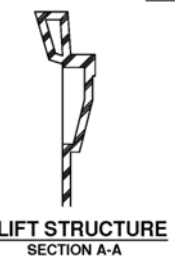
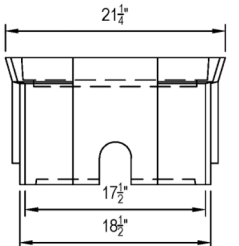
LID KEY	
AF	ANTI-FLOAT MATERIAL
1	BLACK COLOR
M	MAGNET
A	AMR SLIDE MOUNT
TPA	TAMPA WATER



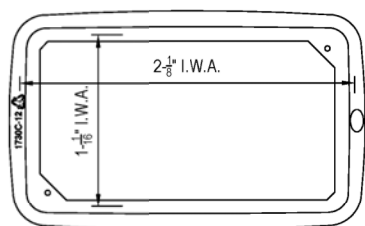
1730CH-12-AF1MA TPA



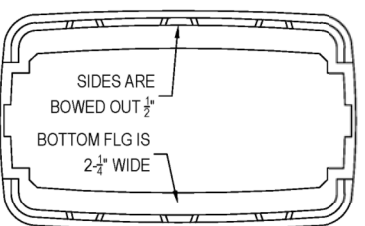
1730CH-12-BODY



LIFT STRUCTURE SECTION A-A



1730CH-12-BODY



BOTTOM VIEW

- NOTES**
- 1) DIMS ± 1/8" U.N.O.
  - 2) LID MATERIAL: HDPE
  - 3) BODY MATERIAL: LLDPE
  - 4) WALL THICKNESS: 1/2" MINIMUM
  - 5) I.W.A. = INSIDE WORK AREA.
  - 6) SNAP LOCK POCKET WILL RECEIVE AMR/AMI DEVICE ENDPOINT. SNAP LOCK SLOT IS 1.80" ± .015" TO ALLOW FOR A FINGER FORCE INSTALL. POCKET HEIGHT IS 15/16" FOR MIN 1/8" AIR GAP.

**#66 HDPE METER BOX W/COVER**

N.T.S.

	LAST REVISION	1-1/2" & 2" SINGLE SERVICE HDPE METER BOX	5.12
	JUL 2018		

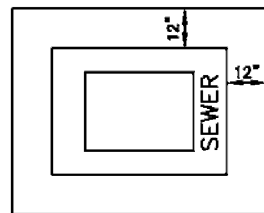
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

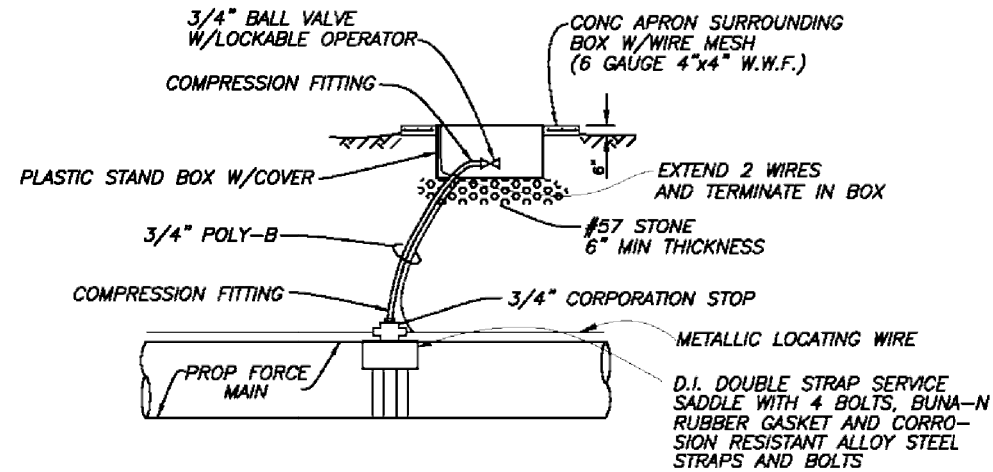
**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**UTILITY RELOCATION SHEETS**  
 DETAILS

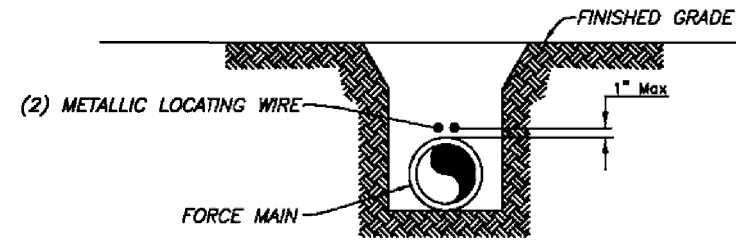
SHEET NO.  
 108



PLAN VIEW



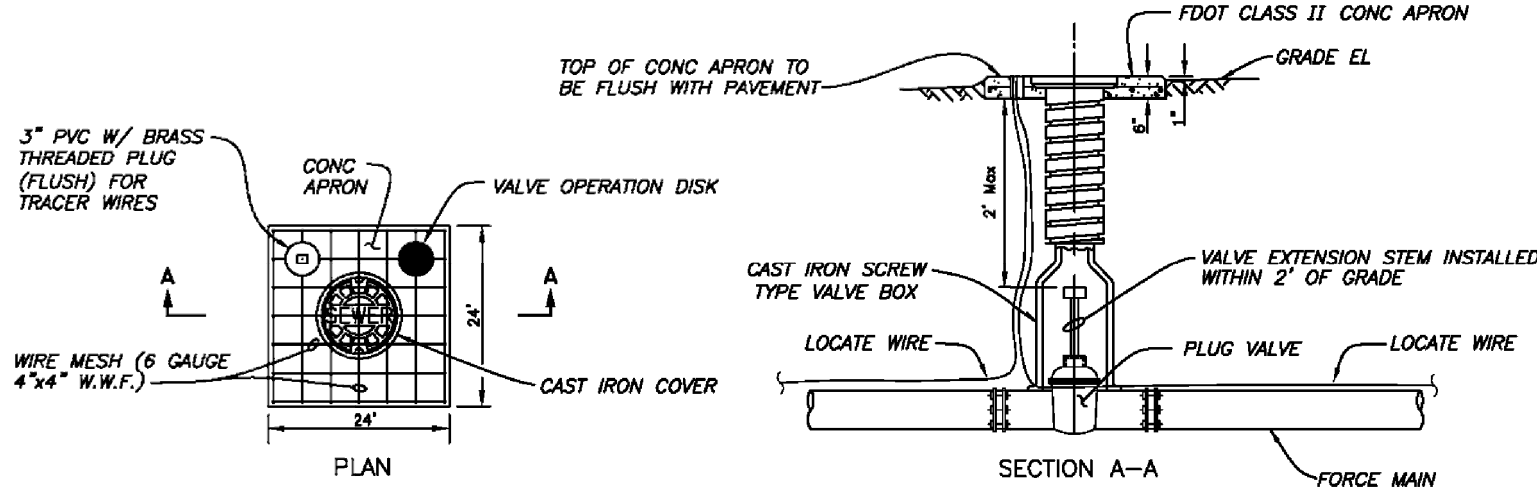
AIR RELEASE VALVE DETAIL  
Not To Scale



NOTES:

1. Pipe shall require 2 green insulated metallic locating wires capable of detection by a cable locator and shall be buried directly above the centerline of the pipe. Use duct tape as necessary to hold wire directly on top of pipe.
2. Direct bury pipe shall have (2) 12 gauge insulated solid copper wires. Directional drilled pipe shall have (2) 8 gauge insulated solid copper wires or (2) 10 gauge insulated copper clad steel wires. For directional drilled HDPE pipe a 1" conduit may be pulled back with the locating wires to ease installation and to prevent the wires from breaking.
3. Wire insulation must be suitable for buried service. HDPE or HMWPE are acceptable insulation materials. Nylon insulation is not acceptable.
4. Wires must be spliced together with wire connectors suitable for buried service. Connectors shall be corrosion and moisture proof such as DBR Kit by 3M, Snakebite by Copperhead Industries or equal. Twisting the wires and sealing with electrical tape alone is not acceptable.
5. All tracer wires must pass a continuity test in the presence of a City inspector. No pipe will be accepted by the City until a continuity test passes.
6. Locating wire shall terminate at the top of each valve box and air release valve. Wire shall be capable of extending 24" above top of box in such a manner so as not to interfere with valve operation.

PIPE LOCATING WIRE DETAIL  
Not To Scale



VALVE BOX DETAIL  
Not To Scale

**IMPORTANT - FOR EACH OPERABLE VALVE:**  
 PROVIDE A BRASS IDENTIFICATION TAG ANCHORED TO THE CONCRETE APRON THAT IS A MINIMUM 2" IN DIAMETER AND 1/8-INCH THICK. THE TAG SHALL BE ENGRAVED WITH "SEWER", SIZE OF VALVE, TYPE OF VALVE, AND DIRECTION AND NUMBER OF TURNS TO OPEN.

FOR EXAMPLE, A 4-INCH PLUG VALVE ON A WASTEWATER FORCE MAIN THAT REQUIRES 1/4 TURNS TO THE LEFT (COUNTERCLOCKWISE) TO BE FULLY OPEN WOULD REQUIRE THE FOLLOWING ON AN IDENTIFICATION TAG:

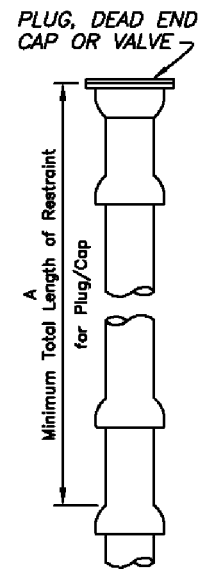
SEWER  
4" P.V.  
1/4 T.O.L.

VALVE OPERATION DISK  
Not To Scale

User: see8 Drawing Name: F:\COT1301\CADD\utils\STD\_FM\_Details.dwg  
 Layout: Mec. FM Details 01 Plotted: 8/21/2018 3:16:29 PM CTR: MONOCHROME.CTB Default: LMK 25mm

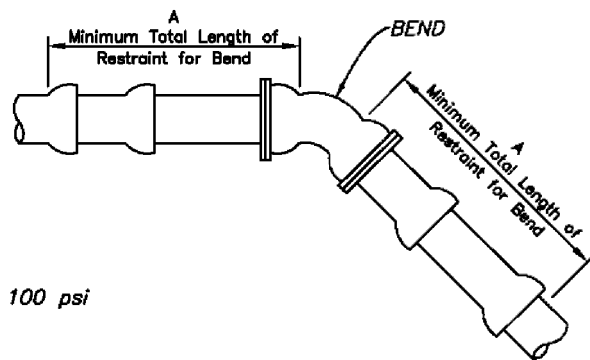
JACINTO CARLOS FERRAS, P.E. #48454 DESIGN DIVISION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: DR DRN: BL CKD: DATE:	<b>CITY of TAMPA</b> WASTEWATER DEPARTMENT	<b>STANDARD DETAILS</b> MISC. FM DETAILS 1 OF 2	W.O. ----
	3						SHEET
	2						9
	1						of 10

REVISIONS				<b>ELEMENT</b> ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798	CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO: 12-D-00057 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.	<b>UTILITY RELOCATION SHEETS</b> DETAILS	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				109



**NOTES:**

- These tables are based on:
  - Maximum test pressure of 100 psi
  - Class "C" pipe bedding
  - Poor soil conditions
  - PVC pipe
  - For vertical offsets, shallower vertical fitting has a minimum cover of 3 feet.
- Restraining devices for PVC pipe shall be by Megalug (Series 2000 PV) or equal, meeting ASTM F1674.
- Any additional fittings within the restrained section shall be restrained accordingly.
- One standard length of PVC pipe (20 feet) shall be laid on either side of the fitting where possible.



**HORIZONTAL OFFSET:**

FITTING TYPE	RESTRAIN "A" (LF) *								
	4"	6"	8"	10"	12"	16"	18"	20"	24"
11-1/4"	1*	2*	2*	2*	3*	3*	3*	4*	4*
22-1/2"	2*	3*	3*	4*	5*	6*	6*	7*	8*
45°	4*	5*	7*	8*	9*	11*	13*	14*	16*
90°	9*	12*	15*	18*	21	27	29	32	37
PLUG / CAP / ISOLATION VALVE	26	36	47	56	66	85	94	102	119

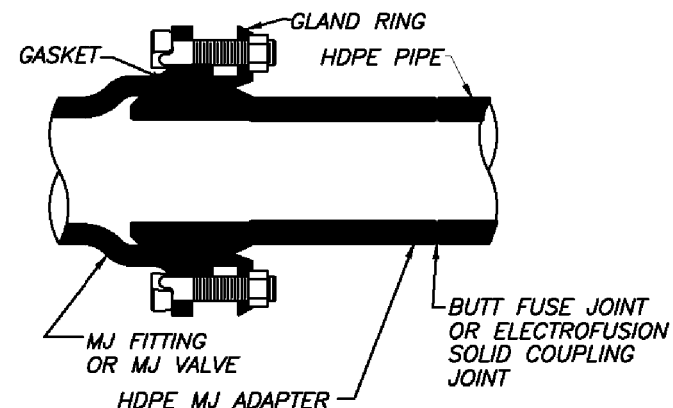
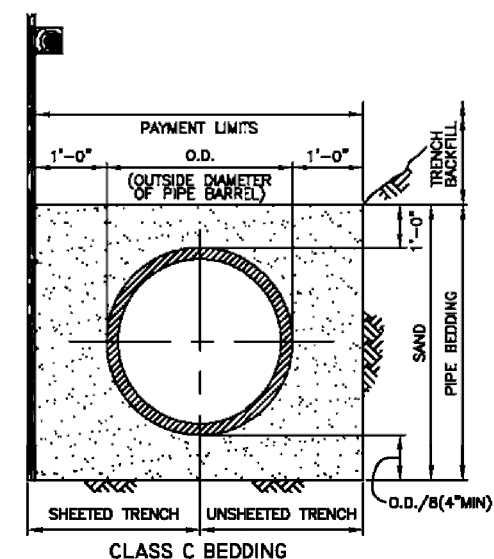
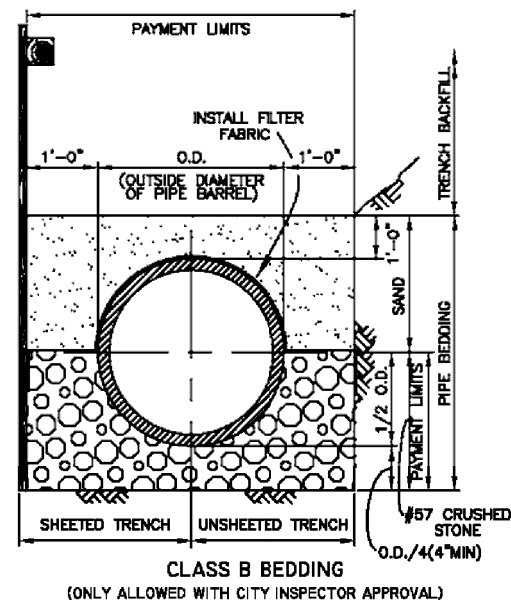
A = MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED  
 \* MINIMUM ONE PIPE JOINT UPSTREAM AND DOWNSTREAM OF EACH FITTING SHALL BE RESTRAINED

**VERTICAL OFFSET:**

FITTING TYPE	RESTRAIN "A" (LF) *								
	4"	6"	8"	10"	12"	16"	18"	20"	24"
11-1/4"	3*	4*	5*	6*	7*	9*	10*	11*	12*
22-1/2"	5*	8*	10*	12*	14*	17*	19*	21	24
45°	11*	15*	20	23	28	35	39	43	50

A = MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED  
 \* MINIMUM ONE PIPE JOINT UPSTREAM AND DOWNSTREAM OF EACH FITTING SHALL BE RESTRAINED

**FITTING RESTRAINT DETAIL**



**HDPE TRANSITION DETAIL**  
Not To Scale

NOTE:  
Schematic shown for standard MJ fitting and plug valves.

User: sss8 Drawing Name: F:\COT1301\CADD\utils\STD\_FM\_Details.dwg  
 Layout: Misc. FM Details 02 Plotted: 8/21/2018 3:17:32 PM CTB: MONOCHROME.CTB Default Lin: 25mm

JACINTO CARLOS FERRAS, P.E. #49454 DESIGN DIVISION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: DR DRN: BL CKD: DATE:	<b>CITY of TAMPA</b> WASTEWATER DEPARTMENT	<b>STANDARD DETAILS</b> MISC. FM DETAILS 2 OF 2	W.O. ----
	3						SHEET
	2						10
	1						of 10

REVISIONS				<b>ELEMENT</b> ENGINEERING GROUP 1713 E. 9th AVENUE   TAMPA, FL 33605 P 813.386.2101   TF 888.603.1942   F 813.386.2106 EOR   DEREK M. GIL, PE 54798	CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO: 12-D-00057 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.	<b>UTILITY RELOCATION SHEETS</b> DETAILS	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				110

SUMMARY OF LUMP SUM ITEMS					
PAY ITEM NO.	PAY ITEM DESCRIPTION	QUANTITY		DESIGN NOTES	CONSTRUCTION REMARKS
		P	F		
0101 1	MOBILIZATION	1			
0102 1	MAINTENANCE OF TRAFFIC	1			

PAY ITEM NOTES

- 0101 1 INCLUDES DESILTING OF EXISTING PIPES AND STRUCTURES TO REMAIN
- 0102 1 INCLUDES ALL DEVICES, SIGNS & PAVEMENT MARKINGS
- 0110 1 1 INCLUDES REMOVAL OF EXISTING LIGHTING CONDUIT AND PULL BOXES, AS NOTED ON PLAN SHEET 25.
- 0570 1 2 USE BAHIA SOD FOR ALL PERFORMANCE TURF
- 0425 5 1 & 0425 6 MANHOLE AND VALVE BOX ADJUSTMENTS ARE TO BE PERFORMED BY THE CONTRACTOR WITH MATERIALS TO BE FURNISHED BY THE APPROPRIATE UTILITY. ARRANGE FOR DELIVERY/RECEIPT OF MATERIALS. COST FOR OBTAINING MATERIALS AND THE ADJUSTMENT WORK SHALL BE INCLUDED IN THE PAY ITEM.

SUMMARY OF TEMPORARY TRAFFIC CONTROL PLAN ITEMS														
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	PHASE I			PHASE II			PHASE III			TOTAL		CONSTRUCTION REMARKS
			DURATION	QUANTITY	TOTAL	DURATION	QUANTITY	TOTAL	DURATION	QUANTITY	TOTAL	P	F	
			DAYS	P	P	DAYS	P	P	DAYS	P	P	P	F	
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE OF INTERSECTION	ED	20	1	20	100	1	100	80	1	80	200		

SUMMARY OF TEMPORARY TRAFFIC CONTROL PLAN ITEMS													
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	PHASE IV			PHASE V			TOTAL		GRAND TOTAL		CONSTRUCTION REMARKS
			DURATION	QUANTITY	TOTAL	DURATION	QUANTITY	TOTAL	P	F	P	F	
			DAYS	P	P	DAYS	P	P	P	F	P	F	
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE OF INTERSECTION	ED	30	1	30	20	1	20	50		250		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

SUMMARY OF QUANTITIES

SHEET NO.

SQ-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



**SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES**

LOCATION  STA. TO STA.	SIDE	AREA ID	SEDIMENT BARRIER		INLET PROTECTION SYSTEM		CONSTRUCTION REMARKS
			0104 10 3		0104 18		
			LF		EA		
			P	F	P	F	
117+16.62 TO 117+16.62	RT.		22.0				
117+98.61 TO 118+99.94	LT.		119.5				
121+64.23 TO 123+28.91	LT.		171.6				
123+61.99 TO 124+46.23	LT.		84.2				
123+76.05 TO 124+74.37	RT.		111.7				
126+36.89 TO 127+03.03	LT.		66.1				
126+91.53 TO 127+90.06	RT.		99.4				
127+27.03 TO 128+15.10	LT.		88.1				
128+05.62 TO 128+43.83	RT.		39.3				
128+32.12 TO 128+67.57	LT.		36.7				
131+25.09 TO 131+73.87	LT.		48.8				
131+89.89 TO 132+46.24	LT.		59.3				
132+64.92 TO 133+27.75	LT.		69.7				
133+56.64 TO 133+98.17	LT.		46.3				
134+84.13 TO 135+27.05	LT.		47.2				
164+92.95 TO 167+00.00	RT.		215.5				
117+18.00	RT.				1		
128+53.00	RT.				1		
165+00.00	RT.				1		
165+00.00	LT.				1		
168+94.19	LT.				1		
171+95.00	RT.				1		
171+95.00	LT.				1		
131+79.00	RT.				1		
132+03.00	RT.				1		
134+65.00	RT.				1		
134+69.00	LT.				1		
135+19.00	RT.				1		
135+41.00	RT.				1		
SUB-TOTAL:			1325.4		13		
TOTAL:			1325		13		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**  
 SQ-2

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF REMOVAL ITEMS**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	AREA ID	UNITS	SECONDARY UNITS (IF LUMP SUM)	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
						AREA (AC)	P	F	P	F		
0110 1 1	CLEARING & GRUBBING	118+05.13 TO 119+88.30	LT.	364492	LS	0.160			1		3.08 AC, TOTAL	
		118+05.15 TO 121+34.92	RT.	364474		0.266						
		118+90.59 TO 119+82.26	LT.	364377		0.026						
		120+09.73 TO 121+98.07	LT.	364590		0.191						
		121+22.62 TO 121+34.60	LT.	332416		0.004						
		121+32.22 TO 121+36.97	LT.	124833		0.002						
		121+58.97 TO 121+64.23	LT.	124838		0.002						
		121+60.40 TO 124+89.60	RT.	364787		0.240						
		121+97.97 TO 128+80.13	LT.	365593		0.948						
		164+93.72 TO 168+53.65	RT.	365762		0.300						
		167+78.29 TO 168+15.46	LT.	366015		0.014						
		168+85.46 TO 169+60.00	LT.	365958		0.021						
		169+06.74 TO 171+56.65	RT.	365849		0.124						
		129+97.98 TO 131+80.03	RT.	365997		0.111						
		130+00.26 TO 135+10.25	LT.	366249		0.505						
		132+02.49 TO 135+02.24	RT.	366411		0.153						
		135+39.42 TO 135+62.09	RT.	332373		0.006						
		135+42.37 TO 135+65.03	LT.	332381		0.010						
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT				SY				2992			
		118+56.61 TO 118+56.61	RT.	224939			15.7					SW
		118+98.51 TO 121+29.17	RT.	224914			164.5					SW
		119+11.38 TO 119+17.48	RT.	224932			8.6					SW
		119+11.93 TO 119+17.89	LT.	319590			9.4					SW
		119+11.93 TO 119+53.60	LT.	225907			36.9					SW
		119+53.51 TO 119+76.85	LT.	319592			28.8					SW
		119+71.74 TO 119+76.82	LT.	319588			5.3					SW
		119+76.82 TO 119+85.60	LT.	319595			4.4					SW
		120+16.43 TO 121+10.06	LT.	224899			50.6					SW
		121+09.32 TO 121+10.14	LT.	225196			0.7					CURB
		121+22.01 TO 123+26.52	LT.	224951			111.5					SW
		121+22.45 TO 121+23.38	LT.	225202			0.7					CURB
		121+61.64 TO 121+67.67	RT.	226182			32.2					DWY
		121+67.15 TO 123+20.88	RT.	225029			104.8					SW
		121+67.38 TO 121+72.81	RT.	319615			31.7					SW
		121+72.43 TO 121+77.93	RT.	226185			18.2					DWY
		121+72.77 TO 121+77.93	RT.	226230			0.4					CURB
		121+76.61 TO 121+77.90	RT.	226203			1.6					CURB
		121+77.63 TO 121+78.30	RT.	226213			0.2					CURB
		121+77.70 TO 121+78.53	RT.	226198			0.8					CURB
		121+77.72 TO 121+78.10	RT.	226225			0.2					CURB
		121+77.90 TO 121+78.88	RT.	226208			0.9					CURB
		121+78.28 TO 121+78.75	RT.	226220			0.2					CURB
		123+09.08 TO 123+52.94	RT.	344784			85.4					DRWY
		123+25.84 TO 123+29.07	LT.	225121			1.7					CURB
		123+39.31 TO 123+50.01	LT.	225110			46.9					CURB
		123+46.27 TO 124+84.74	RT.	319648			88.2					SW
		123+61.27 TO 123+62.56	LT.	225129			1.5					CURB
		123+62.74 TO 124+62.12	LT.	224965			69.5					SW
		123+79.81 TO 123+96.93	LT.	225175			34.0					BUS LANDING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



**CITY OF TAMPA**  
**TRANSPORTATION DIVISION**  
 CONTRACT NO: 12-D-00057  
**ARMENIA AVENUE INTERSECTION PROJECT**  
**AT SR 580/BUSCH BLVD.**

**SUMMARY OF QUANTITIES**

SHEET NO.

SQ-3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF REMOVAL ITEMS**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	AREA ID	UNITS	SECONDARY UNITS (IF LUMP SUM)	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
						AREA (AC)	P	F	P	F		
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT (CONT'D)	124+31.87 TO 124+60.22	RT.	319630	SY		24.9					BUS LANDING
		124+71.39 TO 125+04.08	LT.	224941			16.5					SW
		125+09.72 TO 125+55.27	RT.	225141			20.6					CURB
		125+54.93 TO 126+84.90	RT.	225268			43.6					CURB
		125+82.94 TO 127+03.14	LT.	225231			66.7					SW
		126+74.96 TO 127+95.85	RT.	225221			54.9					TRAF SEP
		126+83.00 TO 127+34.96	LT.	340104			122.1					DWY
		126+84.62 TO 127+91.88	RT.	225284			26.9					CURB
		127+26.80 TO 128+08.98	LT.	225249			52.9					SW
		127+67.88 TO 127+91.85	RT.	225208			11.9					SW
		128+07.37 TO 128+40.99	RT.	225815			20.8					SW
		128+09.95 TO 128+73.53	RT.	320046			16.0					CURB
		128+22.91 TO 128+79.38	LT.	226107			36.9					SW
		128+23.64 TO 128+80.13	LT.	319677			12.8					CURB
		128+26.64 TO 128+77.38	RT.	225705			22.9					TRAF SEP
		128+35.51 TO 128+68.67	RT.	225841			28.0					DWY
		128+40.26 TO 128+43.77	RT.	225826			0.4					CURB
		128+63.39 TO 128+64.88	RT.	225834			0.3					CURB
		128+64.39 TO 128+72.27	RT.	226038			3.1					SW
		129+97.98 TO 130+70.72	RT.	226000			49.6					SW
		130+15.10 TO 131+79.21	RT.	320408			40.3					CURB
		130+21.83 TO 130+25.93	LT.	225381			1.1					MISC
		130+48.01 TO 130+51.97	LT.	225382			1.0					MISC
		130+58.57 TO 134+70.74	LT.	320182			92.4					CURB
		130+59.65 TO 131+24.58	RT.	225618			111.8					DWY
		130+80.61 TO 131+30.47	LT.	225588			42.4					DWY
		131+12.28 TO 131+75.33	RT.	320439			34.4					SW
		131+26.31 TO 131+37.31	LT.	225646			4.3					SW
		131+33.18 TO 131+38.33	RT.	320467			4.7					SW
		131+34.67 TO 131+59.47	LT.	225600			16.6					DWY
		131+54.74 TO 131+78.71	LT.	225653			10.1					SW
		131+73.89 TO 132+03.62	LT.	225609			18.8					DWY
		131+98.26 TO 132+06.61	LT.	225659			3.1					SW
		132+03.42 TO 132+36.26	RT.	225484			11.8					CURB
		132+09.05 TO 133+16.90	RT.	345015			52.1					SW
		132+36.15 TO 134+31.66	RT.	344929			40.4					CURB
		132+39.48 TO 132+70.33	LT.	225635			54.1					DWY
		132+68.66 TO 133+35.50	LT.	225666			42.6					SW
		133+10.23 TO 133+41.40	RT.	225988			14.2					DWY
		133+29.29 TO 133+72.61	LT.	225690			85.5					DWY
		133+36.59 TO 133+54.92	RT.	345036			7.1					SW
		133+48.59 TO 133+75.18	RT.	345048			11.5					DRWY
		133+69.51 TO 134+70.25	RT.	344980			52.8					SW
		134+67.08 TO 134+70.25	RT.	344921			0.7					CURB
		134+70.25 TO 134+94.98	RT.	320535			14.1					SW
		134+70.25 TO 135+02.07	RT.	320480			8.5					CURB
		134+70.68 TO 135+10.26	LT.	320637			13.7					CURB
		135+40.54 TO 135+53.22	RT.	320676			3.6					CURB
		135+42.37 TO 135+56.38	LT.	320658			17.5					SW
		135+44.96 TO 135+57.98	LT.	320647			4.0					CURB
		135+50.21 TO 135+60.62	RT.	345006			5.5					SW

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.  
**SQ-4**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF REMOVAL ITEMS**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNITS	SECONDARY UNITS (IF LUMP SUM)	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
		STA. TO STA.				AREA (AC)	P	F	P	F		
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT (CONT'D)	165+24.18 TO 165+49.83	RT.	225938	SY		17.1					SW
		165+24.82 TO 165+50.20	RT.	225945			5.5					CURB
		165+48.71 TO 167+92.75	RT.	225760			164.3					SW
		165+49.83 TO 168+10.67	RT.	225715			57.7					CURB
		167+87.12 TO 167+96.41	LT.	226137			4.0					TRAF SEP
		167+92.62 TO 168+51.79	RT.	320123			52.5					SW
		168+10.38 TO 168+53.65	RT.	319688			14.2					CURB
		168+85.46 TO 169+31.54	LT.	320390			50.1					SW
		169+17.67 TO 169+59.28	RT.	320701			13.7					CURB
		169+19.41 TO 169+59.20	RT.	320714			38.7					SW
		169+58.93 TO 170+36.10	RT.	344798			56.7					SW
		169+59.20 TO 171+25.22	RT.	320323			37.1					CURB
		170+66.79 TO 171+32.46	RT.	344808			64.6					SW
		171+24.24 TO 171+56.64	RT.	344812			7.3					CURB

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.  
 SQ-5

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF EARTHWORK**

PAY ITEM NO.	PAY ITEM DESCRIPTION	CY		DESIGN NOTES	CONSTRUCTION REMARKS
		P	F		
0120 1	EXCAVATION				
	ARMENIA AVE.	1914.3			
	BUSCH BLVD.	317.8			
	POND (SWMF)	179.8			
	TOTAL:	2411.9			
0120 6	EMBANKMENT				
	ARMENIA AVE.	519.0			
	BUSCH BLVD.	81.9			
	POND (SWMF)	15.6			
	TOTAL:	616.5			

**SUMMARY OF TURNOUTS**

LOCATION STA. TO STA.	SIDE	AREA ID	0286 2		DESIGN NOTES	CONSTRUCTION REMARKS
			TN			
			P	F		
121+22.20 TO 121+73.97	LT	351168	19.79			
121+22.62 TO 121+34.60	LT	256407	4.19			
121+72.39 TO 121+88.14	RT	331512	15.71			
123+15.30 TO 123+74.96	LT	351224	20.82			
124+51.26 TO 125+05.26	LT	351329	15.59			
126+03.89 TO 126+51.89	LT	351276	12.25			
SUB-TOTAL:			88.35			
TOTAL:			88.4			

**REVISIONS**

DATE	DESCRIPTION	DATE	DESCRIPTION



CITY OF TAMPA  
TRANSPORTATION DIVISION

CONTRACT NO: 12-D-00057

ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.

SQ-6

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF PAVEMENT**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
		STA. TO STA.				P	F	P	F		
		0160 4				TYPE B STABILIZATION	168+85.46 TO 169+22.30	LT	80946		
		168+91.66 TO 169+24.34	LT	79446		11.4					
		169+24.32 TO 169+31.54	LT	320948		1.8					
		118+10.62 TO 121+33.52	RT	80795		277.8					
		118+84.32 TO 118+84.32	LT	310651		67.9					
		118+84.84 TO 118+84.84	RT	80923		70.7					
		118+89.68 TO 119+29.64	LT	79365		11.8					
		118+90.83 TO 118+90.83	RT	80810		1.8					
		118+90.83 TO 119+87.54	LT	80903		88.4					
		118+90.83 TO 121+09.23	RT	80817		56.7					
		119+29.38 TO 119+64.63	LT	79371		9.1					
		119+64.41 TO 119+87.30	LT	79376		9.9					
		120+10.31 TO 120+36.83	LT	79391		9.7					
		120+11.27 TO 121+59.48	LT	80827		245.0					
		120+36.69 TO 121+22.24	LT	79384		22.1					
		121+09.21 TO 121+34.92	RT	79399		12.8					
		121+59.48 TO 126+20.00	LT	80849		1114.8					
		121+61.38 TO 121+86.39	RT	345301		29.9					
		121+61.38 TO 124+88.60	RT	79196		507.4					
		121+73.97 TO 123+15.30	LT	79252		36.6					
		121+86.39 TO 124+63.60	RT	79355		71.8					
		121+97.97 TO 128+03.38	LT	312001		156.7					
		123+74.96 TO 124+51.26	LT	79277		19.8					
		124+63.51 TO 124+88.65	RT	305088		10.0					
		125+05.26 TO 126+03.89	LT	79295		25.5					
		125+08.72 TO 126+85.40	RT	345189		135.5					
		125+09.72 TO 127+91.91	RT	345328		77.8					
		126+20.00 TO 128+09.33	LT	311986		455.5					
		126+51.89 TO 126+88.03	LT	79313		9.4					
		126+85.40 TO 127+91.92	RT	345213		75.6					
		126+88.03 TO 127+42.03	LT	345169		22.4					
		127+42.03 TO 128+12.05	LT	311995		18.0					
		127+89.86 TO 128+17.16	LT/RT	306171		53.6					
		128+02.92 TO 128+30.26	LT/RT	320870		53.8					
		128+07.78 TO 128+61.57	RT	320940		14.3					
		128+10.35 TO 128+73.55	RT	320883		100.9					
		128+23.98 TO 128+80.12	LT	308842		95.2					
		128+28.01 TO 128+75.80	LT	308865		12.2					
		165+24.43 TO 168+42.82	RT	308874		87.5					
		165+24.68 TO 168+53.65	RT	308852		446.1					
		167+87.12 TO 167+94.33	LT	306291		3.3					
		169+17.63 TO 169+88.16	RT	320898		109.9					
		169+34.18 TO 171+56.67	RT	320926		63.5					
		129+97.98 TO 131+54.11	RT	79456		40.4					
		129+97.98 TO 131+78.70	RT	80959		193.4					
		130+58.24 TO 131+23.78	LT	306095		17.0					
		131+23.71 TO 133+61.04	LT	306069		63.1					
		131+23.71 TO 133+61.04	LT/RT	339938		493.7					
		131+54.11 TO 131+79.21	RT	79483		9.8					
		132+03.42 TO 134+13.77	RT	79501		151.9					

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



**CITY OF TAMPA**  
**TRANSPORTATION DIVISION**  
 CONTRACT NO: 12-D-00057  
**ARMENIA AVENUE INTERSECTION PROJECT**  
**AT SR 580/BUSCH BLVD.**

**SUMMARY OF QUANTITIES**

SHEET NO.  
**SQ-7**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF PAVEMENT**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
		STA. TO STA.				P	F	P	F		
		0160 4				TYPE B STABILIZATION (CONT'D)	132+03.49 TO 132+28.49	RT	79472		
		132+28.49 TO 132+56.62	RT	79478		7.3					
		132+56.62 TO 134+31.67	RT	183944		41.6					
		133+61.04 TO 135+10.25	LT	306103		44.1					
		134+67.07 TO 135+02.37	RT	305827		11.0					
		135+40.54 TO 135+53.55	RT	306278		4.5					
		135+44.96 TO 135+57.97	LT	306286		4.4					
285707	OPTIONAL BASE, BASE GROUP 07	118+05.15 TO 119+88.29	LT	93334	SY	93.9		4052			
		118+05.15 TO 121+34.42	RT	93314		282.3					
		120+10.30 TO 128+09.33	LT	346127		1816.3					
		121+60.39 TO 124+89.60	RT	93277		508.6					
		125+09.72 TO 126+50.00	RT	331534		134.8					
		126+85.40 TO 127+91.92	RT	331557		75.6					
		127+89.86 TO 128+17.16	LT/RT	346009		52.1				RAILROAD (B-12.5 ONLY)	
		128+02.92 TO 128+30.26	LT/RT	346029		52.3				RAILROAD (B-12.5 ONLY)	
		128+10.35 TO 128+72.44	RT	331574		99.6					
		128+23.98 TO 128+80.12	LT	331623		95.2					
		129+97.98 TO 131+80.03	RT	93560		194.0					
		131+23.71 TO 133+61.04	LT/RT	331562		493.7					
		132+02.49 TO 134+13.77	RT	93453		153.4					
285709	OPTIONAL BASE, BASE GROUP 09	165+25.00 TO 168+53.65	RT	346578	SY	446.1		583			
		167+87.13 TO 167+94.34	LT	346416		3.3					
		168+85.46 TO 169+31.54	LT	346421		20.8					
		169+19.18 TO 169+87.51	RT	346596		112.3					
0327 70 4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	118+98.94 TO 119+62.62	LT/RT	357032	SY	276.3		4723			
		119+62.62 TO 128+00.13	LT/RT	357116		2234.7					
		128+12.78 TO 128+80.12	LT/RT	351813		280.5					
		165+25.21 TO 168+54.62	RT	357286		39.1					
		169+30.57 TO 169+87.51	RT	357225		6.6					
		129+97.98 TO 132+21.01	LT/RT	351595		980.0					
		131+47.84 TO 132+36.15	RT	351857		99.4					
		132+21.01 TO 134+70.25	LT/RT	357006		805.9					
0327 70 6	MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH	119+81.30 TO 120+22.11	LT	357536	SY	78.7		2882			
		121+31.70 TO 121+65.14	RT	357549		79.0					
		124+78.09 TO 125+19.84	RT	357561		96.2					
		167+83.26 TO 169+31.54	LT	357511		204.0					
		167+83.26 TO 169+31.54	LT/RT	357722		1007.5					
		168+15.97 TO 169+31.19	RT	357751		264.7					
		131+74.64 TO 132+07.57	RT	357497		58.6					
		134+70.25 TO 136+20.56	LT/RT	357578		1093.5					
0334 1 53	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG 76-22	118+98.94 TO 118+98.94	LT/RT	343979	TN	17.86		802.7			
		118+98.94 TO 121+33.52	RT	344029		22.90				WIDENING	
		119+00.00 TO 119+87.54	LT	343831		7.29				WIDENING	
		119+00.00 TO 121+00.00	LT/RT	343993		27.70					
		120+10.30 TO 128+09.33	LT	343843		149.85				WIDENING	
		121+00.00 TO 128+00.13	LT/RT	344042		161.60					
		121+61.38 TO 124+88.60	RT	343705		41.86				WIDENING	
		125+08.72 TO 126+50.00	RT	343574		11.18				WIDENING	
		126+85.40 TO 127+91.92	RT	343538		6.24				WIDENING	
		127+89.86 TO 128+17.16	LT/RT	344162		4.30				RAILROAD	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.  
**SQ-8**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF PAVEMENT**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	AREA ID	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
						P	F	P	F		
		0334 1 53				SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG 76-22 (CONT'D)	128+02.92 TO 128+30.26	LT/RT	344181		
		128+10.35 TO 128+72.44	RT	343530		8.22				WIDENING	
		128+12.78 TO 128+80.12	LT/RT	344202		23.16					
		128+23.98 TO 128+80.12	LT	343880		7.86				WIDENING	
		165+25.00 TO 168+54.62	RT	344374		40.03					
		167+87.12 TO 167+94.33	LT	343974		0.27					
		168+85.46 TO 169+22.30	LT	343948		1.59					
		169+19.18 TO 169+87.51	RT	344308		9.27					
		129+97.98 TO 131+00.00	RT	343905		8.28				WIDENING	
		129+97.98 TO 131+00.00	LT/RT	344219		49.30					
		131+00.00 TO 131+78.70	RT	343912		7.68				WIDENING	
		131+00.00 TO 134+70.25	LT/RT	344236		106.23					
		131+23.71 TO 133+61.04	LT/RT	343932		40.73				WIDENING	
		132+03.42 TO 134+13.77	RT	343920		12.53				WIDENING	
		119+62.60 TO 120+44.80	LT	NA		23.16				OVERBUILD	
		131+79.00 TO 133+75.00	RT	NA		9.26				OVERBUILD	
0337 7 83	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22	119+62.62 TO 120+44.78	LT	329884	TN	6.96		1038.1			
		119+81.48 TO 120+21.93	LT	329896		6.39					
		121+22.24 TO 121+73.97	LT	329922		6.62					
		121+22.62 TO 121+34.60	LT	330638		1.57					
		121+27.79 TO 121+65.14	RT	329908		9.50					
		121+72.39 TO 121+88.14	RT	330644		5.89					
		123+15.30 TO 123+74.96	LT	329948		6.87					
		124+51.26 TO 125+05.26	LT	329967		4.79					
		124+78.09 TO 125+19.82	RT	329930		7.94					
		126+03.89 TO 126+51.89	LT	329976		3.79					
		128+10.35 TO 128+72.44	RT	330012		8.22					
		128+12.78 TO 128+80.12	LT/RT	330020		23.14					
		167+96.89 TO 169+40.82	RT	330042		22.70					
		169+19.18 TO 169+88.16	RT	330058		9.32					
		131+23.71 TO 133+59.67	LT/RT	330089		40.73					
		131+70.93 TO 132+11.36	RT	329993		6.67					
		132+21.01 TO 133+81.55 R3	LT/RT	330071		37.36					
		134+70.25 TO 136+42.79	LT/RT	330498		90.21					
		118+05.15 TO 121+59.48	LT/RT	316305		48.95					
		118+07.83 TO 119+87.54	LT	316335		7.29					
		118+07.83 TO 121+33.52	RT	316669		22.90					
		120+10.30 TO 128+09.33	LT	316619		149.85					
		120+92.24 TO 121+98.73	RT	316686		9.91					
		121+59.48 TO 121+98.73	LT/RT	316659		7.33					
		121+61.38 TO 124+88.60	RT	316385		65.57					
		123+65.30 TO 125+39.94	RT	316449		34.22					
		124+56.10 TO 125+38.44	RT	316488		5.51					
		125+08.72 TO 127+94.04	RT	316458		31.02					
		125+39.94 TO 126+64.14	RT	316502		24.55					
		126+64.14 TO 128+00.13	RT	316510		29.53					
		127+89.86 TO 128+17.16	LT/RT	316517		4.42					
		128+02.92 TO 128+30.26	LT/RT	316531		4.45					
		128+23.98 TO 128+80.12	LT	316542		7.86					
		129+97.98 TO 131+78.70	RT	316279		15.96					

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.  
**SQ-9**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



**SUMMARY OF PAVEMENT**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
		STA. TO STA.				P	F	P	F		
		0337 7 83				ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22 (CONT'D)	129+97.98 TO 132+21.01	LT/RT	316189		
		131+47.84 TO 132+37.19	RT	316271		6.37					
		132+03.42 TO 134+13.77 R3	RT	316258		12.53					
		133+79.47 TO 134+70.25 R3	LT/RT	316249		29.13					
		165+25.00 TO 168+53.65	RT	316939		39.20					
		167+83.26 TO 169+22.30	LT	316830		16.75					
		167+83.26 TO 169+31.54	LT/RT	316856		83.73					
		168+85.46 TO 169+22.30	LT	316291		1.59					

**SUMMARY OF MISCELLANEOUS ASPHALT PAVEMENT**

LOCATION STA. TO STA.	SIDE	AREA ID	THICK (IN)	OTHER		DESIGN NOTES	CONSTRUCTION REMARKS
				0339	1		
				TN			
165+23.95 TO 167+90.83	RT.	321416	2	3.05			
170+09.97 TO 170+37.10	RT.	321423	2	0.46			
SUB-TOTAL:				3.51			
TOTAL:				3.5			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO: 12-D-00057  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.

SQ-10

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF UTILITY ADJUSTMENTS**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STATION	SIDE	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
					P	F	P	F		
0425 5 1	MANHOLE, ADJUST, UTILITIES	135+00.95	LT.	EA	1		2			
		135+35.87	RT.		1					
0425 6	VALVE BOXES, ADJUST	120+24.25	LT.	EA	1		26			
		120+25.66	LT.		1					
		120+44.45	LT.		1					
		123+87.92	RT.		1					
		123+88.92	RT.		1					
		124+78.22	RT.		1					
		124+78.53	RT.		1					
		125+40.72	LT.		1					
		125+96.00	RT.		1					
		126+85.34	LT.		1					
		127+54.20	RT.		1					
		127+70.49	RT.		1					
		127+84.96	LT.		1					
		128+44.69	RT.		1					
		128+65.14	RT.		1					
		129+75.37	RT.		1					
		130+33.18	RT.		1					
130+53.05	RT.		1							
131+18.91	LT.		1							
132+07.80	RT.		1							
132+12.43	RT.		1							
132+76.44	LT.		1							
133+04.86	RT.		1							
133+66.62	LT.		1							
134+95.66	RT.		1							
135+30.32	RT.		1							

**SUMMARY OF RAILING**

LOCATION	SIDE	PED/BICYCLE RAILING (STEEL ONLY)		CONSTRUCTION REMARKS
		0515	1 1	
STA. TO STA.		LF		
		P	F	
132+86.80 R2 to 133+03.05 R2	RT	14.7		
133+03.05 R2 to 133+08.73 R2	RT	5.3		
	SUB-TOTAL:	20.0		
	TOTAL:	20		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.  
**SQ-11**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF CURB & GUTTER AND/OR TRAFFIC SEPARATORS**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS	
		STA. TO STA.				GROSS LENGTH	NET LENGTH		P			F
							P	F				
0520 1 7	CONCRETE CURB & GUTTER, TYPE E	169+08.21 TO 169+16.92	RT.		LF	42.9	42.9	199				
		169+10.65 TO 169+30.80	RT.			20.4	20.4					
		169+16.92 TO 169+32.77	RT.			40.6	40.6					
		124+00.00 TO 124+94.66	LT.			94.7	94.7					
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	118+84.69 TO 119+85.54	LT.		LF	117.0	117.0	5304				
		118+84.69 TO 120+36.99	RT.			152.7	152.7					
		118+90.70 TO 118+90.71	LT./RT.			4.5	4.5					
		118+90.70 TO 119+06.91	LT.			17.1	17.1					
		118+90.71 TO 119+06.91	RT.			17.1	17.1					
		119+06.91 TO 119+06.91	LT./RT.			2.3	2.3					
		119+23.91 TO 119+23.91	LT./RT.			4.2	4.2					
		119+23.91 TO 119+81.27	LT./RT.			61.8	61.8					
		119+23.91 TO 119+81.27	LT.			63.5	63.5					
		120+12.78 TO 120+37.10	LT.			36.5	36.5					
		120+24.99 TO 121+15.56	LT./RT.			97.2	97.2					
		120+24.99 TO 121+15.56	LT.			97.4	97.4					
		120+44.57 TO 121+33.34	RT.			112.9	112.9					
		120+44.67 TO 121+36.91	LT.			98.2	98.2					
		121+59.07 TO 121+96.89	LT.			43.4	43.4					
		121+62.39 TO 121+62.89	RT.			44.0	44.0					
		121+62.89 TO 121+63.89	RT.			29.5	29.5					
		121+62.89 TO 121+96.89	RT.			50.6	50.6					
		121+97.97 TO 121+97.97	LT./RT.			14.9	14.9					
		121+97.97 TO 124+00.00	LT.			202.0	202.0					
		121+97.97 TO 127+98.58	RT.			600.6	600.6					
		122+04.47 TO 123+11.14	RT.			106.7	106.7					
		122+04.47 TO 123+28.68	LT.			130.3	130.3					
		123+11.14 TO 123+55.14	RT.			44.0	44.0					
		123+55.14 TO 124+88.65	RT.			150.1	150.1					
		123+61.58 TO 124+64.67	LT.			115.6	115.6					
		124+46.24 TO 124+64.67	LT.			20.0	20.0					
		124+91.84 TO 125+90.04	LT.			104.5	104.5					
		124+91.84 TO 126+17.30	LT.			128.6	128.6					
		124+94.66 TO 127+99.75	LT.			305.1	305.1					
125+11.07 TO 125+45.00	RT.			49.9	49.9							
125+45.00 TO 125+90.04	RT.			45.1	45.1							
125+99.96 TO 126+17.30	LT.			23.6	23.6							
125+99.96 TO 126+30.26	RT.			30.3	30.3							
126+30.26 TO 126+74.26	RT.			44.0	44.0							
126+36.99 TO 126+88.03	LT.			56.6	56.6							
126+74.26 TO 127+91.56	RT.			118.3	118.3							
126+98.67 TO 127+02.93	LT.			8.2	8.2							
127+27.13 TO 127+34.96	LT.			13.0	13.0							
127+42.03 TO 128+11.82	LT.			69.8	69.8							
128+07.97 TO 128+47.58	RT.			40.7	40.7							
128+24.41 TO 128+71.17	RT.			46.8	46.8							
128+25.60 TO 128+71.97	LT.			46.9	46.9							
128+28.43 TO 128+60.60	LT.			32.2	32.2							
128+56.43 TO 128+60.65	RT.			4.8	4.8							
128+60.60 TO 128+75.29	LT.			14.9	14.9							

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**  
 SHEET NO.  
**SQ-12**

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF CURB & GUTTER AND/OR TRAFFIC SEPARATORS**

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS	
		STA. TO STA.				GROSS LENGTH	NET LENGTH		P			F
							P	F				
0520 1 10	CONCRETE CURB & GUTTER, TYPE F (CONT'D)	128+71.17 TO 128+71.97	LT./RT.		LF	7.0	7.0					
		165+24.84 TO 165+75.70	RT.			53.1	53.1					
		165+86.00 TO 167+92.29	RT.			210.3	210.3					
		170+69.63 TO 171+28.63	RT.			59.8	59.8					
		129+97.98 R2 TO 130+65.74 R2	RT.			67.8	67.8					
		130+65.74 R2 TO 131+15.47 R2	RT.			49.8	49.8					
		130+80.41 R2 TO 132+05.17 R2	LT.			125.0	125.0					
		131+15.47 R2 TO 131+77.71 R2	RT.			75.9	75.9					
		132+04.99 R2 TO 132+87.58 R2	RT.			90.1	90.1					
		132+05.17 R2 TO 132+32.59 R2	LT.			28.1	28.1					
		132+32.59 R2 TO 132+73.45 R2	LT.			43.2	43.2					
		132+73.45 R2 TO 133+26.40 R2	LT.			56.1	56.1					
		132+73.45 R2 TO 133+26.40 R2	LT.			56.1	56.1					
		132+99.02 R2 TO 133+49.36 R2	RT.			46.7	46.7					
		133+26.40 R2 TO 133+76.63 R2	LT.			52.5	52.5					
		133+49.36 R2 TO 133+62.83 R2	RT.			12.6	12.6					
		133+62.83 R2 TO 134+10.36 R3	RT.			44.6	44.6					
		133+76.60 R2 TO 135+08.75 R3	LT.			152.0	152.0					
		134+10.36 R3 TO 134+56.61 R3	RT.			46.3	46.3					
		134+67.09 R3 TO 135+00.86 R3	RT.			41.9	41.9					
135+41.89 R3 TO 135+53.07 R3	RT.			17.2	17.2							
135+46.26 R3 TO 135+57.49 R3	LT.			16.9	16.9							
167+92.29 TO 168+41.56	RT.			63.3	63.3							
168+93.20 TO 168+93.65	LT.			2.4	2.4							
168+98.65 TO 169+31.54	LT.			36.5	36.5							
169+35.44 TO 170+69.63	RT.			156.4	156.4							
171+28.63 TO 171+56.64	RT.			28.4	28.4							
127+98.58 TO 128+02.17	LT./RT.			12.5	12.5							
128+21.99 TO 128+25.60	LT./RT.			12.5	12.5							
130+58.72 R2 TO 130+80.41 R2	LT.			21.8	21.8							
0520 2 4	CONCRETE CURB, TYPE D	121+09.53 TO 121+36.97	LT.		LF	76.6	76.6	132				
		121+58.97 TO 121+64.23	LT.			54.9	54.9					
0520 5 11	TRAFFIC SEPARATOR CONCRETE - TYPE 1, 4' WIDE	130+18.37 R2 TO 130+18.37 R2	RT.		LF	3.1	3.1	220				
		130+18.37 R2 TO 132+29.48 R2	RT.			105.4	105.4					
		130+18.37 R2 TO 132+29.57 R2	RT.			105.4	105.4					
		132+29.48 R2 TO 132+29.57 R2	RT.			3.1	3.1					
		167+87.12 TO 167+87.13	LT.			3.2	3.2					
0520 6	SHOULDER GUTTER - CONCRETE	126+88.03 TO 127+42.03	LT.		LF	54.2	54.2	54	MODIFIED, 6" THICK MIN.			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.

SQ-13

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF SIDEWALK & DETECTABLE WARNINGS**

LOCATION  STA. TO STA.	SIDE	AREA ID	CONC SIDEWALK 6"		BUS SHELTER PAD - CONCRETE		DETECTABLE WARNINGS		DESIGN NOTES	CONSTRUCTION REMARKS
			0522 2		0522 4		0527 2			
			SY		SY		SF			
P	F	P	F	P	F					
124+02.50 TO 124+94.66	LT/RT	339680	84.8							
118+24.96 TO 119+66.28	RT	327957	78.5							
119+05.41 TO 119+26.05	LT/RT	279003	16.9							
119+10.31 TO 119+19.30	RT	328083	10.4							
119+10.58 TO 119+19.57	LT	328073	14.3							
119+17.93 TO 119+74.66	LT	327992	31.5							
119+66.28 TO 119+97.65	RT	327965	17.8							
119+69.66 TO 119+76.74	LT	327999	7.7							
119+74.66 TO 119+84.64	LT	279021	4.9							
119+97.65 TO 120+60.00	RT	327974	34.6							
120+15.40 TO 120+27.56	LT	279029	5.5							
120+27.56 TO 121+01.29	LT	328006	63.5							
120+60.00 TO 120+99.87	RT	327979	22.2							
120+99.87 TO 121+21.91	RT	327984	12.8							
121+01.29 TO 121+22.20	LT	328056	24.5							
121+21.91 TO 121+31.70	RT	279616	4.8							
121+22.24 TO 121+34.70	LT	279051	10.6							
121+61.32 TO 121+73.97	LT	279055	10.5							
121+63.39 TO 121+72.39	RT	279601	29.6						DRWY .	
121+63.84 TO 121+86.39	RT	279625	19.8							
121+67.39 TO 121+72.39	RT	328018	9.2							
121+67.39 TO 121+72.82	RT	328013	11.1							
121+73.97 TO 122+00.00	LT	331659	23.0							
121+86.39 TO 123+21.14	RT	328153	85.8							
122+00.00 TO 123+15.30	LT	331668	126.6							
123+11.14 TO 123+55.14	RT	324810	40.2						DRWY .	
123+15.30 TO 123+28.19	LT	279119	10.5							
123+45.14 TO 124+08.94	RT	328144	41.4							
123+62.07 TO 123+74.96	LT	279124	10.5							
123+74.96 TO 124+17.75	LT	328130	47.5							
124+08.94 TO 124+37.60	RT	328048	25.3							
124+17.75 TO 124+51.26	LT	328137	35.0							
124+51.10 TO 124+63.60	RT	331652	11.1							
124+51.26 TO 124+64.18	LT	279111	10.5							
124+63.60 TO 124+88.04	RT	279573	25.7							
124+92.34 TO 125+05.26	LT	279105	10.5							
125+05.26 TO 126+03.89	LT	328108	106.0							
125+12.01 TO 125+45.00	RT	279556	30.3							
125+45.00 TO 125+55.00	RT	328168	5.6							
125+45.00 TO 125+89.00	RT	324809	26.9						DRWY .	
125+79.00 TO 125+89.00	RT	328174	5.6							
125+89.00 TO 126+30.26	RT	328094	23.9							
126+03.89 TO 126+16.80	LT	279093	10.5							
126+30.26 TO 126+40.26	RT	328179	5.6							
126+30.26 TO 126+74.26	RT	324808	40.2						DRWY .	
126+39.24 TO 126+51.89	LT	279099	10.5							
126+51.89 TO 126+88.03	LT	328062	40.2							
SUB-TOTAL:			1334.4							
TOTAL:			3118		36		408			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**  
 SQ-14

SHEET NO.  
SQ-14

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF SIDEWALK & DETECTABLE WARNINGS**

LOCATION  STA. TO STA.	SIDE	AREA ID	CONC SIDEWALK 6"		BUS SHELTER PAD - CONCRETE		DETECTABLE WARNINGS		DESIGN NOTES	CONSTRUCTION REMARKS
			0522	2	0522	4	0527	2		
			SY		SY		SF			
P	F	P	F	P	F					
126+64.26 TO 126+74.26	RT	328185	5.6							
126+74.26 TO 127+36.10	RT	328191	41.7							
126+88.03 TO 127+00.68	LT	279135	10.5							
126+97.66 TO 127+32.40	LT	341001	45.2						DRWY .	
127+29.38 TO 127+42.03	LT	279141	10.5							
127+35.51 TO 127+91.45	RT	328031	36.6							
127+42.03 TO 127+56.85	LT	328067	15.6							
127+56.85 TO 128+13.63	LT	328036	37.3							
127+75.00 TO 128+01.68	LT/RT	324700	24.6							
128+06.47 TO 128+60.35	RT	324861	35.8							
128+22.48 TO 128+71.81	LT/RT	324708	41.6							
128+28.57 TO 128+55.63	LT	328199	17.5							
128+55.63 TO 128+75.13	LT	308819	12.4							
165+24.16 TO 167+90.34	RT	368832	181.8							
167+90.34 TO 168+41.14	RT	308827	44.5							
168+93.71 TO 169+04.12	LT	279424	4.8							
168+99.07 TO 169+31.54	LT	324755	23.2							
169+08.94 TO 169+32.18	RT	324818	50.5							
169+35.87 TO 169+62.19	RT	324880	28.4							
169+60.46 TO 170+07.39	RT	368804	32.5							
170+07.39 TO 170+37.01	RT	368820	29.4							
170+16.85 TO 170+30.08	RT	368839	0.8							
170+36.63 TO 170+79.50	RT	368811	29.1							
170+69.63 TO 171+28.63	RT	324846	52.1						DRWY .	
171+18.76 TO 171+46.38	RT	368821	18.8							
129+97.98 R2 TO 130+16.09 R2	RT	324768	13.4							
130+13.60 R2 TO 130+90.86 R2	LT	328209	49.5							
130+16.09 R2 TO 130+75.74 R2	RT	328253	38.9							
130+65.74 R2 TO 131+15.47 R2	RT	325572	60.6							
130+80.44 R2 TO 131+30.40 R2	LT	317750	56.4							
131+05.47 R2 TO 131+54.11 R2	RT	328263	31.6							
131+20.63 R2 TO 131+43.85 R2	LT	328219	15.5							
131+33.76 R2 TO 131+65.84 R2	LT	317776	24.8							
131+54.11 R2 TO 131+70.05 R2	RT	279384	7.1							
131+55.85 R2 TO 131+82.17 R2	LT	328230	17.8							
131+72.17 R2 TO 132+05.17 R2	LT	317790	27.5							
131+95.17 R2 TO 132+43.23 R2	LT	328239	29.8							
132+12.55 R2 TO 132+28.49 R2	RT	279379	7.1							
132+28.49 R2 TO 133+23.20 R2	RT	328296	49.5							
132+33.23 R2 TO 132+76.59 R2	LT	317803	46.9							
132+66.81 R2 TO 133+36.12 R2	LT	328272	49.2							
133+11.51 R2 TO 133+53.94 R2	RT	324784	66.8							
133+26.12 R2 TO 133+78.58 R2	LT	317815	87.0							
133+44.81 R2 TO 133+77.10 R2	RT	328307	19.3							
133+65.18 R2 TO 134+70.25 R2	LT	328287	67.3							
133+66.15 R2 TO 134+10.43 R2	RT	324795	66.3							
134+00.68 R2 TO 134+65.50 R2	RT	328320	41.0							
134+65.47 R2 TO 134+99.91 R2	RT	324735	23.7							
SUB-TOTAL:			1727.8							

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**  
 SQ-15

SHEET NO.  
SQ-15

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF SIDEWALK & DETECTABLE WARNINGS**

LOCATION  STA. TO STA.	SIDE	AREA ID	CONC SIDEWALK 6"		BUS SHELTER PAD - CONCRETE		DETECTABLE WARNINGS		DESIGN NOTES	CONSTRUCTION REMARKS
			0522 2		0522 4		0527 2			
			SY		SY		SF			
P	F	P	F	P	F					
134+70.25 R2 TO 135+02.54 R2	LT	324718	21.8							
135+42.37 R2 TO 135+60.25 R2	LT	324725	22.2							
135+42.38 R2 TO 135+60.60 R2	RT	324746	11.9							
121+86.50 TO 122+00.00	LT	331676			12.0					
124+37.60 TO 124+51.10	RT	331680			12.0					
170+16.28 TO 170+30.05	RT	331682			12.0					
165+23.44 TO 165+23.44	RT	364029					28.9			
165+23.44 TO 165+23.44	RT	364035					28.9			
168+43.22 TO 168+49.14	RT	318158					12.0			
168+48.48 TO 168+54.30	RT	318157					12.0			
169+23.27 TO 169+26.63	RT	328686					9.0			
169+26.32 TO 169+29.64	RT	328685					9.0			
169+27.97 TO 169+33.66	RT	329090					12.1			
169+31.07 TO 169+36.83	RT	318155					12.0			
169+37.84 TO 169+41.02	RT	224123					9.0			
169+41.11 TO 169+44.25	RT	224036					9.0			
169+57.19 TO 169+58.85	RT	224035					10.0			
169+59.69 TO 169+64.70	RT	224093					11.6			
169+62.41 TO 169+67.59	RT	224098					12.6			
169+81.57 TO 169+86.58	RT	224103					15.6			
169+83.23 TO 169+86.53	RT	224037					9.0			
169+84.48 TO 169+86.11	RT	224034					10.0			
167+93.91 TO 168+00.59	LT	318162					12.4			
167+98.04 TO 168+03.89	RT	318160					11.4			
168+31.94 TO 168+36.83	RT	318159					11.8			
169+10.65 TO 169+13.33	RT	328702					12.0			
169+17.78 TO 169+23.69	RT	328701					12.0			
169+18.27 TO 169+23.74	LT	224067					10.3			
169+19.83 TO 169+24.73	RT	328709					13.1			
169+41.00 TO 169+45.70	RT	328697					12.0			
167+98.58 TO 168+05.22	LT	363891					11.6			
168+12.69 TO 168+22.05	LT	363885					11.7			
168+13.67 TO 168+16.29	LT	318161					12.4			
168+45.40 TO 168+51.18	LT	363869					8.6			
168+46.14 TO 168+51.80	LT	363874					8.6			
168+56.15 TO 168+61.94	LT	224082					8.7			
168+67.79 TO 168+73.00	LT	224087					8.7			
168+91.61 TO 169+00.03	LT	363897					11.0			
168+92.10 TO 168+94.92	LT	224066					10.0			
169+09.63 TO 169+16.36	LT	363879					11.2			
SUB-TOTAL:			55.9		36.0		408.2			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION



**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.

SQ-16

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**SUMMARY OF FENCING**

PAY ITEM NO.	DESCRIPTION	LOCATION	SIDE	UNIT	QUANTITY		TOTAL		DESIGN NOTES	CONSTRUCTION REMARKS
		STA. TO STA.			P	F	P	F		
		0550 10220			FENCING, TYPE B, 5.1- 6.0' HEIGHT, STANDARD	169+36.20 TO 170+79.51	RT.	LF		
		165+21.01 TO 165+75.24	RT.		56.7					
		165+75.24 TO 167+90.33	RT.		220.1					
0550 60237	FENCE GATE, TYPE B, SLIDING/CANTILEVER, GREATER THAN 30' OPENING	170+79.50 TO 171+18.77	RT.	EA	1		1			

**SUMMARY OF PERFORMANCE TURF**

LOCATION STA. TO STA.	SIDE	AREA ID	PERFORMANCE TURF		PERFORMANCE TURF (SOD)		DESIGN NOTES	CONSTRUCTION REMARKS
			0570	1 1	0570	1 2		
			SY		SY			
			P	F	P	F		
134+00.00 TO 134+87.77	LT.	333647	60.3					
118+00.64 TO 119+11.93	LT.	332788			253.8			
118+05.11 TO 119+11.67	RT.	146701			240.2			
118+05.15 TO 121+32.87	RT.	332806			291.3			
118+90.76 TO 119+06.41	LT./RT.	146657			5.7			
119+11.93 TO 119+71.83	LT.	332736			15.5			
119+17.67 TO 121+29.41	RT.	148275			219.1			
119+17.93 TO 119+82.16	LT.	148361			85.5			
119+24.41 TO 119+81.56	LT./RT.	146647			67.0			
119+74.66 TO 119+87.24	LT.	148381			14.9			
120+13.28 TO 121+36.31	LT.	333116			84.6			
120+20.06 TO 121+01.37	LT.	287505			38.0			
120+25.24 TO 121+15.29	LT./RT.	148307			114.1			
SUB-TOTAL:			60.3		1429.7			
TOTAL:			60		4693			

**REVISIONS**

DATE	DESCRIPTION	DATE	DESCRIPTION



CITY OF TAMPA  
TRANSPORTATION DIVISION

CONTRACT NO: 12-D-00057

ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.

SQ-17

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



**SUMMARY OF PERFORMANCE TURF**

LOCATION  STA. TO STA.	SIDE	AREA ID	PERFORMANCE TURF		PERFORMANCE TURF (SOD)		DESIGN NOTES	CONSTRUCTION REMARKS
			0570	1 1	0570	1 2		
			SY		SY			
P	F	P	F					
121+04.99 TO 121+36.31	LT.	333128			53.3			
121+59.64 TO 121+69.23	LT.	333141			18.9			
121+59.64 TO 121+86.50	LT.	333159			16.4			
121+61.39 TO 121+67.82	RT.	185869			17.3			
121+63.39 TO 121+67.40	RT.	332837			4.7			
121+72.39 TO 121+73.84	RT.	185861			2.6			
121+72.39 TO 123+16.14	RT.	332848			43.3			
121+86.50 TO 122+00.00	LT.	333154			3.0			
121+97.97 TO 124+02.50	LT./RT.	339687			196.3			
122+00.00 TO 123+28.92	LT.	333167			78.6			
122+48.36 TO 123+21.14	RT.	332862			40.4			
123+40.31 TO 123+49.58	LT.	333177			2.2			
123+45.14 TO 124+63.05	RT.	332867			64.1			
123+50.14 TO 124+10.94	RT.	146757			12.7			
123+61.38 TO 124+62.44	LT.	287520			58.5			
124+58.02 TO 124+79.15	RT.	146766			25.7			
124+84.00 TO 124+88.16	RT.	332872			2.8			
124+94.08 TO 126+15.07	LT.	287531			48.1			
124+94.66 TO 127+75.00	LT./RT.	339692			264.8			
125+17.79 TO 125+50.00	RT.	146801			18.4			
125+84.00 TO 126+35.26	RT.	146814			10.3			
126+36.89 TO 127+03.03	LT.	287536			40.1			
126+84.25 TO 127+93.55	RT.	332887			70.3			
127+27.03 TO 128+19.87	LT.	333188			84.1			
128+02.54 TO 128+56.66	RT.	332934			15.2			
128+26.73 TO 128+73.10	LT.	333201			59.4			
165+21.73 TO 167+92.29	RT.	333234			519.5			
167+92.29 TO 168+36.10	RT.	333215			85.4			
168+99.86 TO 169+31.54	LT.	333003			25.9			
169+40.92 TO 170+10.04	RT.	332947			79.6			
169+48.85 TO 170+07.39	RT.	332991			23.4			
170+09.97 TO 170+79.50	RT.	332978			33.0			
129+97.98 TO 130+75.03	RT.	333001			67.1			
130+17.27 TO 130+90.94	LT.	333242			20.3			
131+06.14 TO 131+77.21	RT.	333017			69.3			
131+20.83 TO 131+43.88	LT.	333250			7.9			
131+55.85 TO 131+82.17	LT.	333260			9.9			
131+95.17 TO 132+41.64	LT.	333268			25.1			
132+05.49 TO 133+13.32	RT.	333026			176.8			
132+63.79 TO 133+36.76	LT.	333296			79.8			
133+39.67 TO 133+74.38	RT.	333035			38.1			
133+51.62 TO 134+50.00	LT.	333675			436.7			
134+01.64 TO 134+11.23	RT.	333056			10.8			
134+10.77 TO 134+71.78	RT.	333066			13.6			
134+50.00 TO 135+10.25	LT.	333694			257.6			
134+71.78 TO 135+00.40	RT.	333074			8.6			
135+42.34 TO 135+60.62	RT.	333093			6.5			
135+43.21 TO 135+63.58	LT.	333105			16.4			
<b>SUB-TOTAL:</b>					<b>3262.8</b>			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**  
 SQ-18

SHEET NO.  
SQ-18

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

**TABULATION OF LIGHTING QUANTITIES**

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL		
			25												PLAN	FINAL	PLAN	FINAL	
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL					
0715 1 60	LIGHTING CONDUCTORS, REMOVE & DISPOSE, CONTRACTOR OWNS	LF	1110													1110		1110	
0715 4 70	LIGHT POLE COMPLETE, REMOVE POLE AND FOUNDATION	EA	1													1		1	
0715 21 1	LIGHTING REPAIRS- ELECTRICAL WORK	LS	1													1		1	

**TABULATION OF UTILITY RELOCATION QUANTITIES**

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS										TOTAL THIS SHEET		GRAND TOTAL				
			93		94		95		96		97		PLAN	FINAL	PLAN	FINAL			
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL							
704.06	Furnish & Install 4"Dia. C900 PVC pipe, CL-150, Green, 0'-6' Cut	LF	48		32											80		80	
2102.00	Furnish & Install 6" Ductile Iron Pipe	LF	36		10											46		46	
2104.00	Furnish & Install 8" Ductile Iron Pipe	LF	232		186				262				5			685		685	
2106.00	Furnish & Install 12" Ductile Iron Pipe	LF											52			52		52	
2400.40	Furnish & Install 4" Dia. C900 PVC or DIP, Bends, Sleeves, Reducers, Caps or Plugs	EA	8		10											18		18	
2500.00	Remove 1" - 3" Dia. Abandoned Pipe	LF	115		650		44		35							844		844	
2501.00	Remove 4" - 12" Dia. Abandoned Pipe	LF	504		816		105		252				127			1804		1804	
2600.00	Cut & Plug 3" and smaller	EA							1							1		1	
2601.00	Cut & Plug 4", 6" and 8" Pipe	EA	1				1		2							4		4	
3042.00	Furnish & Install 8" Bell or Mechanical Joint Restraints on Existing Pipe	EA	1		3											4		4	
3043.00	Furnish & Install 12" Bell or Mechanical Joint Restraints on Existing Pipe	EA											1			1		1	
3072.00	Furnish 8" Push-On Joint Restraint Gaskets	EA	10		10				10							30		30	
3073.00	Furnish 12" Push-On Joint Restraint Gaskets	EA											4			4		4	
3304.10	Furnish & Install 4" Dia. Bell Restraint	EA	1		1											2		2	
3304.20	Furnish & Install 4" Dia. Thrust Restraint	EA	10		6											16		16	
4005.00	Furnish & Install 6" Ductile Iron MJ Bend, Sleeve	EA	1		1											2		2	
4009.00	Furnish & Install 8" Ductile Iron MJ Bend, Sleeve	EA	2		1				2							5		5	
4010.00	Furnish & Install 8"x6" Ductile Iron MJ Tee	EA	1													1		1	
4013.00	Furnish & Install 12" Ductile Iron MJ Bend, Sleeve or Reducer	EA											2			2		2	
5000.00	Furnish & Install Full Std. Fire Hydrant Assembly on New or Existing Mains	EA	1													1		1	
5200.00	Remove & Salvage Hydrant	EA	1													1		1	
6001.00	Furnish & Install 6" Gate or Tapping Valve and Box on DIP	EA	1		1											2		2	
6002.00	Furnish & Install 8" Gate or Tapping Valve and Box on DIP	EA	2		1				1				2			6		6	
6003.00	Furnish & Install 12" Gate or Tapping Valve and Box on DIP	EA											1			1		1	
6107.00	Furnish & Install 8" Line Stop on Existing Water Main	EA	1						1							2		2	
6108.00	Furnish & Install 12" Line Stop on Existing Water Main	EA											1			1		1	
7500.00	Furnish & Install 4" Air Release Valve	EA	1		1											2		2	
8107.00	Furnish, Tap & Install 1" Meter Service (+15' - 80')	EA			2											2		2	
8128.00	Furnish, Tap & Install 2" Meter Service (+15' - 80')	EA	1		1			1								3		3	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ELEMENT**  
 ENGINEERING GROUP  
 1713 E. 9th AVENUE | TAMPA, FL 33605  
 P 813.386.2101 | TF 888.603.1942 | F 813.386.2106  
 EOR | DEREK M. GIL, PE 54798

**CITY OF TAMPA**  
 TRANSPORTATION DIVISION  
 CONTRACT NO: 12-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**SUMMARY OF QUANTITIES**

SHEET NO.
SQ-19

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.