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[MailTo:ContractAdministration@TampaGov.net](mailto:ContractAdministration@TampaGov.net)

Please Let Us Know If You Plan To Bid

City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456



CITY OF TAMPA

BUSCH BOULEVARD PEDESTRIAN AND SIGNALIZATION IMPROVEMENTS

LAP FINACIAL PROJECT ID: 413407-2-58-01
FEDERAL AID PROJECT NO.: SFTI 267R
(FEDERAL FUNDS)

SR 580 (BUSCH BLVD.) FROM ARMENIA AVE. TO FLORIDA AVE.

TRANSPORTATION DIVISION
CITY OF TAMPA, FLORIDA

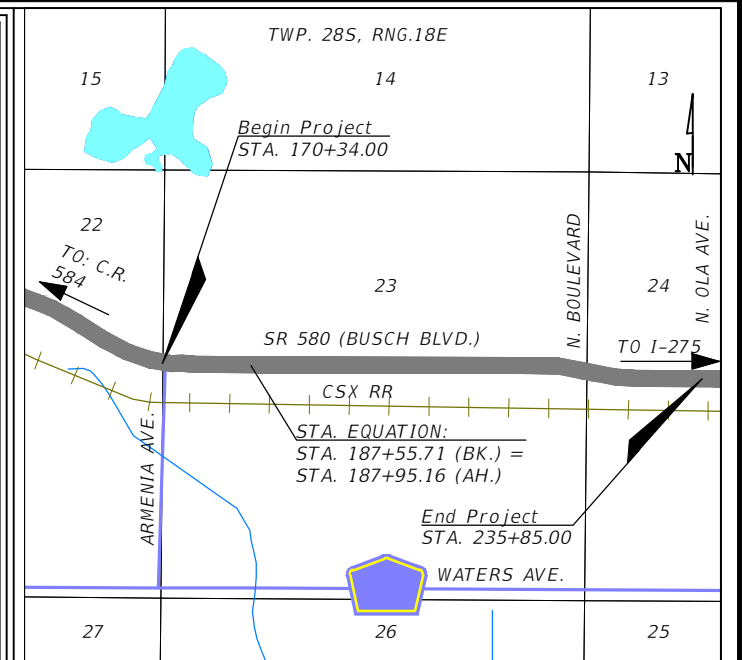
CITY OF TAMPA PROJECT NO: 0000029

COMPONENTS OF CONTRACT SET:
SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS
INTELLIGENT TRANSPORTATION SYSTEMS PLANS

PLANS PREPARED BY:

ICON
CONSULTANT GROUP
INCORPORATED

10006 N. DALE MABRY HIGHWAY
SUITE 201
TAMPA, FLORIDA 33618
(813) 962-8689
CERTIFICATE OF AUTHORIZATION NO. 8230



VICINITY MAP
SCALE: NTS

INDEX OF ROADWAY DRAWINGS

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STANDARD DRAWINGS & INDICES

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH, AND GOVERNED BY, THE CITY OF TAMPA STANDARD DRAWINGS AND WHERE APPLICABLE, FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS DATED JANUARY, 2014, AND DIVISION II AND III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2014, 2007 FLORIDA GREEN BOOK, MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, AS AMENDED BY CONTRACT DOCUMENTS.

**FINAL PLANS
FEBRUARY, 2014**

APPROVED BY:

MILTON MARTINEZ, P.E. #54056
PROJECT MANAGER
CITY OF TAMPA TRANSPORTATION DIVISION

CERTIFICATION

WILLIAM CLIFFORD COGAN, P.E. #66438
ICON CONSULTANT GROUP, INC.

200--ROADWAY

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
0101 1	MOBILIZATION	LS	1
0102 1	MAINTENANCE OF TRAFFIC	LS	1
0102 3	COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE	CY	1
0102 14	TRAFFIC CONTROL OFFICER	MH	80
0102 60	WORK ZONE SIGN	ED	4849
0102 74 1	TEMPORARY BARRICADE- TYPES I, II, DI, VP, DRUM, OR LCD	ED	16586
0102 74 2	BARRICADE, TEMPORARY, TYPE III, 6'	ED	1064
0102 76	ARROW BOARD / ADVANCE WARNING ARROW PANEL	ED	135
0102 77	HIGH INTENSITY FLASHING LIGHTS, TEMP, TYPE B	ED	1820
0102 99	PORTABLE CHANGEABLE MESSAGE SIGN, TEMPORARY	ED	288
0102104	TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION	ED	100
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	ED	100
0104 1	ARTIFICIAL COVERINGS /ROLLED EROSION CONTROL PRODUCTS	SY	15
0104 10 3	SEDIMENT BARRIER	LF	169
0104 12	STAKED TURBIDITY BARRIER- NYLON REINFORCED PVC	LF	587
0104 18	INLET PROTECTION SYSTEM	EA	22
0107 1	LITTER REMOVAL	AC	12.4
0107 2	MOWING	AC	12.4
0109 71 2	FIELD OFFICE, 600 SQ FT	DA	160
0110 1 1	CLEARING & GRUBBNG	LS	1
0110 4	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	7
0120 1	REGULAR EXCAVATION	CY	216
0120 6	EMBANKMENT	CY	191
0285715	OPTIONAL BASE, BASE GROUP 15	SY	7.0
0327 70 1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	SY	1803
0334 1 13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	TN	1.1
0337 7 73	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-9.5, PG 76-22, ARB	TN	99.5
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	161
0520 2 4	CONCRETE CURB, TYPE D	LF	39
0520 5 11	TRAFFIC SEPARATOR CONCRETE-TYPE I, 4' WIDE	LF	2
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	943
0522 2	CONC SIDEWALK AND DRIVEWAYS, 6" THICK	SY	17
0527 2	DETECTABLE WARNINGS	SF	280
0550 10220	FENCING, TYPE B, 5.1-6.0', STANDARD	LF	569
0550 60213	FENCE GATE, TYPE B, SINGLE, 12.1-18.0' OPENING	EA	1
0570 1 2	PERFORMANCE TURF, SOD	SY	1438
0571 1 11	PLASTIC EROSION MAT, TURF REINFORCED MAT, TYPE 1	SY	828
0710 11111	PANDED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	NM	0.026
0710 11123	PANDED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12"	LF	1324
0710 11125	PANDED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 24"	LF	826
0710 11160	PANDED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE	EA	1
0710 11211	PANDED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6"	NM	0.026
0999 25	INITIAL CONTINGENCY AMOUNT, DO NOT BID	LS	1

300--SIGNING & PAVEMENT MARKINGS

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
0700 1 11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	6
0700 1 13	SINGLE POST SIGN, F&I GROUND MOUNT, 21-30 SF	AS	2
0700 1 50	SINGLE POST SIGN, RELOCATE	AS	6
0700 1 60	SINGLE POST SIGN, REMOVE	AS	3
0700 3101	SIGN PANEL, FURNISH & INSTALL GROUND MOUNT, UP TO 12 SF	EA	1
0700 3602	SIGN PANEL, REMOVE, 12-20 SF	EA	2
0705 11 3	DELINEATOR, FLEXIBLE HIGH VISABILITY MEDIAN	EA	3
0706 3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	14
0710 11290	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, ISLAND NOSE	SF	12
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12"	LF	1324
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF	826
0711 11160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE	EA	1
0711 15111	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES WHITE, SOLID, 6"	NM	0.056
0711 15211	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, YELLOW, SOLID, 6"	NM	0.026
0711 17	THERMOPLASTIC, REMOVE EXISTING THERMOPLASTIC PAVEMENT MARKINGS	SF	51

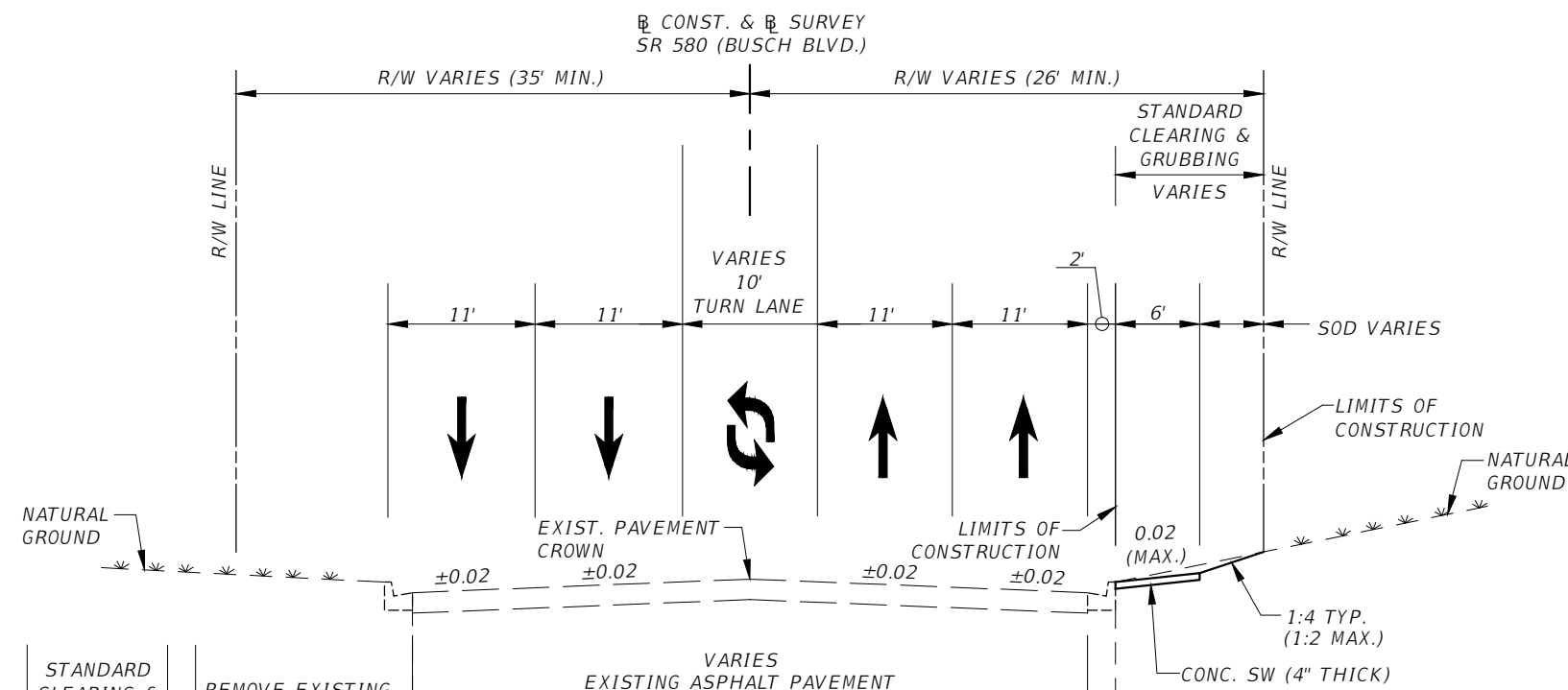
500--SIGNALIZATION

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
0630 2 11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	74
0630 2 12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	433
0632 7 1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1
0635 2 11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA	19
0639 1122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	AS	1
0639 2 1	ELECTRICAL SERVICE WIRE	LF	60
0639 3 11	ELECTRICAL SERVICE DISCONNECT, F&I, POLE MOUNT	EA	1
0641 2 12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	EA	1
0646 1 11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	8
0649 31202	MAST ARM,F&I, WIND SPEED-130,SINGLE ARM,W/O LUMINAIRE-46	EA	3
0649 31205	MAST ARM,F&I, WIND SPEED-130,SINGLE ARM,W/O LUMINAIRE, ARM LENGTH 78	EA	1
0650 1311	TRAFFIC SIGNAL, F&I, 3 SECTION, 1 WAY, ALUMINUM	AS	10
0650 1411	TRAFFIC SIGNAL, F&I, 4 SECTION, 1 WAY, ALUMINUM	AS	4
0653191	PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 1 DIRECTION	AS	8
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 5111	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION	AS	1
0685106	SYSTEM AUXILIARIES, F&I, UNINTERRUPTIBLE POWER SOURCE	EA	1
0690 10	SIGNAL HEAD TRAFFIC ASSEMBLY REMOVAL	EA	10
0690 20	SIGNAL PEDESTRIAN ASSEMBLY REMOVAL	EA	8
0690 31	SIGNAL PEDESTAL REMOVAL	EA	3
0690 34 1	COMPLETE POLE REMOVAL- DEEP, DIRECT BURIAL	EA	4
0690 70	DETECTOR PEDESTRIAN ASSEMBLY REMOVE	EA	8
0690 80	SPAN WIRE ASSEMBLY, REMOVE	EA	1
0690 90	CONDUIT & CABLING- WITHIN INTERSECTION, REMOVE	PI	1
0690100	SIGNAL EQUIPMENT MISCELLANOUS REMOVE	PI	1
0700 5 21	INTERNALLY ILLUMINATED SIGN, FURNISH & INSTALL, UP TO 12 SF	EA	4
0700 11391	ELECTRONIC DISPLAY SIGN, FURNISH & INSTALL OVERHEAD MOUNT- AC POWERED, BLANK OUT SIGN, UP TO 12 SF	AS	1

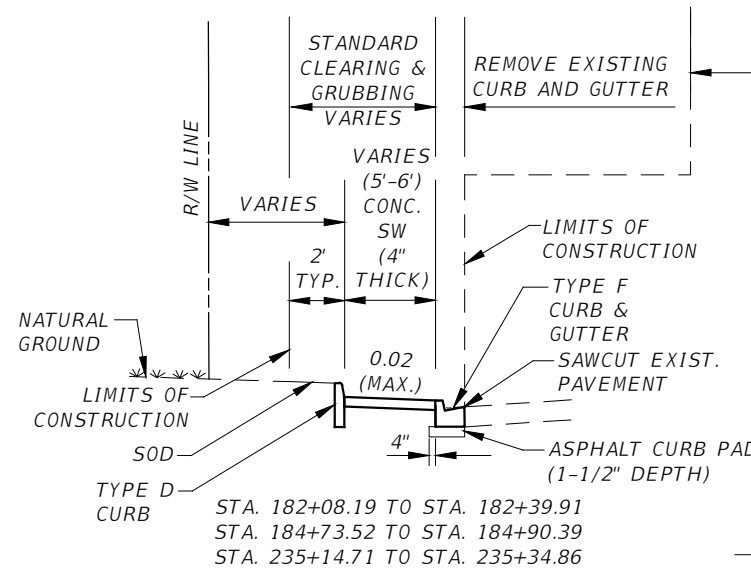
550--ITS

PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
0630 2 11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	85
0630 2 14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	LF	160
0635 2 11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA	2
0635 2 12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA	2
0639 1410	ELECTRICAL POWER SERVICE, REL OVERHEAD	AS	1
0639 2 1	ELECTRICAL SERVICE WIRE	LF	30
0670 5410	TRAFFIC CONTROLLER ASSEMBLY, MODIFY, NEMA	AS	2
0682 1 11	ITS CCTV CAMERA, F&I, DOME ENCLOSURE - PRESSURIZED	EA	2
0684 1 1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA	2
0684 3 11	ITS DIGITAL VIDEO ENCODER W/SOFTWARE DECODER (F&I)	EA	2
0684 6 11	WIRELESS COMM. DEVICE (ETHERNET ACCESS POINT)	EA	1
0684 6 12	WIRELESS COMM. DEVICE (ETHERNET SUBSCRIBER UNIT)	EA	2
0785 1 12	ITS POLE, F&I, STEEL WITH LOWERING DEVICE	EA	2
0785 2112	ITS FIELD CABINET, F&I, TYPE 336, GROUND MOUNT	EA	2

3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC				
1				CKD: JWK		SUMMARY OF PAY ITEMS	Sh. 2	
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230		of 57	



- TYPICAL SECTION NOTES**
1. A PLASTIC EROSION MAT SHALL BE PLACED ON ALL SIDE SLOPES STEEPER THAN 1:3.
 2. ALL DISTURBED AREAS, INCLUDING AREAS OUTSIDE THE CONSTRUCTION LIMITS, SHALL BE RETURNED TO THEIR PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTOR'S EXPENSE. GRASS AREAS SHALL BE SODDED, NOT SEEDED AND MULCHED.
 3. THE CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS NOT TO DISTURB THE EXISTING BASE.
 4. REMOVE AND REPLACE THE SIDEWALK AT SAWCUT/JOINT LINES.



TYPICAL SECTION (1)
N.T.S.

STA. 170+36.18 TO STA. 170+69.25
STA. 171+30.78 TO STA. 171+67.44
STA. 172+27.48 TO STA. 172+59.96
STA. 172+96.42 TO STA. 174+43.98
STA. 215+16.22 TO STA. 216+09.55
STA. 216+55.29 TO STA. 217+05.28
STA. 217+37.52 TO STA. 219+42.28
STA. 219+63.34 TO STA. 221+57.32

**MILLING (INTERSECTION OF
BUSCH BLVD. AND NORTH BLVD.).**

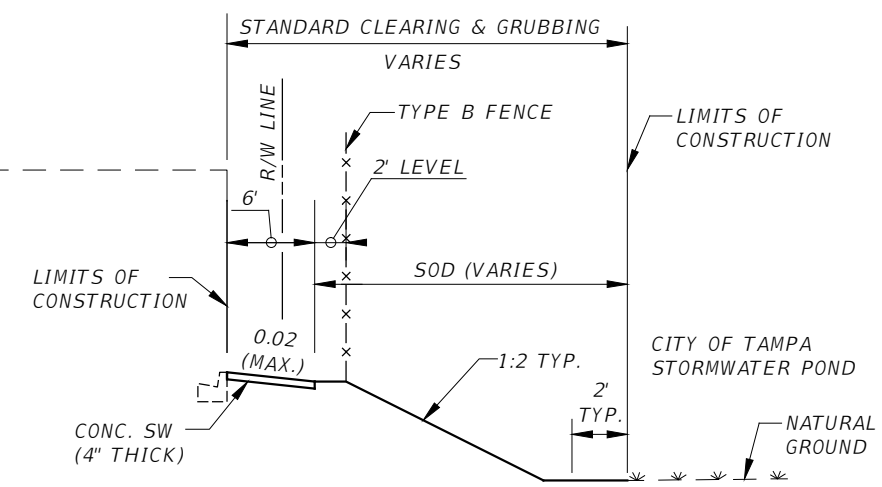
MILL EXISTING ASPHALT PAVEMENT (1" AVG. DEPTH)
STA. 221+00.00 TO STA. 222+50.00

**RESURFACING (INTERSECTION OF BUSCH
BLVD. AND NORTH BLVD.)**

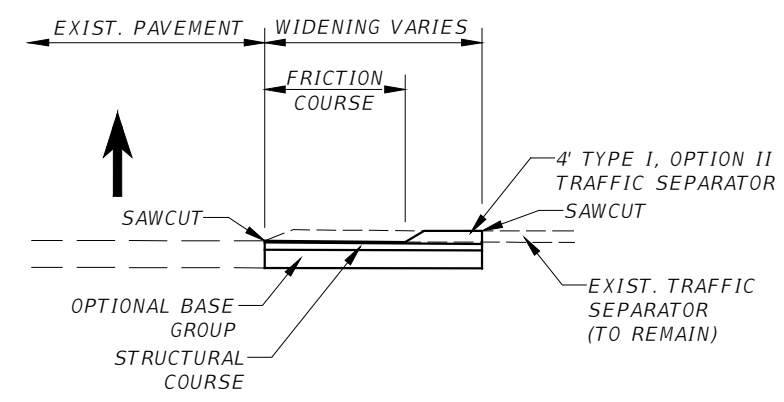
FRICTION COURSE FC-9.5 (TRAFFIC C) (1") (PG 76-22) (ARB)
STA. 221+00.00 TO STA. 222+50.00

**WIDENING (INTERSECTION OF BUSCH
BLVD. AND NORTH BLVD.)**

OPTIONAL BASE GROUP 15 (TYPE B - 12.5 ONLY) WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (3") WITH
FRICTION COURSE FC-9.5 (TRAFFIC C) (1") (PG 76-22) (ARB)
STA. 221+12.95 TO STA. 221+28.18



STA. 188+10.00 TO STA. 193+89.98



WIDENING DETAIL
N.T.S.

3				DES:	RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 962-1610 CONSULTANT GROUP INCORPORATED	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC				
1				CKD:	JWK			Sh. 3	
No.	DATE	BY:	REVISIONS	DATE:	4/13		CERTIFICATE OF AUTHORIZATION NO 8230	Of 57	
							TYPICAL SECTIONS		

SUMMARY OF EARTHWORK		
DESCRIPTION	CY	
	P	F
EXCAVATION	216	
EMBANKMENT	191	

SUMMARY OF LITTER REMOVAL AND MOWING									
CONST. PHASE	DURATION (DAYS)	FREQUENCY (DAYS)	LITTER REMOVAL AND DISPOSAL			MOWING			REMARKS
			CYCLES	AREA		CYCLES	AREA		
				AC/CYCLE	TOTAL (AC)		AC/CYCLE	TOTAL (AC)	
1	40	30	2	3.1	6.2	2	3.1	6.2	
2	30	30	1	3.1	3.1	1	3.1	3.1	
3	30	30	1	3.1	3.1	1	3.1	3.1	
TOTAL			P	12.40		TOTAL	P	12.40	
			F				F		

SUMMARY OF FENCING TYPE B								
LOCATION		SIDE	FENCE TYPE B		GATE		REMARKS	FIELD BOOK REFERENCE
STA.	TO STA.		FT		EA			
			P	F	P	F		
188+10.00	TO 193+68.00		558		1		12' SINGLE SWING	
193+68.00	TO 193+80.00							
193+80.00	TO 193+91.23		11.23					

SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES												
LOCATION		SIDE	SEDIMENT BARRIER		FLOATING TURBIDITY BARRIER		STAKED TURBIDITY BARRIER		INLET PROTECTION		REMARKS	FIELD BOOK REFERENCE
STA. TO	STA.		LF		LF		LF		EA			
			P	F	P	F	P	F	P	F		
188+03.76 TO 193+90.00		RT					587					
186+70.00 TO 188+03.76		RT	97									
194+46.00 TO 195+18.25		RT	72									
172+48.00		RT							1			
174+00.00		RT							1			
181+30.00		RT							1			
181+40.00		LT							1			
184+54.00		RT							1			
184+62.00		LT							1			
187+50.00		RT							1			
189+85.00		RT							1			
189+85.00		LT							1			
194+33.00		RT							1			
194+33.00		LT							1			
195+95.00		RT							1			
195+95.00		LT							1			
211+67.00		RT							1			
211+67.00		LT							1			
214+30.00		RT							1			
214+30.00		LT							1			
219+10.00		RT							1			
219+10.00		LT							1			
224+27.00		LT							1			
235+07.00		LT							1			
235+50.00		RT							1			
236+06.00		LT							1			
							</					

PAY ITEM NOTES

1.

102-1

INCLUDES THE FOLLOWING ITEMS LISTED BELOW:
COST FOR POT HOLE REPAIRS, TEMPORARY LIGHTING, MAINTAINING / RELOCATION OF EXISTING SIGNS.

INCLUDES COST OF ANY EXISTING SIGN TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION OR RELOCATED. THESE SIGNS SHALL BE RESET TO CURRENT STANDARDS FOR HEIGHT, OFFSET, AND METHOD OF INSTALLATION.

INCLUDES ANY COST DEEMED NECESSARY BY THE CONTRACTOR FOR OFF-DUTY ENFORCEMENT OFFICERS.
2.

110-1-1

INCLUDES THE REMOVAL OF ALL EXISTING SINGLE COLUMN SIGNS WITHIN THE LIMITS OF CLEARING AND GRUBBING, UNLESS OTHERWISE NOTED IN THE SIGNING & PAVEMENT MARKING PLANS.
3.

710-

THE TOTALS SHOWN ON THE SUMMARY OF ROADWAY PAY ITEMS ARE FOR PAINTED PAVEMENT MARKINGS USED FOR MAINTENANCE OF TRAFFIC.

3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC		SUMMARY OF QUANTITIES	Sh. 4	
1				CKD:	JWK			Of 57	
No.	DATE	BY:	REVISIONS	DATE:	4/13			CERTIFICATE OF AUTHORIZATION NO 8230	

GENERAL NOTES

1. HORIZONTAL CONTROL WAS ESTABLISHED BY GPS METHODOLOGY HOLDING BASELINE CONTROL COORDINATES FROM RIGHT OF WAY CONTROL SURVEY (SECTION 10310-1520), PREPARED BY ZOLLER NAJJAR AND SHROYER, INC. ON FEBRUARY 2, 1998, PURPORTED TO BE ON THE NORTH AMERICAN DATUM OF 1983 (1990 ADJUSTMENT). SAID RIGHT OF WAY CONTROL SURVEY TRAVERSES ALONG BUSCH BLVD. FROM ARMENIA AVE. TO FLORIDA AVE.
2. ELEVATIONS ARE RELATIVE TO FDOT BENCHMARK "BM 36-97" (FDOT FIELD BOOK #13434), HAVING AN ELEVATION OF 35.344 FEET, NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) AND FDOT BENCH MARK "BM230" (FDOT FIELD BOOK #2566), HAVING AN ELEVATION OF 30.311 FEET.
3. EXISTING DRAINAGE STRUCTURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN, UNLESS OTHERWISE NOTED.
4. 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 ALEX W. PARNES, DISTRICT LOCATION SURVEYOR, BY TELEPHONE AT (813) 975-6781, WITHOUT DELAY.
5. GRADES SHOWN ARE FINISHED GRADES.
6. CITY OF TAMPA STANDARD DRAWINGS ARE AVAILABLE AT THE CITY HALL ANNEX, 306 E. JACKSON STREET, 5TH FLOOR, NORTH WING.
7. CALL SUNSHINE (1-800-432-4770) AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY
8. WHEN IN CONFLICT, UTILITY POLES, GAS LINES, UNDERGROUND ELECTRIC AND TELEPHONE CABLES WILL BE RELOCATED BY THE RESPECTIVE UTILITY OWNERS AT THEIR OWN EXPENSE AS DIRECTED BY THE ENGINEER. THE ROADWAY CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COORDINATION FOR THE RESOLUTION OF UTILITY CONFLICTS.

9. PRIOR TO ANY CONSTRUCTION, NOTIFY THE FOLLOWING:

TAMPA ELECTRIC CO.

AT 275-3433

COT WASTEWATER DEPT.

AT 274-8936

VERIZON

AT 627-7920

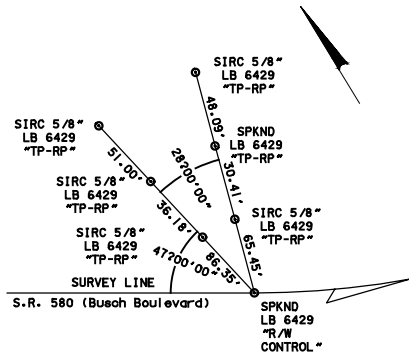
PEOPLES GAS

AT 275-3743

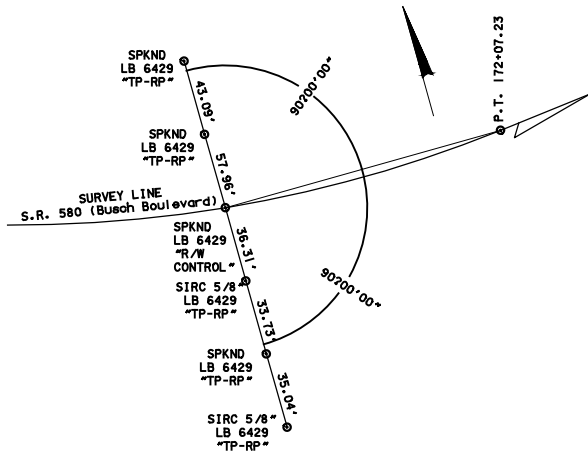
TAMPA WATER DEPT.

AT 274-7096
10. SPECIAL CARE MUST BE TAKEN TO PROTECT WATER LINES DURING CONSTRUCTION. PROVIDE SUPPORTS AS NECESSARY.
11. STREET SIGNS, STREET MARKERS, AND R-O-W MARKERS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER. ANY LOST OR DAMAGED SIGNS OR MARKERS SHALL BE REPLACED.
12. NO TREES NOR TREE ROOTS SHALL BE REMOVED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
13. WHERE CONNECTIONS TO EXISTING WALKS AND DRIVES ARE NOT INDICATED ON THE PLANS, CONNECTIONS SHALL BE MADE AT THE DIRECTION OF THE ENGINEER.
14. SIDEWALK CROSS SLOPE TRANSITIONS APPROACHING DRIVEWAYS AND/OR SIDE STREETS SHALL BE A MINIMUM OF 10 FEET IN LENGTH.
15. THE COST OF SAW CUTTING SHALL BE INCIDENTAL TO THE WORK BEING PERFORMED.

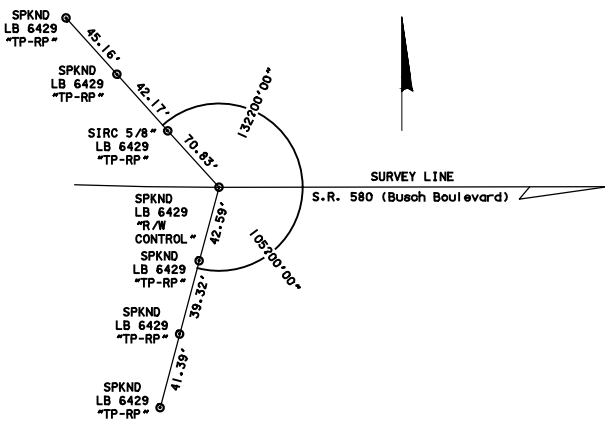
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2				DRN:	RBC				
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No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	GENERAL NOTES	Sh. 5 of 57	



P.C. STA. 161+58.36

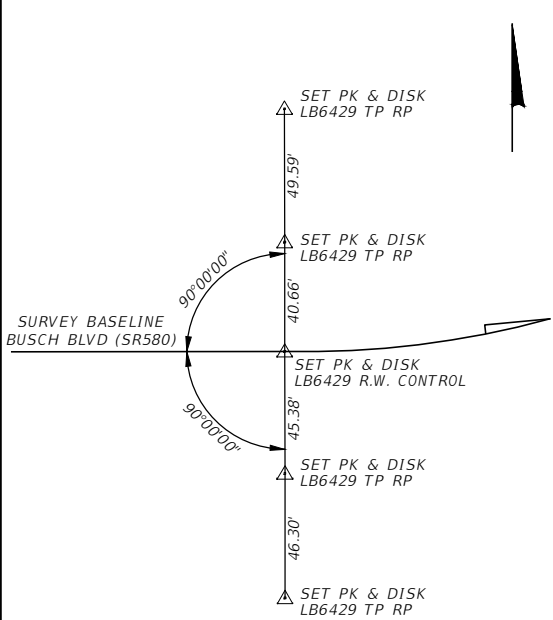


P.O.C. STA. 170+00.00

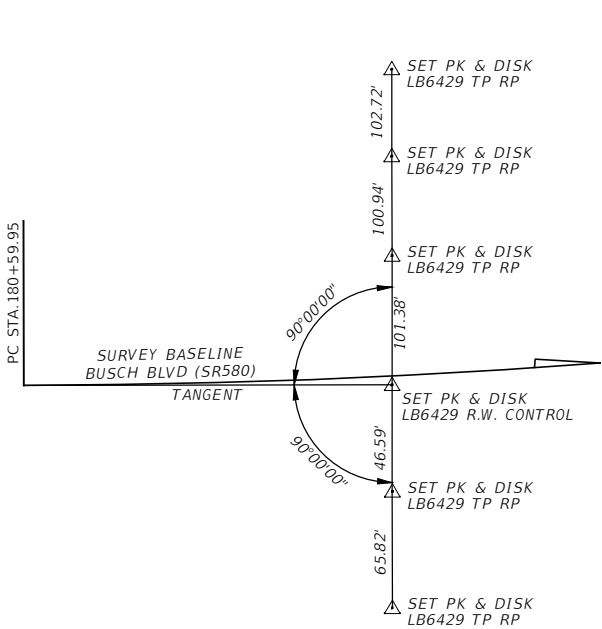


P.T. STA. 172+07.23

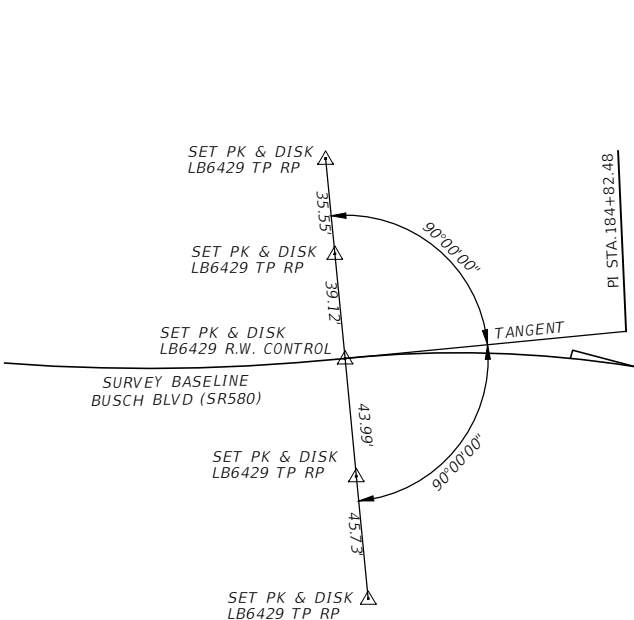
NO.	3			DES:	GEORGE F. YOUNG, INC. 299 DR. MARTIN LUTHER KING JR. ST. N. ST. PETERSBURG, FL 33701 PHONE:(727) 822-4317 EXT 286	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Michael J. Curley, PSM NO. 6361
	2			DRN:				
	1			CKD:		REFERENCE POINTS (1)	Sh. 6	
	6361	DATE	BY:	REVISIONS			Of 57	



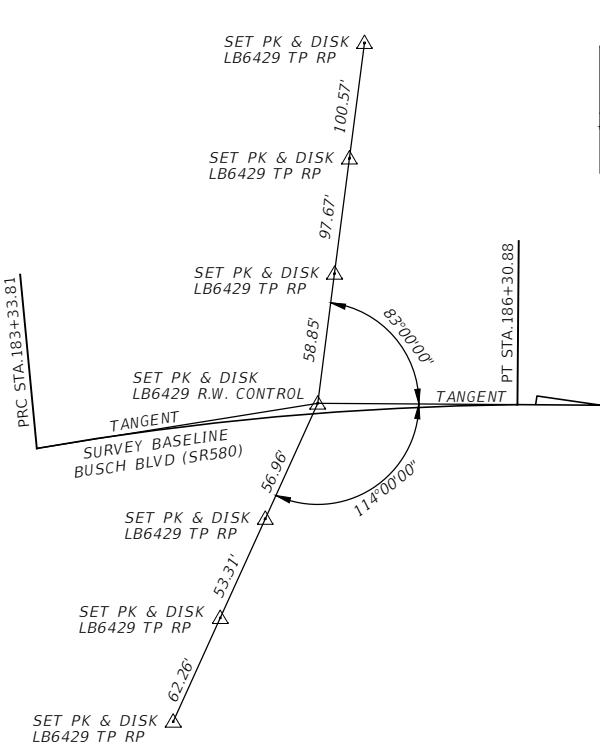
P.C. STA. 180+59.95



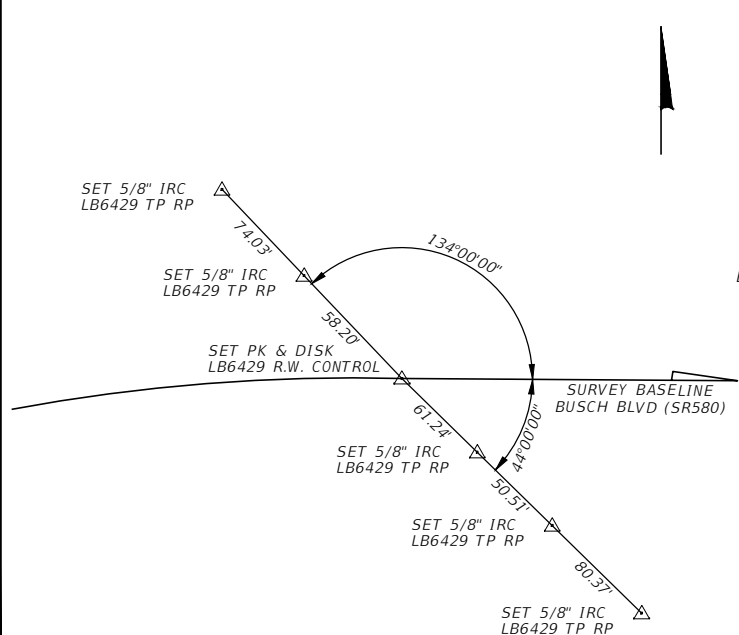
P.I. STA. 181+96.98



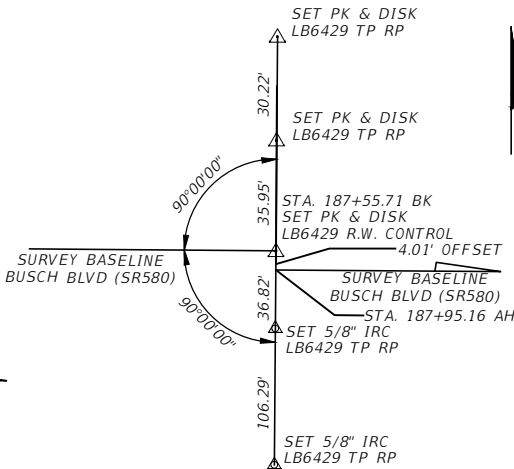
P.R.C. STA. 183+33.81



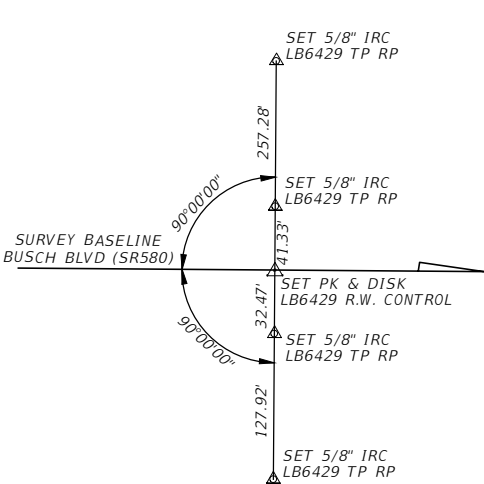
P.I. STA. 184+82.48



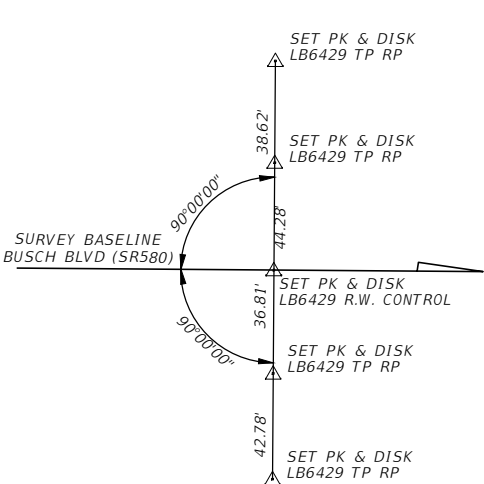
P.T. STA. 186+30.88



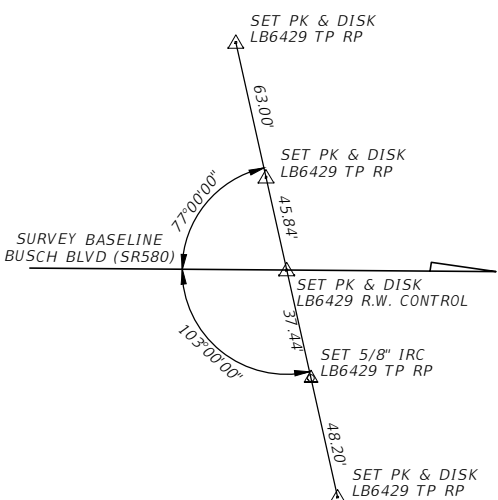
P.O.T. STA. 187+55.71 BK



P.O.T. STA. 190+00.00

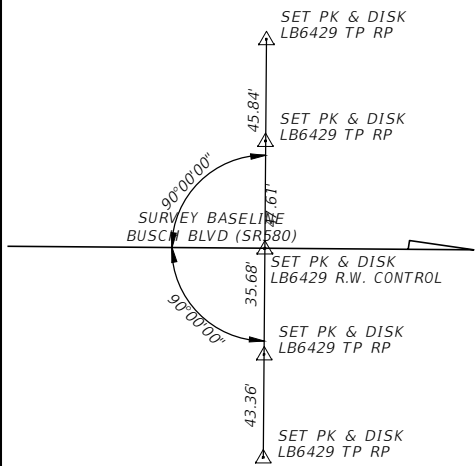


P.O.T. STA. 200+00.00

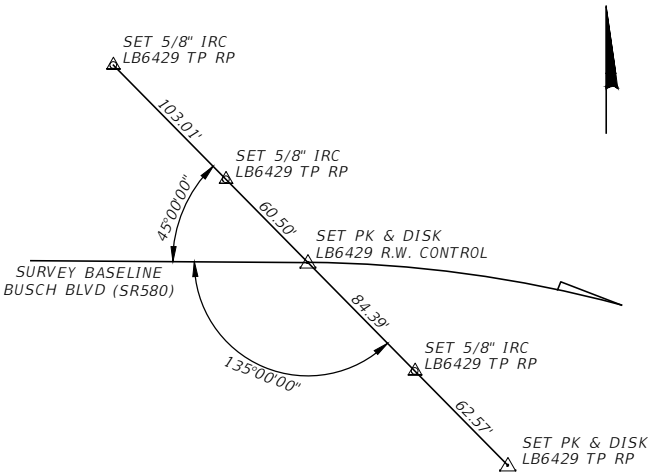


P.O.T. STA. 205+00.00

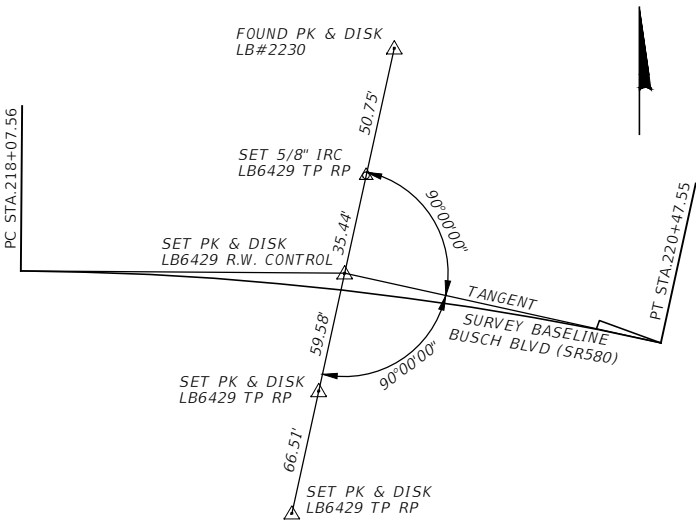
3			DES:	GEORGE F. YOUNG, INC. 299 DR. MARTIN LUTHER KING JR. ST. N. ST. PETERSBURG, FL 33701 PHONE:(727) 822-4317 EXT 286	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Michael J. Curley, PSM NO. 6361
2			DRN:		REFERENCE POINTS (2)	Sh. 7 Of 57	
1			CKD:				
6361	DATE	BY:	REVISIONS				



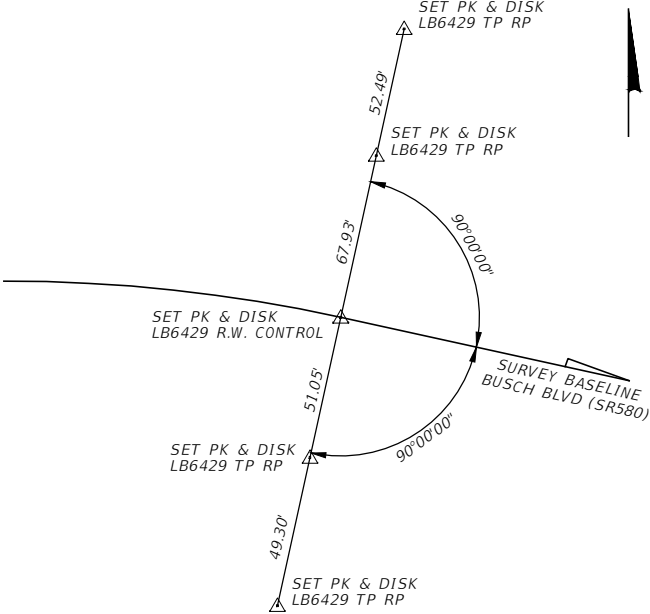
P.O.T. STA. 210+00.00



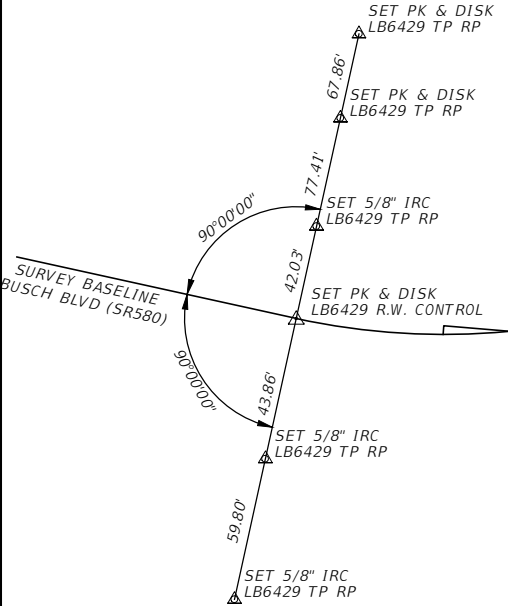
P.C. STA. 218+07.56



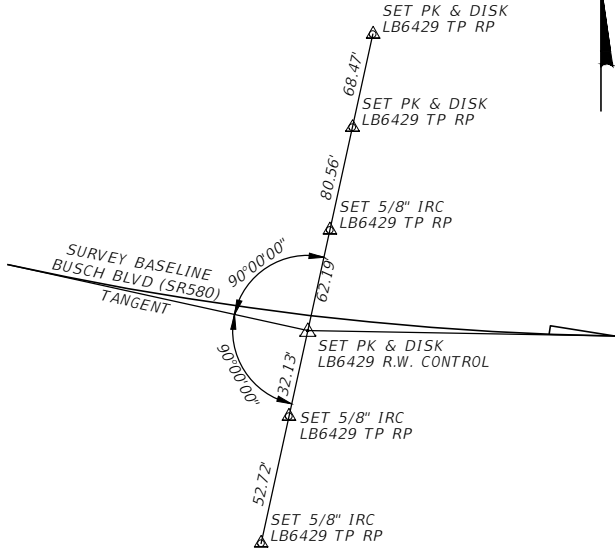
P.I. STA. 219+28.00



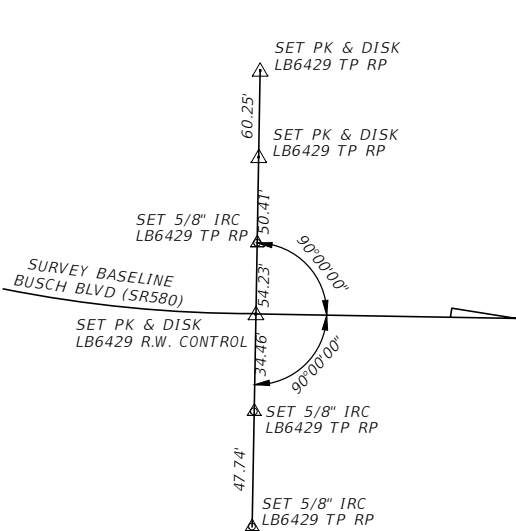
P.T. STA. 220+47.55



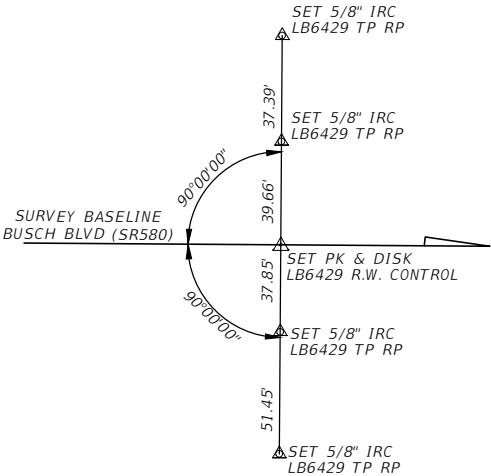
P.C. STA. 225+30.37



P.I. STA. 226+44.61

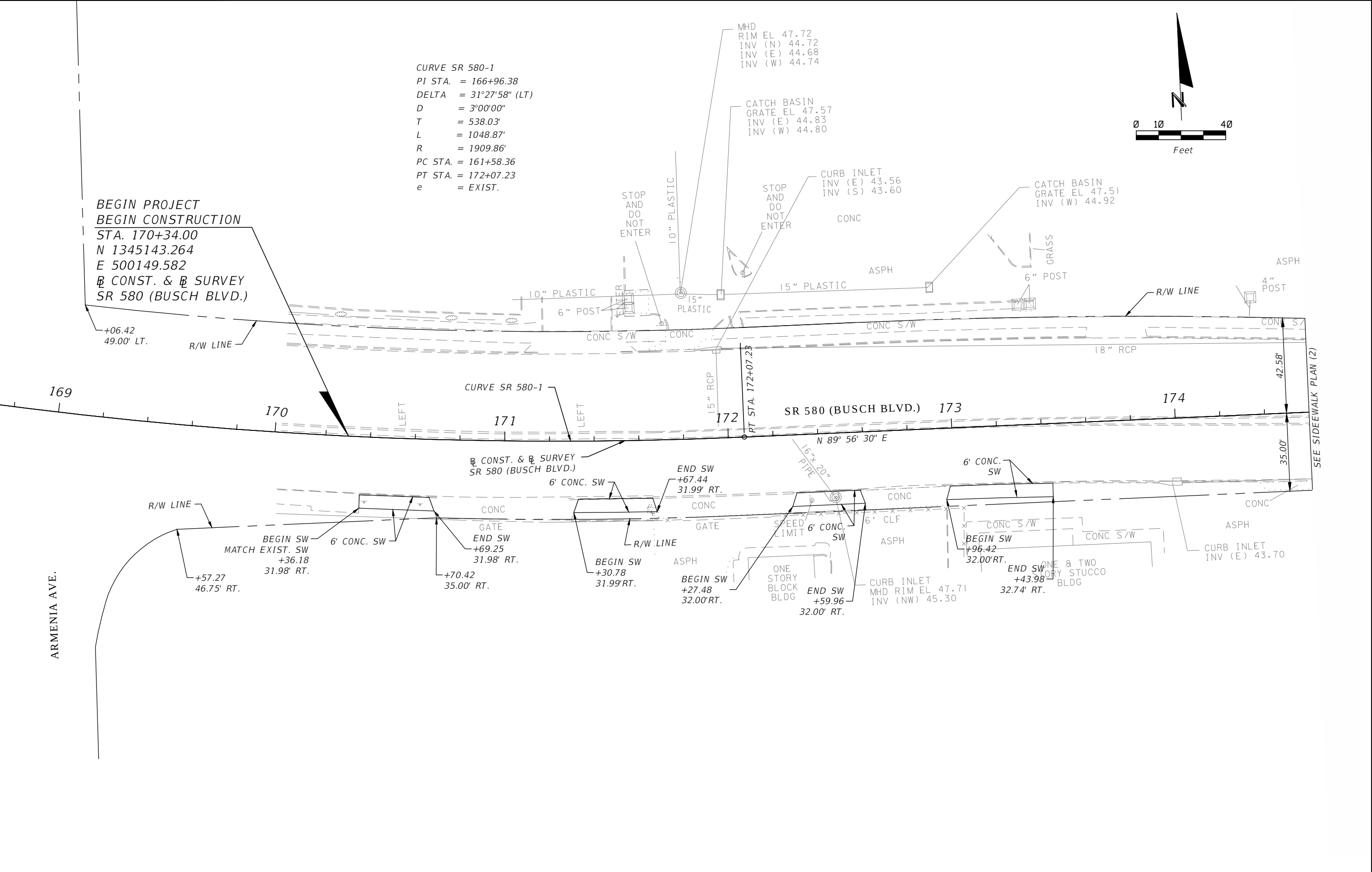


P.T. STA. 227+58.11

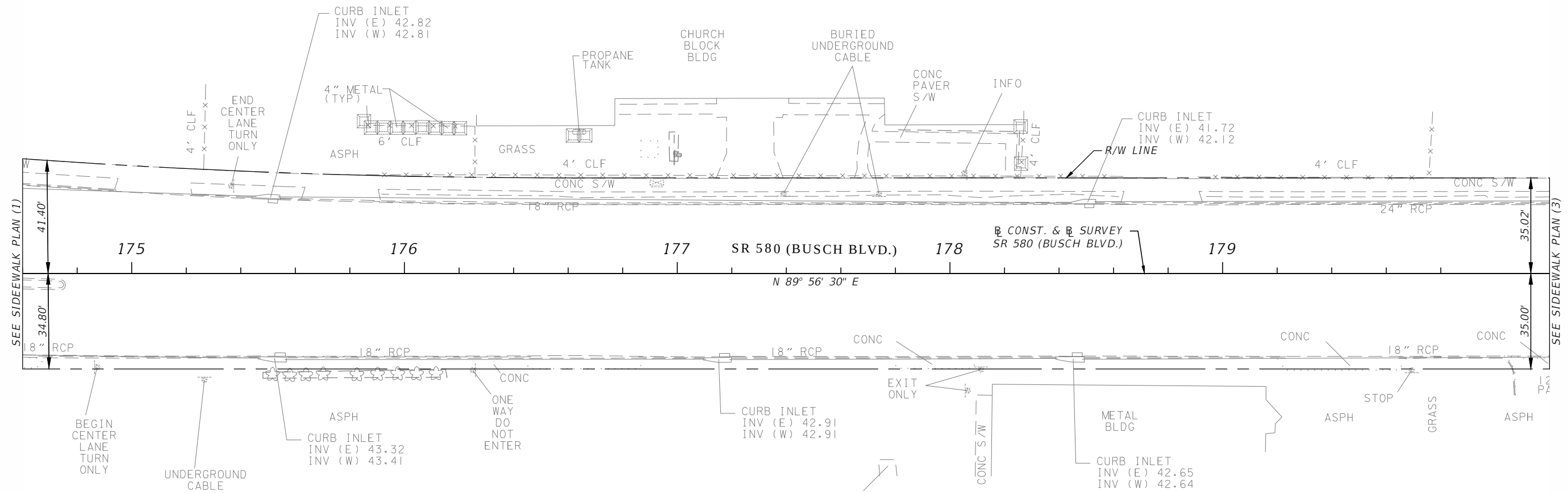
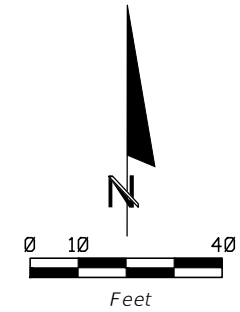


P.O.T. STA. 230+00.00

NO.	3			DES:	GEORGE F. YOUNG, INC. 299 DR. MARTIN LUTHER KING JR. ST. N. ST. PETERSBURG, FL 33701 PHONE:(727) 822-4317 EXT 286	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Michael J. Curley, PSM NO. 6361
	2			DRN:				
	1			CKD:		REFERENCE POINTS (3)	Sh. 8	
	6361	DATE	BY:	REVISIONS			DATE:	



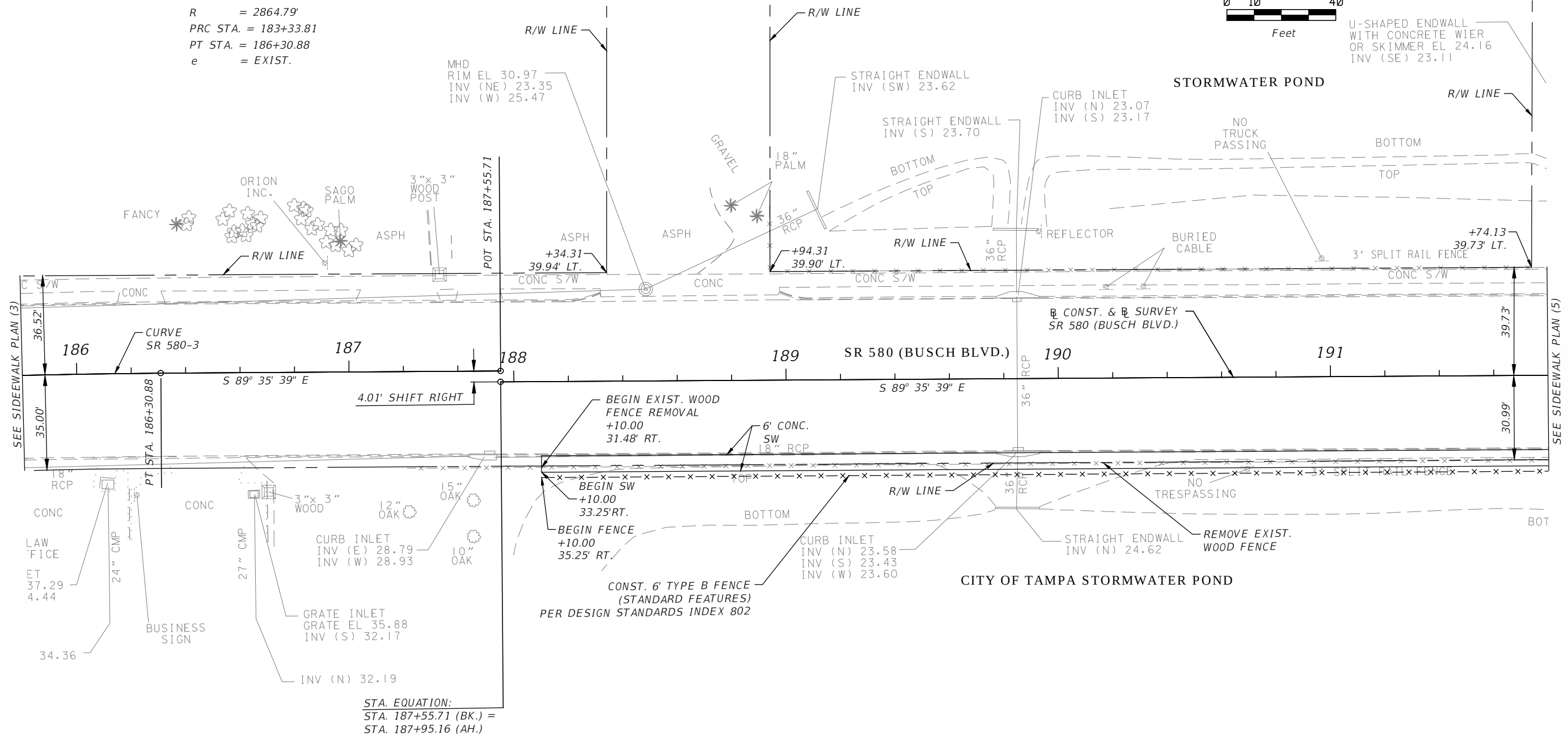
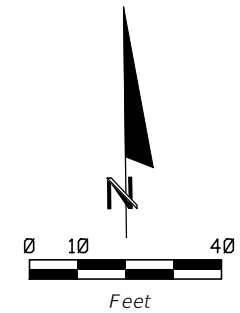
3				DES:	RBC	ICON10006 NORTH DALE MABRY HIGHWAY, SUITE 201TAMPA, FL 33618TELEPHONE (813) 962-8689FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 9 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	SIDEWALK PLAN (1)			



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 10 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	SIDEWALK PLAN (2)			

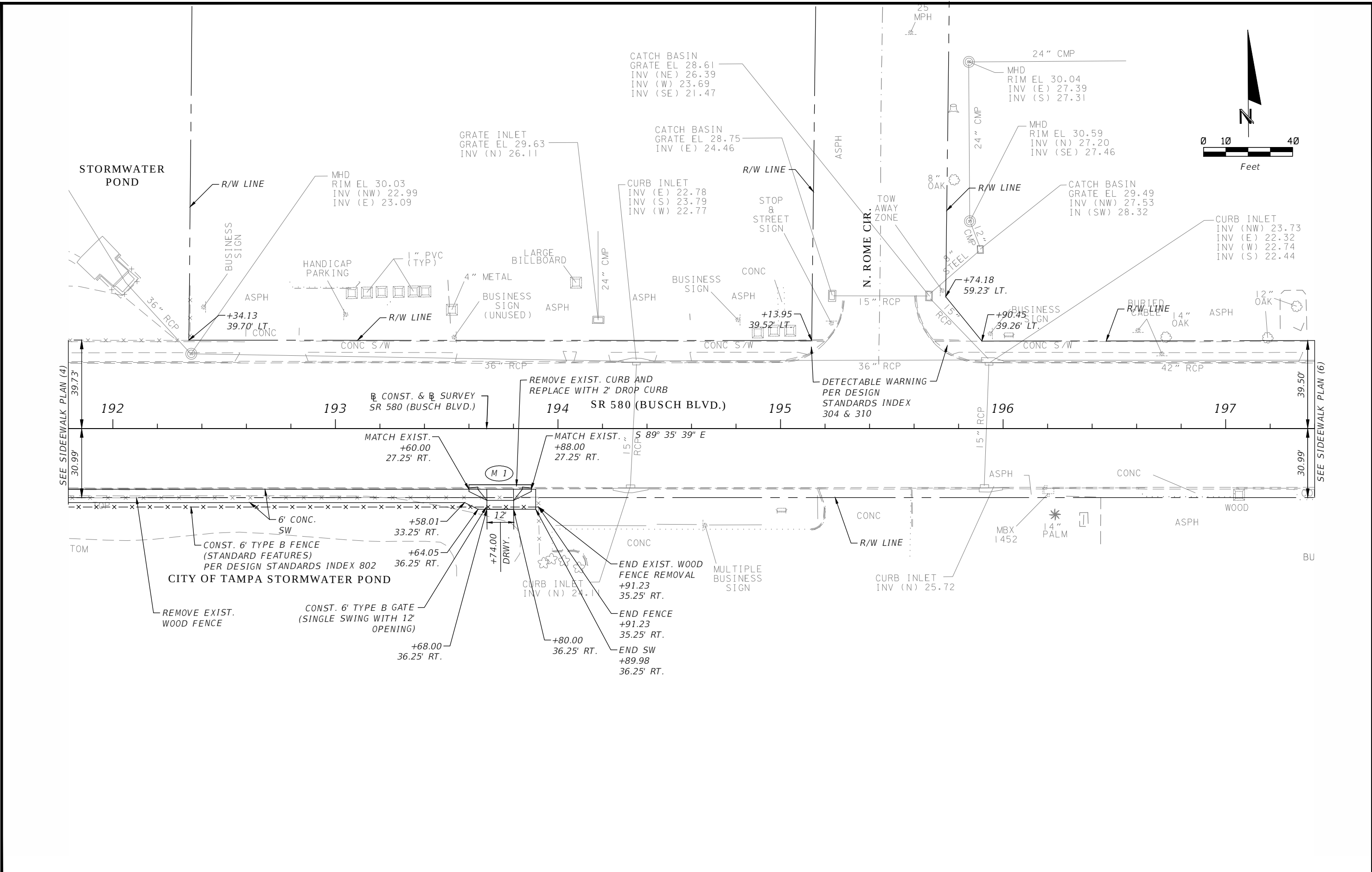


CURVE SR 580-3
PI STA. = 184+82.48
DELTA = 5°56'29"
D = 2°00'00"
T = 148.67'
L = 297.07'
R = 2864.79'
PRC STA. = 183+33.81
PT STA. = 186+30.88
e = EXIST.

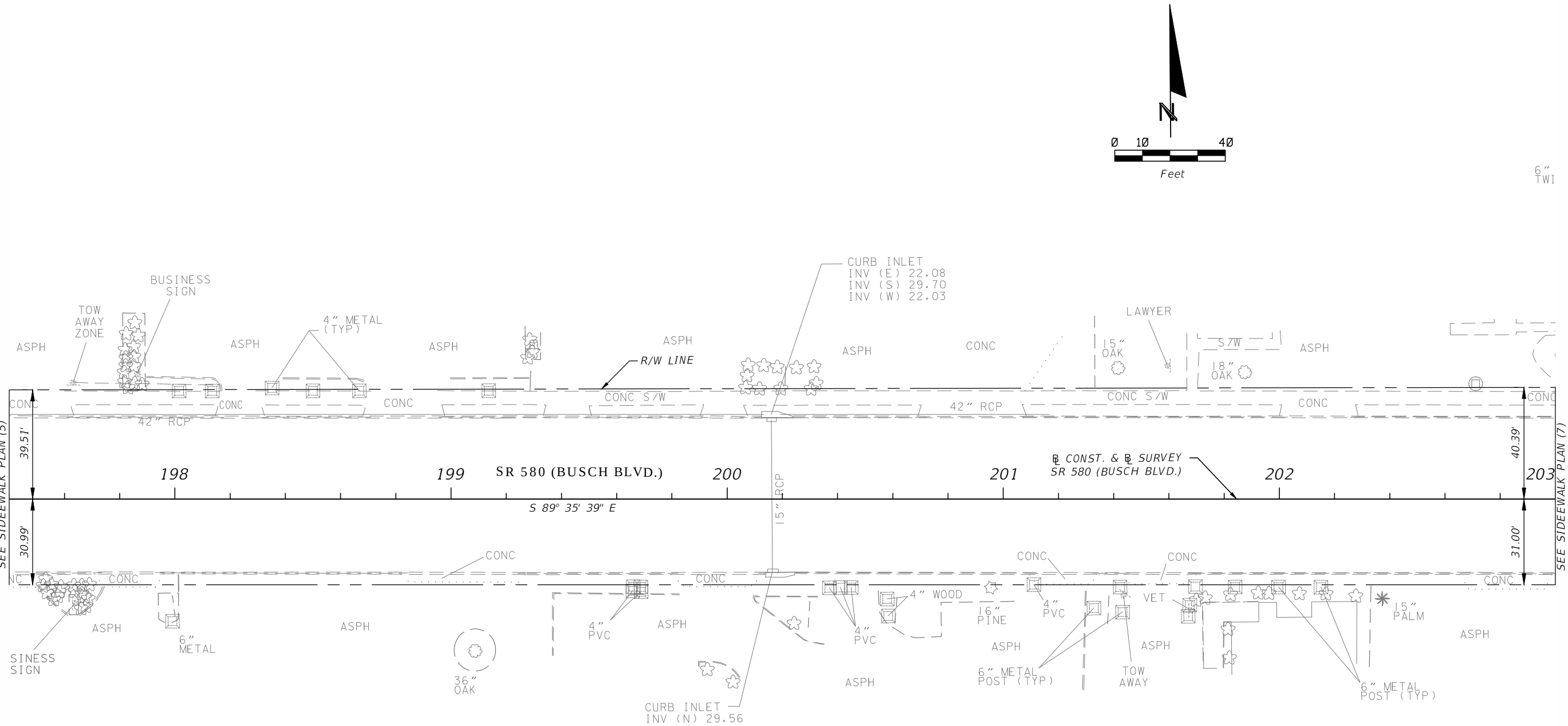


STA. EQUATION:
STA. 187+55.71 (BK.) =
STA. 187+95.16 (AH.)

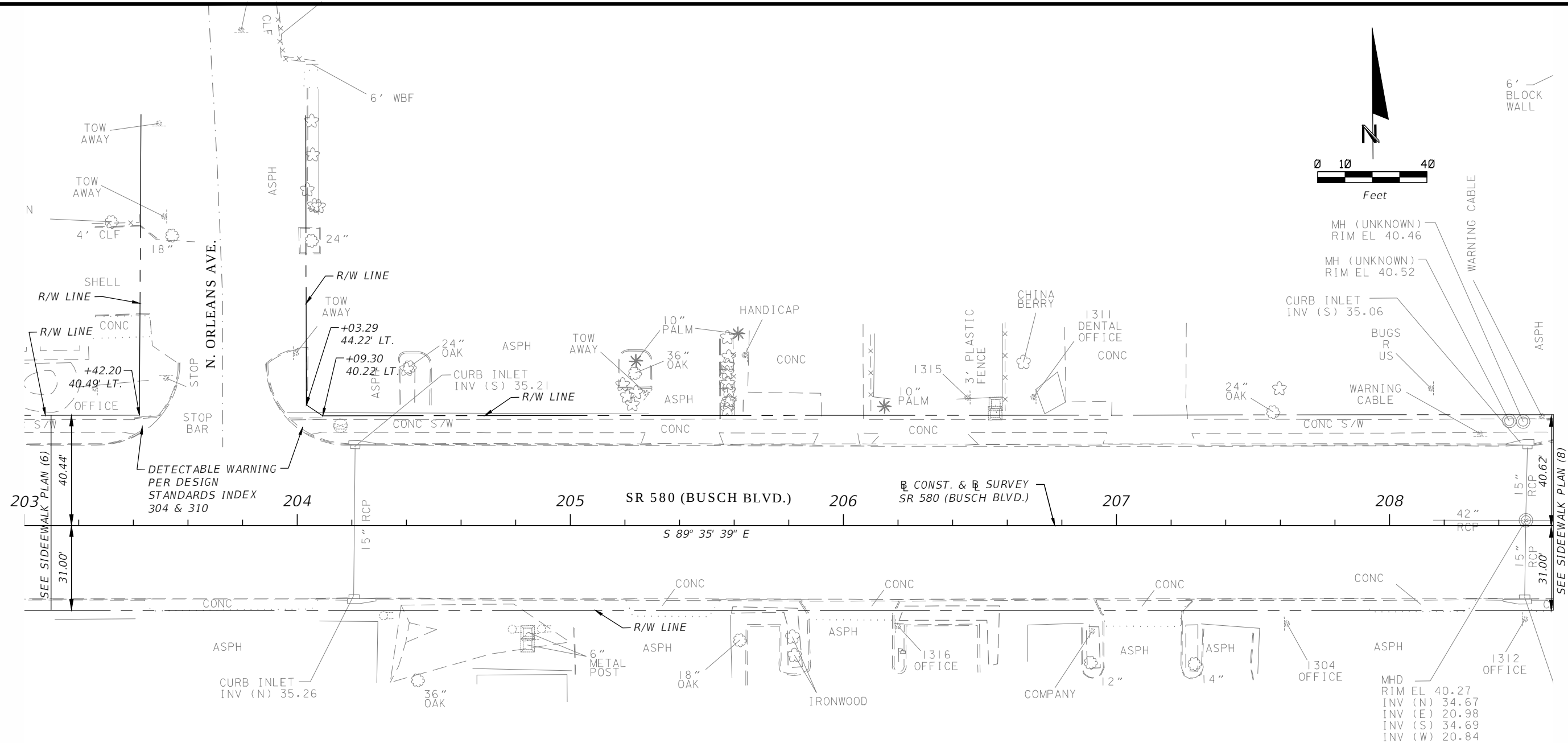
3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 12 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC					
1				CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230	SIDEWALK PLAN (4)			



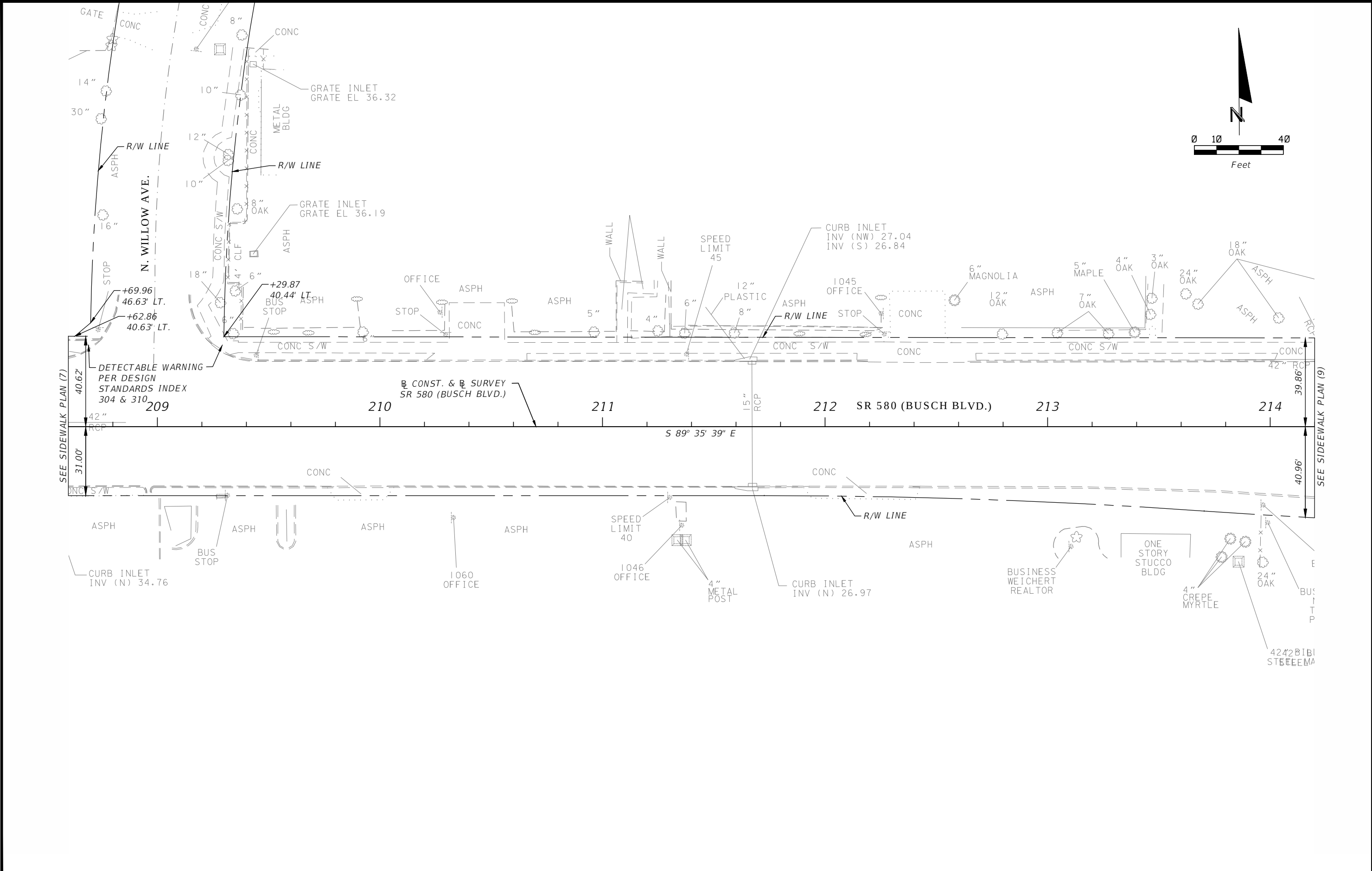
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	SIDEWALK PLAN (5)	Sh. 13 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438



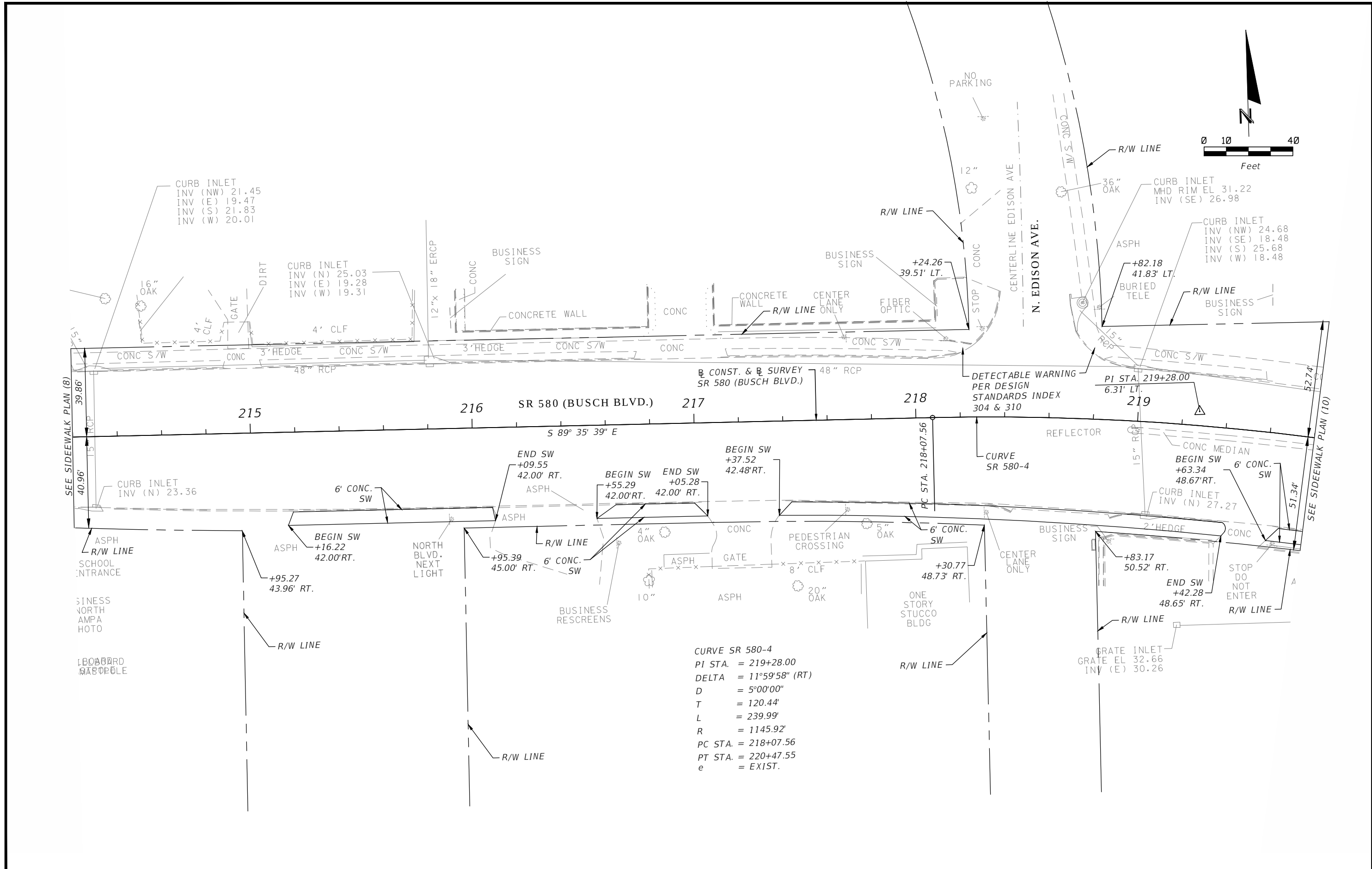
3				DES:	RBC	ICONCONSULTANT GROUP INCORPORATED10006 NORTH DALE MABRY HIGHWAY, SUITE 201TAMPA, FL 33618TELEPHONE: (813) 962-8689FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 14 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13					



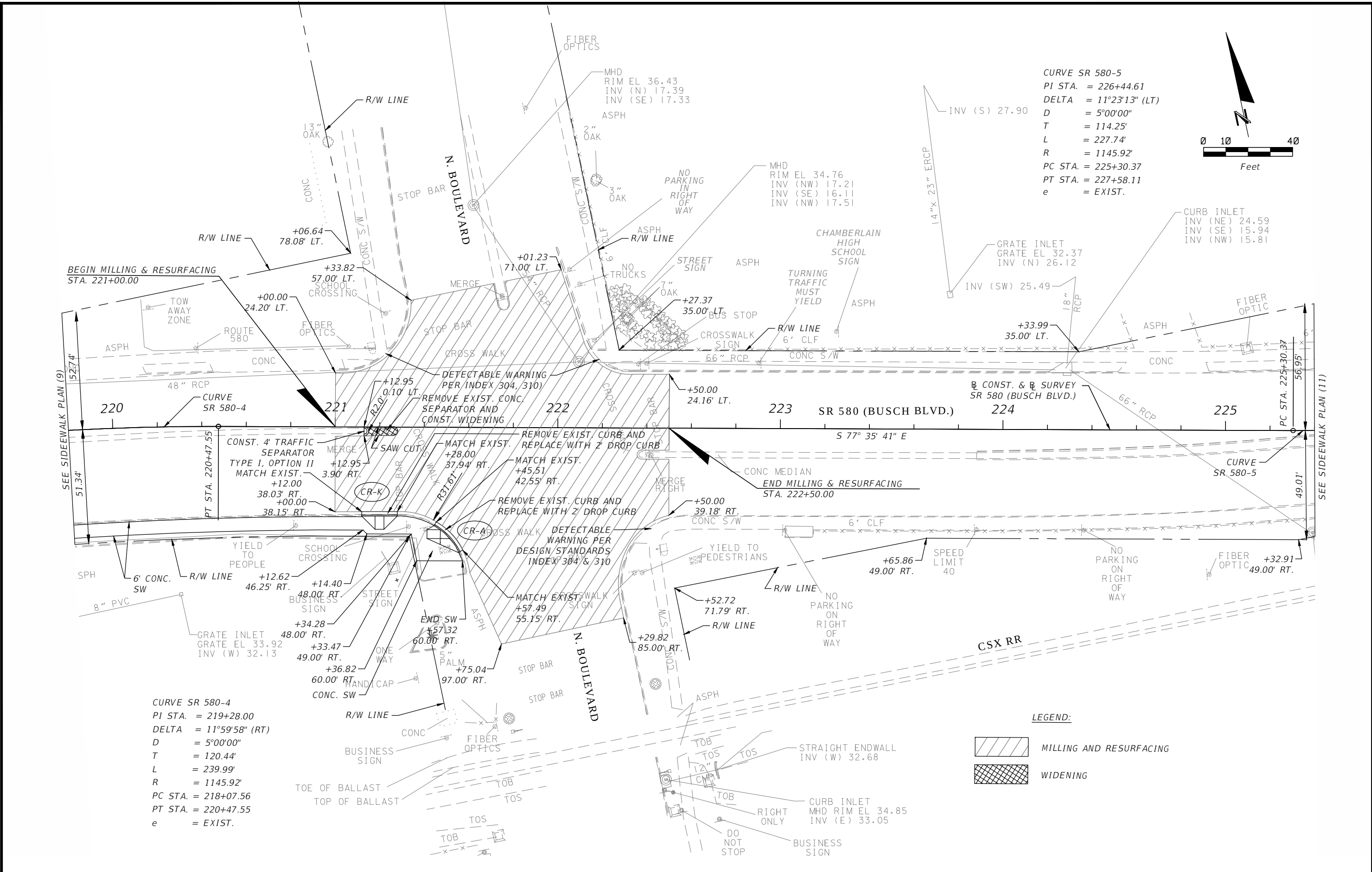
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS SIDEWALK PLAN (7)	W.O. Sh. 15 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				



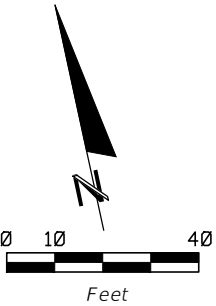
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 16 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	SIDEWALK PLAN (8)			



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2			DRN:	RBC					
1			CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	SIDEWALK PLAN (9)	Sh. 17	
								Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438



CURVE SR 580-5
PI STA. = 226+44.61
DELTA = 11°23'13" (LT)
D = 5°00'00"
T = 114.25'
L = 227.74'
R = 1145.92'
PC STA. = 225+30.37
PT STA. = 227+58.11
e = EXIST.

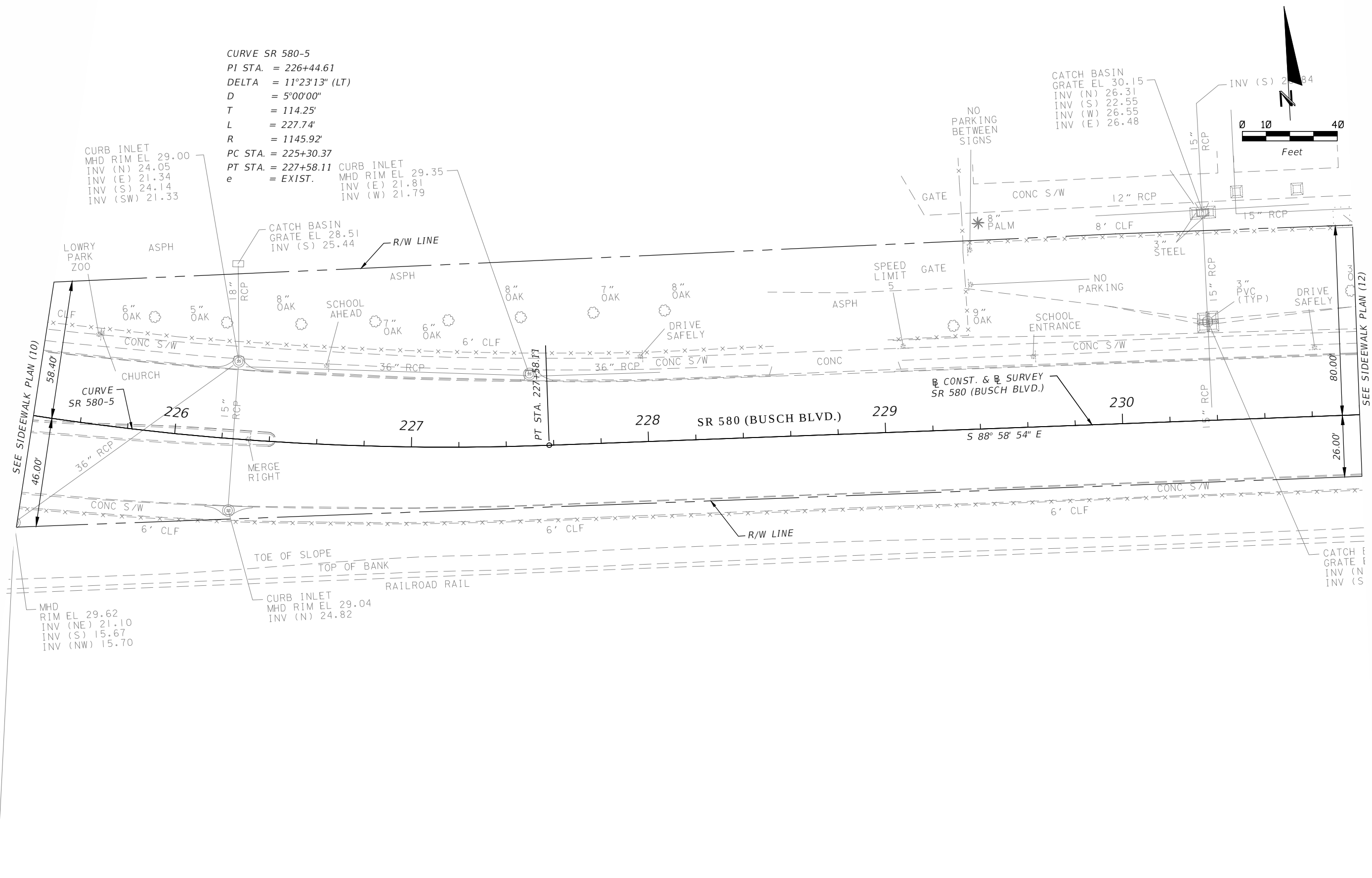


CURVE SR 580-4
PI STA. = 219+28.00
DELTA = 11°59'58" (RT)
D = 5°00'00"
T = 120.44'
L = 239.99'
R = 1145.92'
PC STA. = 218+07.56
PT STA. = 220+47.55
e = EXIST.

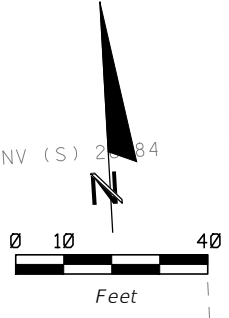
LEGEND:

- MILLING AND RESURFACING
- WIDENING

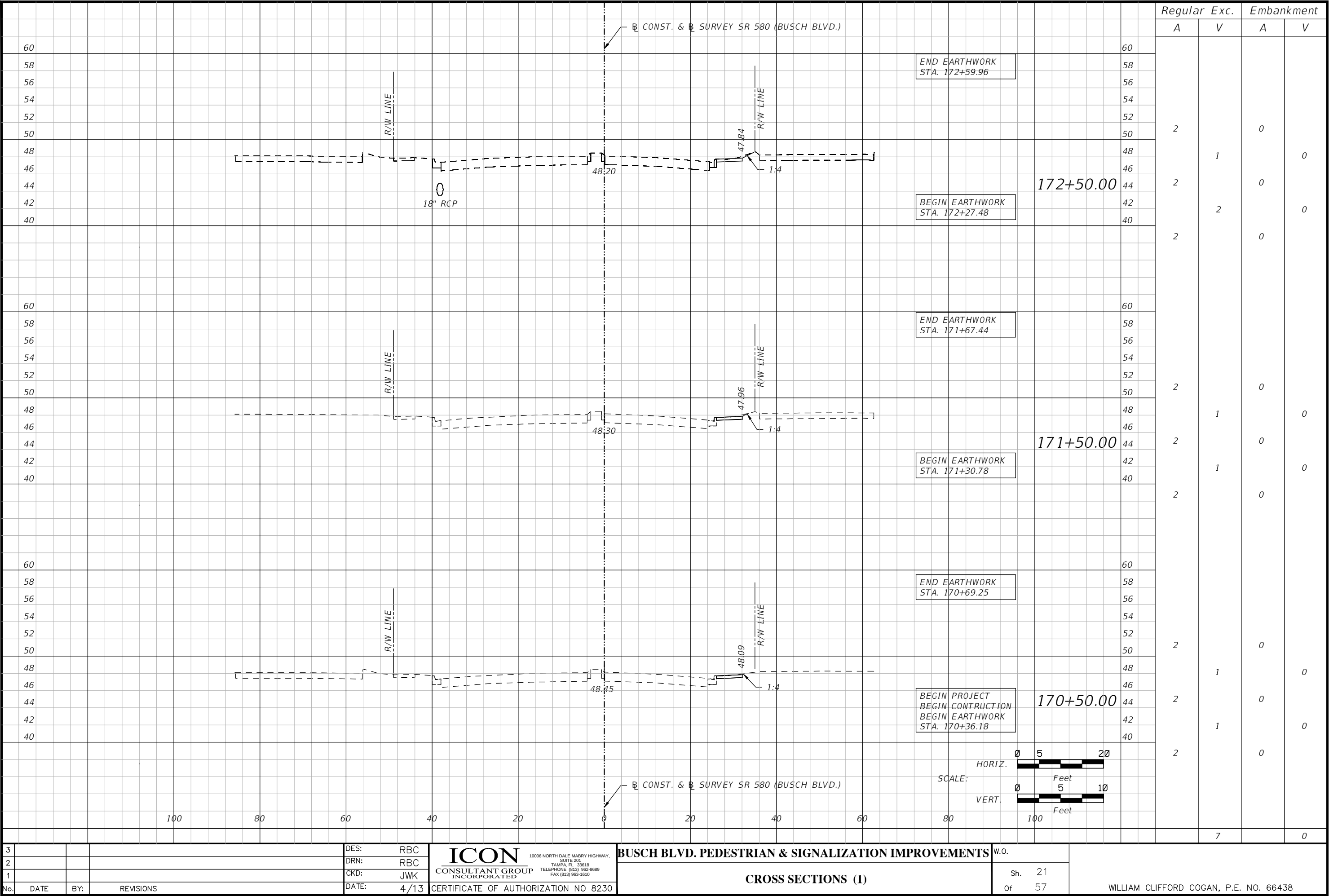
3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 CERTIFICATE OF AUTHORIZATION NO 8230	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC				
1				CKD: JWK				
No.	DATE	BY:	REVISIONS	DATE: 4/13				

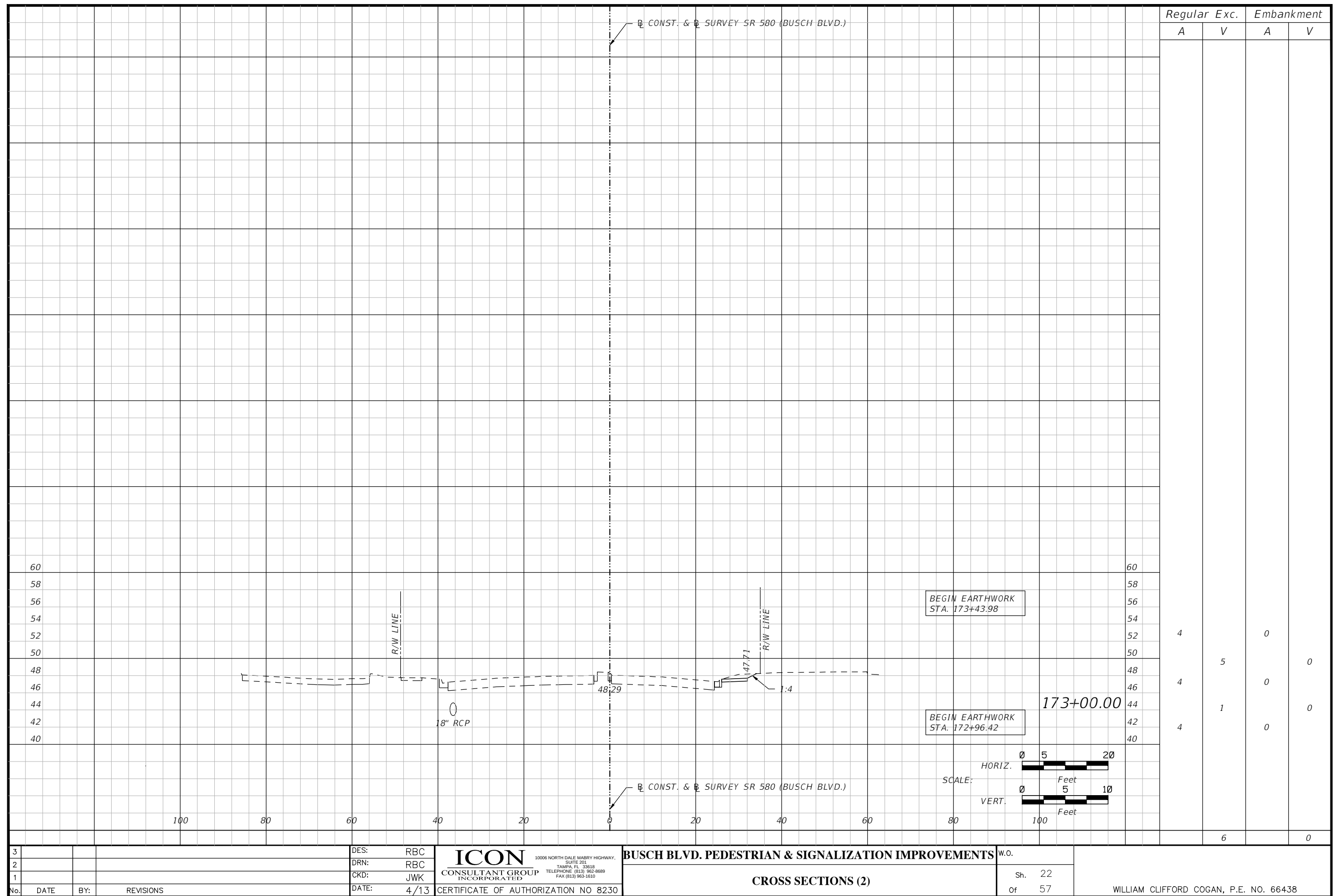


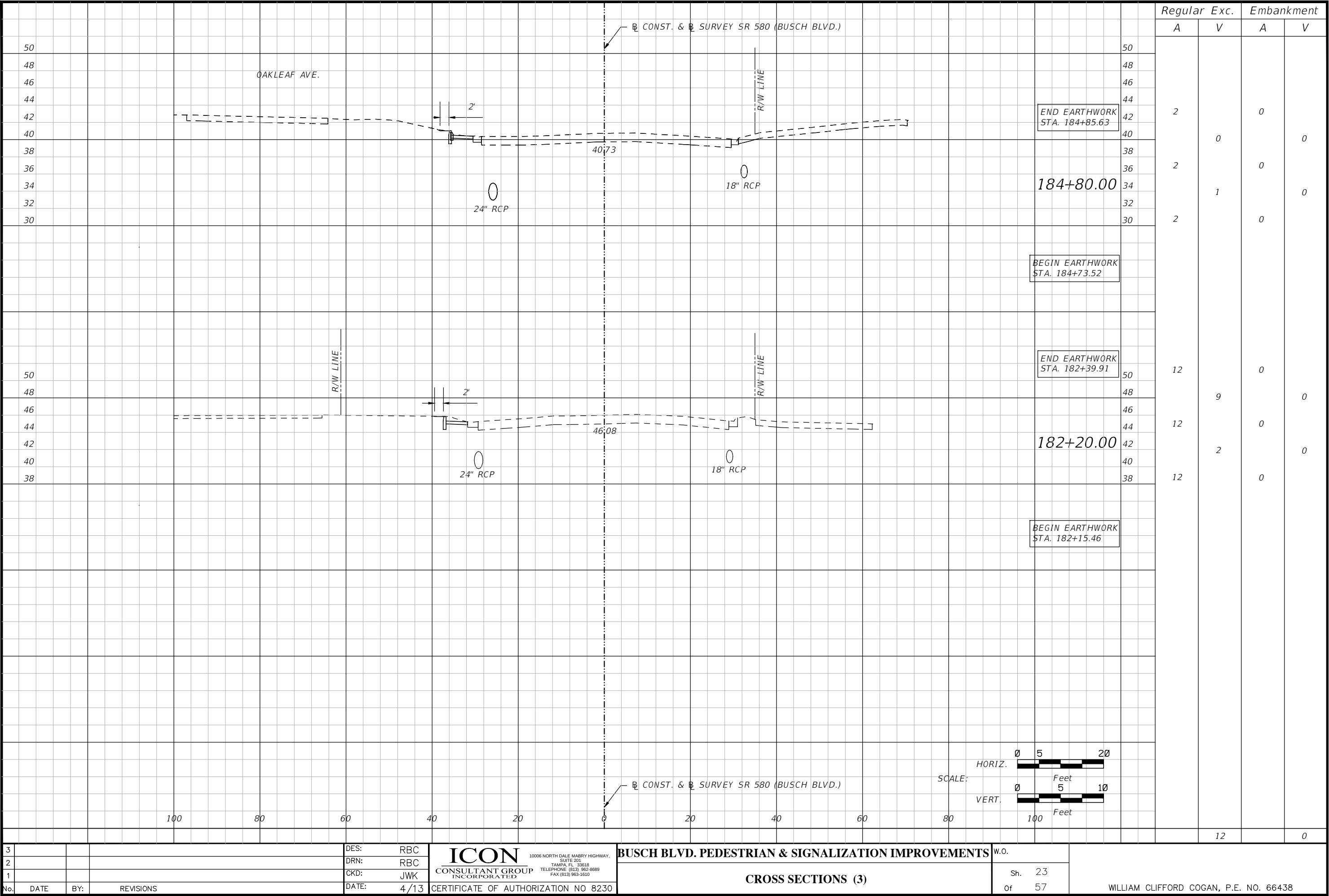
CURVE SR 580-5
 PI STA. = 226+44.61
 DELTA = 11°23'13" (LT)
 D = 5°00'00"
 T = 114.25'
 L = 227.74'
 R = 1145.92'
 PC STA. = 225+30.37
 PT STA. = 227+58.11
 e = EXIST.



3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 19 Of 57 WILLIAM CLIFFORD COGAN, P.E. NO. 66438	
2				DRN: RBC		SIDEWALK PLAN (11)			
1				CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230				







Regular Exc. Embankment

A V A V

2 0 0

0 0

2 0 0

1 0

2 0

BEGIN EARTHWORK
STA. 184+73.52

END EARTHWORK
STA. 182+39.91

12 0

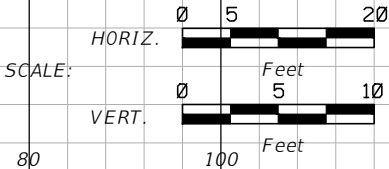
9 0

12 0

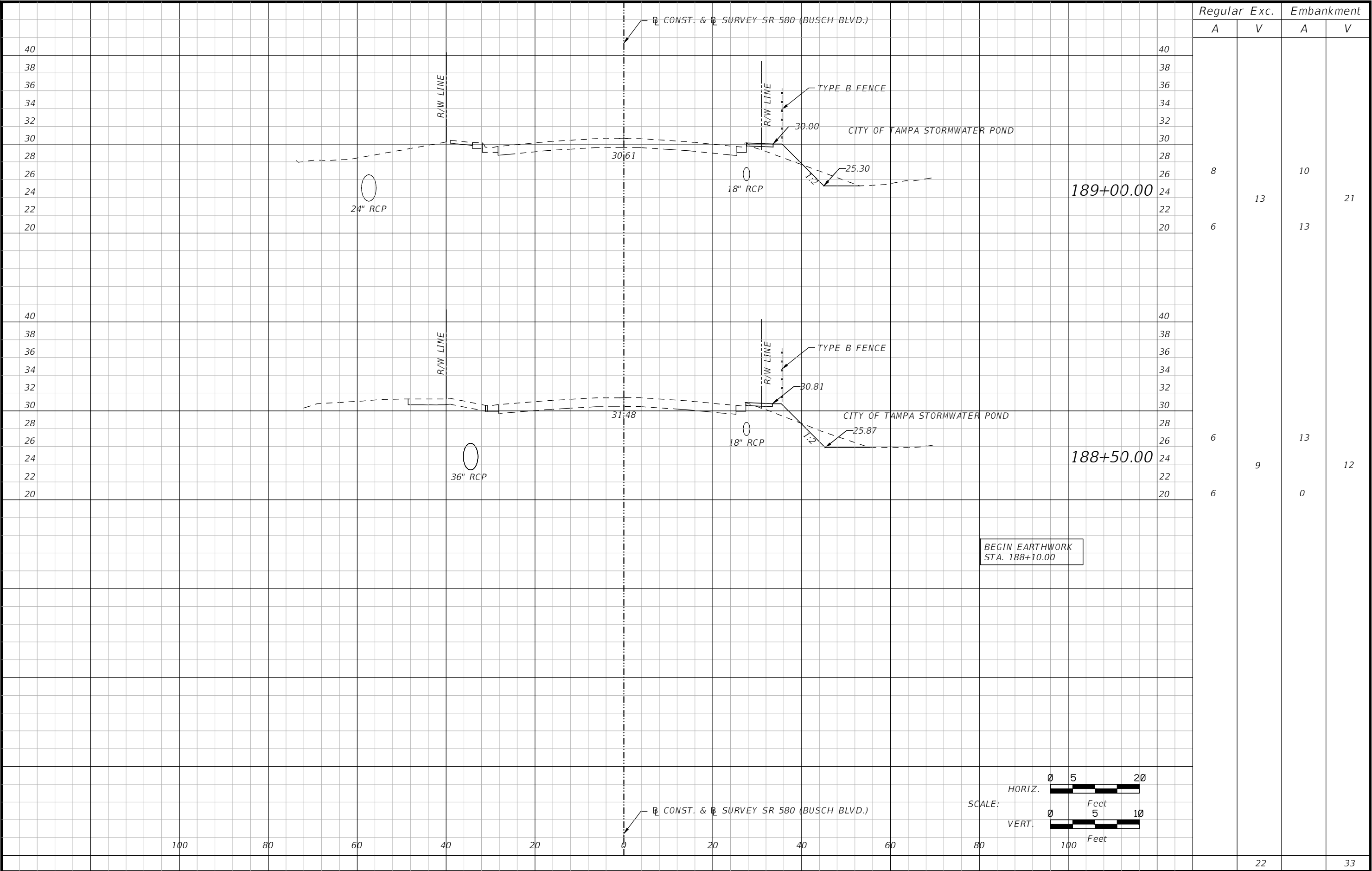
2 0

12 0

BEGIN EARTHWORK
STA. 182+15.46

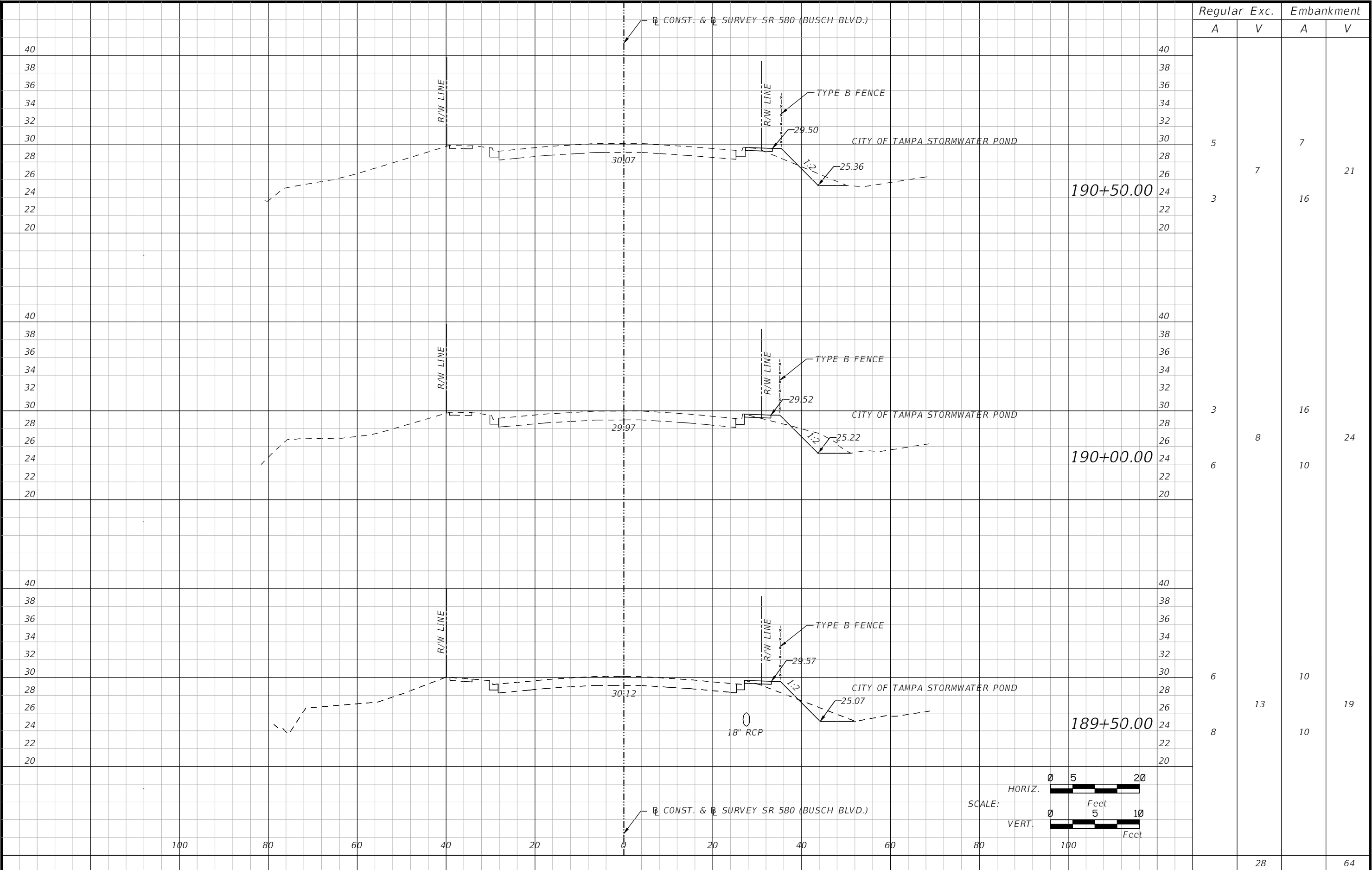


12 0



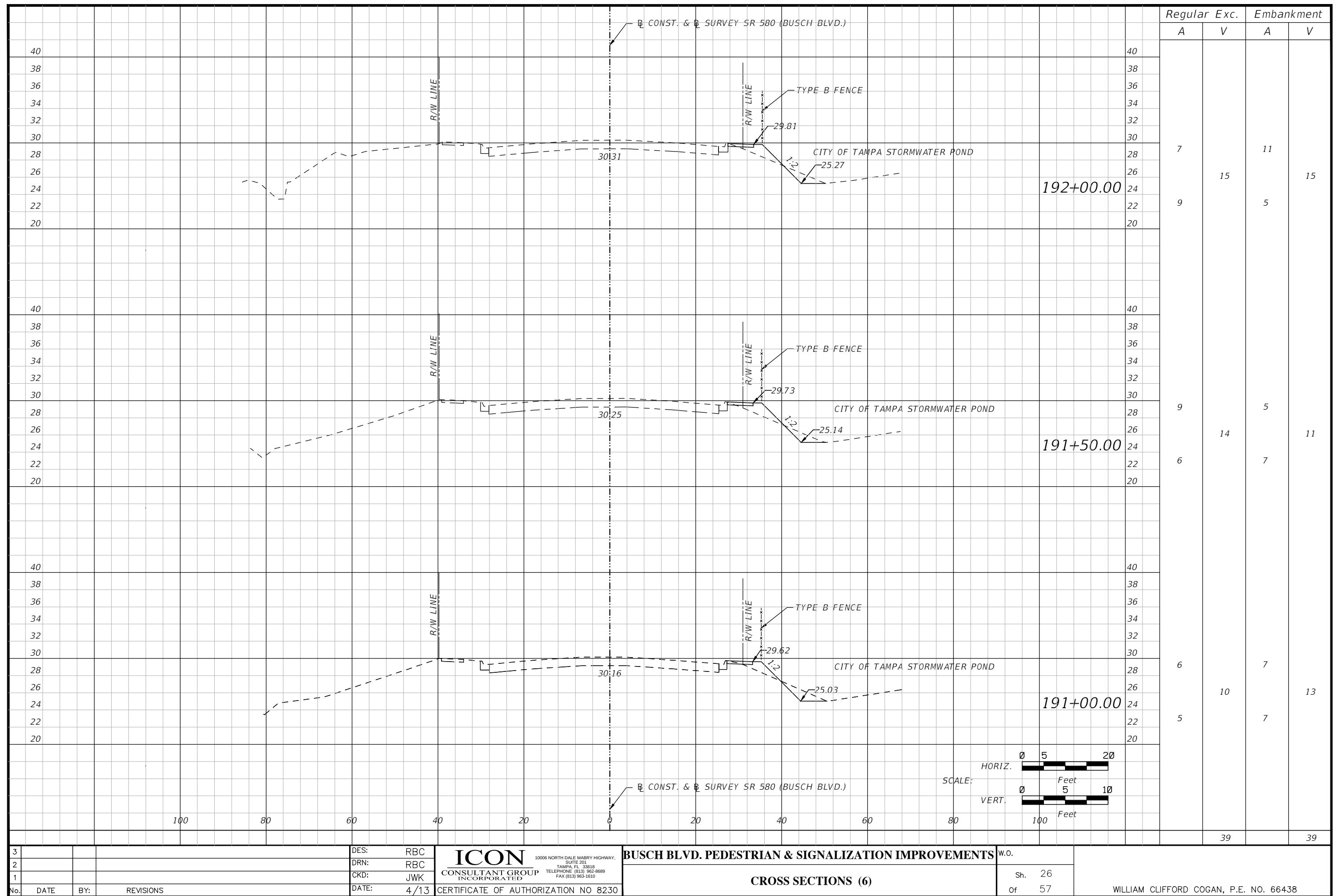
Regular		Exc.	Embankment	
A		V	A	V
8	6	13	10	21
			13	
6	6	9	13	12
			0	
		22	33	

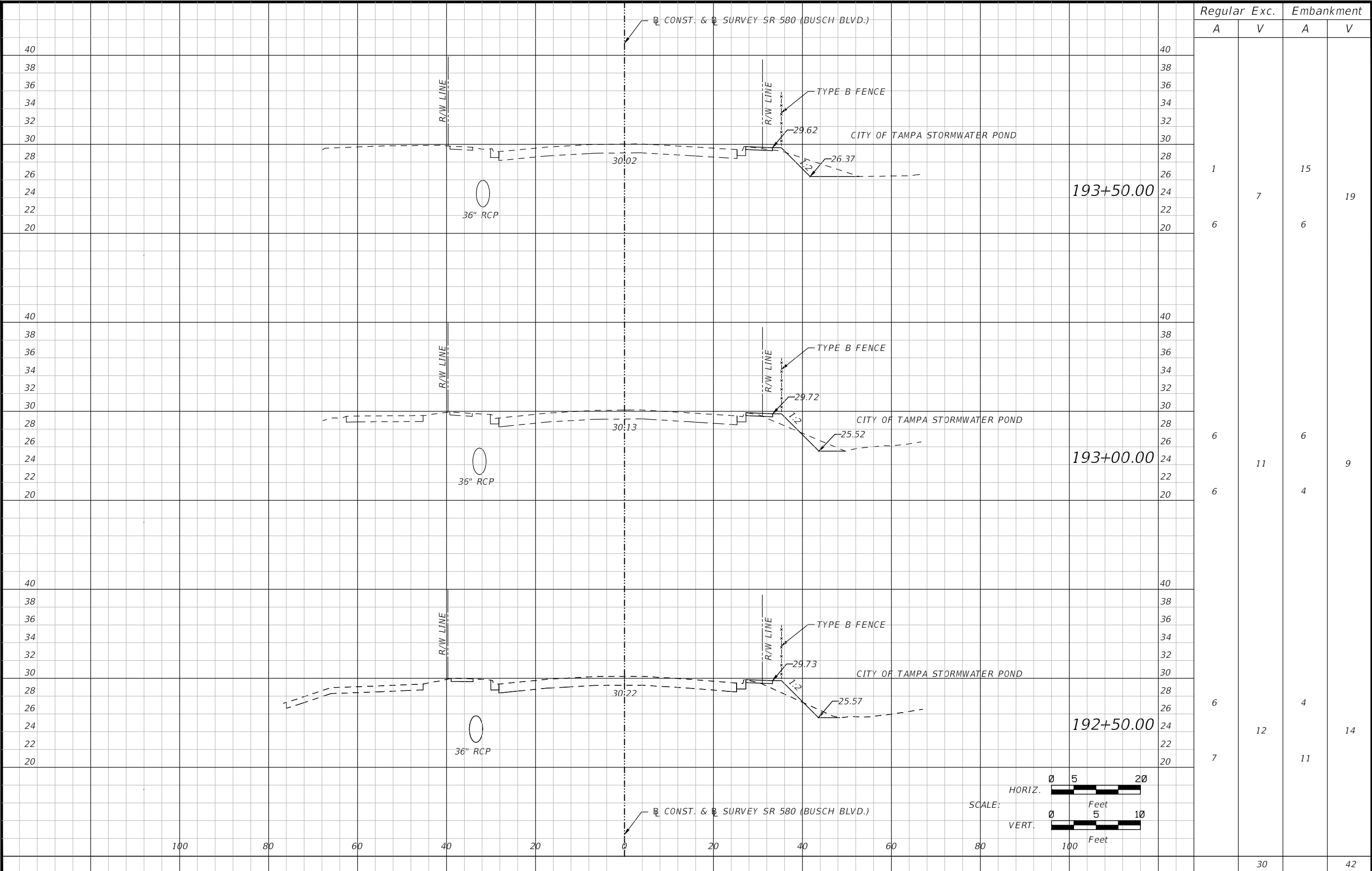
3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438	
2				DRN: RBC					
1				CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230	CROSS SECTIONS (4)	Sh. 24 Of 57		



Regular		Exc.	Embankment	
A		V	A	V
5		7	7	21
3		7	16	
3		8	16	24
6		13	10	19
6			10	
		28	64	

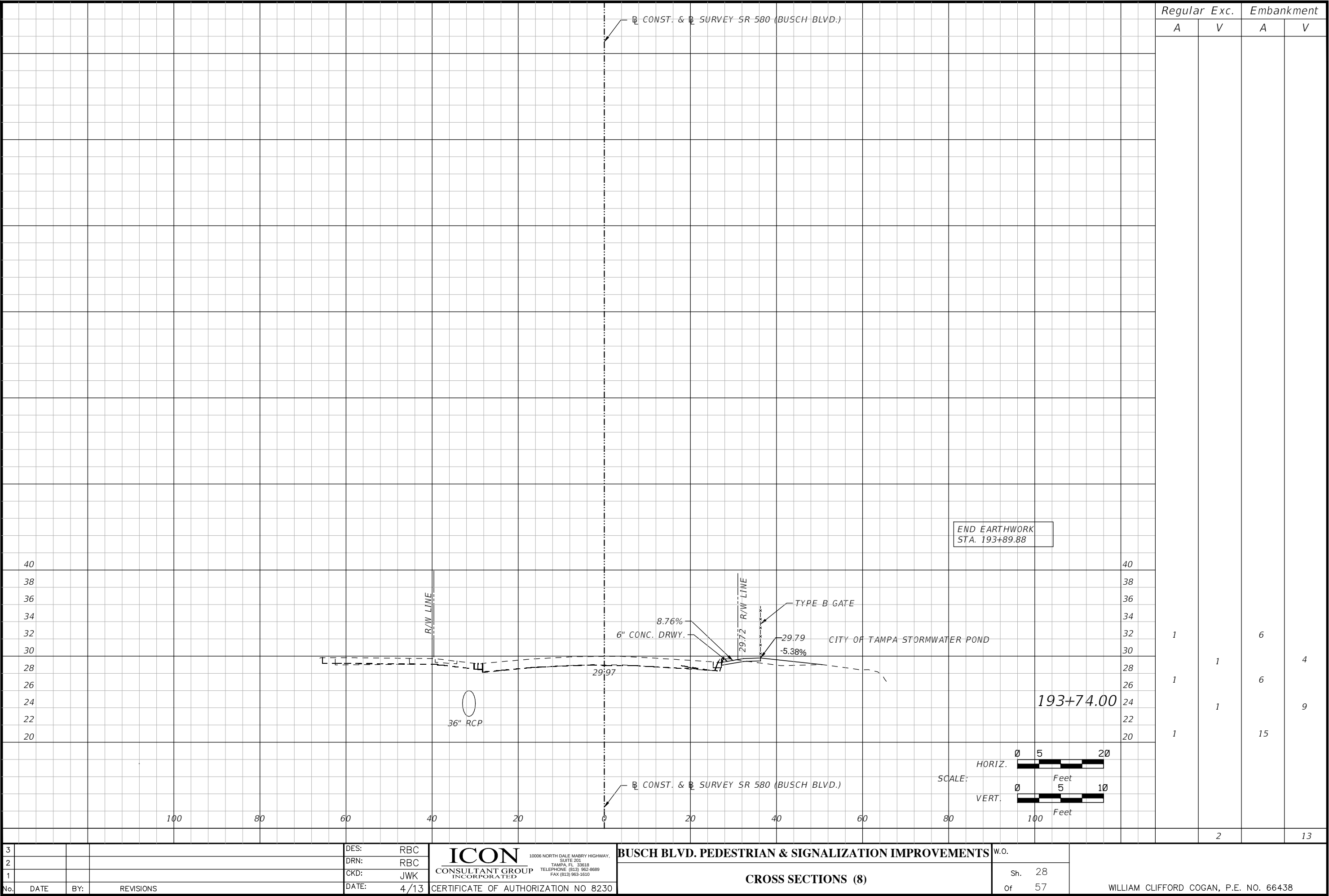
3			DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 25 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2			DRN: RBC					
1			CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230	CROSS SECTIONS (5)		

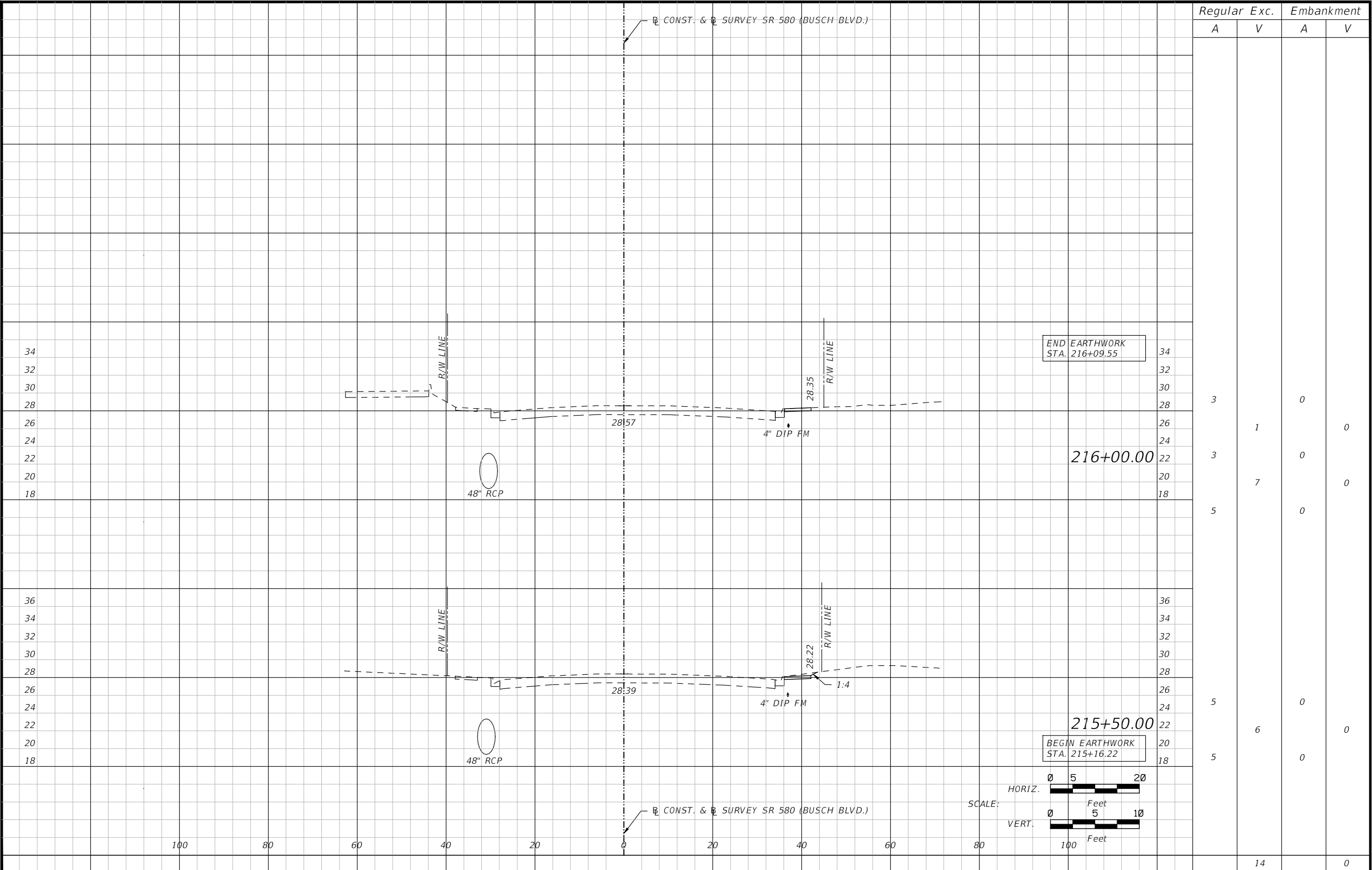




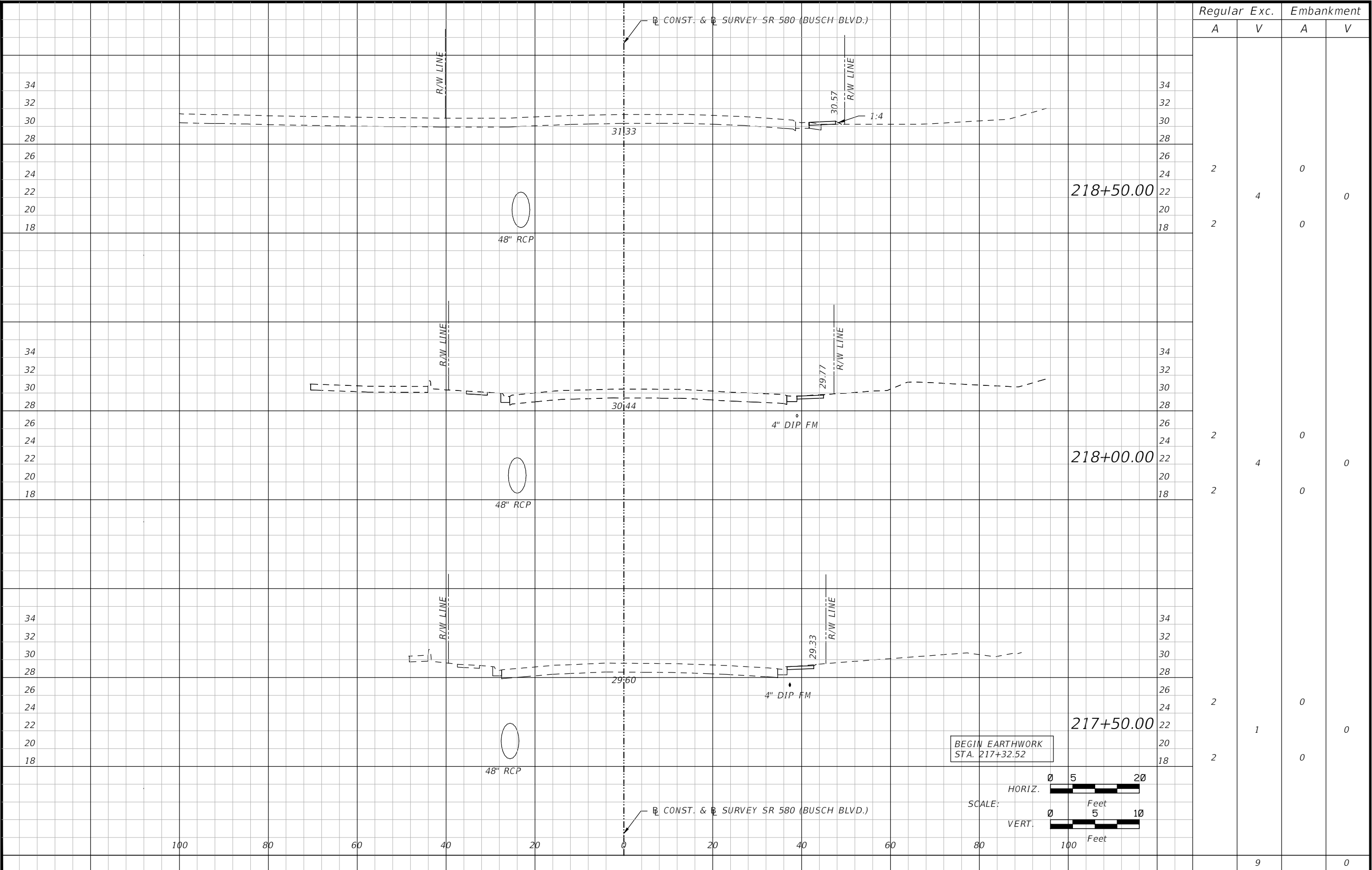
Regular		Exc.	Embankment	
A	V		A	V
1	7		15	19
6			6	
6			6	
6	11		6	9
6			4	
6			4	
7	12		11	14
		30		42

3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2				DRN:	RBC		CROSS SECTIONS (7)	Sh. 27	
1				CKD:	JWK			Of 57	
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	WILLIAM CLIFFORD COGAN, P.E. NO. 66438		



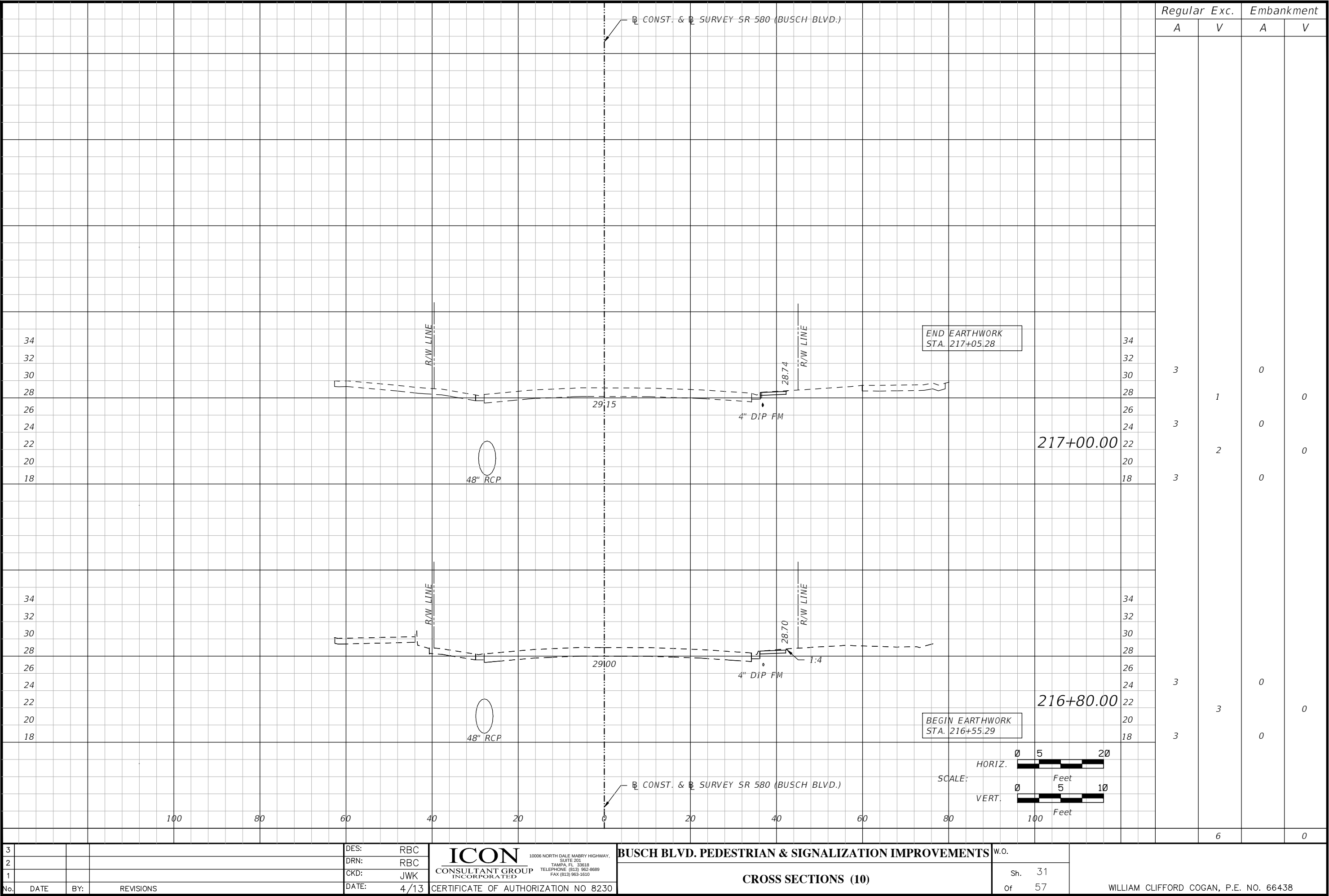


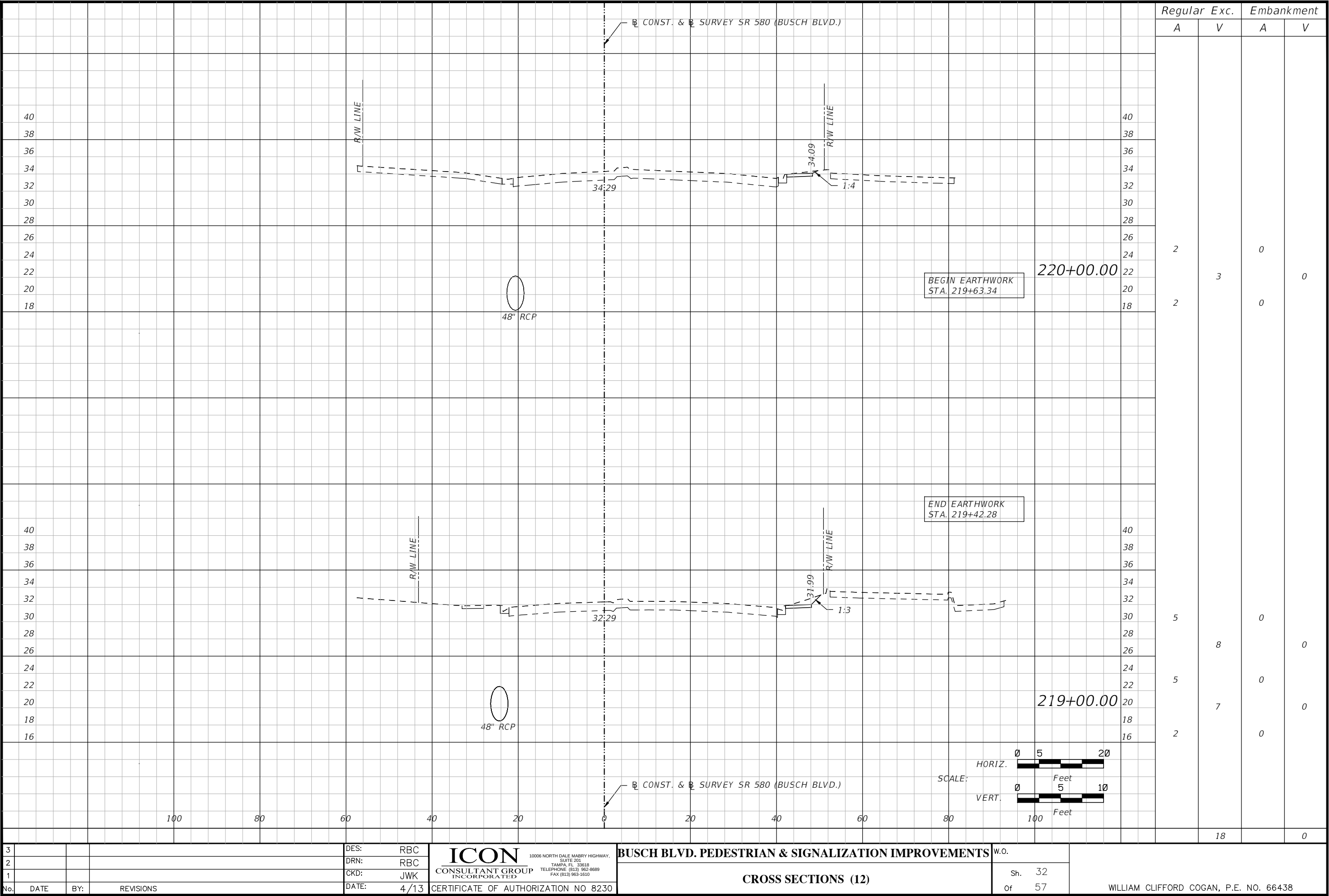
3				DES:	RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS CROSS SECTIONS (9)	W.O.		WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				
CERTIFICATE OF AUTHORIZATION NO 8230									

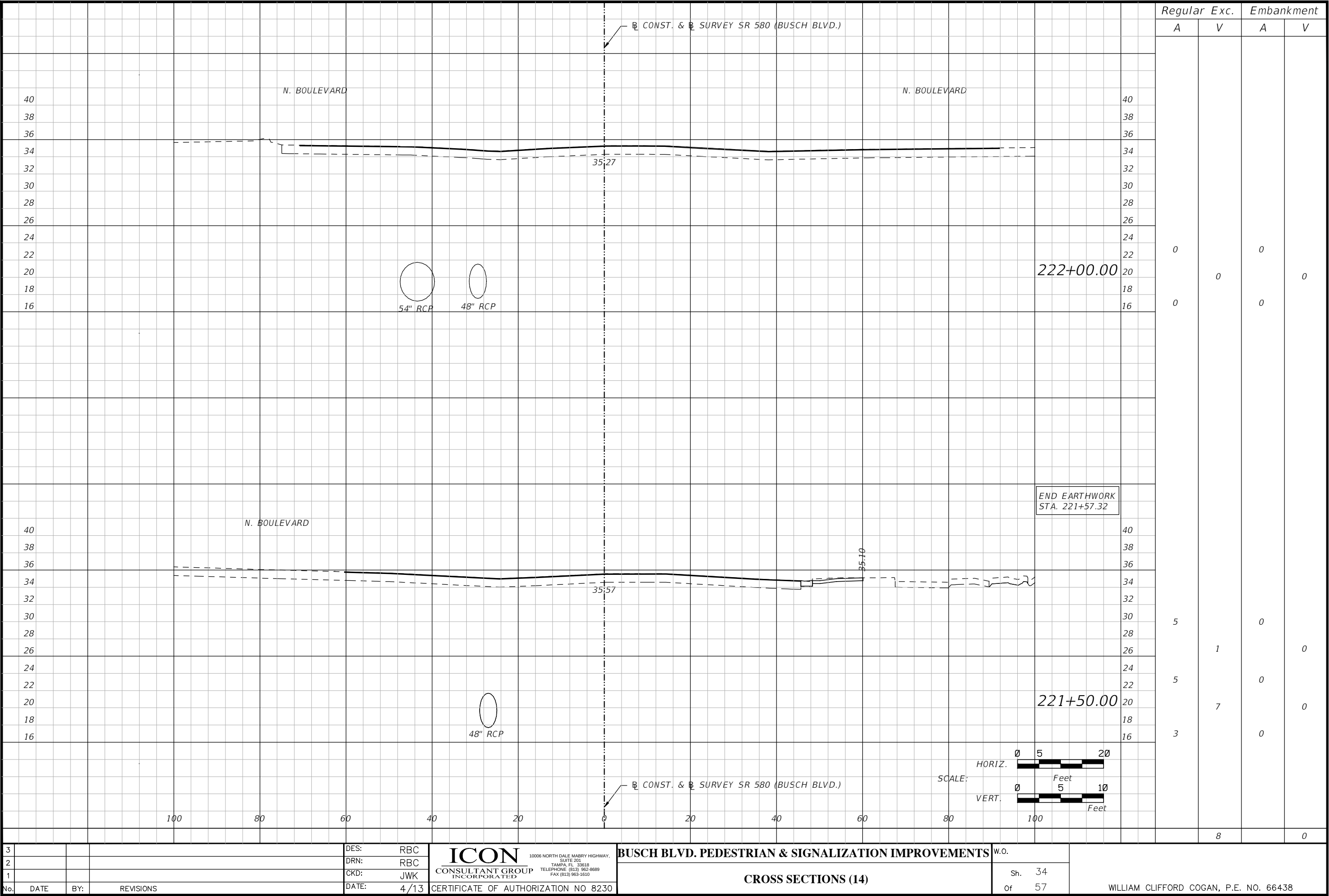


Regular		Exc.	Embankment	
A	V		A	V
2	4		0	0
2			0	
2	4		0	0
2			0	
2	1		0	0
2			0	
		9	0	

3			DES: RBC	ICON10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 30 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2			DRN: RBC					
1			CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230	CROSS SECTIONS (11)		

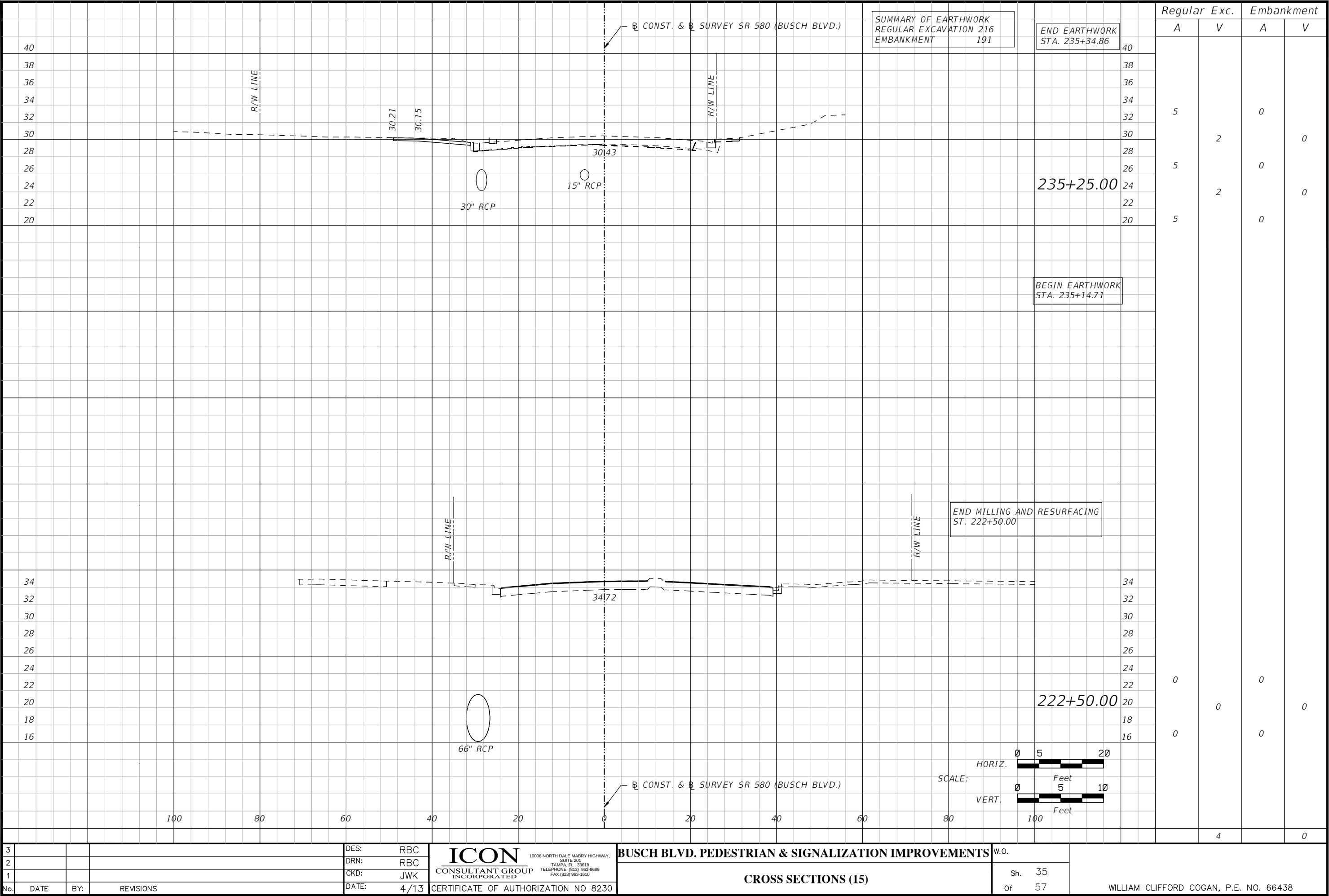


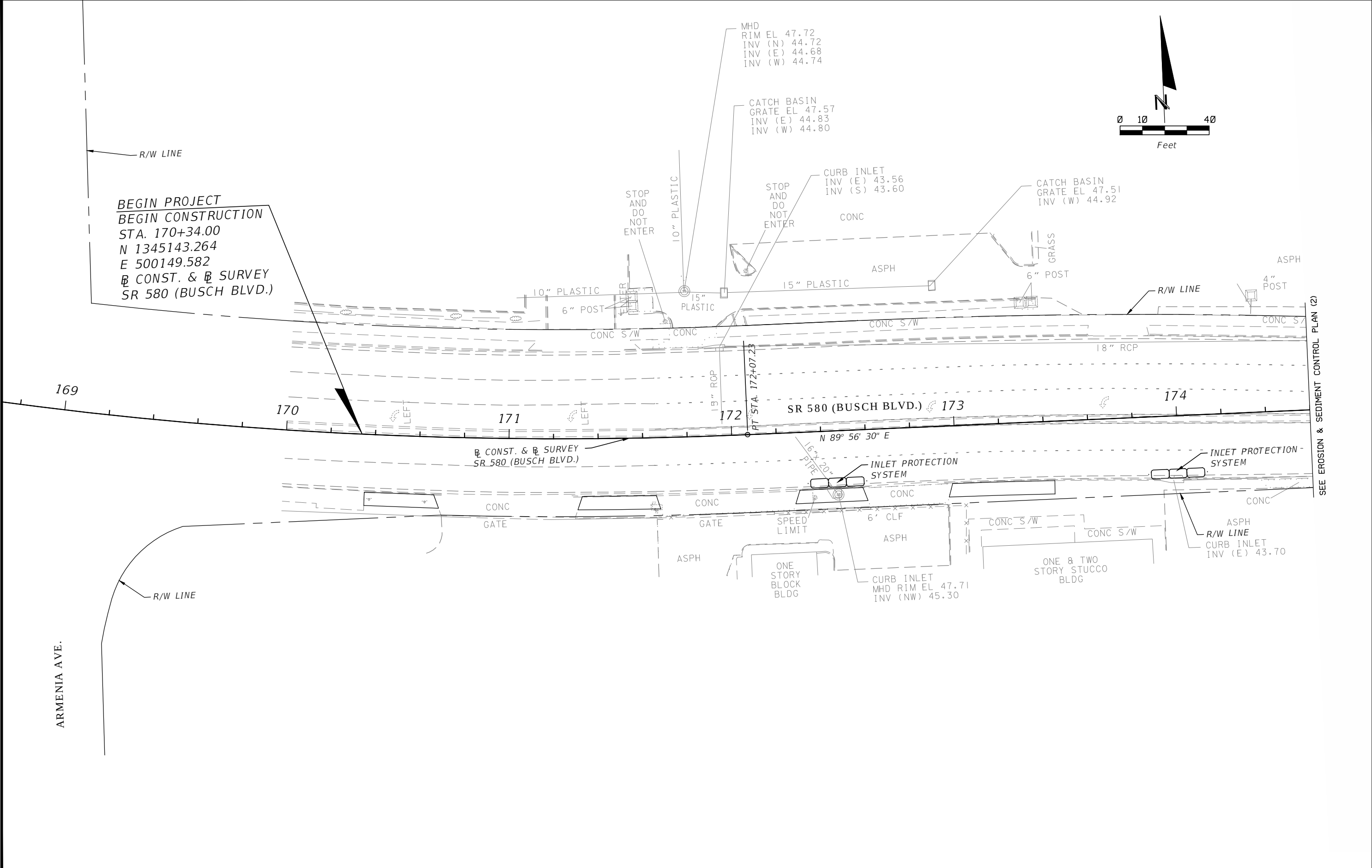




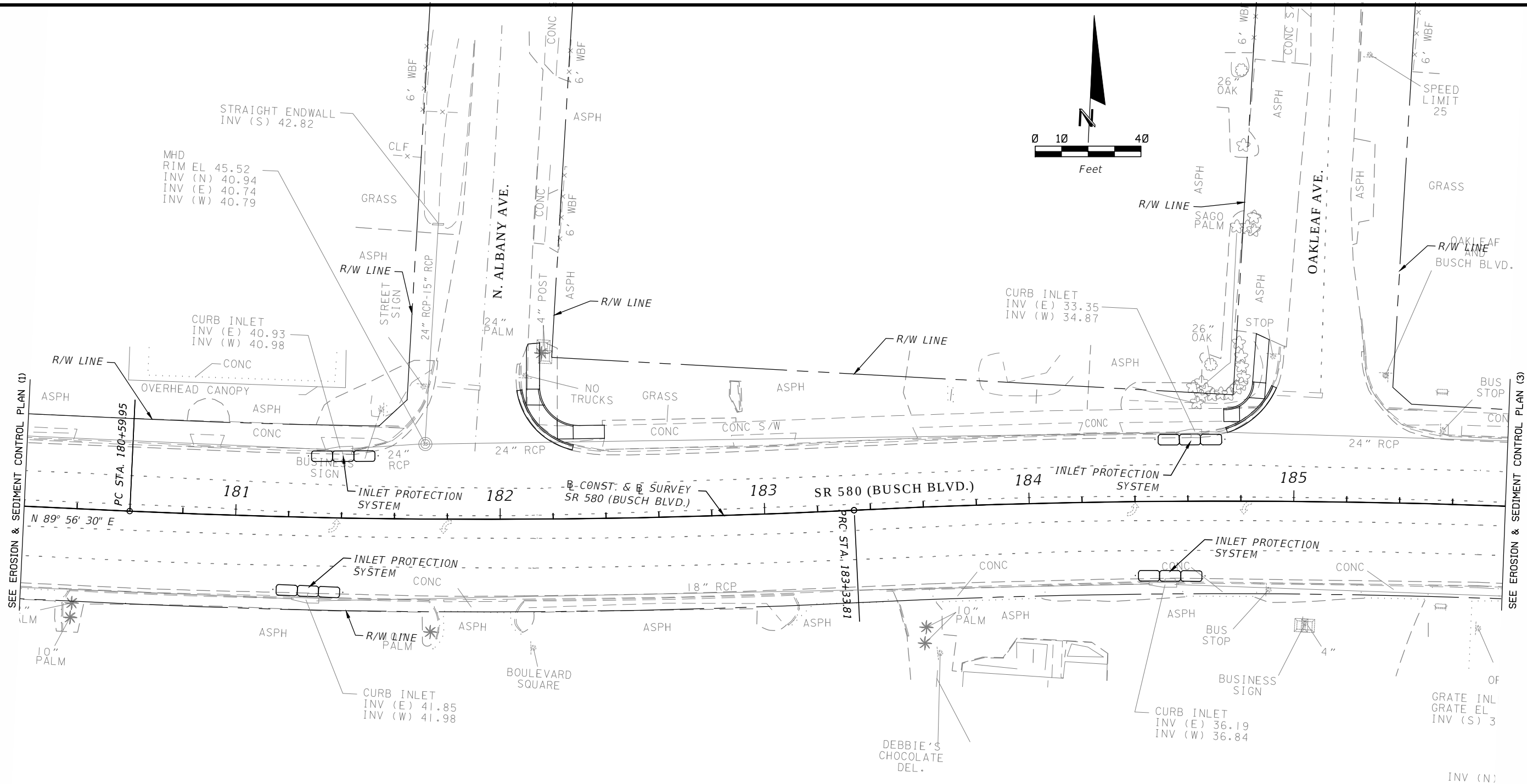
Regular		Exc.	Embankment	
A		V	A	V
0	0	0	0	0
5	5	1	0	0
3	3	7	0	0
		8	0	

3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 CERTIFICATE OF AUTHORIZATION NO 8230	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 34 Of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC					
1				CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13					

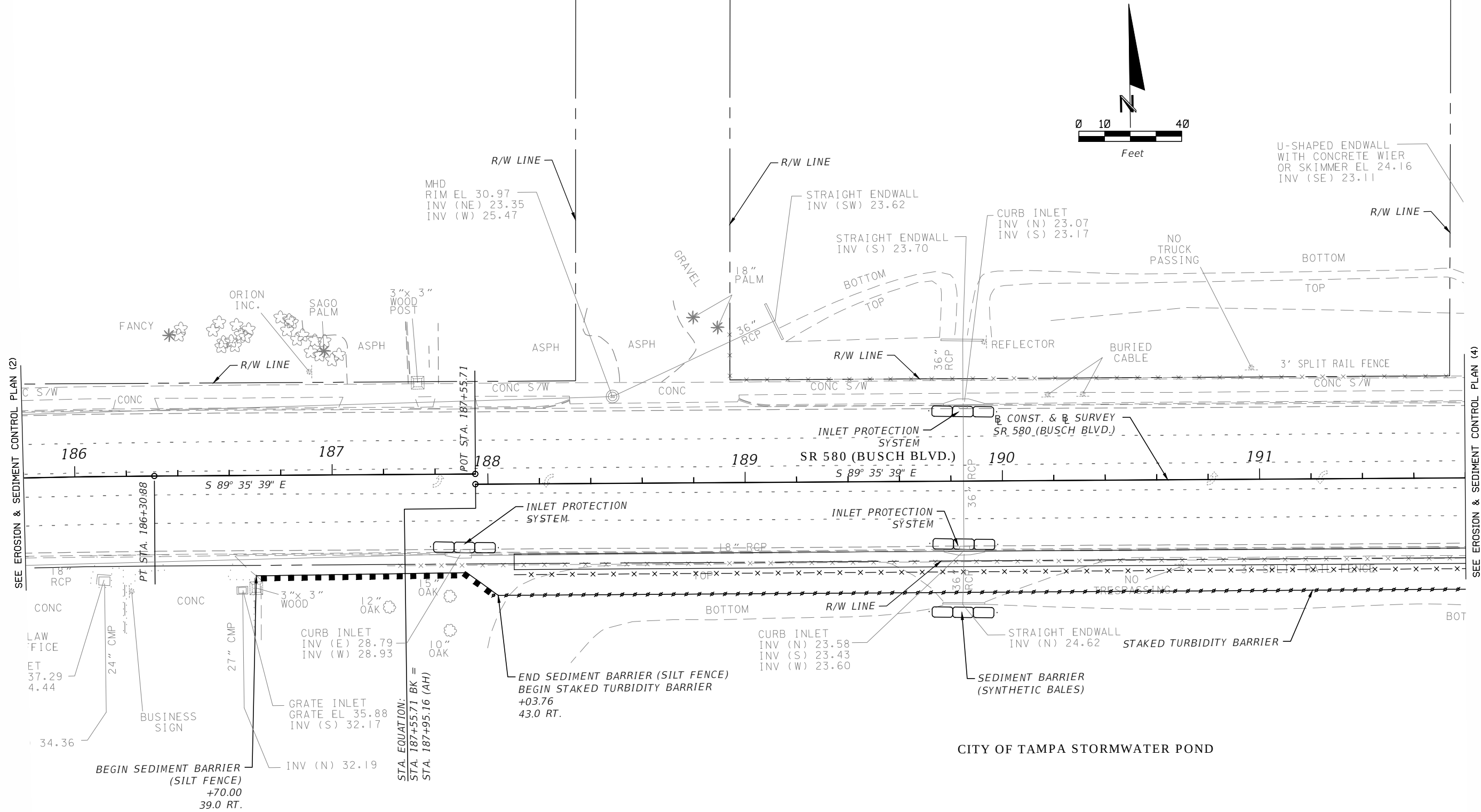




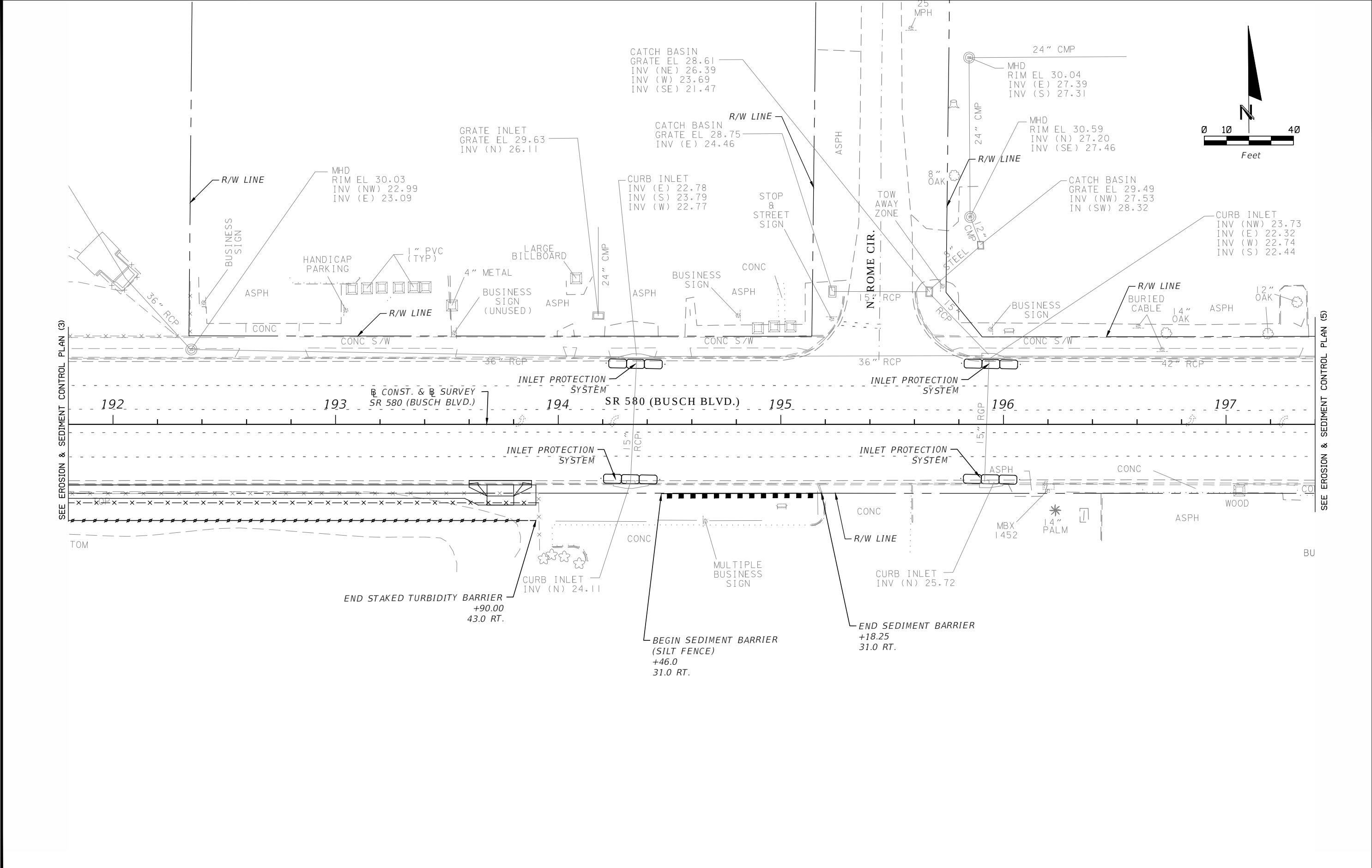
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2				DRN:	RBC			
1				CKD:	JWK			
No.	DATE	BY:	REVISIONS	DATE:	4/13			



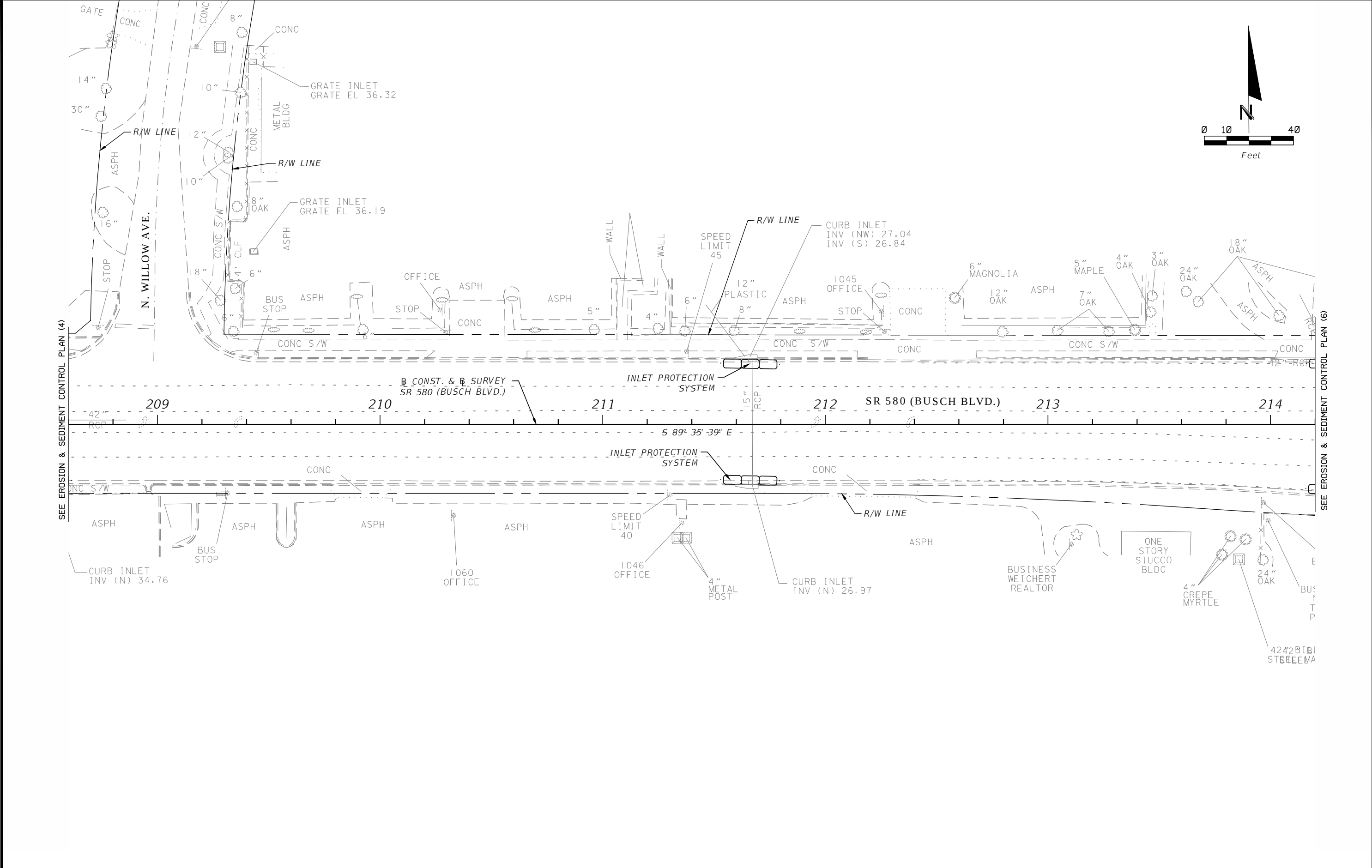
3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 203 TAMPA, FL 33618 TELEPHONE: (813) 962-8889 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS EROSION & SEDIMENT CONTROL PLAN (2)	W.O. Sh. 37 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC				
1				CKD: JWK				
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230			



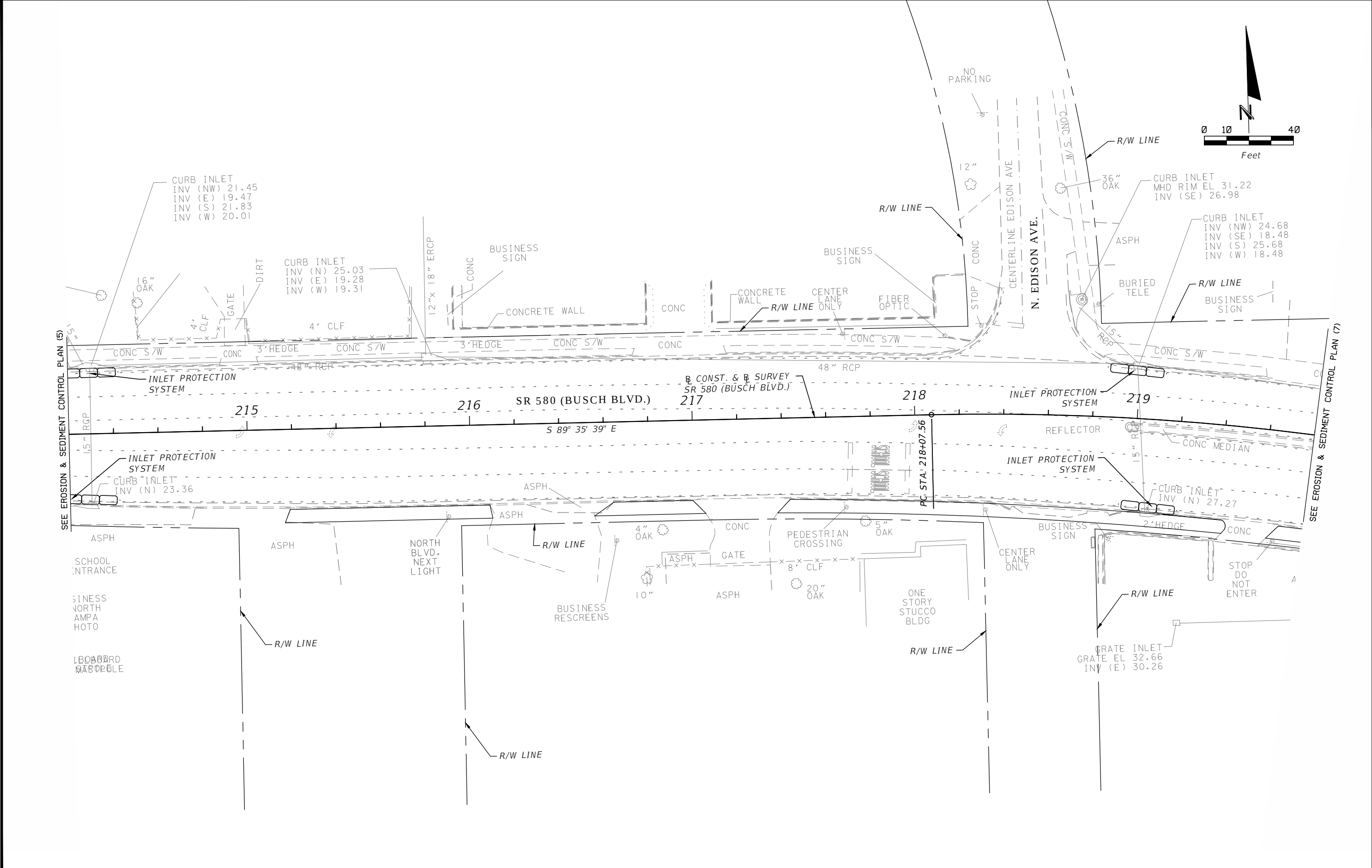
3				DES:	RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS EROSION & SEDIMENT CONTROL PLAN (3)	W.O. Sh. 38 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				



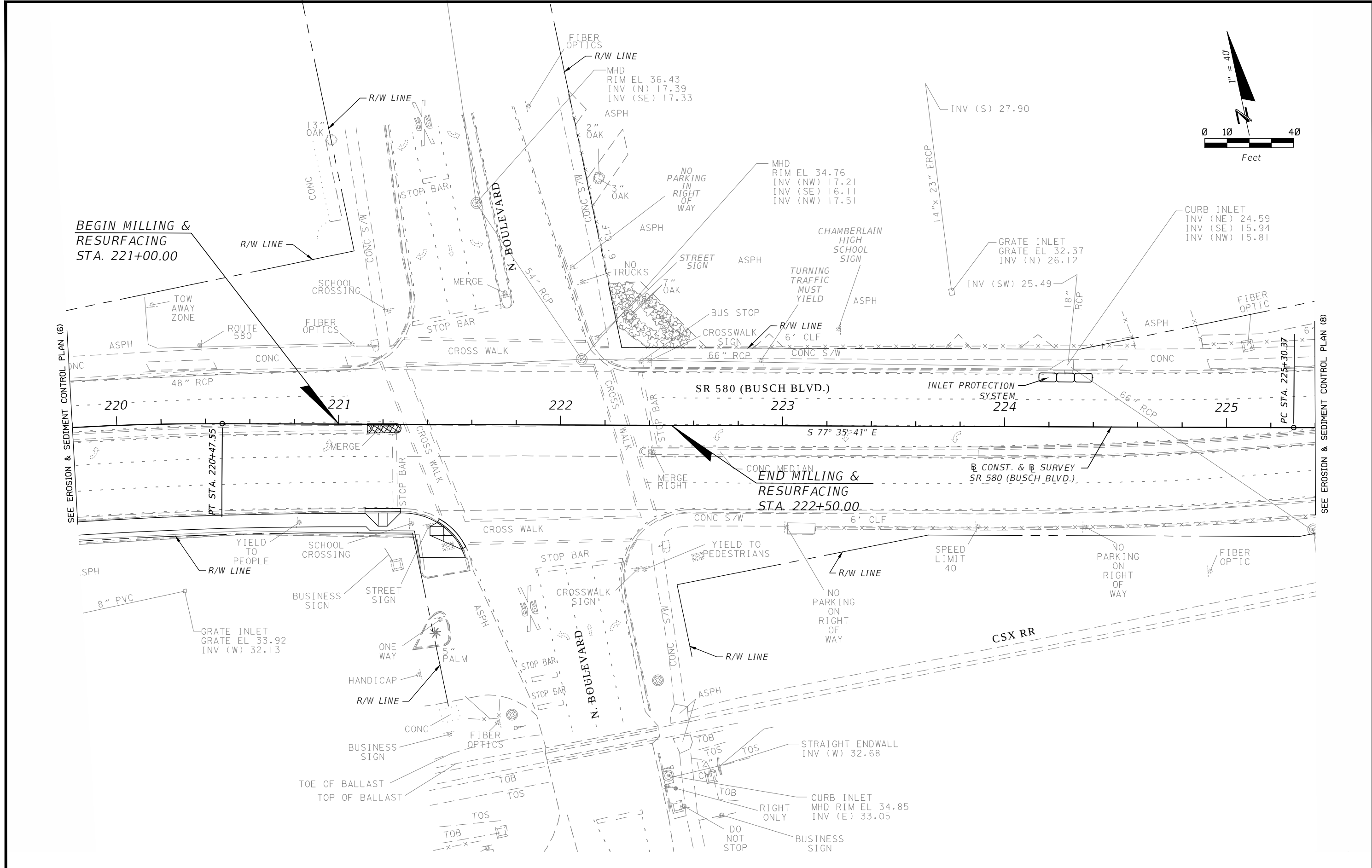
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8889 FAX (813) 963-1610 CERTIFICATE OF AUTHORIZATION NO 8230	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS		W.O.		WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC		EROSION & SEDIMENT CONTROL PLAN (4)	Sh. 39			
1				CKD:	JWK			of 57			
No.	DATE	BY:	REVISIONS	DATE:	4/13						



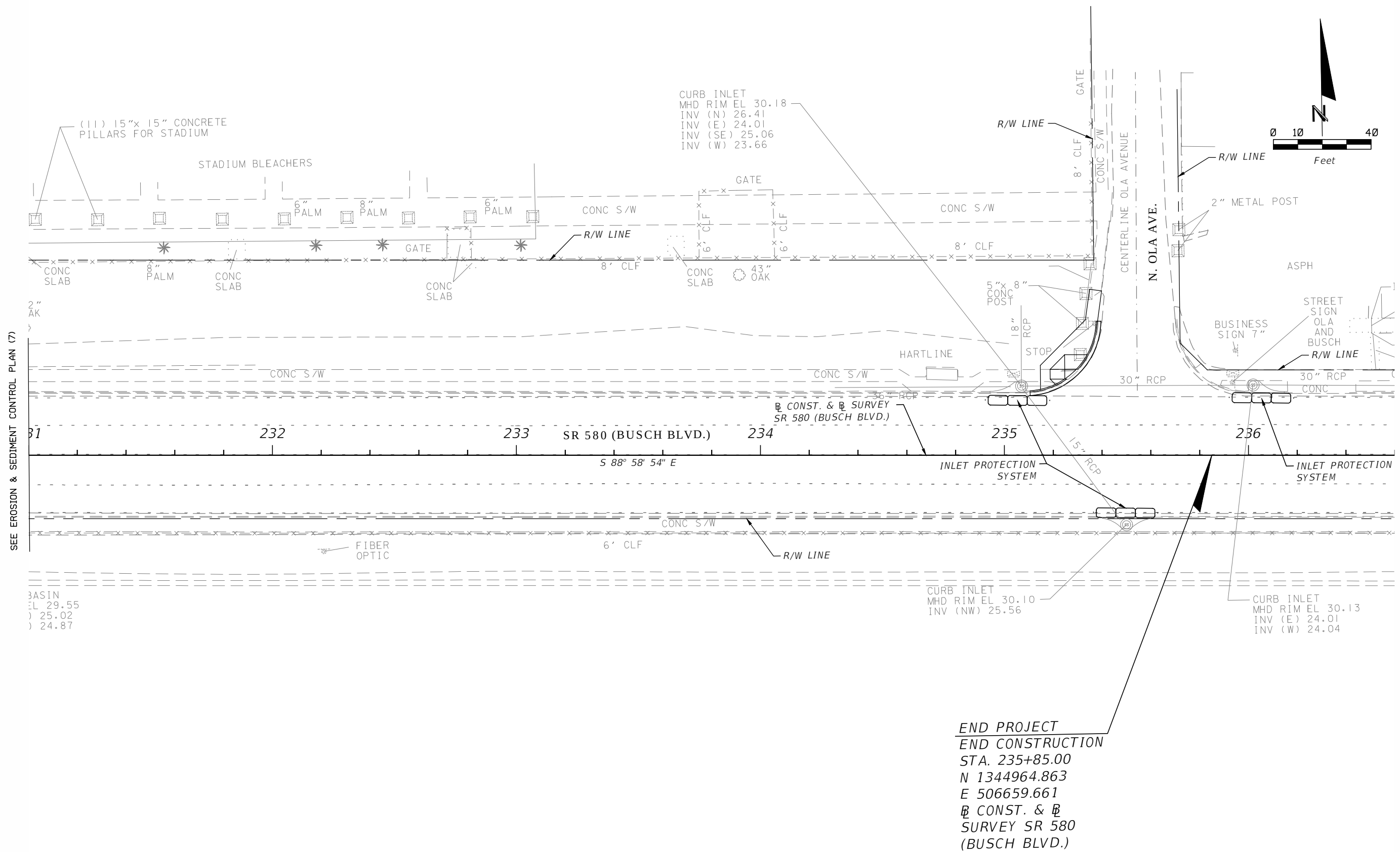
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8889 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				
								EROSION & SEDIMENT CONTROL PLAN (5)	



3				DES:	RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8889 FAX (813) 963-1610 CONSULTANT GROUP INCORPORATED	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 41 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13					



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8899 FAX (813) 963-1610 CERTIFICATE OF AUTHORIZATION NO 8230	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS		W.O.		WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC		EROSION & SEDIMENT CONTROL PLAN (7)		Sh. 42		
1				CKD:	JWK				of 57		
No.	DATE	BY:	REVISIONS	DATE:	4/13						



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 203 TAMPA, FL 33618 TELEPHONE: (813) 962-8889 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS EROSION & SEDIMENT CONTROL PLAN (8)	W.O. Sh. 43 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				

GENERAL NOTES

1. THE REGULATORY SPEED LIMITS FOR THE PROJECT ROADWAYS SHALL BE MAINTAINED UNLESS OTHERWISE INDICATED IN THE PLANS:

ROADWAY	REGULATORY SPEED LIMIT (MPH):
SR 580 (BUSCH BLVD.)	
FROM ARMENIA AVE. TO N. WILLOW AVE.	45 MPH
FROM N. WILLOW AVE. TO FLORIDA AVE.	40 MPH

2. LANE CLOSURE RESTRICTIONS FOR SR 580 (BUSCH BLVD.) HAVE BEEN ESTABLISHED AS FOLLOWS:

OPEN ROADWAY: EASTBOUND - NO LANE CLOSURES BETWEEN THE HOURS OF 7:00 AM AND 10:00 AM OR 2:30 PM AND 7:00 PM.
WESTBOUND - NO LANE CLOSURES BETWEEN THE HOURS OF 7:30 AM AND 10:00 AM OR 2:30 PM AND 7:30 PM

WITHIN 600' OF INTERSECTIONS: EASTBOUND - NO LANE CLOSURES BETWEEN THE HOURS OF 6:30 AM AND 8:30 PM.
WESTBOUND - NO LANE CLOSURES BETWEEN THE HOURS OF 6:30 AM AND 9:00 PM.

3. ALL LANES ON SR 580 (BUSCH BLVD.) 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.

4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 7 DAYS IN ADVANCE OF ANY LANE CLOSURES.

5. THE CONTRACTOR SHALL NOTIFY ALL LOCAL LAW ENFORCEMENT AND EMERGENCY/RESCUE AGENCIES LOCATED IN THE PROJECT VICINITY 24 HOURS IN ADVANCE OF PERFORMING ANY LANE CLOSURES.

6. A DISCUSSION OF LANE CLOSURE OPERATIONS WILL BE MADE PART OF ALL PRECONSTRUCTION CONFERENCES. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A WRITTEN PLAN WHICH DETAILS EACH ACTIVITY INVOLVED IN THE LANE CLOSURE. THE WRITTEN PLAN SHALL INCLUDE BACK-UP PLANS FOR ACTIVITIES CRITICAL TO REOPENING LANES TO TRAFFIC. THE BACK-UP PLAN SHALL INCLUDE THE ACTIVITIES OF ALL SUBCONTRACTOR OPERATIONS AS WELL AS THE PRIME CONTRACTORS. NO LANE CLOSURES WILL BE ALLOWED WITHOUT A PLAN TO ACHIEVE REOPENING. AN EXAMPLE OF AN ACCEPTABLE BACK-UP PLAN WOULD INCLUDE THE CONTRACTOR CHOOSING TO HAVE TEMPORARY TAPE ON HAND. THE CONTRACTOR SHALL NOTIFY THE PUBLIC OF LANE CLOSURES THROUGH MEDIA OUTLETS.

7. TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT OR REMOVE LANE CLOSURES OR CHANNELIZATIONS SHOWN IN THE PLANS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS, AS DIRECTED BY THE ENGINEER, WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES FROM THE TIME OF NOTIFICATION BY THE ENGINEER TO ANY REQUESTS MADE BY THE ENGINEER FOR CORRECTION, IMPROVEMENT OR MODIFICATION OF THE MAINTENANCE OF TRAFFIC AT NO ADDITIONAL COST OR TIME EXTENSION.

8. THE CONTRACTOR SHALL, AT THE DISCRETION OF THE ENGINEER, OPEN ANY TEMPORARY LANE CLOSURE CAUSING EXTENDED TRAFFIC CONGESTION (5 MINUTE DELAY) UNTIL TRAFFIC HAS RETURNED TO AN ACCEPTABLE FLOW AS DETERMINED BY THE ENGINEER.

9. THE CONTRACTOR SHALL NOTIFY ADJACENT PROPERTY OWNERS 48 HOURS IN ADVANCE OF CONSTRUCTION ACTIVITIES WHICH SHALL RESTRICT ACCESS, DELIVERY, ETC, TO PRIVATE OR COMMERCIAL PROPERTIES.

10. ALL PAVEMENT MARKINGS, EXISTING AND TEMPORARY, SHALL BE MAINTAINED DURING CONSTRUCTION UNLESS NOTED OTHERWISE.

11. CONFLICTING EXISTING PAVEMENT MARKINGS SHALL BE REMOVED. ALL EXISTING PAVEMENT MARKINGS WHICH ARE ALTERED SHALL BE REPLACED UPON COMPLETION OF THE PROJECT. ALL COST FOR REMOVAL SHALL BE INCLUDED IN THE BID PRICE FOR MAINTENANCE OF TRAFFIC, LUMP SUM, BID ITEM 102-1. THE REPLACEMENT OF MARKINGS SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM.

12. IN INSTANCES WHERE A MOVING OPERATION WILL BE REQUIRED FOR STRIPING OR RPM PLACEMENT, TRUCK MOUNTED ATTENUATORS WILL BE REQUIRED. COST SHALL BE INCLUDED IN PAY ITEM NO. 102-1, MAINTENANCE OF TRAFFIC, LUMP SUM.

13. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN TRAFFIC, INCLUDING BUS STOPS, AT ALL TIMES DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT A SAFE AND UNOBSTRUCTED ROUTE EXISTS FOR PEDESTRIANS. REFER TO DESIGN STANDARDS INDEX NO. 660.

14. FOR DROP-OFFS IN WORK ZONES THE CONTRACTOR IS DIRECTED TO THE REQUIREMENTS OF DESIGN STANDARDS INDEX NO. 600. ALL TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORK DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE.

15. THE CONTRACTOR IS ALERTED THAT PRE-MIXED, PRE-APPROVED STABILIZATION MAY BE NEEDED TO MEET THE DROP-OFF CRITERIA.

16. WHENEVER CONSTRUCTION EQUIPMENT IS BEING DRIVEN OR TRANSPORTED ON THE OPEN TRAVEL LANES, THE CONTRACTOR SHALL UTILIZE DESIGN STANDARDS INDEX NO. 619.

17. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE FOR ALL PHASES OF CONSTRUCTION. ALL COSTS SHALL BE INCLUDED IN PAY ITEM NO. 102-1 MAINTENANCE OF TRAFFIC, LUMP SUM. EROSION CONTROL ITEMS SHALL BE PAID PER THE APPROPRIATE PAY ITEM.

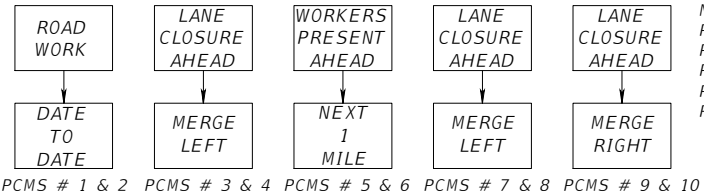
18. THE CONTRACTOR SHALL MAINTAIN STREET NAME SIGNS VISIBLE DURING CONSTRUCTION OPERATIONS IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC. COST FOR THIS WORK WILL BE INCLUDED UNDER MAINTENANCE OF TRAFFIC, LUMP SUM.

19. ALL PAVEMENT MARKING, DELINEATORS, RPMs AND SIGNS SHALL BE PLACED IN THEIR PROPER MOT PHASE CONFIGURATION DURING CONSTRUCTION. UPON FINAL COMPLETION OF THE PROJECT ALL PAVEMENT MARKINGS, DELINEATORS, RPMs AND SIGNS SHALL BE PLACED IN THEIR FINAL CONFIGURATION IN ACCORDANCE WITH THE SIGNING AND PAVEMENT MARKING PLANS. UNLESS OTHERWISE SPECIFIED, PAYMENT SHALL BE INCLUDED IN THE LUMP SUM MOT ITEM.

20. DURING PERIODS OF LANE CLOSURES THE CONTRACTOR SHALL PROVIDE A DEDICATED CREW FOR THE INSTALLATION, MAINTENANCE AND REMOVAL OF THE TRAFFIC CONTROL DEVICES (i.e. BARRICADES, SIGNS, ARROW BOARDS, ETC.). THE CREW SHALL CONSIST OF AT LEAST THREE MEMBERS OF THE CONTRACTOR'S WORK FORCE WHOSE SOLE RESPONSIBILITY WILL BE THE MAINTENANCE OF TRAFFIC CONTROL. THE CONTRACTOR SHALL FURNISH A WORK VEHICLE TO AID IN MAINTAINING THE CONTROL DEVICES.

21. FOR LANE CLOSURES, THE CONTRACTOR SHALL UTILIZE DESIGN STANDARDS INDEX NOS. 613, AND 615.

22. THE CONTRACTOR SHALL MAINTAIN THE SAME NUMBER OF LANES EXISTING (PRIOR TO CONSTRUCTION) ON ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT.THE ONLY EXCEPTIONS ARE AS SHOWN OR NOTED ON THE PLAN SHEETS.



NOTE:
PCMS # 1 & 2 TO BE USED 14 DAYS PRIOR TO BEGINNING OF CONSTRUCTION.
PCMS # 3 & 4 TO BE USED DURING PHASE I AND II LANE CLOSURES.
PCMS # 5 & 6 TO BE USED DURING PHASE I AND II WITHOUT LANE CLOSURES.
PCMSH 7, 8, 9, & 10 TO BE USED DURING PHASE III MILLING OPERATION,
RESURFACING, TEMPORARY SIGNAL ADJUSTMENTS, FRICTION COURSE PLACEMENT.

3				DES:	RBC	ICON10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 44 of 57 WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC			
1				CKD:	JWK			
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	TRAFFIC CONTROL PLAN GENERAL NOTES	

INTENT OF SEQUENCE OF CONSTRUCTION

PHASE I

- 1. MAINTAIN TRAFFIC ALONG EXISTING FACILITY. ERECT ADVANCE CONSTRUCTION IDENTIFICATION SIGNS, WARNING DEVICES AND WARNING LIGHTS PER PHASE I TRAFFIC CONTROL TYPICAL SECTION (CONFORM TO FDOT DESIGN STANDARDS INDEX NO. 600).
- 2. INSTALL TEMPORARY EROSION CONTROL DEVICES.
- 3. CONSTRUCT EASTBOUND SIDEWALK AND SOUTHERN SIGNAL POLES PER PHASE I TRAFFIC CONTROL TYPICAL SECTION. (TO BE CONSTRUCTED DURING OFF PEAK HOURS UTILIZING LANE CLOSURES AND FDOT DESIGN STANDARDS INDEX 612 ,613, 615 & 616.)

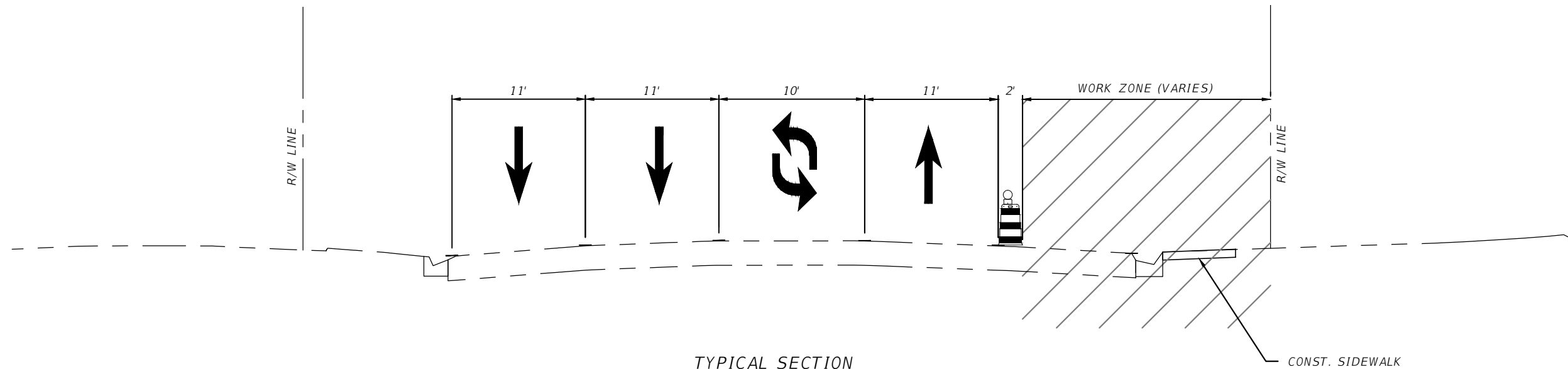
PHASE II

- 1. MAINTAIN TRAFFIC ALONG EXISTING FACILITY. ERECT ADVANCE CONSTRUCTION IDENTIFICATION SIGNS, WARNING DEVICES AND WARNING LIGHTS PER PHASE II TRAFFIC CONTROL TYPICAL SECTION (CONFORM TO FDOT DESIGN STANDARDS INDEX NO. 600).
- 2. INSTALL TEMPORARY EROSION CONTROL DEVICES.
- 3. CONSTRUCT WESTBOUND SIDEWALK AND NORTHERN SIGNAL POLES PER PHASE II TRAFFIC CONTROL TYPICAL SECTION.(TO BE CONSTRUCTED DURING OFF PEAK HOURS UTILIZING LANE CLOSURES AND FDOT DESIGN STANDARDS INDEX 612, 613, 615 & 616.)

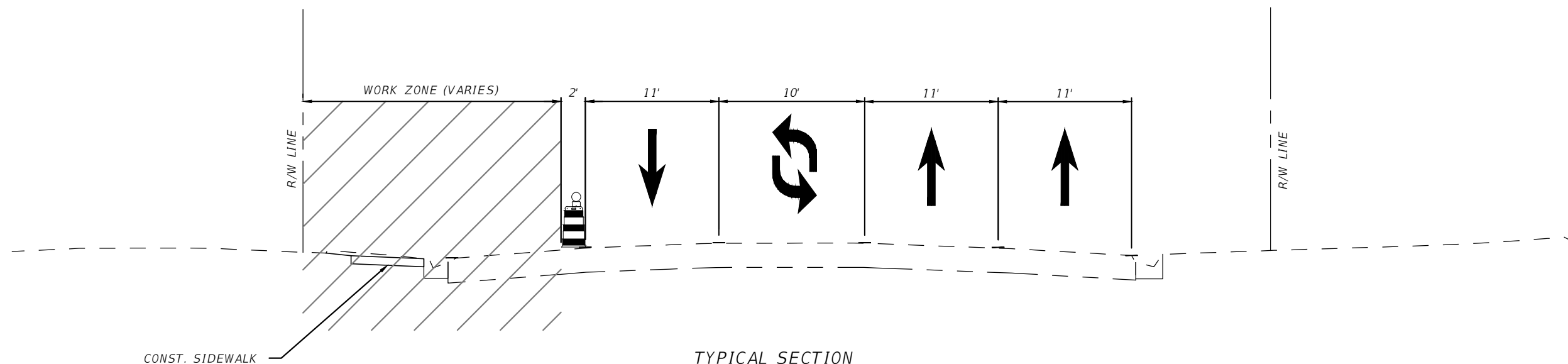
PHASE III

- 1. MILL AND RESURFACE EASTBOUND AND WESTBOUND ASPHALT PAVEMENT OF SR 580 (BUSCH BLVD.) (TO BE CONSTRUCTED DURING OFF-PEAK HOURS UTILIZING FDOT DESIGN STANDARDS INDEX 613, 615 & 616 DURING LANE CLOSURES).
- 2. PLACE FRICTION COURSE. APPLY TEMPORARY PAVEMENT MARKINGS AND PERMANENT RPM'S PER SIGNING AND PAVEMENT MARKING PLANS
- 3. FINALIZE ALL SIGNING AND SIGNALIZATION.
- 4. PLACE FINAL PAVEMENT MARKINGS, PER SIGNING AND PAVEMENT MARKING PLANS, A MINIMUM OF 30 DAYS AFTER THE PAINT HAS BEEN APPLIED (TO BE CONSTRUCTED DURING OFF-PEAK HOURS UTILIZING LANE CLOSURES AND FDOT DESIGN STANDARDS INDEX 613, 615 & 616)

3				DES:	RBC	10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 963-8889 FAX (813) 963-1610 ICON CONSULTANT GROUP INCORPORATED	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.		WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK			Sh.	45	
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230		of	57	

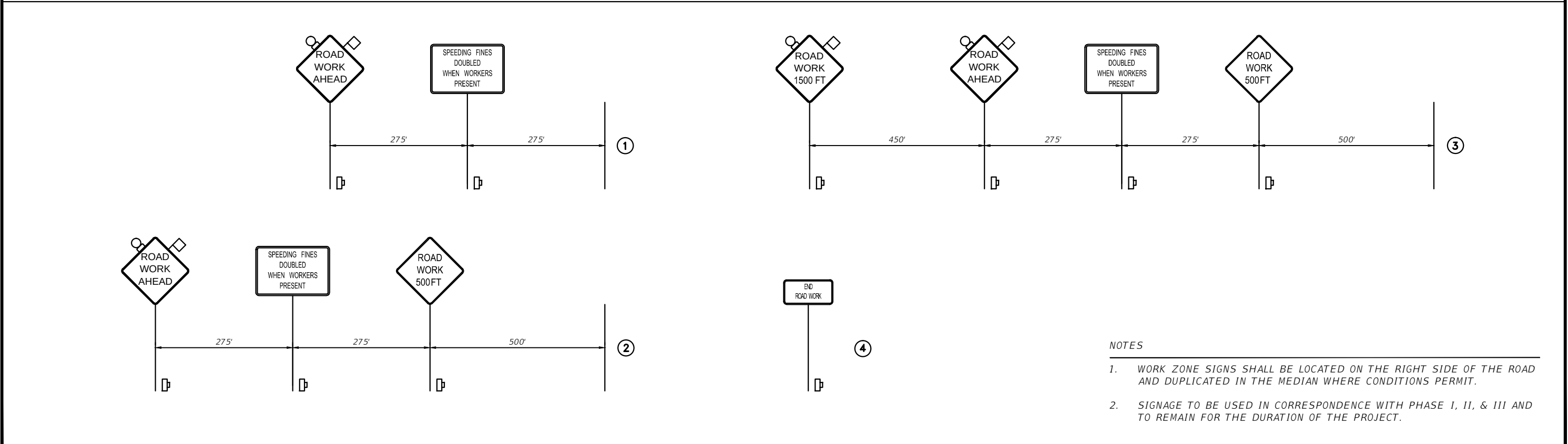
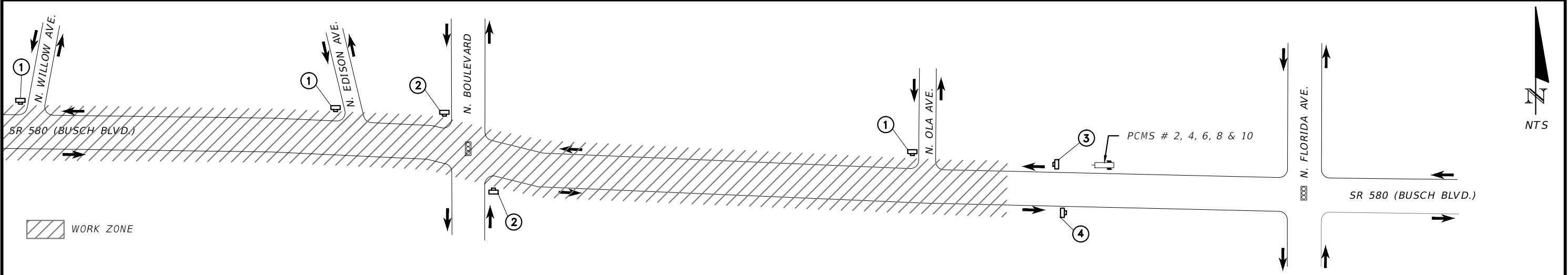
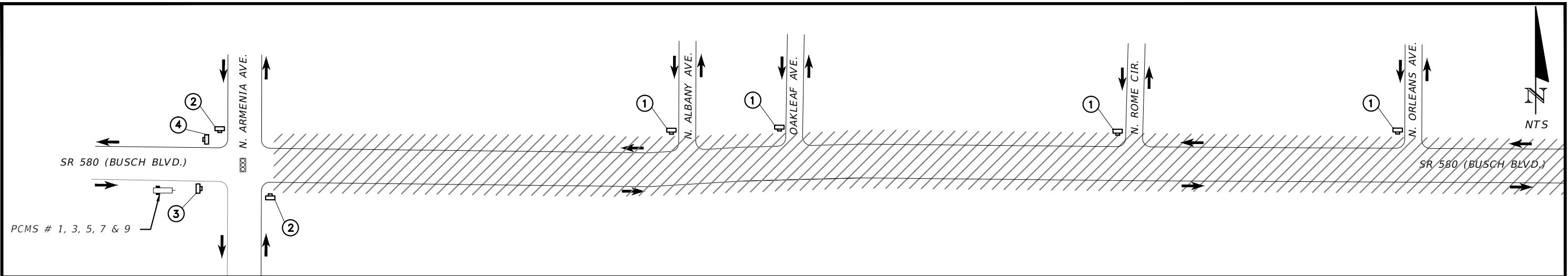


**TYPICAL SECTION
PHASE I**
 STA. 170+34.00 TO STA. 173+43.98
 STA. 188+10.00 TO STA. 193+89.98
 STA. 215+16.22 TO STA. 221+57.32
 @ CONST. & @ SURVEY SR 580 (BUSCH BLVD.)
 N.T.S.



**TYPICAL SECTION
PHASE II**
 STA. 182+08.19 TO STA. 184+90.39
 STA. 235+10.61 TO STA. 235+39.58
 @ CONST. & @ SURVEY SR 580 (BUSCH BLVD.)
 N.T.S.

3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 202 TAMPA, FL 33618 TELEPHONE (813) 963-8889 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 46 or 57 WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				



3				DES: RBC	10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 ICON CONSULTANT GROUP INCORPORATED	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC		TRAFFIC CONTROL PLAN ADVANCE SIGNAGE DETAILS	Sh. 47 Of 57	
1				CKD: JWK				
No.	DATE	BY:	REVISIONS	DATE: 4/13				
CERTIFICATE OF AUTHORIZATION NO 8230								

1.

THE LOCATION(S) 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. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.

2.

EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED .

3.

CONTRACTOR'S ATTENTION IS DIRECTED TO THE EXISTING OVERHEAD UTILITIES WHICH MAY INTERFERE WITH NORMAL CONSTRUCTION PRACTICES AT LOCATIONS ON THIS PROJECT.

4.

THE TYPE OF EQUIPMENT USED WHEN WORKING UNDER OVERHEAD FACILITIES SHALL MEET THE FOLLOWING REQUIREMENTS:

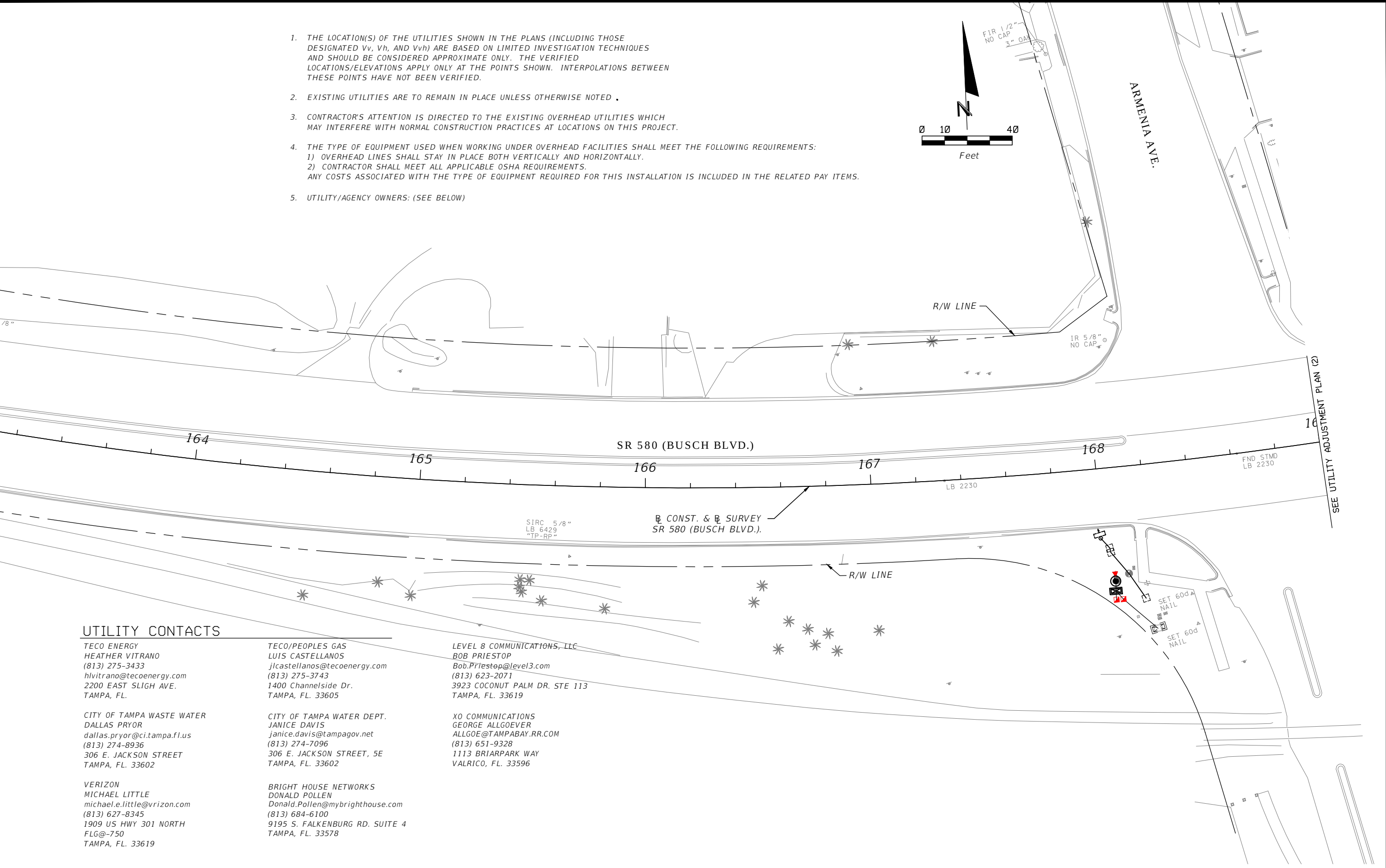
1) OVERHEAD LINES SHALL STAY IN PLACE BOTH VERTICALLY AND HORIZONTALLY.

2) CONTRACTOR SHALL MEET ALL APPLICABLE OSHA REQUIREMENTS.

ANY COSTS ASSOCIATED WITH THE TYPE OF EQUIPMENT REQUIRED FOR THIS INSTALLATION IS INCLUDED IN THE RELATED PAY ITEMS.

5.

UTILITY/AGENCY OWNERS: (SEE BELOW)



UTILITY CONTACTS

TECO ENERGY
HEATHER VITRANO
(813) 275-3433
hlvitrano@tecoenergy.com
2200 EAST SLIGH AVE.
TAMPA, FL.

CITY OF TAMPA WASTE WATER
DALLAS PRYOR
dallas.pryor@ci.tampa.fl.us
(813) 274-8936
306 E. JACKSON STREET
TAMPA, FL. 33602

VERIZON
MICHAEL LITTLE
michael.e.little@vrizon.com
(813) 627-8345
1909 US HWY 301 NORTH
FLG@-750
TAMPA, FL. 33619

TECO/PEOPLES GAS
LUIS CASTELLANOS
jlcastellanos@tecoenergy.com
(813) 275-3743
1400 Channelside Dr.
TAMPA, FL. 33605

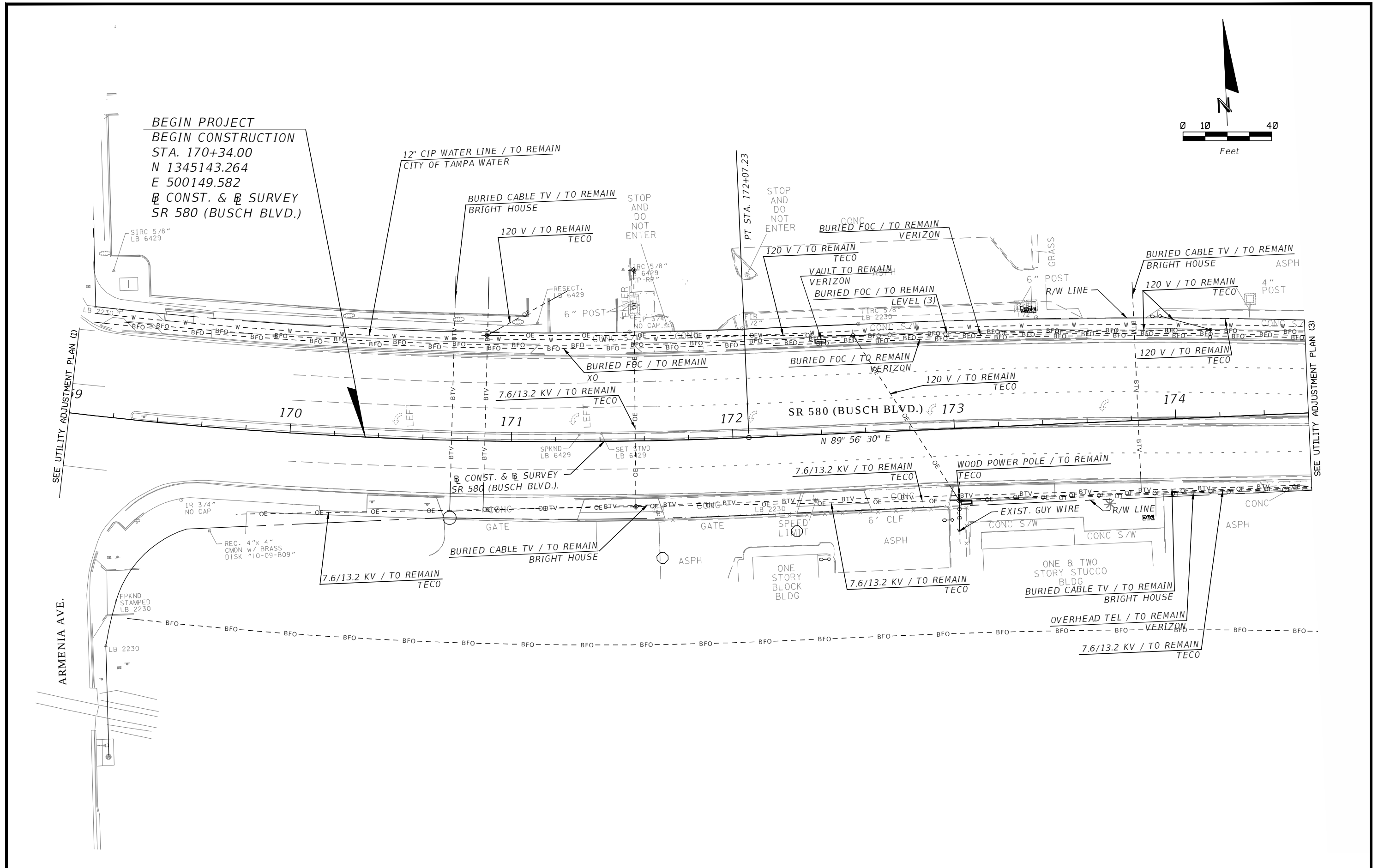
CITY OF TAMPA WATER DEPT.
JANICE DAVIS
janice.davis@tampagov.net
(813) 274-7096
306 E. JACKSON STREET, 5E
TAMPA, FL. 33602

BRIGHT HOUSE NETWORKS
DONALD POLLEN
Donald.Pollen@mybrighthouse.com
(813) 684-6100
9195 S. FALKENBURG RD. SUITE 4
TAMPA, FL. 33578

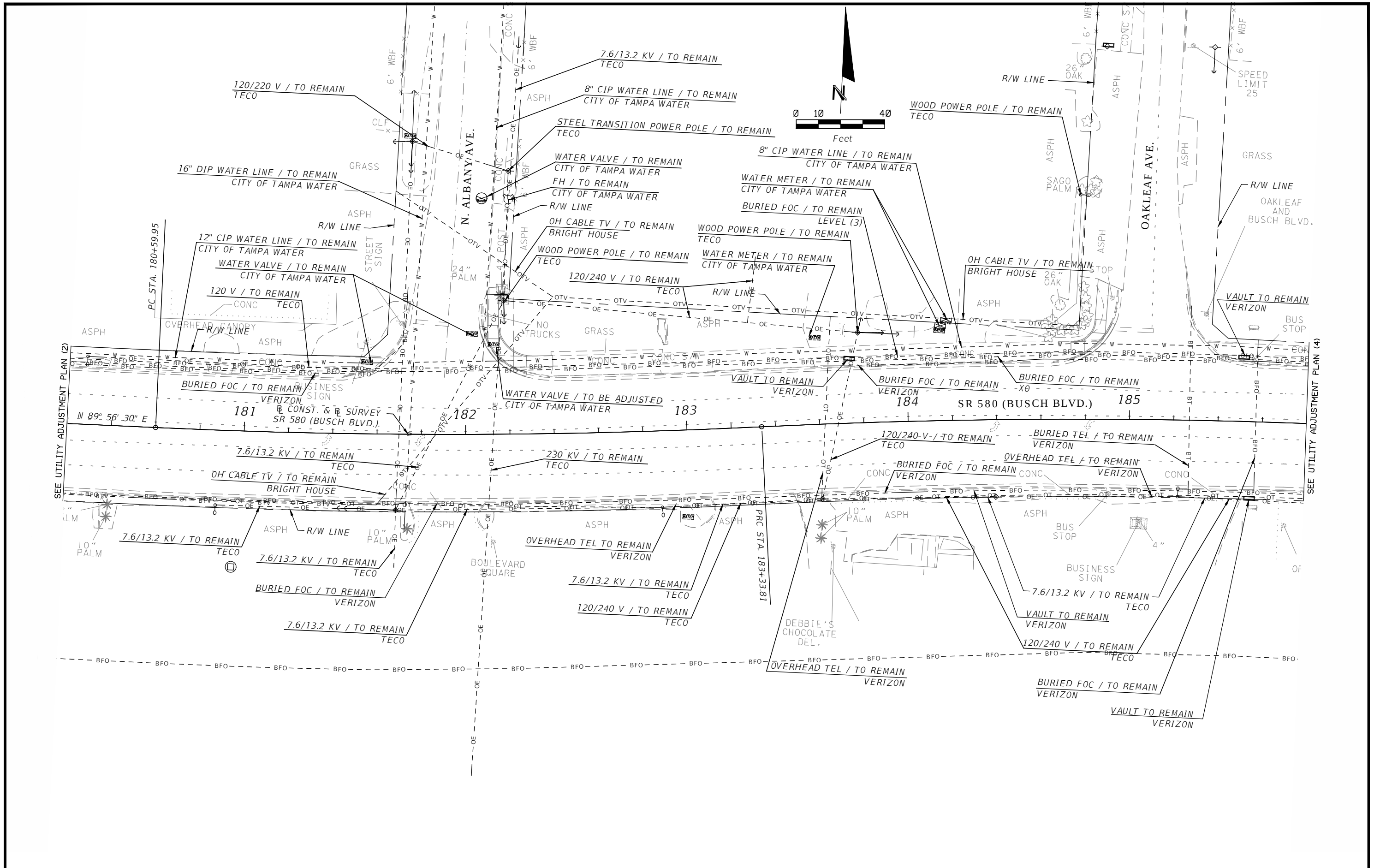
LEVEL 8 COMMUNICATIONS, LLC
BOB PRIESTOP
Bob.Priestop@level3.com
(813) 623-2071
3923 COCONUT PALM DR. STE 113
TAMPA, FL. 33619

XO COMMUNICATIONS
GEORGE ALLGOEVER
ALLGOE@TAMPABAY.RR.COM
(813) 651-9328
1113 BRIARPARK WAY
VALRICO, FL. 33596

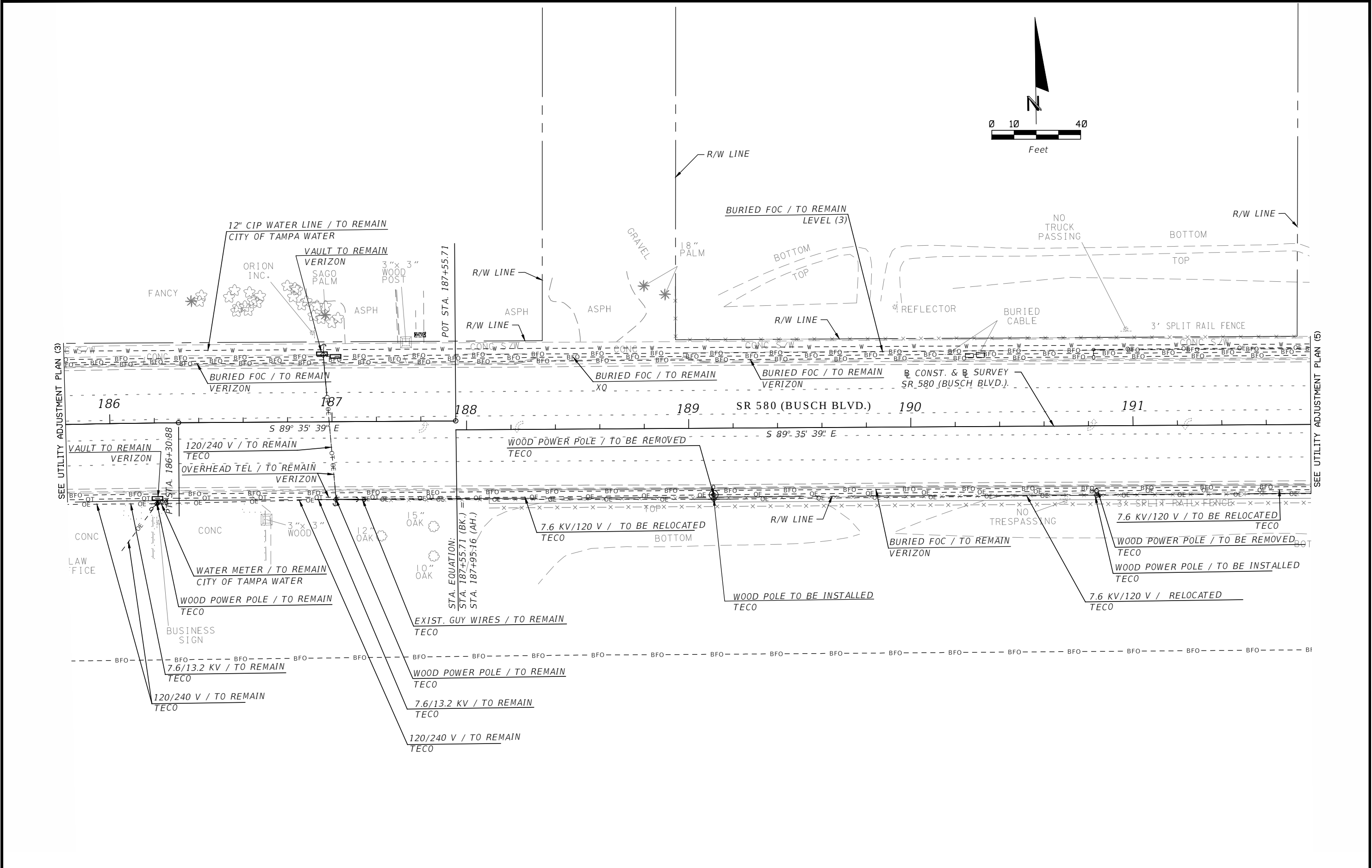
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL. 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 48 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	UTILITY ADJUSTMENT PLAN (1)			



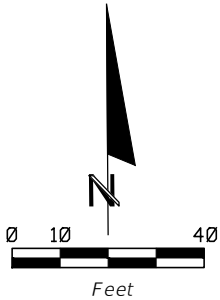
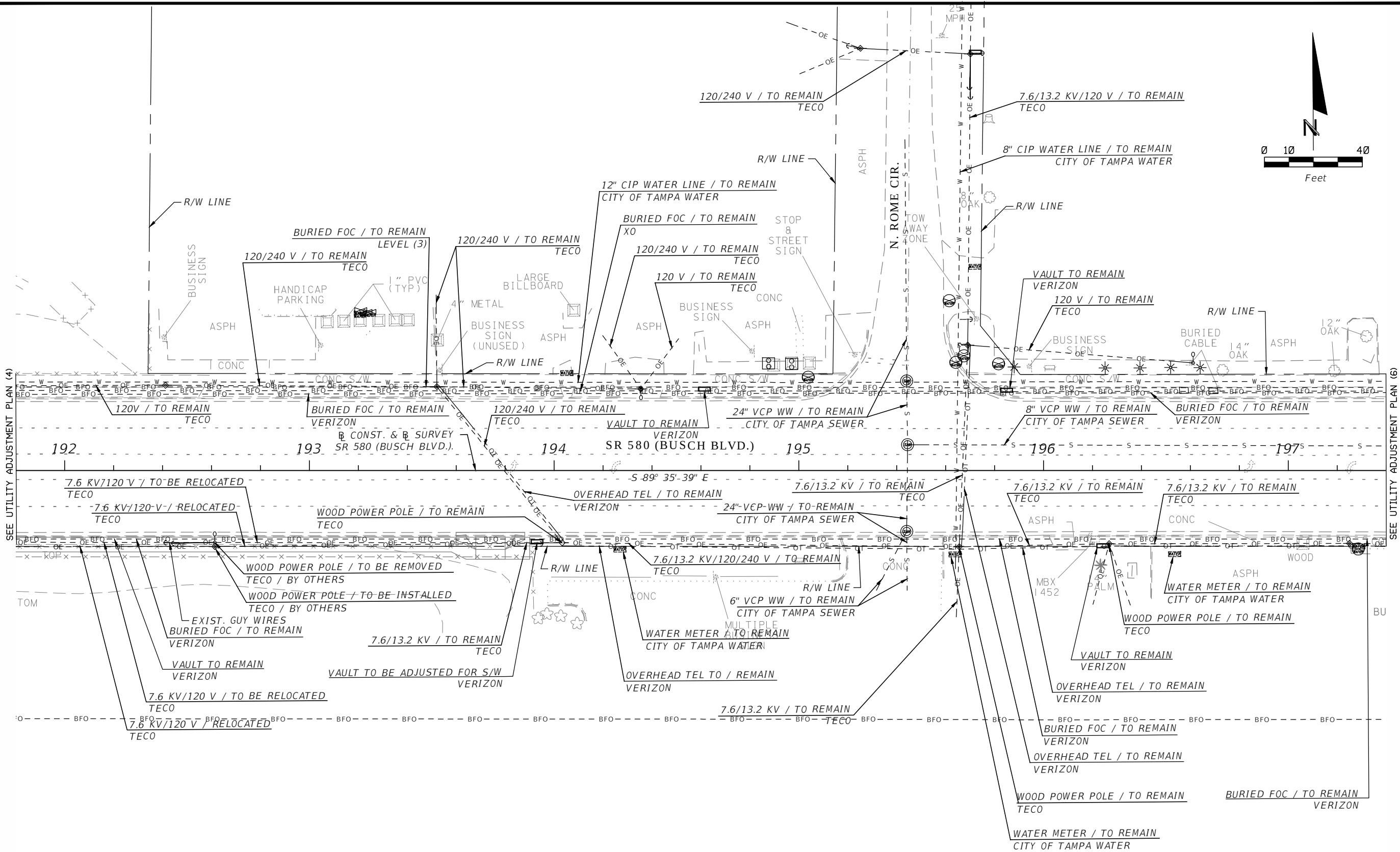
3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 49 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC					
1				CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13					
CERTIFICATE OF AUTHORIZATION NO 8230					UTILITY ADJUSTMENT PLAN (2)				



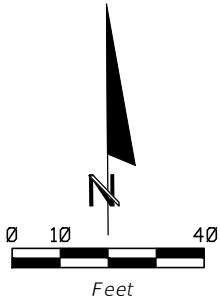
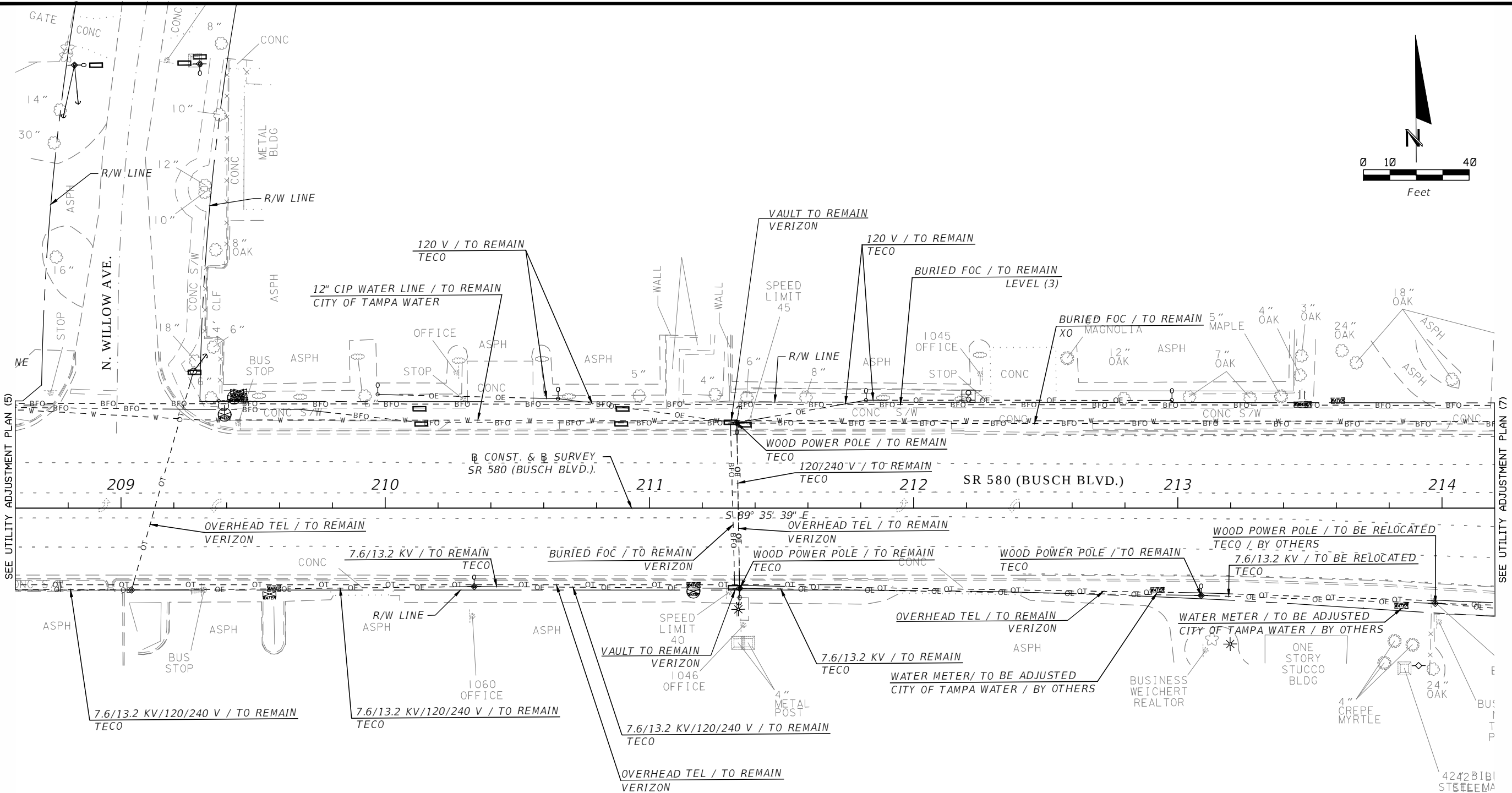
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.			
2				DRN:	RBC						
1				CKD:	JWK						
No.	DATE	BY:	REVISIONS	DATE:	4/13						
CERTIFICATE OF AUTHORIZATION NO 8230						UTILITY ADJUSTMENT PLAN (3)				Sh. 50	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
										Of 57	
Rick Callison 12/13/2013 9:54:45 AM F:\Projects\41340723801\AutoCAD Civil 3D Project\41340723801\roadway\UTADRD01.dwg											



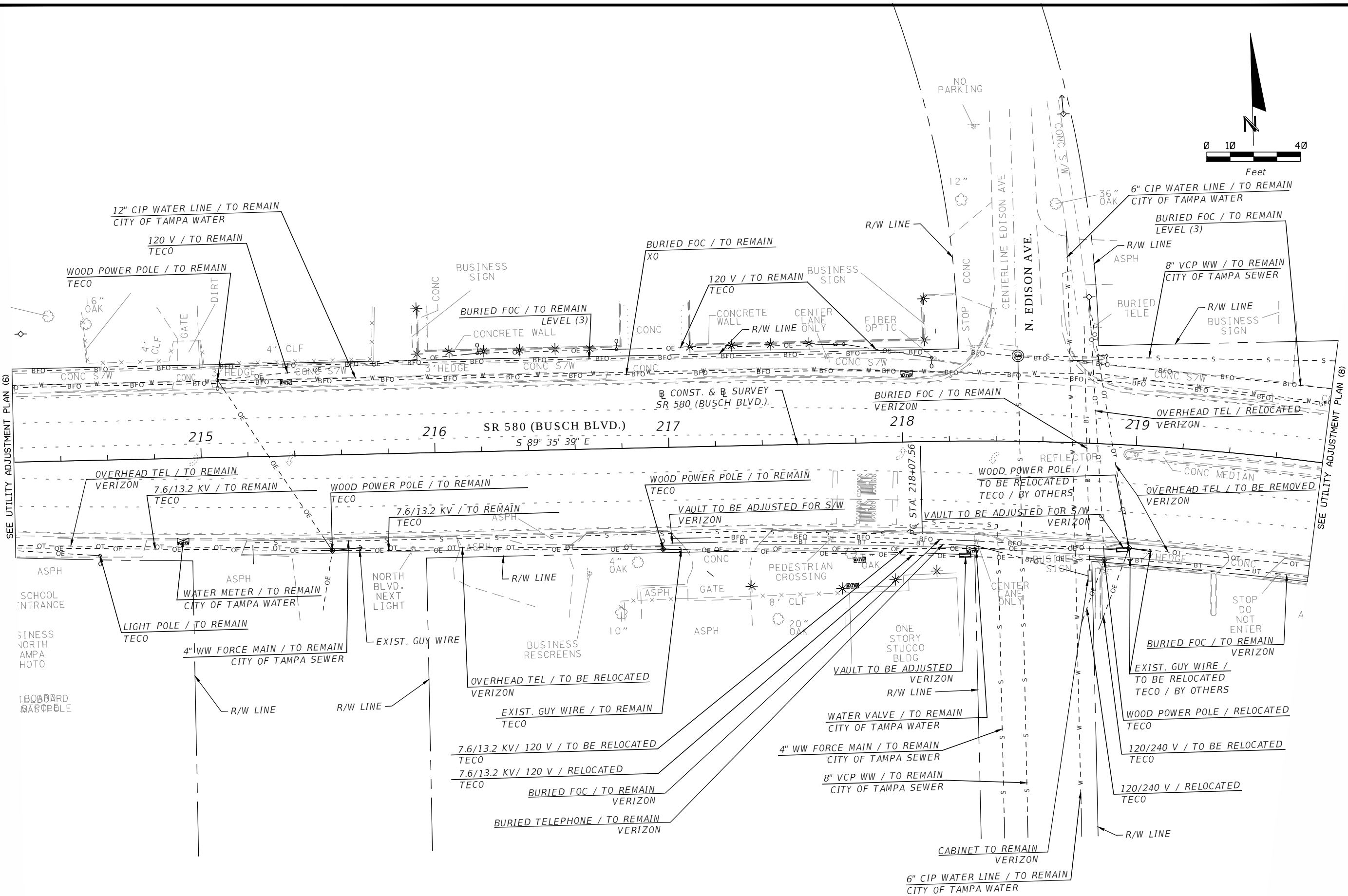
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC		UTILITY ADJUSTMENT PLAN (4)	Sh. 51	
1				CKD:	JWK			of 57	
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230			



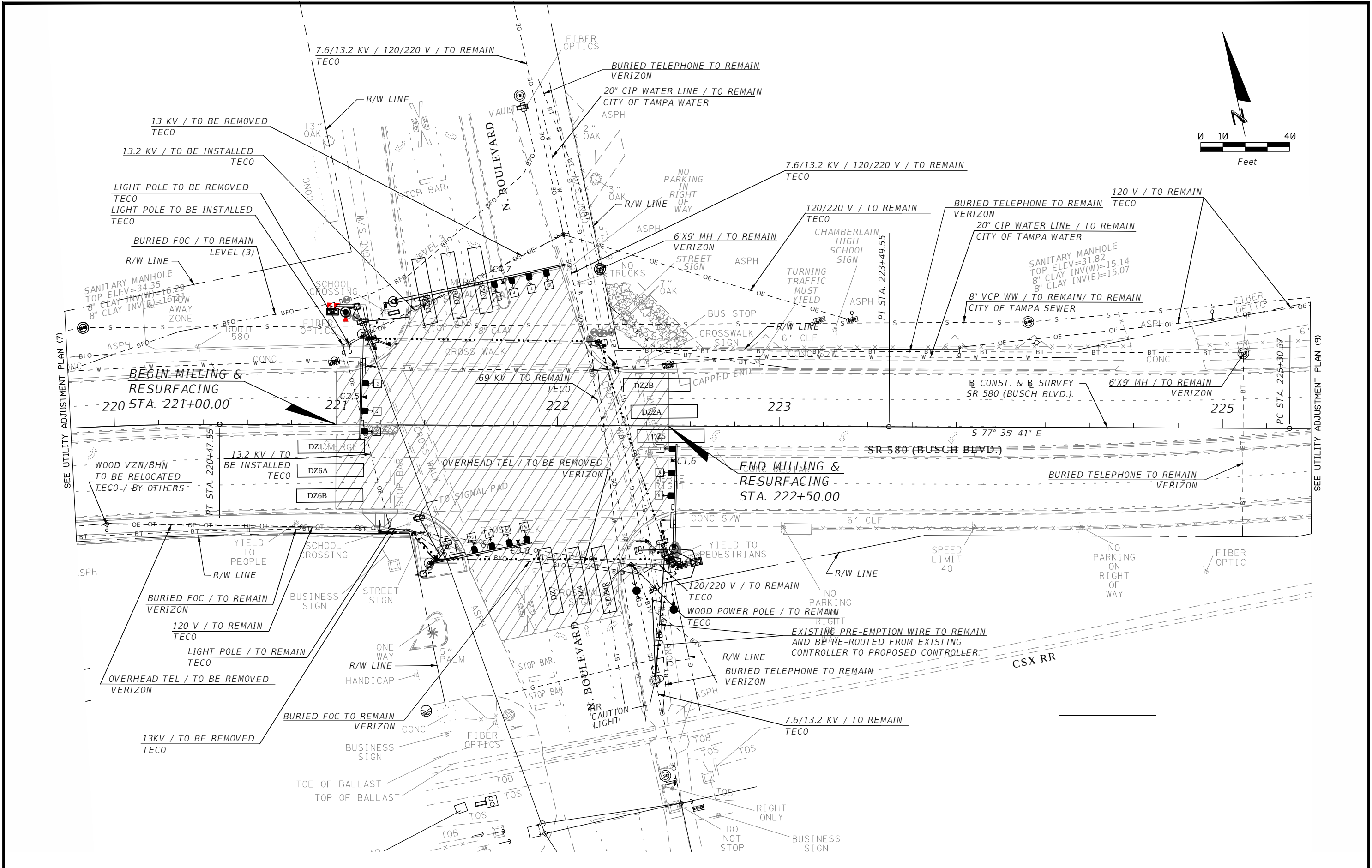
3				DES: RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33613 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 52 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN: RBC					
1				CKD: JWK					
No.	DATE	BY:	REVISIONS	DATE: 4/13	CERTIFICATE OF AUTHORIZATION NO 8230	UTILITY ADJUSTMENT PLAN (5)			



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	Sh. 53 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC					
1				CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13					



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33613 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610 CERTIFICATE OF AUTHORIZATION NO 8230	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS UTILITY ADJUSTMENT PLAN (7)	W.O. Sh. 54 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				

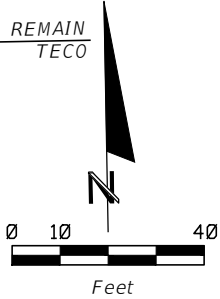


3			DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10005 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33613 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610 CERTIFICATE OF AUTHORIZATION NO 8230	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	WILLIAM CLIFFORD COGAN, P.E. NO. 66438
2			DRN:	RBC		UTILITY ADJUSTMENT PLAN (8)	Sh. 55	
1			CKD:	JWK			Of 57	
No.	DATE	BY:	REVISIONS	DATE:	4/13			

Rick Callison

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3			DES:	RBC		BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.		
2			DRN:	RBC					
1			CKD:	JWK					
No.	DATE	BY:	REVISIONS	DATE:	4/13	CERTIFICATE OF AUTHORIZATION NO 8230	UTILITY ADJUSTMENT PLAN (9)	Sh. 56 of 57	WILLIAM CLIFFORD COGAN, P.E. NO. 66438

TEST HOLE	NORTHING	EASTING	SURFACE ELEV	MEASURE DOWN	TOP OF UTILITY	UTILITY DESCRIPTION	UTILITY OWNER	FIELD DATE
VVH101	1345128.29	499912.57	46.96'	10.0'	36.96'	BOTTOM OF EXCAVATION	N/A	2/15/13
VVH102	1345129.71	499918.53	46.85'	2.81'	44.04'	2" PVC TRAFFIC (x4)	CITY OF TAMPA	2/15/13
VVH103	1345027.28	505199.44	35.40'	9.19'	26.21'	TRAFFIC (SIZE/MATERIAL NFV)	CITY OF TAMPA	2/15/13
EDO104	1345013.52	505299.28	34.99'	8.0'	26.99'	ELECTRONIC DEPTH ONLY - TELEPHONE	VERIZON	2/15/13
VVH105	1345011.85	505304.25	35.47'	2.91'	32.56'	2" PVC TRAFFIC (GREY)	CITY OF TAMPA	2/15/13
VVH106	1345013.42	505309.91	35.56'	10.0'	25.56'	BOTTOM OF EXCAVATION	N/A	2/15/13
VVH107	1345011.47	505310.71	35.63'	1.29'	34.34'	2" PVC TRAFFIC (GREY)	CITY OF TAMPA	2/15/13
VVH108	1345009.94	505310.22	35.66'	1.55'	34.11'	2" PVC TRAFFIC (GREY)	CITY OF TAMPA	2/15/13
VVH109	1345008.12	505308.78	35.82'	1.49'	34.33'	2" PVC TRAFFIC (GREY)	CITY OF TAMPA	2/15/13
VVH110	1345004.66	505314.24	35.64'	1.14'	34.50'	1.5" PVC ELECTRIC (GREY)	TECO	2/15/13
VVH111	1345112.32	505291.76	35.83'	5.66'	30.17'	18" CAST IRON WATER	CITY OF TAMPA	2/25/13
VVH112	1345114.29	505296.93	35.92'	5.80'	30.12'	2" STEEL GAS	TECO	2/25/13
VVH113	1345115.10	505294.48	36.09'	10.0'	26.09'	BOTTOM OF EXCAVATION	N/A	2/25/13
VVH114	1345113.62	505298.70	35.79'	10.0'	25.79'	BOTTOM OF EXCAVATION	N/A	2/25/13
EDO115	1345113.50	505302.06	35.74'	7.0'	28.74'	ELECTRONIC DEPTH ONLY - TELEPHONE	VERIZON	2/25/13
VVH116	1345152.89	505188.40	36.35'	5.08'	31.27'	10" POLY FIBER OPTIC (BLACK)	XO,FPL,L3	2/25/13
VVH117	1345145.91	505187.43	36.36'	10.0'	26.36'	BOTTOM OF EXCAVATION	N/A	2/25/13
VVH118	1345144.23	505190.62	36.41'	2.08'	34.33'	2" PVC TRAFFIC (GREY)	CITY OF TAMPA	2/25/13

Rick Callison

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CITY OF TAMPA

SIGNING AND PAVEMENT MARKING PLANS

BUSCH BOULEVARD PEDESTRIAN AND SIGNALIZATION IMPROVEMENTS

LAP FINACIAL PROJECT ID: 413407-2-58-01
FEDERAL AID PROJECT NO.: SFTI 267R
(FEDERAL FUNDS)

BUSCH BLVD (SR 580) FROM ARMENIA AVE. TO FLORIDA AVE.

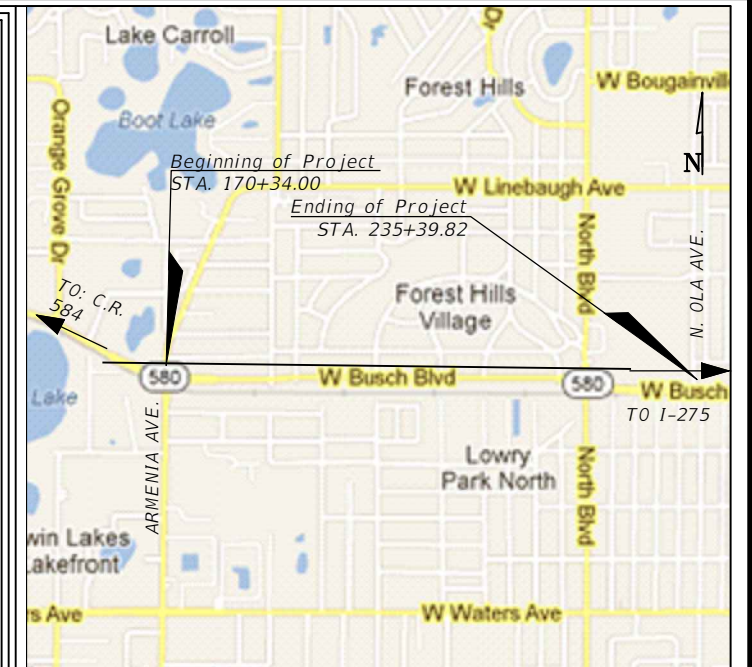
TRANSPORTATION DIVISION CITY OF TAMPA, FLORIDA

TRANSPORTATION DIVISION PROJECT NO: 0000029

PLANS PREPARED BY:

ICON
CONSULTANT GROUP
INCORPORATED

10006 N. DALE MABRY HIGHWAY
SUITE 201
TAMPA, FLORIDA 33618
(813) 962-8689
CERTIFICATE OF AUTHORIZATION NO. 8230



VICINITY MAP
SCALE: None

INDEX OF DRAWINGS

SHEET NO.	SHEET DESCRIPTION
S-1	KEY SHEET
S-2	TABULATION OF QUANTITIES
S-3	GENERAL NOTES
S-4 THRU S-17	SIGNING AND PAVEMENT MARKING PLANS
S-18	GUIDE SIGN WORKSHEET
S-19	SINGLE COLUMN CANTILEVER GROUND SIGN DETAILS

STANDARD DRAWINGS & INDICES

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH, AND GOVERNED BY, THE CITY OF TAMPA STANDARD DRAWINGS AND WHERE APPLICABLE, FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS DATED JANUARY, 2014 AND DIVISION II AND III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2014, 2007 FLORIDA GREEN BOOK, MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, AS AMENDED BY CONTRACT DOCUMENTS.

**FINAL PLANS
FEBRUARY, 2014**

APPROVED BY:

MILTON MARTINEZ, P.E. #54056
PROJECT MANAGER
CITY OF TAMPA TRANSPORTATION DIVISION

CERTIFICATION

Sheet ~~501~~ Inclusive, Certified By:

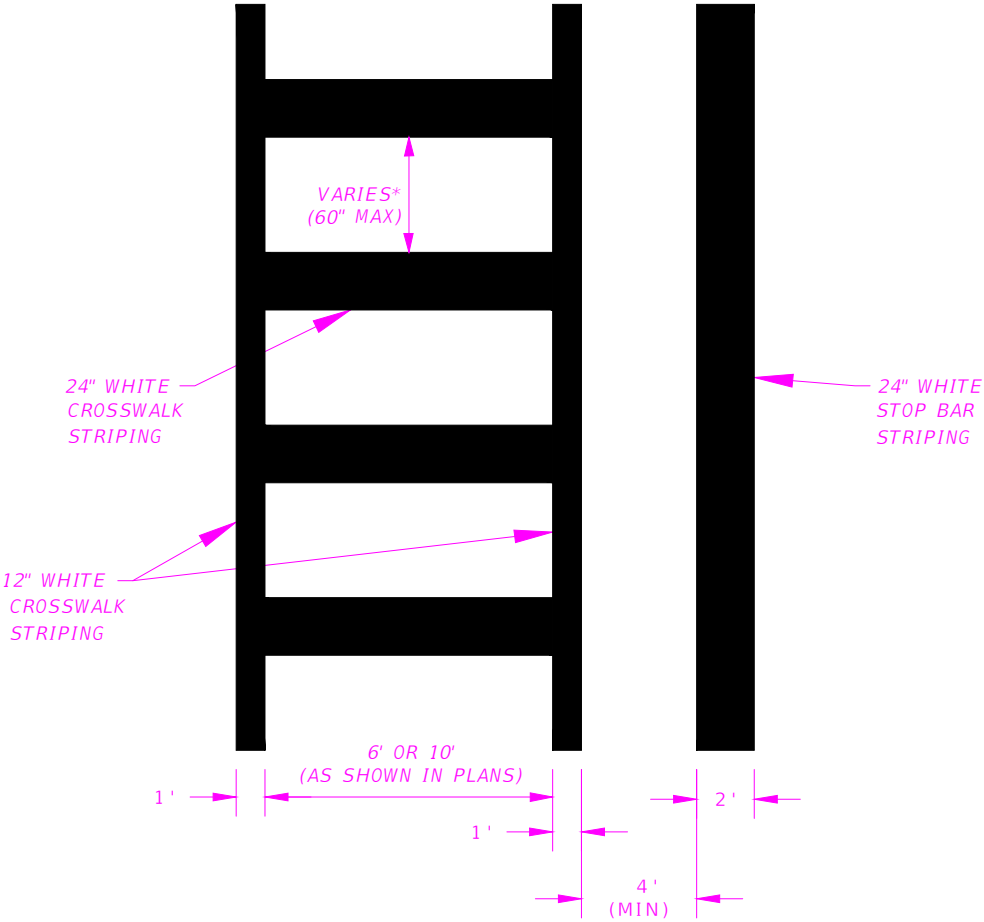
MICHELLE H. SCHOFNER, P.E. #51977
PROJECT MANAGER
ICON CONSULTANT GROUP INC.

[illegible]

3			DES: RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 CONSULTANT GROUP INCORPORATED	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2		DRN: RBC				Sh. S-2	
1		CKD: RDM				of S-19	
No.	DATE	BY:	REVISIONS	DATE: 04/13	CERTIFICATE OF AUTHORIZATION NO 8230		

SIGNING AND PAVEMENT MARKING GENERAL NOTES:

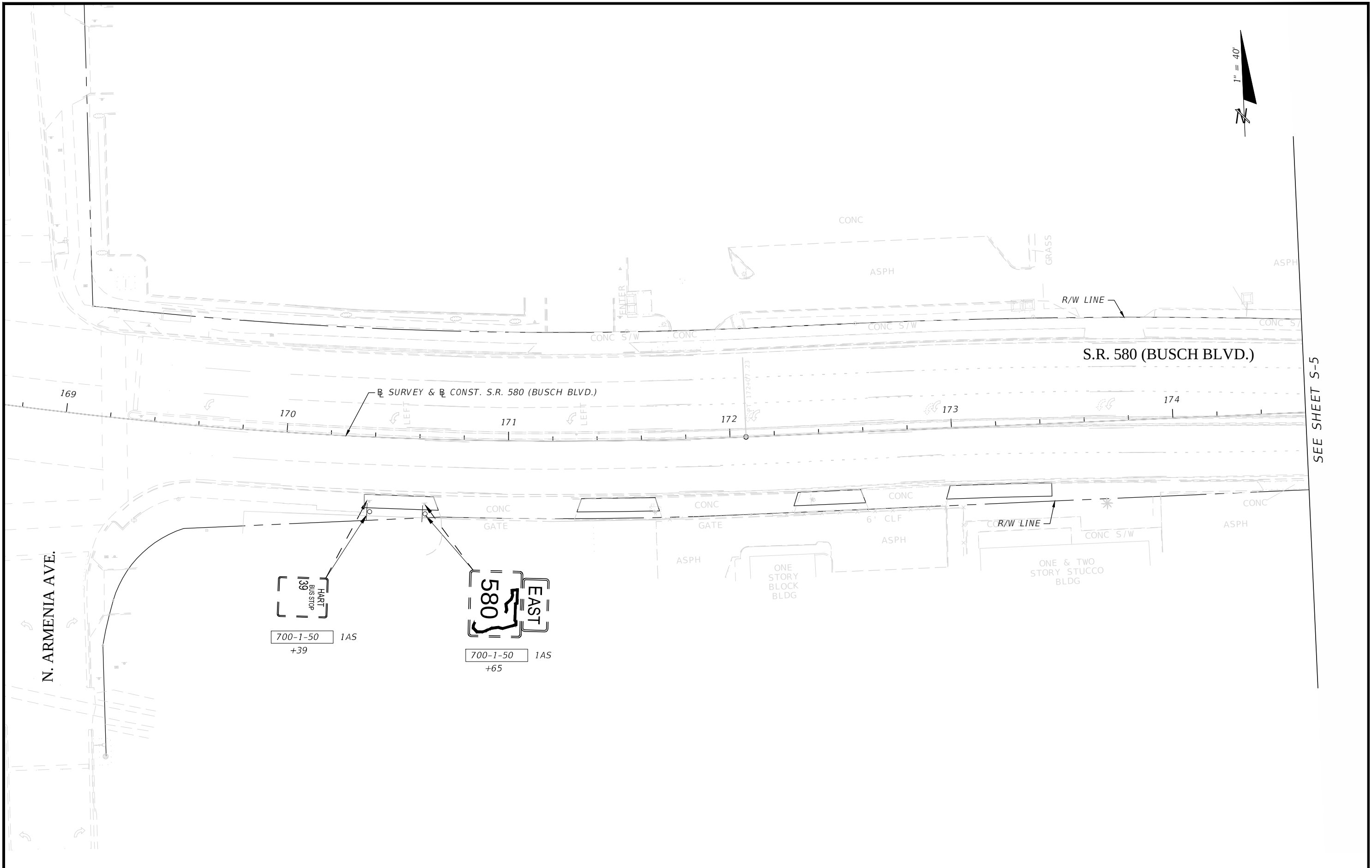
- 1. PAVEMENT MARKINGS SHALL BE PLACED AS SHOWN IN THE PLANS WITH THE APPROPRIATE FDOT DESIGN STANDARD INDEX AND MUTCD ADHERENCE. ALL PAVEMENT MARKINGS SHALL BE REINSTALLED ACCORDING TO EXISTING MARKINGS UNLESS OTHERWISE NOTED.
- 2. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS SO AS TO PREVENT DAMAGE TO THE SIGNS. IF THE SIGNS ARE DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, THEY SHALL BE REPLACED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- 3. THE SIGN AND PAVEMENT MARKING LOCATIONS ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT AS DIRECTED BY THE ENGINEER.
- 4. ANY EXISTING SIGN TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION RELOCATION SHALL BE RESET TO CURRENT STANDARDS FOR HEIGHT, OFFSET AND METHOD OF INSTALLATION.
- 5. PAINT ALL MEDIAN NOSES AND RAISED ISLAND NOSES REFLECTIVE WHITE OR REFLECTIVE YELLOW AS INDICATED IN THE PLANS.
- 6. PAY ITEM 711-17: SHALL INCLUDE THE WATERBLASTING (HYDROBLASTING) METHOD. THIS PAY ITEM SHALL ALSO INCLUDE THE REMOVAL OF ALL RETRO REFLECTIVE PAVEMENT MARKERS ASSOCIATED WITH ALL PAVEMENT MARKING BEING REMOVED UNDER THIS ITEM.
- 7. PAY ITEM 705-11-3: SHALL INCLUDE THE REMOVAL OF EXISTING DELINEATORS THAT ARE BEING PROPOSED IN THE PLANS.



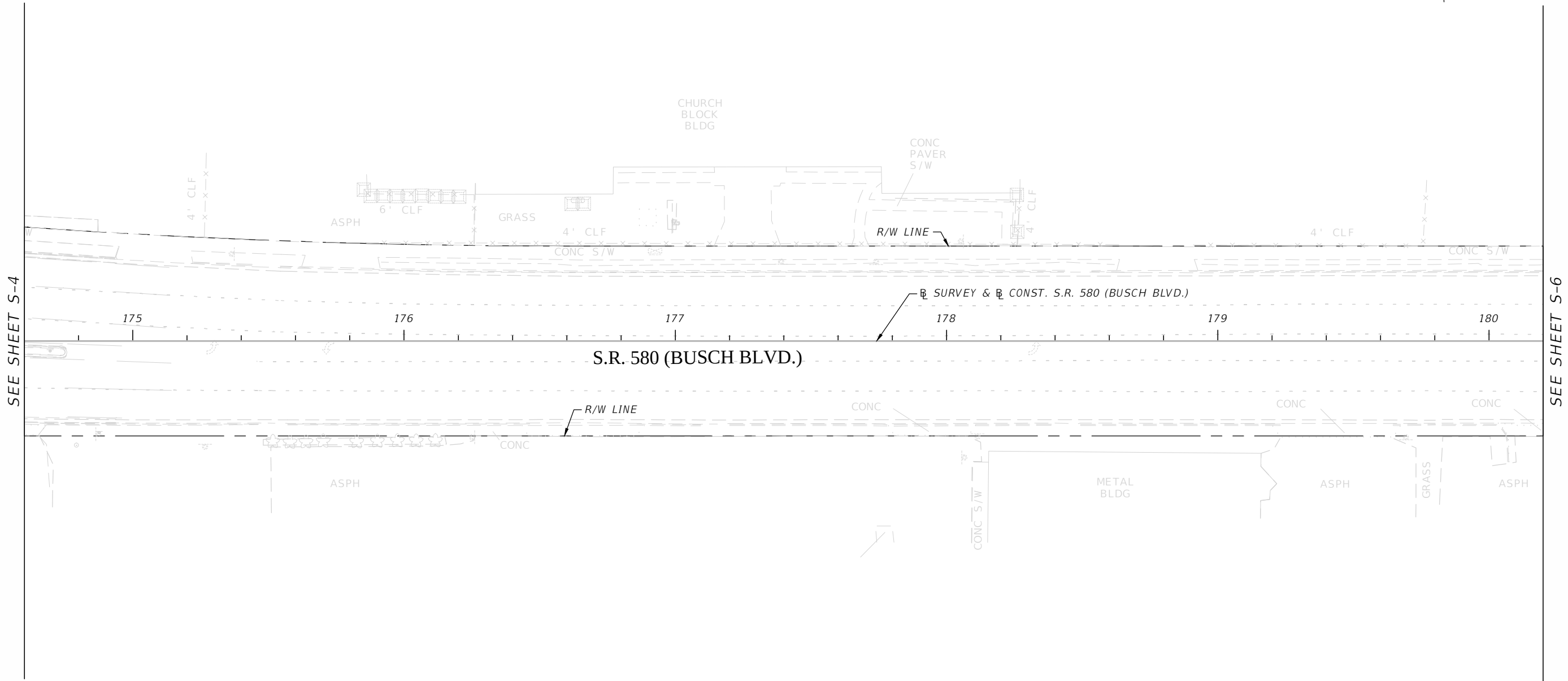
CROSSWALK AND STOP BAR STRIPING DETAIL
N.T.S.

* LONGITUDINAL LINES SHALL BE PLACED TO LINE UP WITH LANE LINES AND AT THE CENTER OF EACH LANE.

3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13	CERTIFICATE OF AUTHORIZATION NO 8230	GENERAL NOTES	Sh. S-3 of S-19	

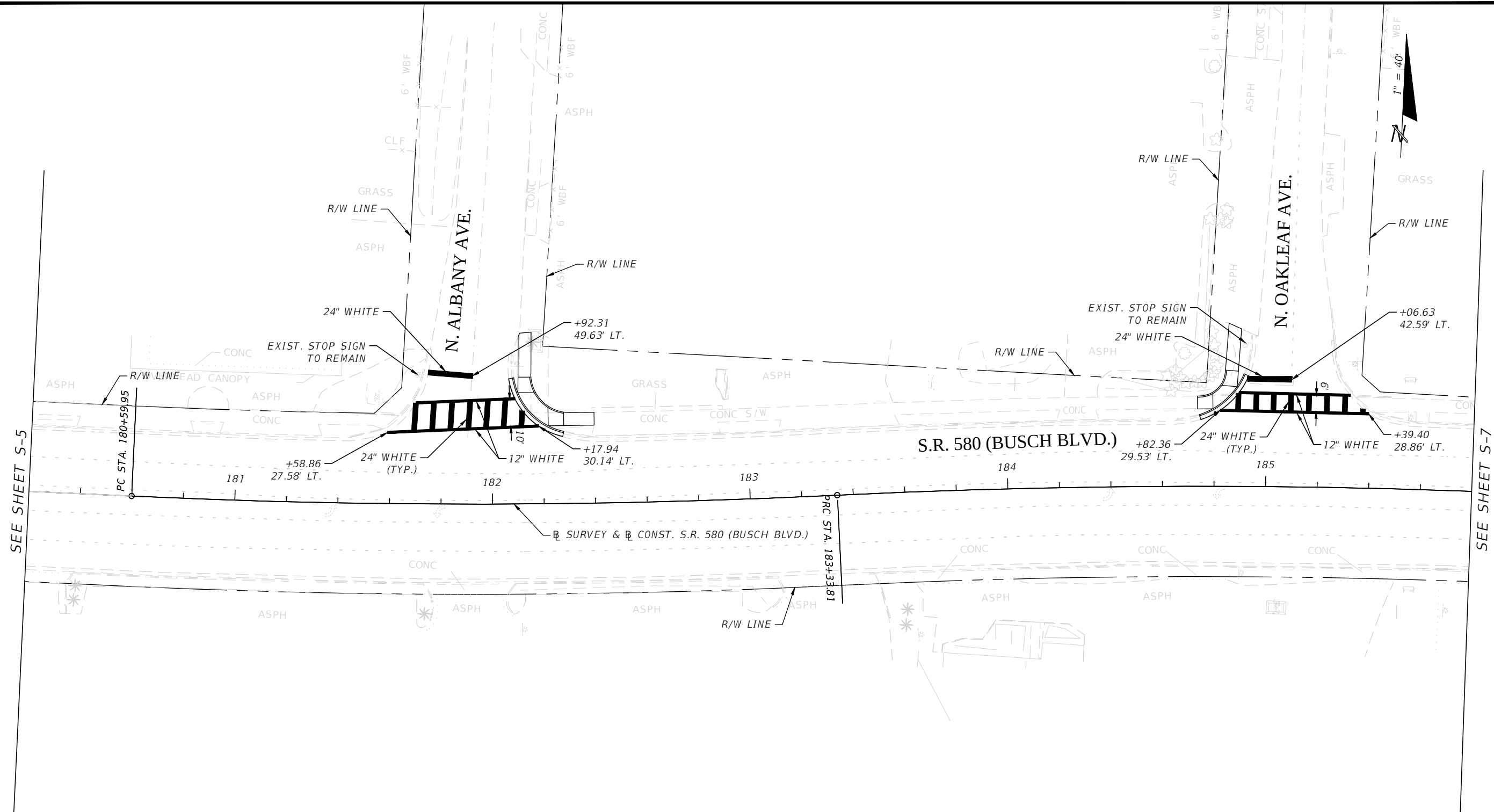


3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (1)	Sh. S-4 Of S-19	



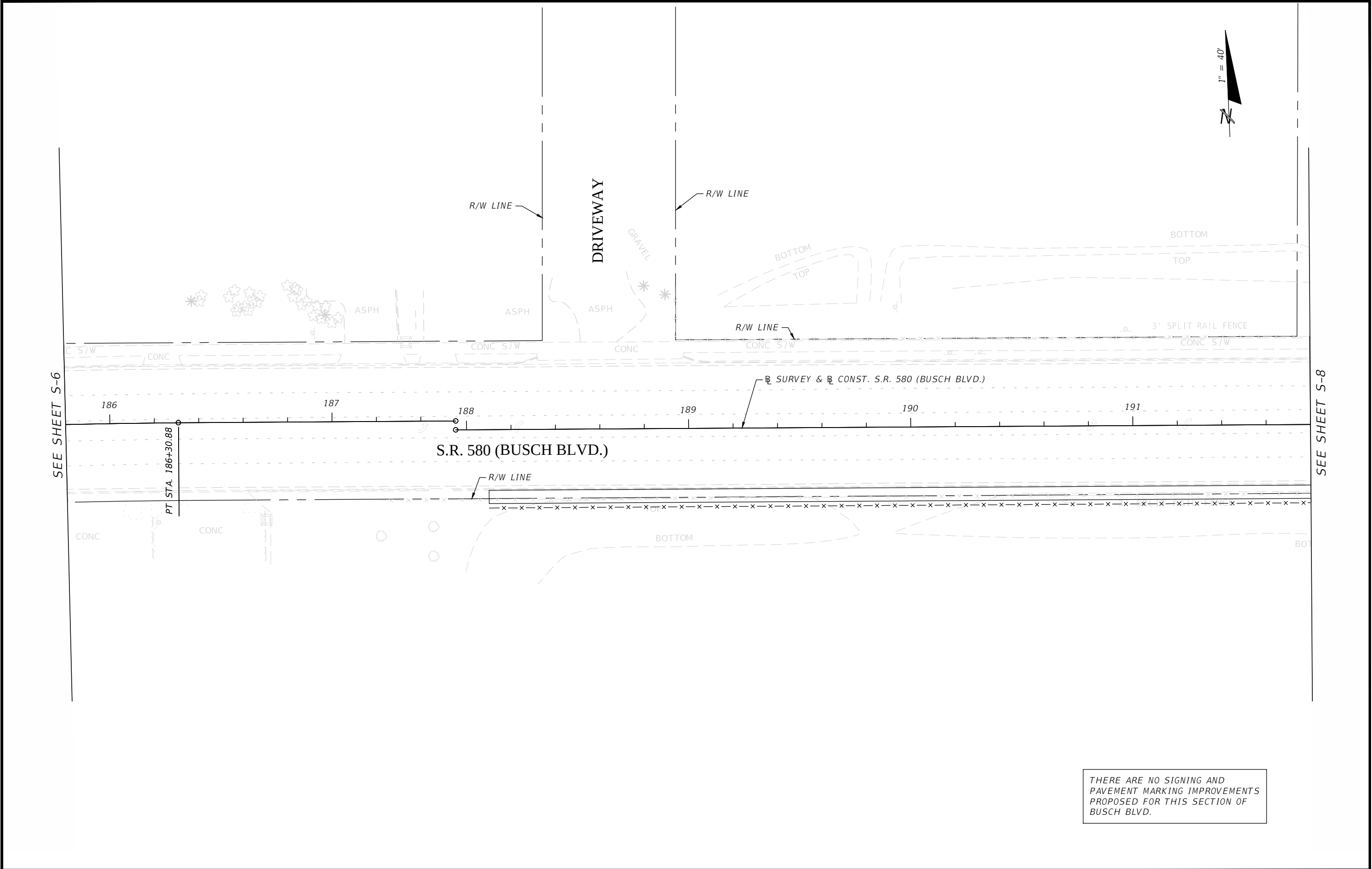
THERE ARE NO SIGNING AND
PAVEMENT MARKING IMPROVEMENTS
PROPOSED FOR THIS SECTION OF
BUSCH BLVD.

3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (2)	Sh. S-5 of S-19	

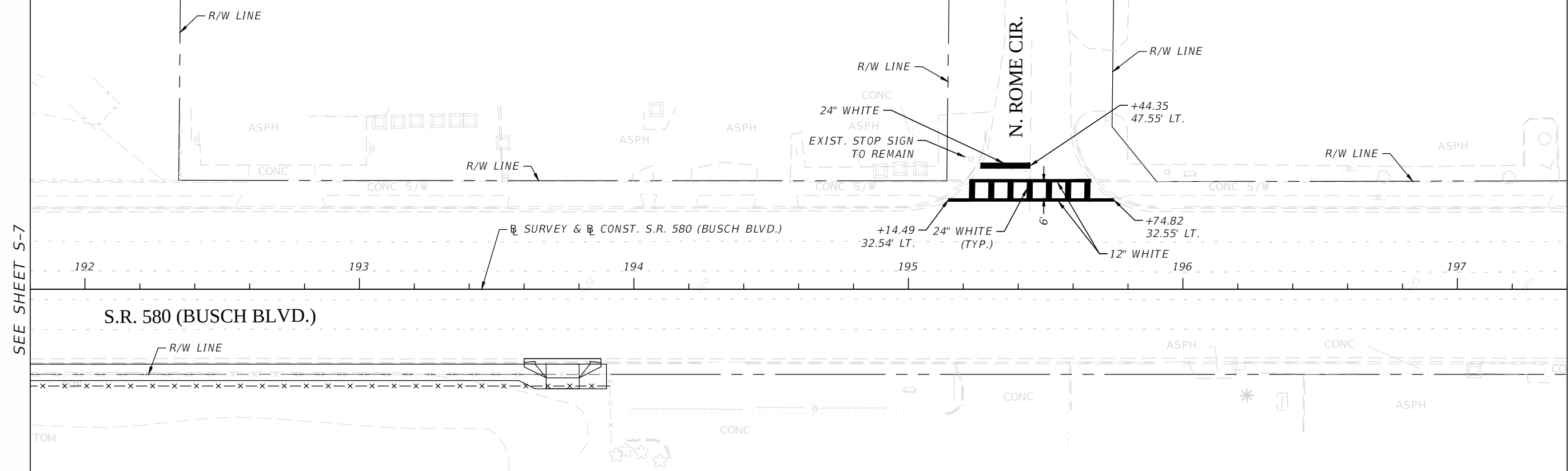


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2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				

SIGNING & PAVEMENT MARKING PLAN (3)		Sh. S-6
		Of S-19



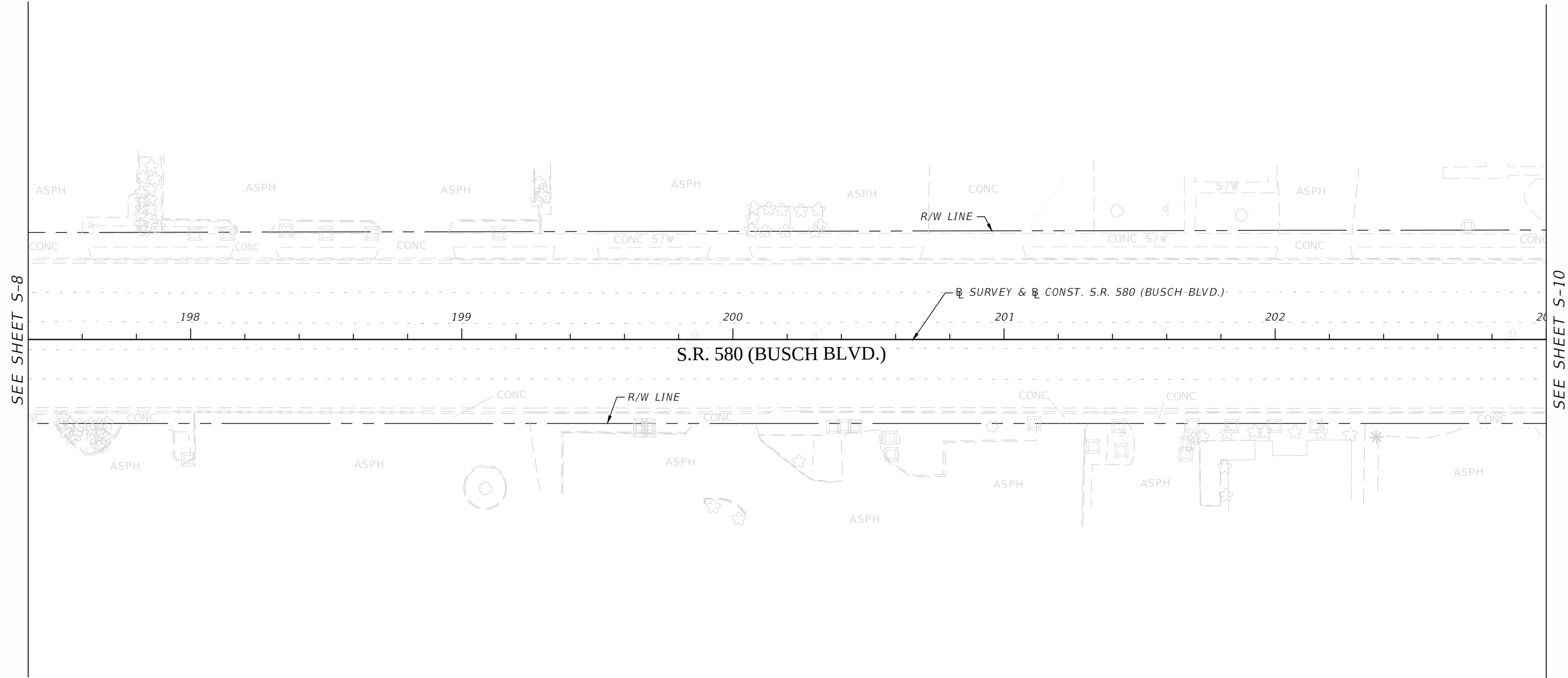
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2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (4)	Sh. S-7 of S-19	



SEE SHEET S-7

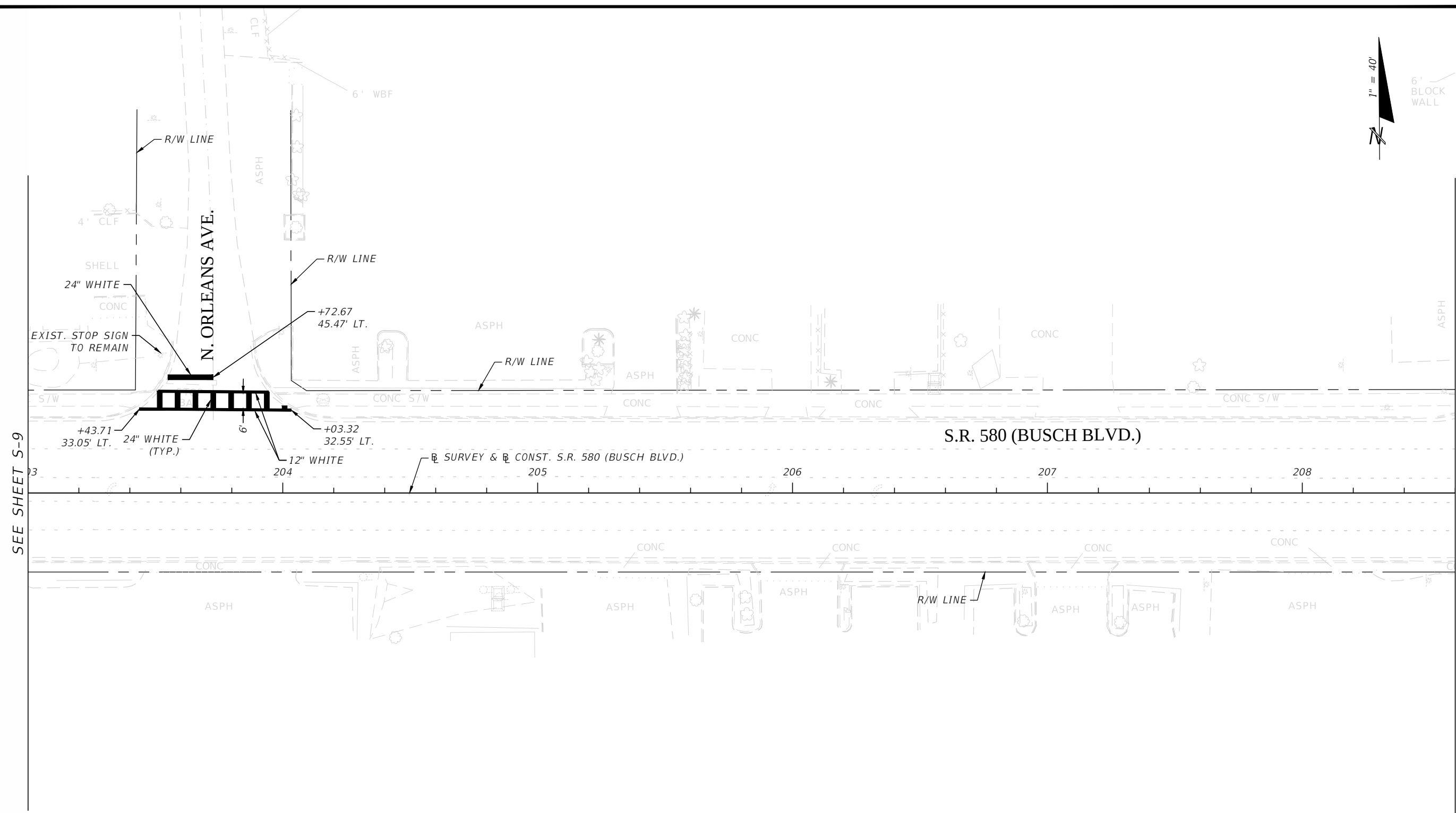
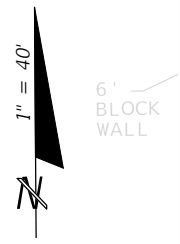
SEE SHEET S-9

3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (5)	Sh. S-8 of S-19	

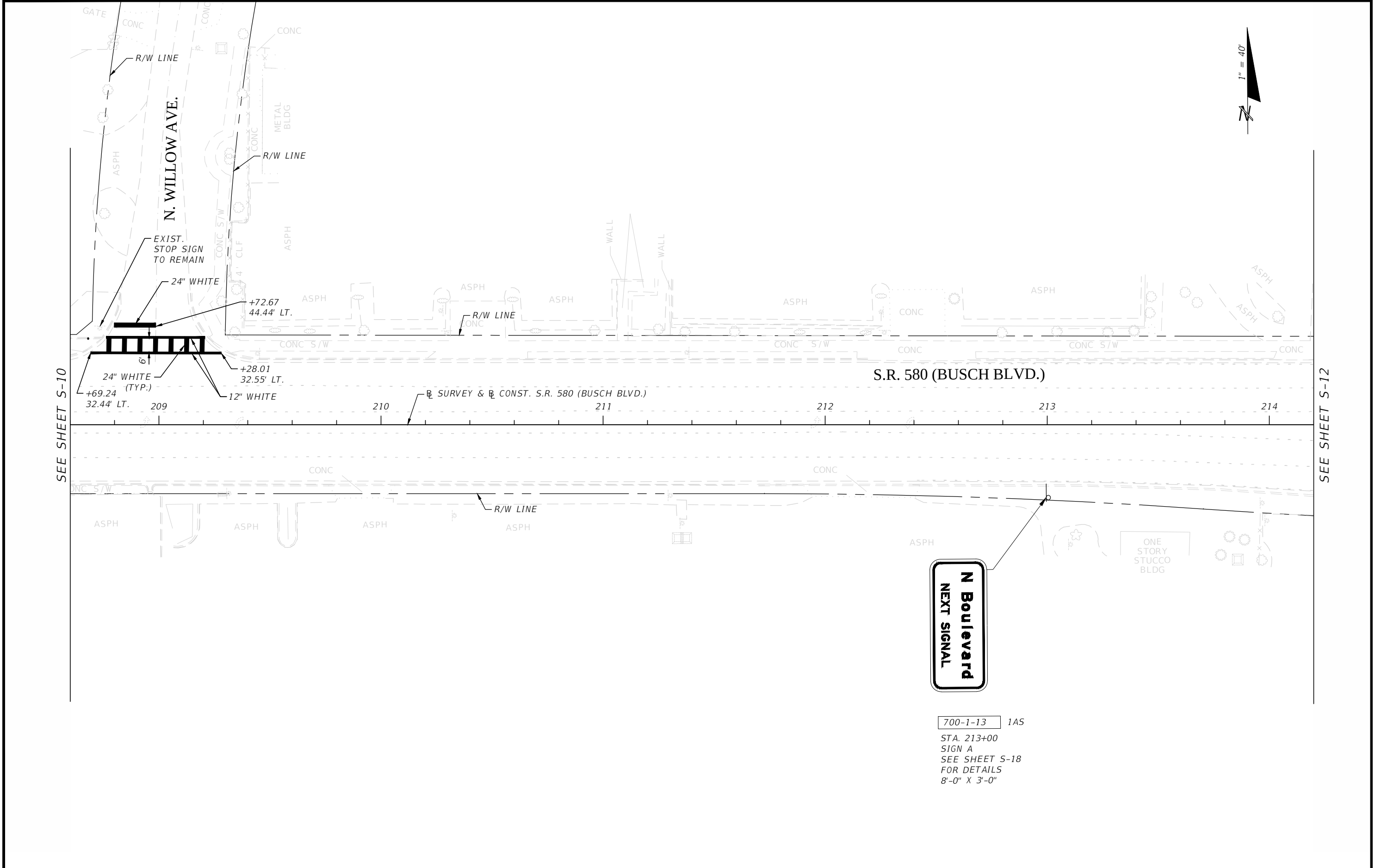


THERE ARE NO SIGNING AND
PAVEMENT MARKING IMPROVEMENTS
PROPOSED FOR THIS SECTION OF
BUSCH BLVD.

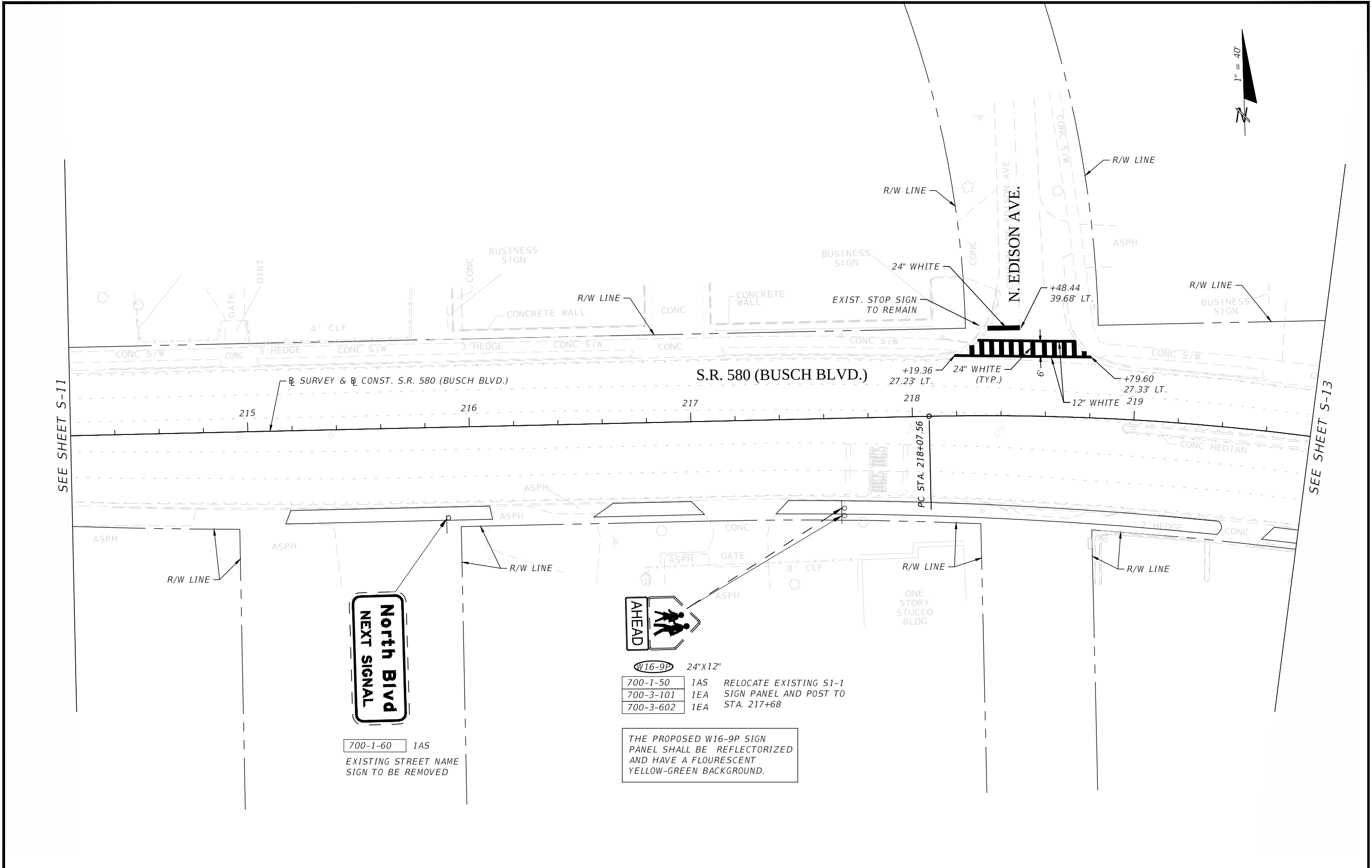
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2				DRN:	RBC				
1				CKD:	JWK				
No.	DATE	BY:	REVISIONS	DATE:	4/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (6)	Sh. S-9 of S-19	



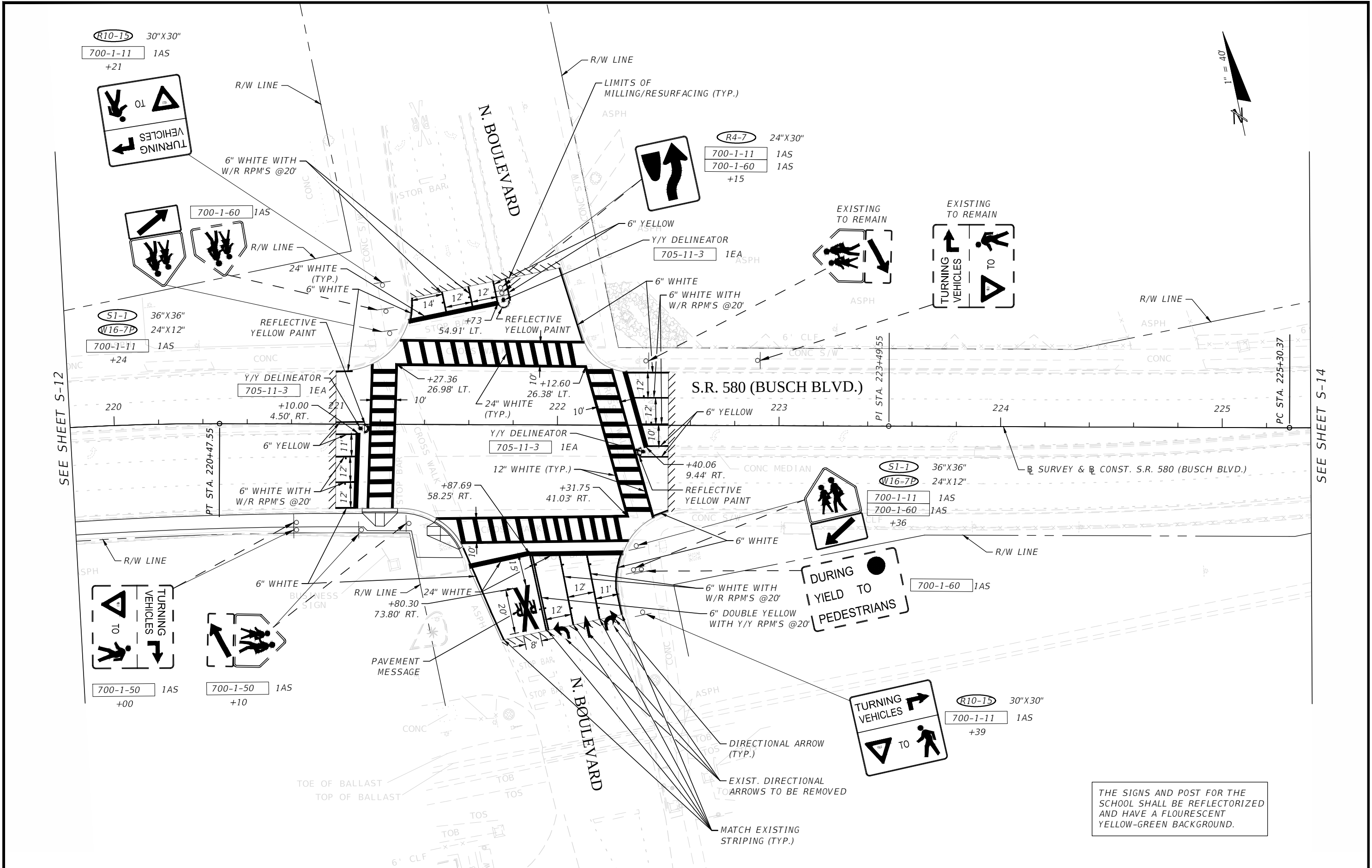
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2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (7)	Sh. S-10 of S-19	



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-9689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC		SIGNING & PAVEMENT MARKING PLAN (8)	Sh. S-11 Of S-19	
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
CERTIFICATE OF AUTHORIZATION NO 8230									

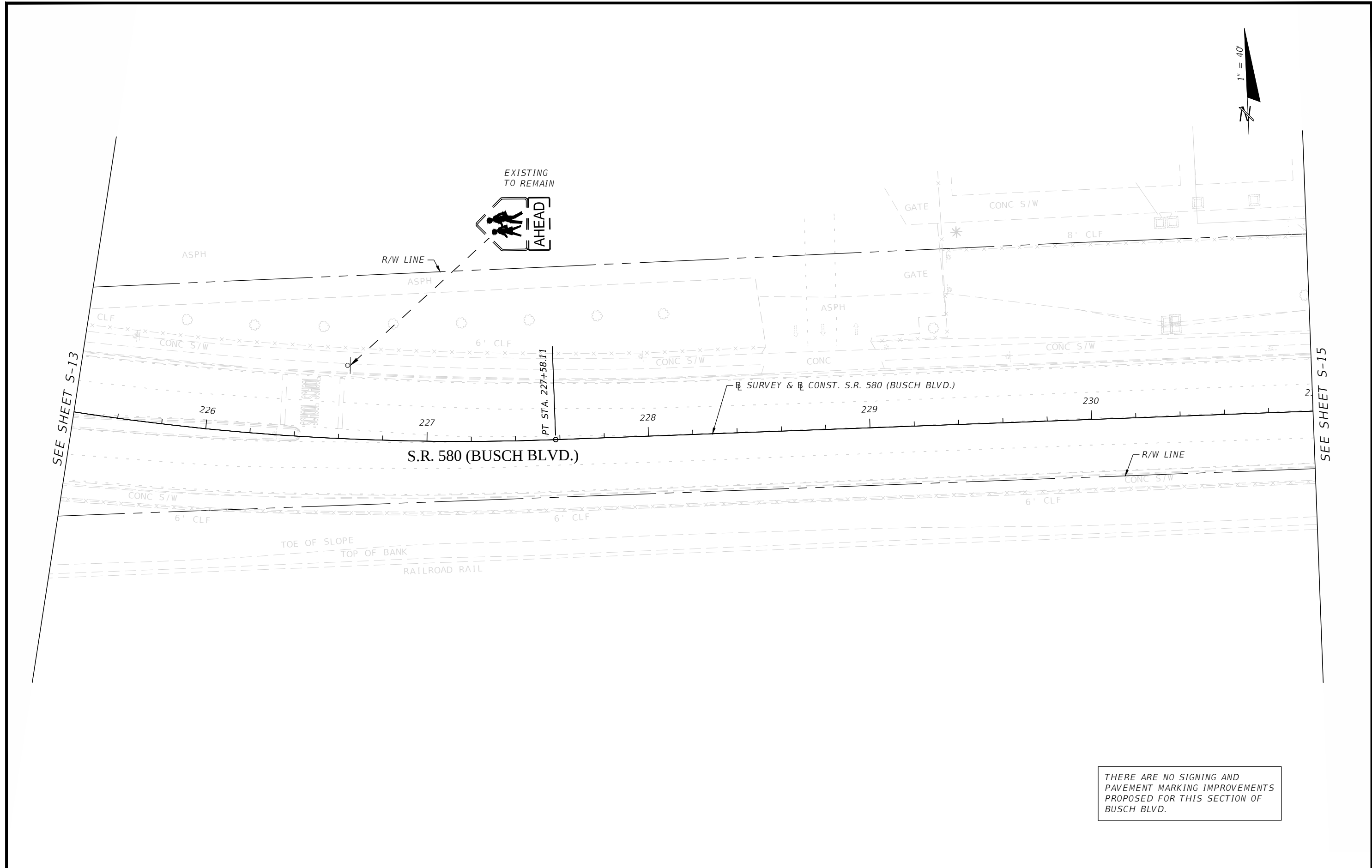


3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33619 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS SIGNING & PAVEMENT MARKING PLAN (9)	W.O. Sh. S-12 of S-19	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				

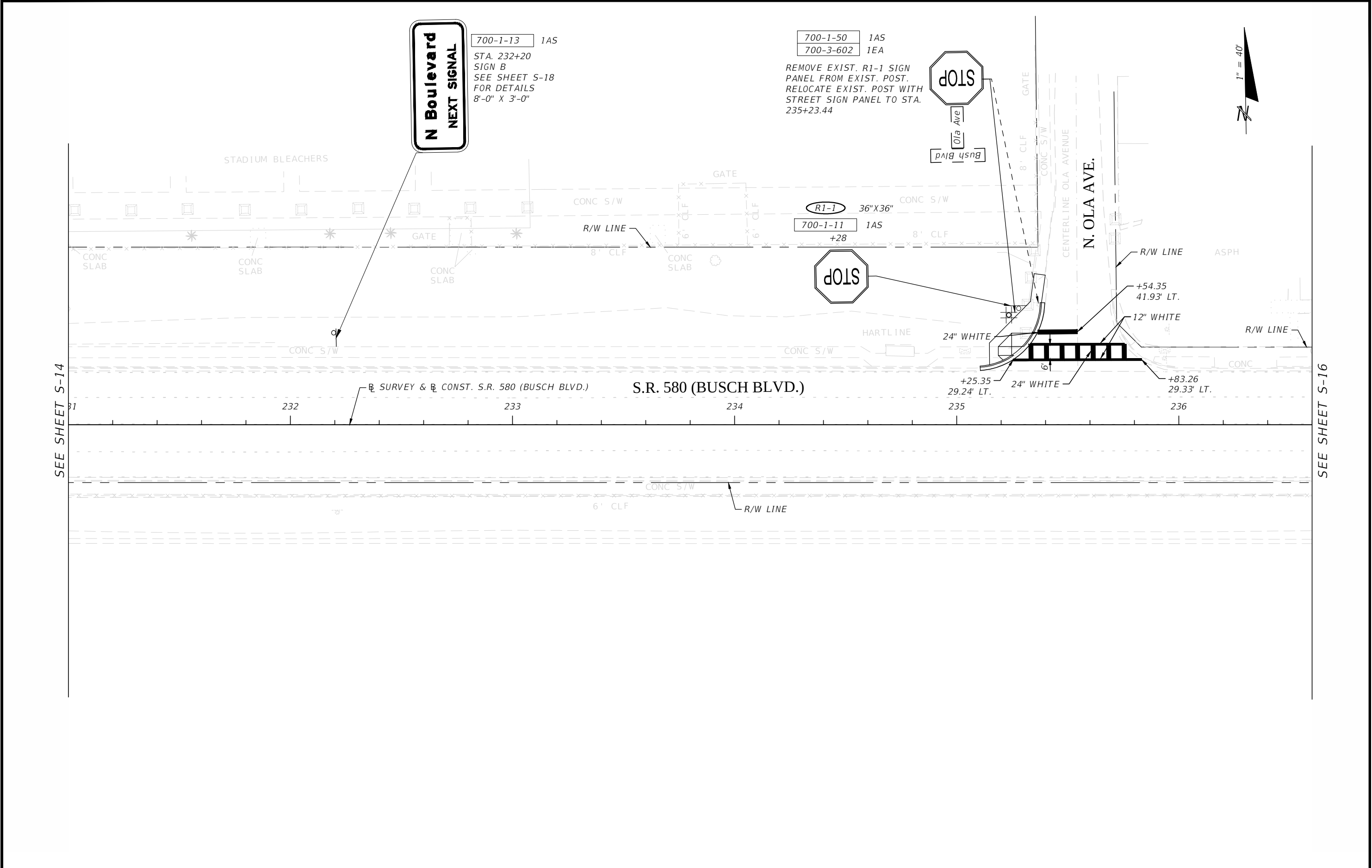


THE SIGNS AND POST FOR THE SCHOOL SHALL BE REFLECTORIZED AND HAVE A FLOURESCENT YELLOW-GREEN BACKGROUND.

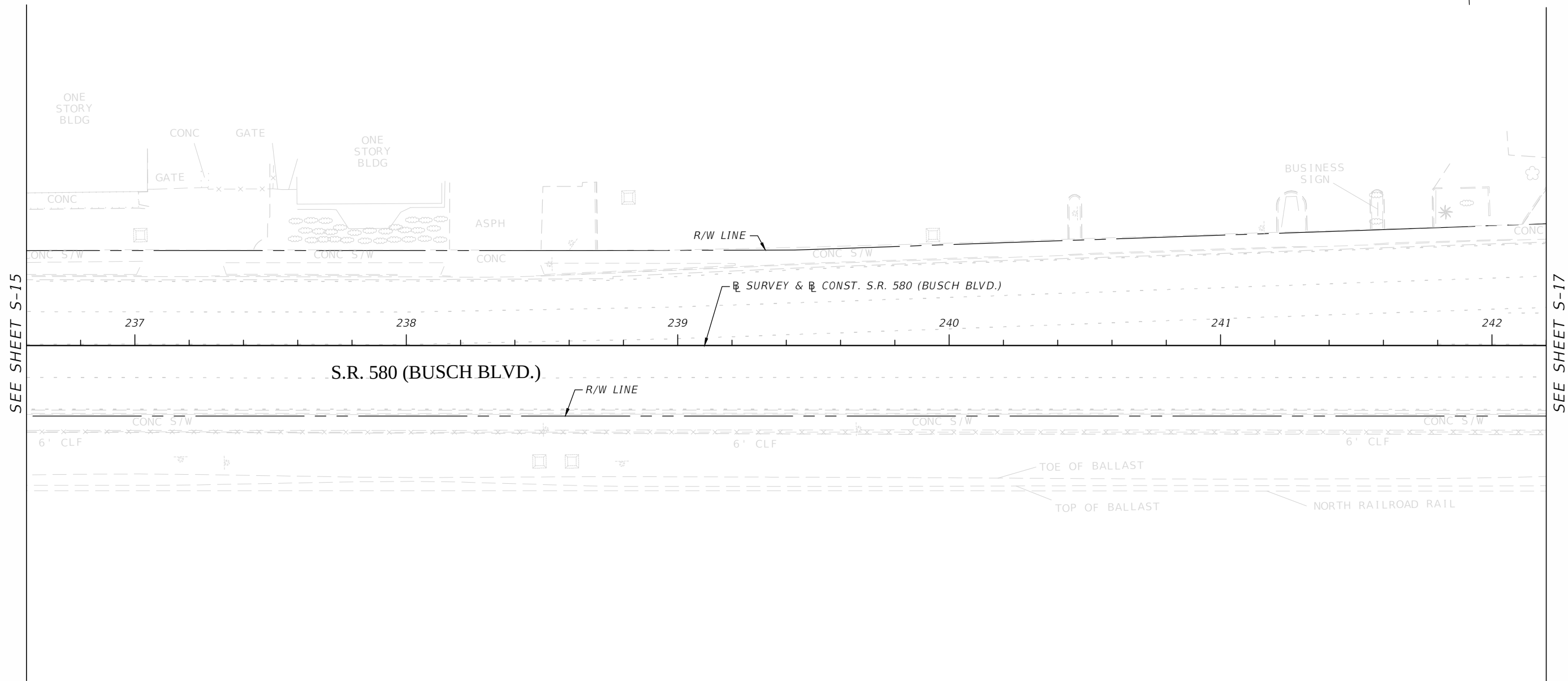
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2				DRN:	RBC					
1				CKD:	RDM					
No.	DATE	BY:	REVISIONS	DATE:	04/13					
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (10)			



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (11)	Sh. S-14 Of S-19	

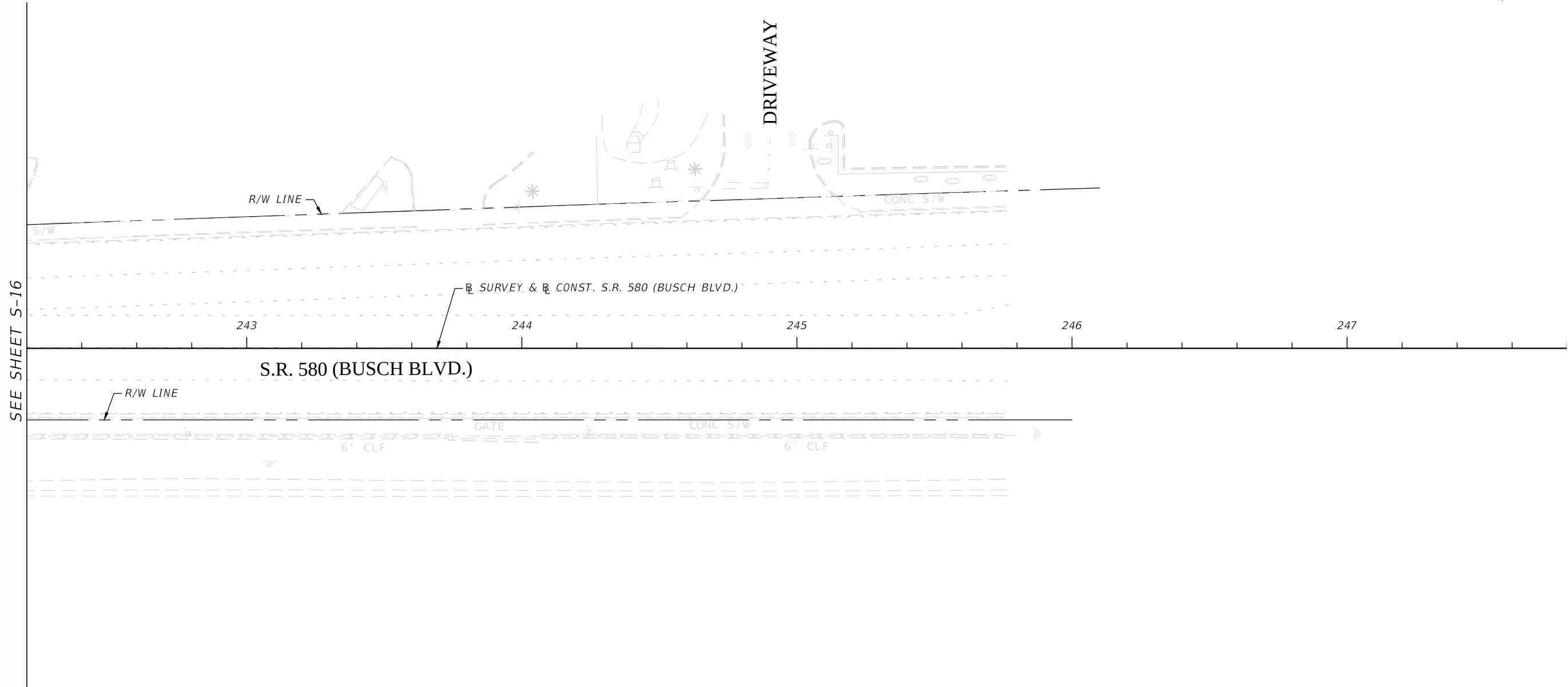


3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33619 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (12)	Sh. S-15 of S-19	



THERE ARE NO SIGNING AND
PAVEMENT MARKING IMPROVEMENTS
PROPOSED FOR THIS SECTION OF
BUSCH BLVD.

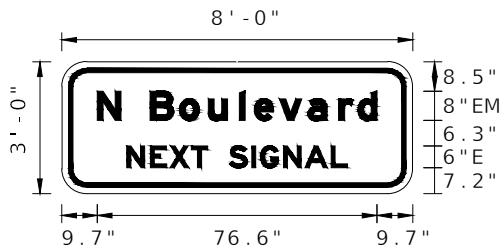
3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (13)	Sh. S-16 of S-19	



THERE ARE NO SIGNING AND
PAVEMENT MARKING IMPROVEMENTS
PROPOSED FOR THIS SECTION OF
BUSCH BLVD.

3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13	CERTIFICATE OF AUTHORIZATION NO 8230	SIGNING & PAVEMENT MARKING PLAN (14)	Sh. S-17 of S-17	

SIGN DETAIL



SIGN NUMBER	A=B
WIDTH x HGHT.	8'-0" x 3'-0"
BORDER WIDTH	1.75"
CORNER RADIUS	5.00"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/White

SYMBOL	X	Y	WID	HT

KR-D7_LESS 45MPH.ssi
Dimensions are in inches.tenths
Letter spacings are to start of next letter

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE
	N		B	o	u	l	e	v	a	r	d						EM 2000
9.7	6.5	8	8	7.9	8.5	4.1	6.9	7.8	8.5	5.2	5.3	9.7				76.6	8/6
	N	E	X	T		S	I	G	N	A	L						E 2000
17.8	6.4	5.3	5.9	4.5	6	6.1	2.5	6.2	5.9	7.1	4.6	17.8				60.5	6

SIGN DETAIL

SIGN NUMBER	
WIDTH x HGHT.	
BORDER WIDTH	
CORNER RADIUS	
MOUNTING	
BACKGROUND	TYPE : COLOR :
LEGEND/BORDER	TYPE : COLOR :

SYMBOL	X	Y	WID	HT

Dimensions are in

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE

SIGN DETAIL

SIGN NUMBER	
WIDTH x HGHT.	
BORDER WIDTH	
CORNER RADIUS	
MOUNTING	
BACKGROUND	TYPE : COLOR :
LEGEND/BORDER	TYPE : COLOR :

SYMBOL	X	Y	WID	HT

Dimensions are in

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE

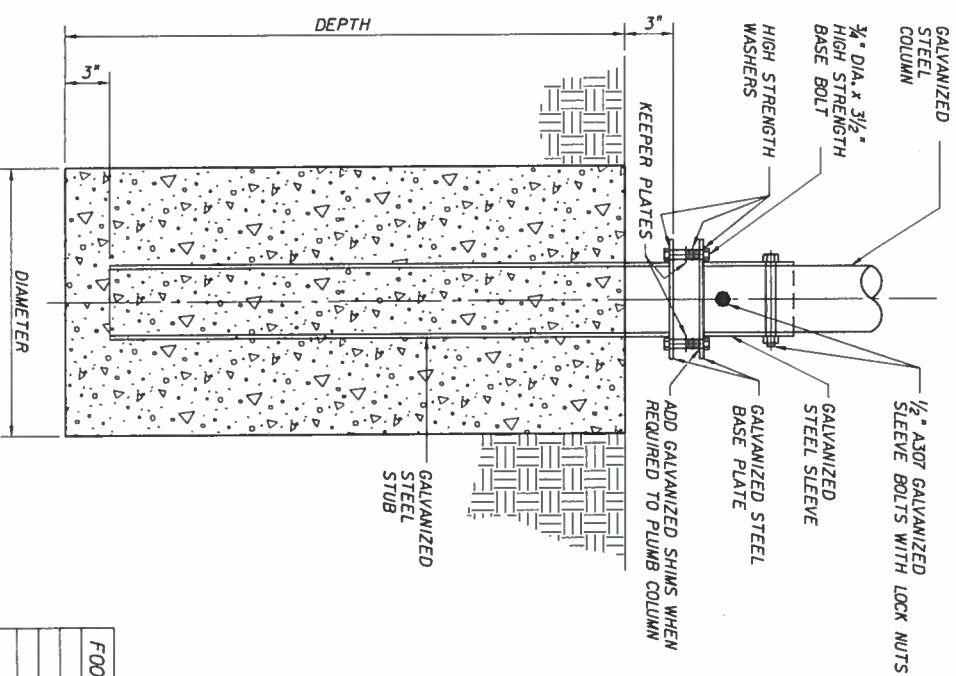
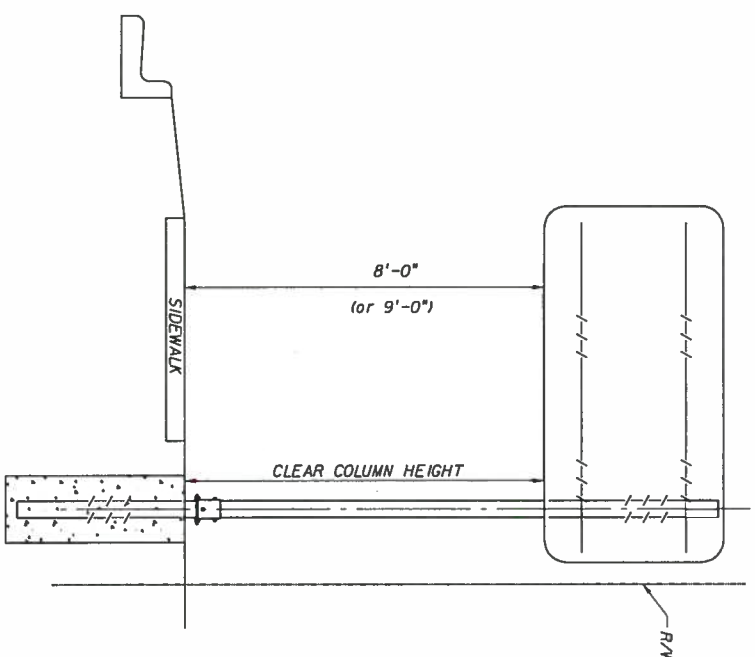
SIGN DETAIL

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CORNER RADIUS	
MOUNTING	
BACKGROUND	TYPE : COLOR :
LEGEND/BORDER	TYPE : COLOR :

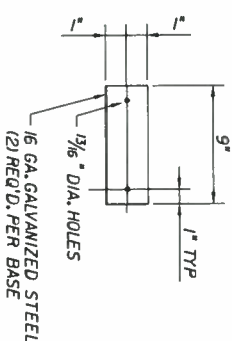
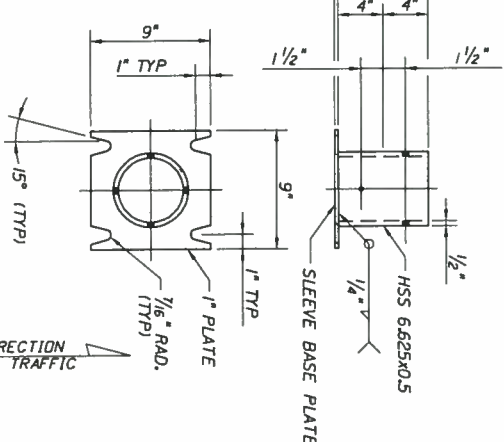
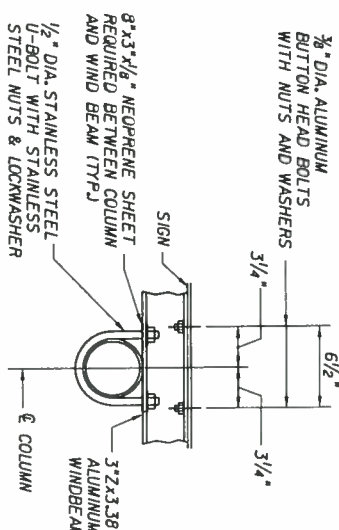
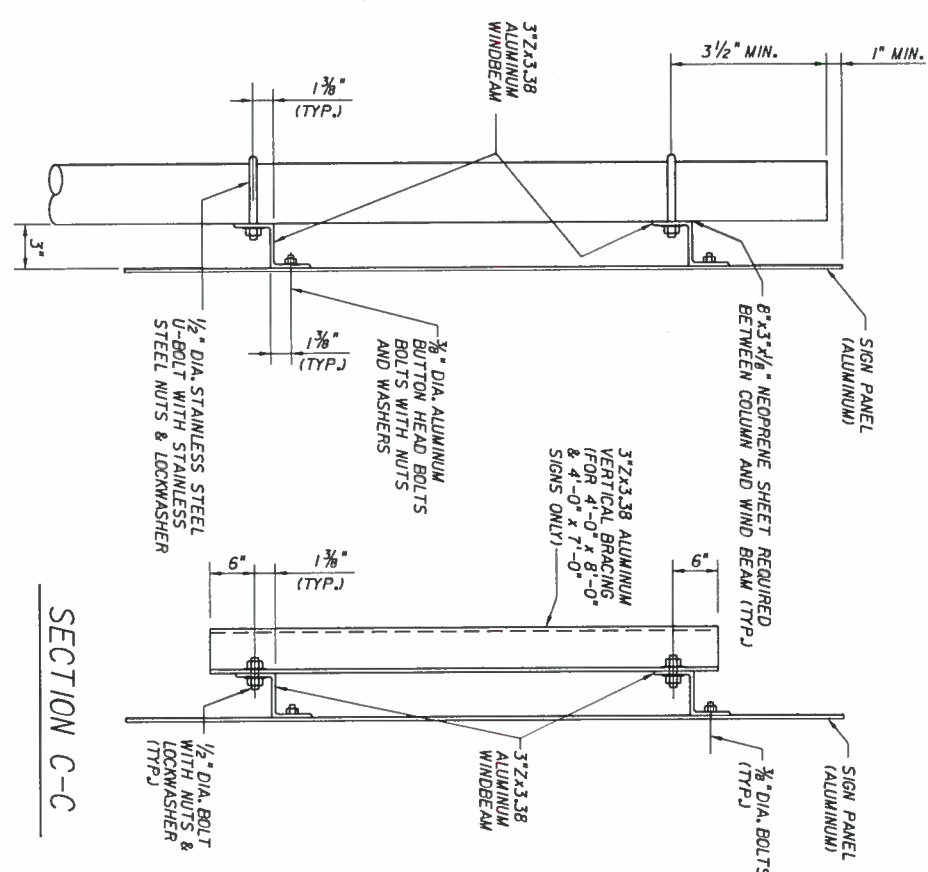
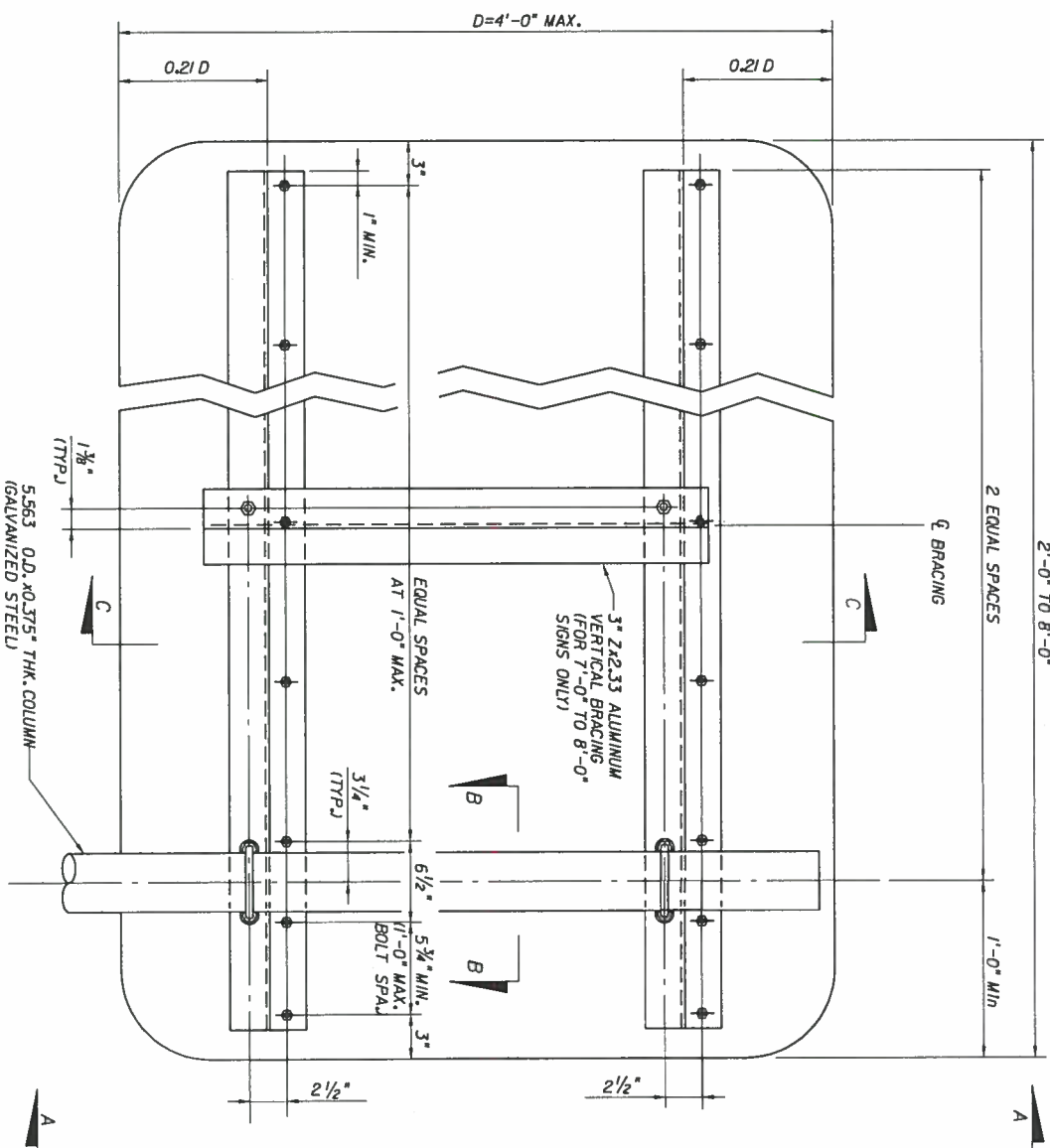
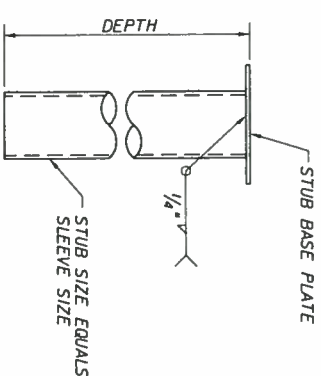
SYMBOL	X	Y	WID	HT

Dimensions are in

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE



FOOTING SIZES (9' MAX. CLEAR COLUMN HEIGHT)		
SIGN SIZE	DEPTH	DIAMETER
3'-0" x 8'-0"	5'-6"	2'-0"
4'-0" x 6'-0"	N/A	N/A
4'-0" x 7'-0"	N/A	N/A
4'-0" x 8'-0"	N/A	N/A
2'-0" x 4'-0"	N/A	N/A



- GENERAL NOTES:
1. ROUND HSS SHALL CONFORM TO THE REQUIREMENT OF ASTM A500, GRADE B.
2. FOR ADDITIONAL NOTES AND FOR MATERIAL SPECIFICATIONS, NOT GIVEN HEREIN, REFER TO FOOT DESIGN STANDARDS INDEX NO. IJ860.
3. THE FOUNDATIONS ARE BASED UPON THE FOLLOWING SOIL CRITERIA:
CLASSIFICATION = COHESIONLESS (FINE SAND)
FRICTION ANGLE = 30 DEGREES (30°)
UNIT WEIGHT = 50 LBS./CU. FT. (ASSUMED SATURATED)
4. DESIGN WIND SPEED = 130 MPH
5. IMPORTANCE FACTOR, I = 0.54

BOLT KEEPER DETAIL

SLEEVE AND STUB BASE
PLATE DETAIL

3		DES:	VOLKERT Certificate of Authorization #661 3409 West Lenoir Street Tampa, FL 33609 www.volkert.com Phone: 813.875.1365 Fax: 813.874.7656	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.
2		DRN:			
1		CKD:			
		DATE:			
DATE	BY:	REVISIONS			
			SINGLE COLUMN CANTILEVER GROUND MOUNTED SIGN	Sh. S-19 of S-19	KENNETH B. DRAKE, P.E. NO. 37258

SUSERS

\$DATE\$

STIMES

FILES

KENNETH B. DRAKE, P.E. NO. 37258



CITY OF TAMPA

SIGNALIZATION PLANS

BUSCH BOULEVARD PEDESTRIAN AND SIGNALIZATION IMPROVEMENTS

LAP FINACIAL PROJECT ID: 413407-2-58-01
FEDERAL AID PROJECT NO.: SFTI 267R
(FEDERAL FUNDS)

BUSCH BLVD (SR 580) FROM ARMENIA AVE. TO FLORIDA AVE.

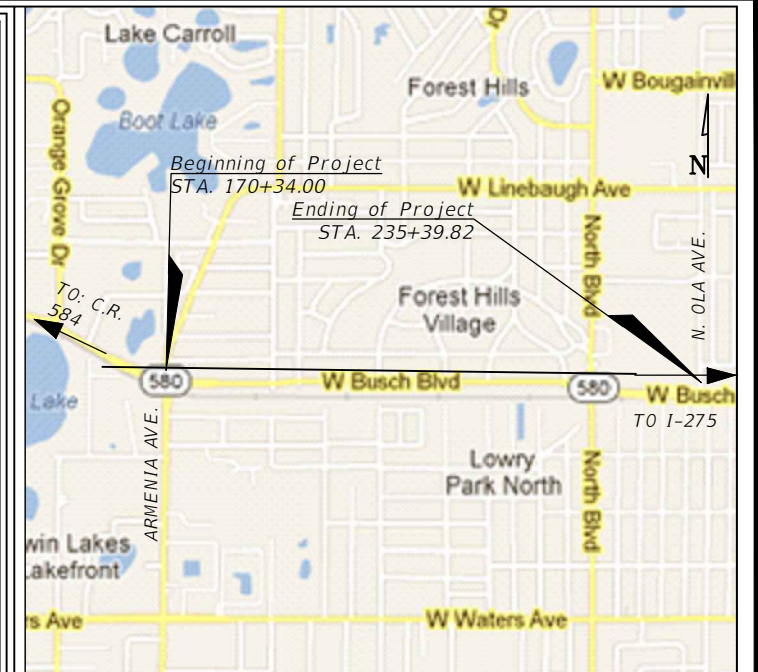
TRANSPORTATION DIVISION CITY OF TAMPA, FLORIDA

TRANSPORTATION DIVISION PROJECT NO: 0000029

PLANS PREPARED BY:

ICON
CONSULTANT GROUP
INCORPORATED

10006 N. DALE MABRY HIGHWAY
SUITE 201
TAMPA, FLORIDA 33618
(813) 962-8689
CERTIFICATE OF AUTHORIZATION NO. 8230



VICINITY MAP
SCALE: None

INDEX OF DRAWINGS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES
T-3	GENERAL NOTES
T-4	SIGNALIZATION PLAN
T-5	GUIDESIGN WORKSHEET
T-6	STANDARD MAST ARM TABULATION
T-7	MAST ARM ASSEMBLIES DATA TABLE
T-8	REPORT OF CORE BORINGS

STANDARD DRAWINGS & INDICES

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH, AND GOVERNED BY, THE CITY OF TAMPA STANDARD DRAWINGS AND WHERE APPLICABLE, FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS DATED JANUARY, 2014 AND DIVISION II AND III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2014, 2007 FLORIDA GREEN BOOK, MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, AS AMENDED BY CONTRACT DOCUMENTS.

**FINAL PLANS
FEBRUARY, 2014**

APPROVED BY:

MILTON MARTINEZ, P.E. #54056
PROJECT MANAGER
CITY OF TAMPA TRANSPORTATION DIVISION

CERTIFICATION

Sheet T-1 to T-8 Inclusive, Certified By:

MICHELLE H. SCHOFNER, P.E. #51977
PROJECT MANAGER
ICON CONSULTANT GROUP INC.

[illegible]

David Meadows 12/12/2013 8:26:14 AM F:\Projects\41340723801\AutoCAD Civil 3D Project\41340723801\signals\TABQSG01.DWG

SIGNALIZATION GENERAL NOTES

1. THE CONTRACTOR SHALL MEET THE CRITERIA OUTLINED IN "THE MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNALS AND DEVICES".

2. THE LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. PRIOR TO DIGGING, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL UTILITIES.

3. ONE WEEK PRIOR TO THE START OF THE TRAFFIC SIGNAL INSTALLATION, THE SIGNAL CONTRACTOR SHALL CONTACT:

A) WAYNE CORNELISON, TRAFFIC SIGNAL SUPERVISOR
CITY OF TAMPA
3802 E. 26TH AVENUE
TAMPA, FLORIDA 33605
PHONE: (813) 622-1966
EMAIL: bill.hall@tampagov.net

B) JIM A. ROSA, FDOT DISTRICT SEVEN TRAFFIC OPERATIONS
CONSTRUCTION LIAISON
FLORIDA DEPARTMENT OF TRANSPORTATION
11201 NORTH MCKINLEY DRIVE
TAMPA, FLORIDA 33612
PHONE: (813) 975-6269
EMAIL: james.rosa@dot.state.fl us

4. PRIOR TO ALL TRAFFIC SIGNAL CHANGES (I.E., MAINTENANCE OF TRAFFIC CHANGES, NEW SIGNAL INSTALLATIONS, DIFFERENT PAVEMENT CONFIGURATIONS, ETC.), CONTACT RICK NAPORA, FDOT DISTRICT SEVEN TRAFFIC OPERATION AT (813) 975-6232 AND MIKE SCANLON (813) 274-8105 AT LEAST 48 HOURS IN ADVANCE FOR ANY SIGNAL CHANGES WHETHER MOT RELATED OR NEW INSTALLATIONS.

5. THE CONTRACTOR SHALL CONTACT THE LOCAL POWER COMPANY (TECO) FOR THEIR ASSISTANCE IN PERFORMING ALL NECESSARY WORK UNDER POWER LINES. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO THE INSTALLATION OF SIGNAL CABLE, FIBERGLASS INSULATORS, AND / OR SIGNAL POLES.

6. THE CONTRACTOR SHALL SUBMIT THE AS-BUILT PLANS TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF THE 48 HOUR TEST. AT THE START OF THE 48 HOUR TEST, THE ENGINEER SHALL PROVIDE AT LEAST ONE COPY OF THE FINAL AS-BUILT PLANS TO THE CITY OF TAMPA SIGNAL SHOP AND ONE COPY TO THE DISTRICT TRAFFIC OPERATIONS. ADDITIONALLY, THE CONTRACTOR SHALL PROVIDE ONE ELECTRONIC COPY OF AS-BUILTS IN AUTOCAD FORMAT TO MIKE SCANLON.

7. THE CONTRACTOR SHALL FIELD VERIFY ALL CRITICAL ELEVATIONS PRIOR TO ORDERING MAST ARM POLES.

8. THE TYPE OF EQUIPMENT USED IN THE INSTALLATION OF MAST ARM POLES/FOUNDATIONS SHALL MEET THE FOLLOWING REQUIREMENTS:

A. OVERHEAD LINES SHALL STAY IN PLACE BOTH VERTICALLY AND HORIZONTALLY.

B. CONTRACTOR SHALL MEET ALL APPLICABLE OSHA REQUIREMENTS. ANY COST ASSOCIATED WITH THE TYPE OF EQUIPMENT REQUIRED FOR THIS INSTALLATION IS INCLUDED IN THE RELATED PAY ITEMS.

9. MAST ARM FOUNDATIONS SHALL NOT BE INSTALLED UNLESS A CITY OF TAMPA INSPECTOR IS ON SITE. THERE ARE NOT EXCEPTIONS. CONTACT MIKE SCANLON TRAFFIC DESIGN ENGINEER @ 813-274-8105 24-48 HOURS PRIOR TO INSTALLING SIGNAL POLE.
- SIGNALIZATION PAY ITEM FOOTNOTES:
10. 630-2-11:
ALL CONDUIT RUNS SHOWN ON THE PLANS ARE SCHEMATIC AND FIELD ADJUSTMENTS MAY BE NECESSARY. WITH THE EXCEPTION OF ELECTRICAL POWER SERVICE DUCTS AND JACK AND BORE SLEEVES, ALL UNDERGROUND AND UNDER PAVEMENT CONDUITS SHALL BE SCHEDULE 40 PVC WITH A MINIMUM SIZE OF TWO INCHES UNLESS OTHERWISE SPECIFIED IN THE PLANS. TWO SEPARATE UNDERGROUND CONDUIT RUNS LOCATED 180 DEGREES APART ARE REQUIRED FOR ALL SIGNAL STRAIN POLES AND MAST ARMS. THERE SHALL BE MINIMUM OF TWO RUNS OF TWO INCHES CONDUIT BETWEEN THE LAST LOW VOLTAGE (LOOPS) PULL BOX LOCATED NEAR THE CONTROLLER CABINET AND THE CONTROLLER CABINET.

11. 630-2-12:
CONDUITS INSTALLED WITH THE DIRECTIONAL BORE METHOD SHALL BE HDPE WITH A MINIMUM SIZE OF 2 INCHES UNLESS OTHERWISE SPECIFIED IN THE PLANS. ALL "SPARE CONDUITS" SHALL BE ROUTED TO HIGH VOLTAGE PULL BOXES UNLESS DESIGNATED OTHERWISE.
12. 632-7-1:
EACH PHASE / MOVEMENT SHALL BE WIRED FROM THE SIGNAL DISPLAY TO THE CONTROLLER AS A SEPARATE PHASE / MOVEMENT. THIS INCLUDES THE LEFT TURN MOVEMENT WHICH SHALL HAVE CONDUCTORS AVAILABLE FOR EITHER PROTECTED OR PERMISSIVE MOVEMENTS. THE CONTRACTOR SHALL VERIFY COLOR CODES FOR SIGNAL CABLE WITH THE CITY OF TAMPA TRAFFIC SIGNAL SUPERVISOR BEFORE ORDERING AND WIRE THE SIGNAL IN ACCORDANCE WITH THAT COLOR CODE AND F.D.O.T. SPECIFICATIONS. THERE SHALL BE ONE NEUTRAL PER APPROACH. NO JUMPING/SPLICING SIGNAL CABLE POLE TO POLE (AKA: DAISY CHAINING) ALLOWED.

13. 639-1-122:
THE COST OF THIS ITEM SHALL INCLUDE THE COST FOR THE APPROPRIATE METER CAN CONTAINING AN INTERNAL BYPASS SHUNT SWITCH AS REQUIRED BY THE LOCAL POWER COMPANY. THE CONTRACTOR SHALL VERIFY THE TYPE OF METER CAN AND A BREAKER BOX TO USE WITH THE CITY OF TAMPA SIGNAL SHOP.

14. 639-2-1:
PAYMENT SHALL BE BASED ON THE LINEAR FOOT OF A SINGLE CONDUCTOR.

15. 641-2-12:
SERVICE POLE TO BE A TYPE P-IIB (36").

16. 646-1-11:
ALUMINUM PEDESTALS SHALL BE MOUNTED ON TRANSFORMER BASE.

17. 649-31-202, 649-31-205:
AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE IN CLOSE PROXIMITY TO THE SIGNAL POLE FOUNDATION, THE CONTRACTOR SHALL HAND DIG THE FIRST FOUR FEET OF THE HOLE FOR THE POLE FOUNDATION.

18. 650-1-311 / 650-1-411: SIGNAL HEAD BACK PLATES SHALL HAVE YELLOW RETRO-REFLECTIVE BORDER.

19. 653-191:
PEDESTRIAN SIGNAL SHALL BE COUNTDOWN WITH OVERLAY/FILLED/FILLED HAND AND PEDESTRIAN SYMBOLS, AND SHALL BE FDOT APPROVED PRODUCT.

20. 660-3-12:
THIS ITEM SHALL INCLUDE ALL LABOR AND MATERIALS REQUIRED TO FURNISH AND INSTALL A VEHICLE DETECTION SYSTEM THAT SHALL BE COMPATIBLE WITH THE CITY OF TAMPA, INCLUDING MICROWAVES, PROCESSORS, INTERFACE UNITS, CABLE PLANTS, MONITORING BRACKETS, AND ANY ADDITIONAL EQUIPMENT REQUIRED TO MAKE A COMPLETE AND ACCEPTABLE SYSTEM. CABLE SHALL HAVE NO SPLICE BETWEEN THE MICROWAVE SYSTEM AND THE CONTROLLER CONNECTION. THE APPROVED SYSTEM SHALL BE COMPATIBLE WITH THE CITY OF TAMPA CONTROLLER EQUIPMENT, CABINET, AND TRAFFIC SIGNAL COMPUTER SYSTEM. THE CONTRACTOR SHALL COORDINATE WITH THE MAINTAINING AGENCY FOR UNIT ACCEPTANCE AND SHALL BE LISTED IN THE F.D.O.T. APPROVED PRODUCT LIST.

21. 665-1-11:
SHALL INCLUDE ADDITIONAL COST OF LABOR AND MATERIALS REQUIRED FOR INSTALLATION OF PEDESTRIAN SIGNAL SIGN R10-31. PEDESTRIAN DETECTORS SHALL BE WIRED WITH IMSA 50-2 ROUTED THROUGH LOW VOLTAGE CONDUIT. IN ADDITION, THE PEDESTRIAN PUSH BUTTONS SHALL INCLUDE RAISED ARROWS TO INDICATE CROSSING DIRECTION.

22. 670-5-111:
THE CONTRACTOR SHALL NOTIFY THE CITY OF TAMPA SIGNAL SHOP (VIA EMAIL) AT LEAST 48 HOURS IN ADVANCE OF TURNING ON A NEW OR MODIFIED CONTROLLER CABINET ASSEMBLY. CABINET DOOR SHOULD OPEN AWAY FROM TRAFFIC. THE TECHNICIAN SERVICE SLAB SHALL BE A MAXIMUM OF 4" BELOW THE TOP OF THE CONCRETE PAD. THE CABINET SHALL INCLUDE AN 8 PHASE BACKPLANE WITH 16 POSITIONS ON THE LOAD BAY AND SHALL INCLUDE ADDITIONAL COST OF LABOR, CONCRETE, AND OTHER MATERIALS FOR CONTROLLER BASE, PAD, AND STEPS, AS ONE UNIT.

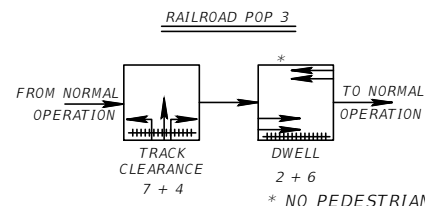
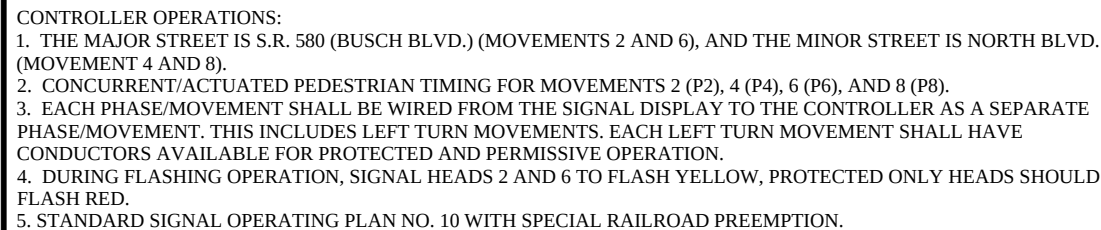
THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF TAMPA SIGNAL SHOP FOR ACCEPTABLE CHOICES OF TRAFFIC CONTROLLER AND CONTROLLER CABINET.

23. 670-5-111:
SHALL INCLUDE A COMMUNICATIONS INTERFACE PANEL COMPATIBLE WITH THE CITY OF TAMPA'S MTCS SYSTEM. IT SHALL ALSO INCLUDE A CONTROLLER CAPABLE OF INTERNAL COMMUNICATIONS WITH THE COMPUTRAN ECONOLITE CENTREX SYSTEM SOFTWARE, INCLUDING UPLOAD AND DOWNLOAD OF CONTROLLER TIMINGS.

24. 685-106:
THE UNINTERRUPTED POWER SUPPLY (UPS) UNIT SHALL BE HOUSED IN A SEPARATE ENCLOSED CABINET, THIS PAY ITEM SHALL INCLUDE CABINET TO HOUSE THE UPS ASSEMBLY. THE TRAFFIC SIGNAL CABINET CONCRETE BASE SHALL BE LARGE ENOUGH TO SUPPORT THE TRAFFIC SIGNAL CABINET AND THE UPS CABINET. PAYMENT FOR ADDITIONAL CONCRETE BASE, INCLUDING LABOR AND MATERIAL, SHALL BE INCLUDED IN TRAFFIC CONTROLLER ASSEMBLY PAY ITEM NUMBER. THE CONTRACTOR SHALL COORDINATE WITH C.O.T. TRAFFIC SIGNAL SHOP FOR SPECIFICATIONS. THE UPS UNIT SHALL BE THE SAME MAKE AND MODEL AS IS CURRENTLY BEING USED BY THE MAINTAINING AGENCY.

25. 700-5-21:
SHALL BE I.E.D. TYPE AND SHALL BE LISTED IN THE F.D.O.T. APPROVED PRODUCT LIST. CONTRACTOR SHALL CONTACT THE CITY OF TAMPA SIGNAL SHOP FOR VERIFICATION OF CORRECT SIGN FACE LAYOUT.
- | | | | | | | | | |
|-----|------|-----|-----------|-------------|---|---|---------|--------------------------------------|
| 3 | | | | DES: RBC | <div><div>ICON</div><div>CONSULTANT GROUP INCORPORATED</div><div>10006 NORTH DALE MABRY HIGHWAY, SUITE 201
TAMPA, FL 33618
TELEPHONE: (813) 962-8689
FAX (813) 963-1610</div></div> | BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS | W.O. | MICHELLE H. SCHOFNER, P.E. NO. 51977 |
| 2 | | | | DRN: RBC | | | | |
| 1 | | | | CKD: RDM | | | Sh. T-3 | |
| No. | DATE | BY: | REVISIONS | DATE: 12/12 | CERTIFICATE OF AUTHORIZATION NO 8230 | GENERAL NOTES | Of T-8 | |
- David Meadows
- 12/18/2013 1:25:47 PM
- F:\Projects\41340723801\AutoCAD Civil 3D Project\41340723801\signals\GNNTSG01.DWG

1. ALL SIGNAL HEADS SHALL HAVE TUNNEL VISORS.



VEHICLE DETECTION ASSIGNMENTS			
VEHICLE	DETECTION	CONNECT	DELAY
DETECTOR	ZONE	TO TIMING	TIME
		FUNCTION	(SEC.)
CD1,6	DZ 1		
	DZ 6 AB		
CD2,5	DZ 2 AB		
	DZ 5		
CD4	DZ 4		
	DZ 7		
CD8	DZ 3		
	DZ 8		

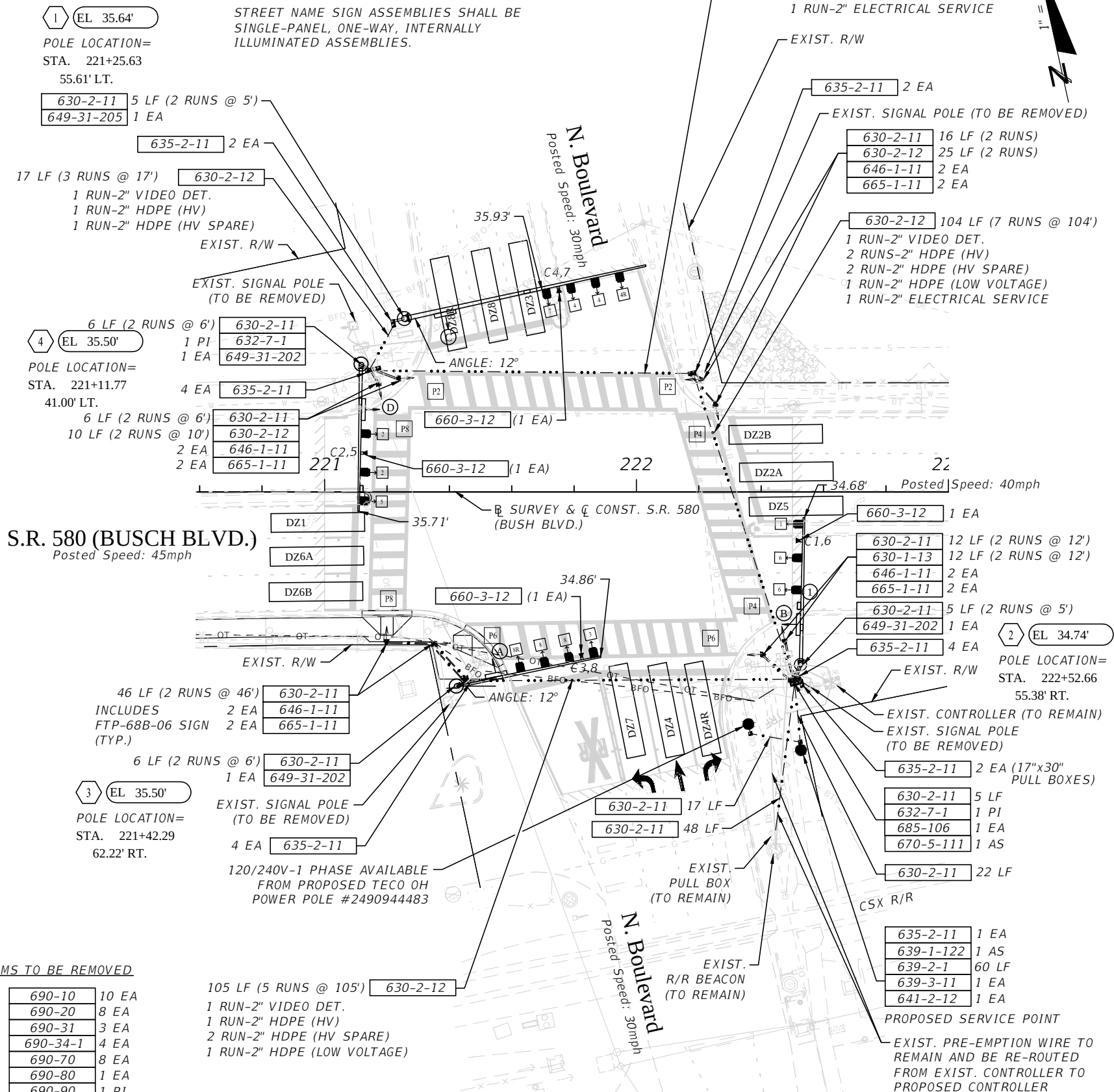
POWER SERVICE METER BASE AND DISCONNECT
SHALL BE INSTALLED ON THE CONCRETE SERVICE
POLE AS SHOWN ON THE PLANS AND PER INDEX
NUMBERS 17504 DETAIL "B" AND 17736.

 VEHICLE DETECTOR

 VEHICLE DETECTION ZONE

690-10	10 EA
690-20	8 EA
690-31	3 EA
690-34-1	4 EA
690-70	8 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI

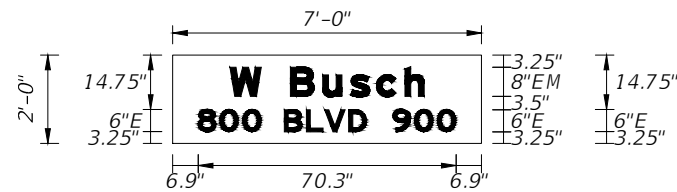
STREET NAME SIGN ASSEMBLIES SHALL BE SINGLE-PANEL, ONE-WAY, INTERNALLY ILLUMINATED ASSEMBLIES.



STRUCTURE NUMBER 10M376

3				DES:	RBC	 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	12/12	CERTIFICATE OF AUTHORIZATION NO 8230	SIGNALIZATION PLAN	Sh. T-4 of T-8	MICHELLE H. SCHOFNER, P.E. NO. 51977

SIGN DETAIL



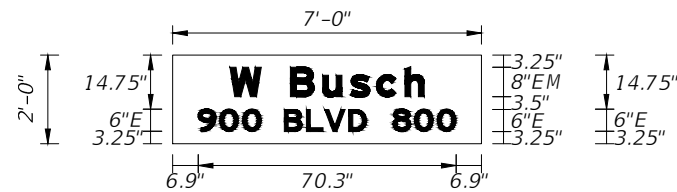
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CORNER RADIUS	0"
MOUNTING	Overhead
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LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Green

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Letter spacings are to start of next letter

[illegible]

SIGN DETAIL



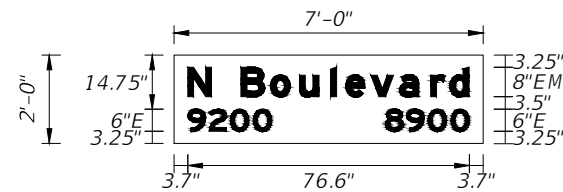
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Letter spacings are to start of next letter

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SIGN DETAIL



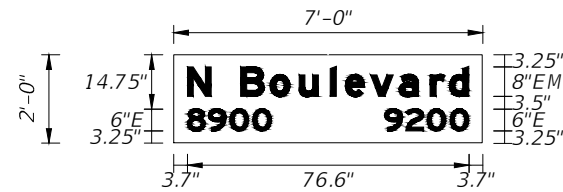
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CORNER RADIUS	0"
MOUNTING	Overhead
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LEGEND/BORDER	TYPE: Reflective COLOR: White/Green

[illegible]

Letter spacings are to start of next letter

[illegible]

SIGN DETAIL



SIGN NUMBER	D
WIDTH x HGHT.	7'-0" x 2'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/Green

[illegible]

Letter spacings are to start of next letter

[illegible]

3				DES:	RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 CONSULTANT GROUP INCORPORATED	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2				DRN:	RBC				
1				CKD:	RDM			GUIDESIGN WORKSHEET	
No.	DATE	BY:	REVISIONS	DATE:	12/12	CERTIFICATE OF AUTHORIZATION NO 8230		of T-8	MICHELLE H. SCHOFNER, P.E. NO. 51977

STANDARD MAST ARM ASSEMBLIES DATA TABLE																			Table Date 01-01-12	
STRUCTURE LOCATION NUMBER	STRUCTURE ID NUMBERS	ASSEMBLY NUMBERS ⁽¹⁾	FIRST ARM			SECOND ARM			UF (deg)	LL (deg)	POLE				SPECIAL DRILLED SHAFT ⁽⁴⁾					
			ARM TYPE	FAA ⁽²⁾ (ft.)	FBA ⁽²⁾ (in.)	ARM TYPE	FAA ⁽²⁾ (ft.)	FBA ⁽²⁾ (in.)			POLE TYPE	UAA ⁽³⁾ (ft.)	UB (ft.)	UCA ⁽³⁾ (in.)	DA (ft.)	DB (ft.)	RA	RB	RC	RD (in.)
1 - 1	10M376	E7-T6	E7								T6		21.30		17	4.5	11	15	10	12
1 - 2	10M376	E3-T2	E3								T2		20.36		13	4	11	12	10	12
1 - 3	10M376	E3-T2	E3								T2		20.37		13	4	11	12	10	12
1 - 4	10M376	E3-T2	E3								T2		20.63		15.5	4	11	12	10	12

TABLE NOTES:

1. Assembly Number Legend

Single Arm:
Arm Type - Pole Type = D# - S#
= E# - T#

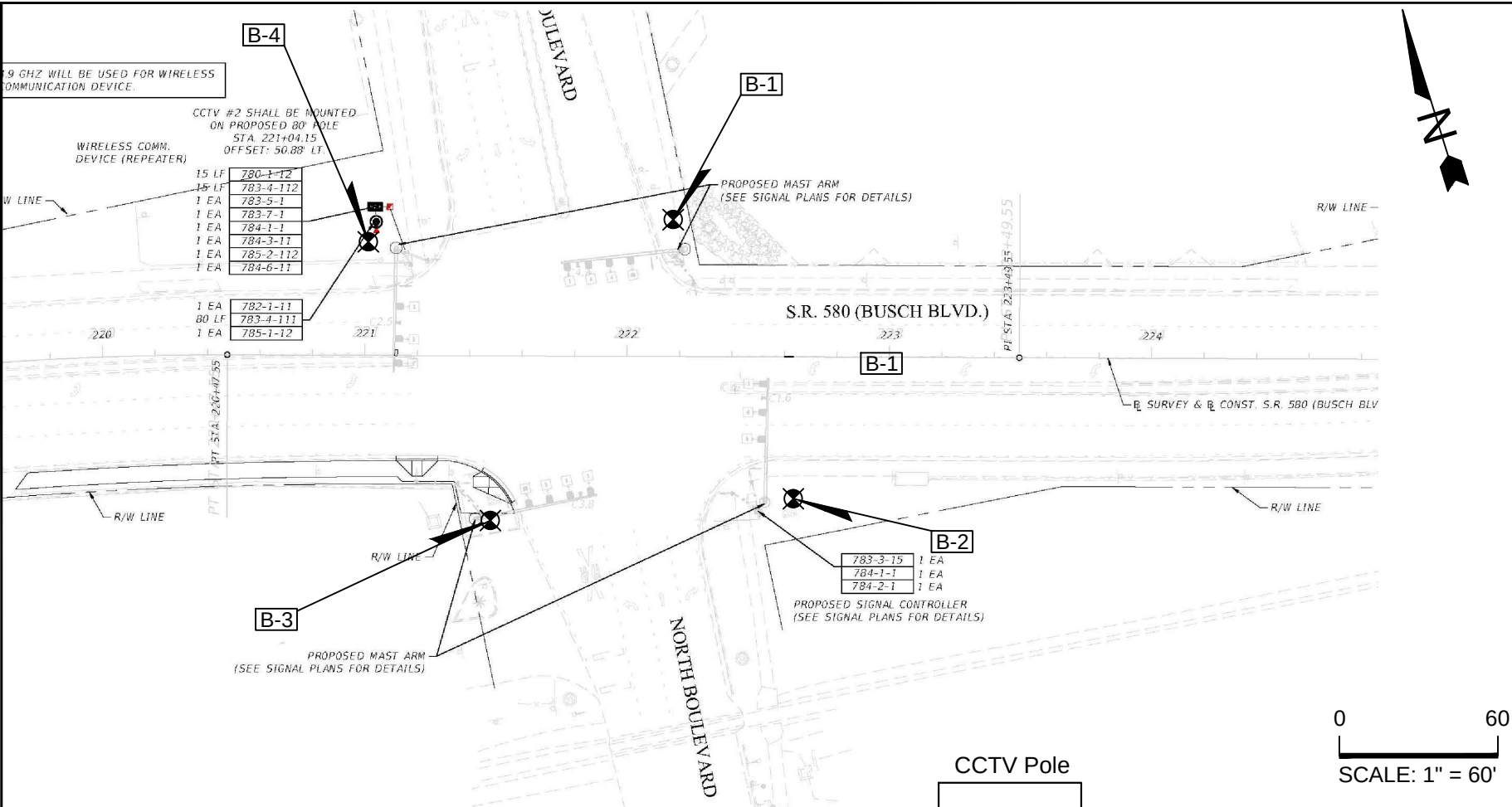
Double Arm:
First Arm Type - Second Arm Type - Pole Type = D# - D# - S#
= E# - E# - T#

2. If an entry appears in columns "FAA" and "FBA", a shorter arm is required. This is obtained by removing length from the arm tip. For these cases the mast arm length shall be shortened from "FA" to "FAA" and the tip diameter shall be increased from "FB" to "FBA".
3. If an entry appears in columns "UAA" and "UCA", a shorter pole is required. This is obtained by removing length from the pole tip. For these cases the pole height shall be shortened from "UA" to "UAA" and the pole tip diameter shall be increased from "UC" to "UCA".
4. Design based on Borings taken 03/05/2013 sealed by Kermit Schmidt, PE 45603.

Assumptions and Values used in design for Mastarms:
Soil Type - Sand
Soil Friction Angle = 28 deg.
Soil Weight = 37.6 pcf (buoyant)
Design Water Table is 0 ft. below surface

GENERAL NOTES:

1. Work this sheet with the Signal Designer's "Mast Arm Tabulation". See "Mast Arm Tabulation" for special instructions that include non-standard Handhole location, paint color, terminal compartment requirement, and pedestrian features.
2. Work with Index Nos. 17743 and 17745.



BORING NO. = B-1
STA. 222+15, 50' LT
DATE = 3/5/13

BORING NO. = B-2
STA. 222+60, 55' RT
DATE = 3/5/13

BORING NO. = B-3
STA. 221+50, 60' RT
DATE = 3/5/13

BORING NO. = B-4
STA. 221+00, 40' LT
DATE = 3/5/13

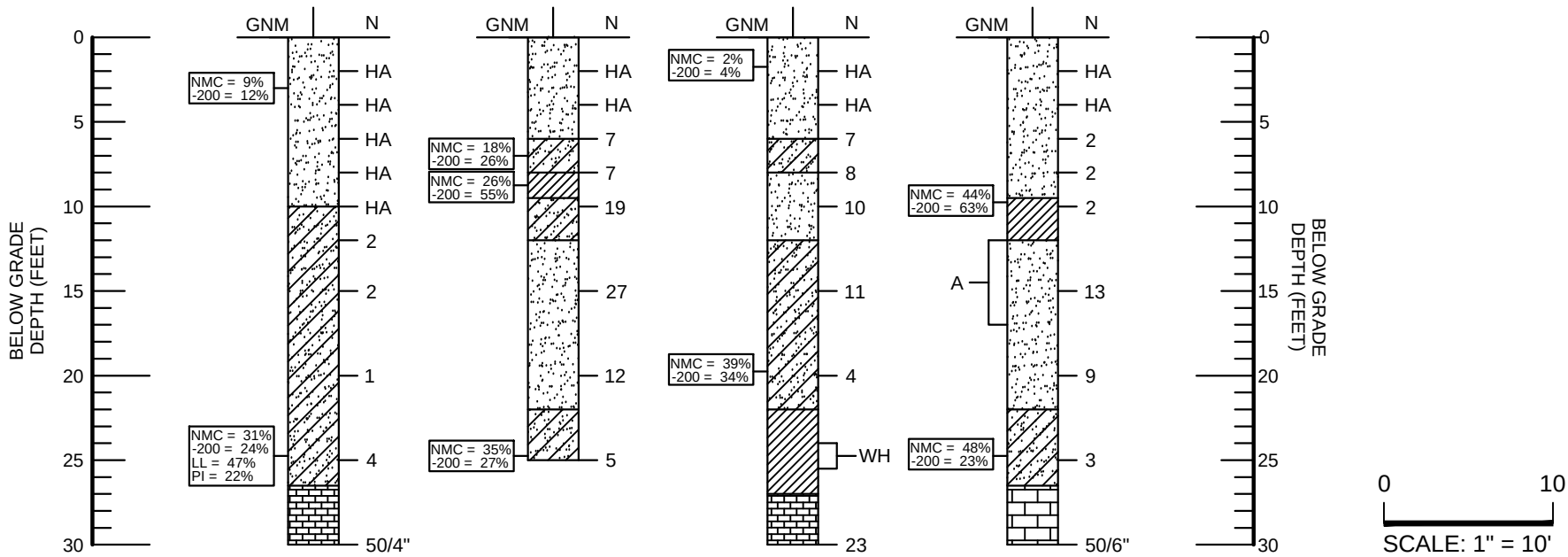


TABLE SOIL PARAMETERS										
BORING ID	ELEV. RANGE NGVD, FT	DEPTH RANGE, FT	SPT "N" VALUE RANGE	UNIFIED SOIL CLASSIFICATION	APPROXIMATE SOIL UNIT WEIGHT (PCF)		SOIL ANGLE OF FRICTION (DEGREES)	COHESION (PSF)	EARTH PRESSURE COEFFICIENT	
					SATURATED	SUBMERGED			ACTIVE (Ka)	PASSIVE (Kp)
B-1	-----	0-10	HA	SP/SP-SM/SP-SC	100.0	37.6	28	0	0.361	2.77
	-----	10-26.5	1-4	SC	100.0	37.6	28	0	0.361	2.77
	-----	26.5-30	50/4"	CL	125.0	62.6	0	9400	1.00	1.00
B-2	-----	0-4	HA	SP/SP-SM/SP-SC	100.0	37.6	28	0	0.361	2.77
	-----	4-6	7	SP/SP-SM/SP-SC	105.0	42.6	29	0	0.347	2.88
	-----	6-8	7	SC	105.0	42.6	29	0	0.347	2.88
	-----	8-9.5	19	CL/CH	125.0	62.6	0	2400	1.00	1.00
	-----	9.5-12	19	SC	110.0	47.6	30	0	0.333	3.00
	-----	12-17	27	SP/SP-SM/SP-SC	115.0	52.6	32	0	0.307	3.25
	-----	17-22	12	SP/SP-SM/SP-SC	110.0	47.6	30	0	0.333	3.00
B-3	-----	0-4	HA	SP/SP-SM/SP-SC	100.0	37.6	28	0	0.361	2.77
	-----	4-6	7	SP/SP-SM/SP-SC	105.0	42.6	29	0	0.347	2.88
	-----	6-8	8	SC	105.0	42.6	29	0	0.347	2.88
	-----	8-12	10	SP/SP-SM/SP-SC	105.0	42.6	29	0	0.347	2.88
	-----	12-22	4-11	SC	105.0	42.6	29	0	0.347	2.88
	-----	22-27	0	CL/CH	105.0	42.6	0	0	1.00	1.00
	-----	27-30	23	CL	125.0	62.6	0	2900	1.00	1.00
B-4	-----	0-9.5	HA-2	SP/SP-SM/SP-SC	100.0	37.6	28	0	0.361	2.77
	-----	9.5-12	2	CL/CH	105.0	42.6	0	250	1.00	1.00
	-----	12-22	9-13	SP/SP-SM/SP-SC	110.0	47.6	30	0	0.333	3.00
	-----	22-26.5	3	SC	100.0	37.6	28	0	0.361	2.77
	-----	26.5-30	50/6"	LS	135.0	72.6	0	15000	1.00	1.00

LEGEND

- (SP/SP-SM/SP-SC) GRAY, PALE BROWN, OR BROWN FINE SAND TO SLIGHTLY SILTY OR CLAYEY FINE SAND.
- (CL/CH) PALE BROWN TO BROWN SANDY CLAY TO CLAY.
- (SC) PALE BROWN TO BROWN CLAYEY FINE SAND.
- (CL) PALE BROWN, BROWN, OR REDDISH BROWN SANDY CLAY.
- (LS) PALE BROWN WEATHERED LIMESTONE

- NOTES:
- SPT BORING LOCATION
- N SPT N-VALUE
- HA HAND AUGER
- A WITH CLAY CLOGS
- WH WEIGHT OF HAMMER
- GNM GROUNDWATER NOT MEASURED

BORING LOCATIONS ARE APPROXIMATE.

GRANULAR MATERIALS- RELATIVE DENSITY	SPT (BLOWS/FT)
VERY LOOSE	LESS THAN 4
LOOSE	5-10
MEDIUM	11-30
DENSE	31-50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	SPT (BLOWS/FT)
VERY SOFT	LESS THAN 2
SOFT	3-4
FIRM	5-8
STIFF	9-15
VERY STIFF	16-30
HARD	30-50
VERY HARD	GREATER THAN 50



CITY OF TAMPA

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

BUSCH BOULEVARD PEDESTRIAN AND SIGNALIZATION IMPROVEMENTS

LAP FINACIAL PROJECT ID: 413407-2-58-01
FEDERAL AID PROJECT NO.: SFTI 267R
(FEDERAL FUNDS)

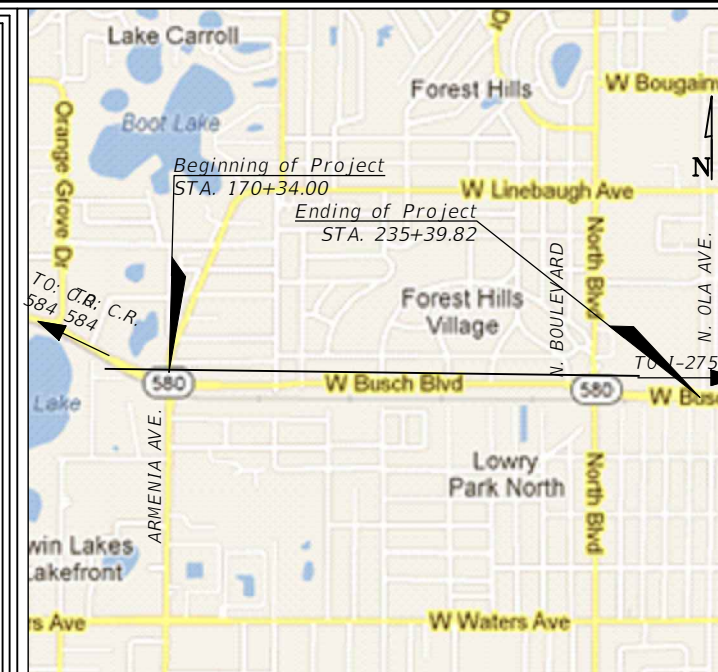
BUSCH BLVD (SR 580) FROM ARMENIA AVE. TO FLORIDA AVE.

TRANSPORTATION DIVISION CITY OF TAMPA, FLORIDA

TRANSPORTATION DIVISION PROJECT NO: 0000029

PLANS PREPARED BY:

ICON
CONSULTANT GROUP
INCORPORATED
10006 N. DALE MABRY HIGHWAY
SUITE 201
TAMPA, FLORIDA 33618
(813) 962-8689
CERTIFICATE OF AUTHORIZATION NO. 8230



VICINITY MAP
SCALE: None

INDEX OF DRAWINGS

SHEET NO.	SHEET DESCRIPTION
IT-1	KEY SHEET
IT-2	TABULATION OF QUANTITIES
IT-3	GENERAL NOTES
IT-4 THRU IT-6	ITS PLANS
IT-7	CCTV POLE DETAILS
IT-8 THRU IT-11	CCTV POLE SCHEDULE
IT-12 & IT 13	REPORT OF CORE BORINGS

STANDARD DRAWINGS & INDICES

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH, AND GOVERNED BY, THE CITY OF TAMPA STANDARD DRAWINGS AND WHERE APPLICABLE, FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS DATED JANUARY, 2014 AND DIVISION II AND III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2014, 2007 FLORIDA GREEN BOOK, MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, AS AMENDED BY CONTRACT DOCUMENTS.

**FINAL PLANS
FEBRUARY, 2014**

APPROVED BY:

MILTON MARTINEZ, P.E. #54056
PROJECT MANAGER
CITY OF TAMPA TRANSPORTATION DIVISION

CERTIFICATION

Sheet IT-1 to IT-13 Inclusive, Certified By:

MICHELLE H. SCHOFNER, P.E. #51977
PROJECT MANAGER
ICON CONSULTANT GROUP INC.

FORM 625-000-02
ROADWAY DESIGN 01-2000

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GENERAL NOTES

1. THIS PLAN SET IS ASSOCIATED WITH THE BUSCH BLVD FROM ARMENIA AVE. TO FLORIDA AVE. ROADWAY, SIGNALIZATION, AND SPM PLANS. THE CONTRACTOR SHALL COORDINATE FURNISHING AND INSTALLATION OF INTELLIGENT TRANSPORTATION SYSTEM DEVICES, CABINETS, CONDUITS AND PULL- BOXES WITH ONGOING AND FUTURE ROAD CONSTRUCTION WORK WITHIN THE BUSCH BLVD. CORRIDOR.

2. THE CONTRACTOR SHALL FOLLOW ALL RELEVANT GUIDELINES ABOUT TRAFFIC CONTROL, BRIDGE WORK, STAGING, WETLANDS AND EROSION CONTROL INCLUDED IN THE ROADWAY PLANS.

3. STATIONS SHOWN ON THIS PLAN SET ARE FOR REFERENCE ONLY. DEVICE LOCATIONS MAY REQUIRE FIELD ADJUSTMENT TO CLEAR UTILITIES. ALL DEVICE ADJUSTMENTS SHALL COMPLY WITH MINIMUM STANDARD SPECIFICATION REQUIREMENTS AND SHALL BE APPROVED BY THE ENGINEER OF RECORD (AS DEFINED BY THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION) PRIOR TO INSTALLATION. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING EXISTING UNDERGROUND AND ABOVEGROUND STRUCTURES AND FACILITIES.

4. THE CONTRACTOR SHALL PROCURE UTILITY LOCATES IN ACCORDANCE WITH THE FLORIDA UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT (556). THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS AT SUNSHINE STATE ONE CALL OF FLORIDA INC. AT (800) 432-4770 TWO FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION AT PROJECT SITES, AND TEN FULL BUSINESS DAYS IN ADVANCE WHEN DIGGING UNDER WATER. THE EXACT LOCATION OF THE UTILITIES SHALL BE IDENTIFIED BY THE CONTRACTOR DURING CONSTRUCTION. THE CONTRACTOR SHALL ADJUST THE CONDUIT RUNS, BORES AND SERVICE POLE PLACEMENTS TO AVOID ANY UTILITY CONFLICT IDENTIFIED BY THE LOCATES. ANY MODIFICATIONS REQUIRED SHALL BE APPROVED BY THE ENGINEER OF RECORD.

5. THE CONTRACTOR SHALL CONTACT TECO ELECTRIC REPRESENTATIVE WHO IS RESPONSIBLE FOR TECHNICAL ASSISTANCE IN PERFORMING ALL NECESSARY WORK UNDER POWER LINES.

6. ALL APPLICABLE PROVISIONS OF EXISTING UTILITY EASEMENTS WILL BE ADHERED TO BY CONTRACTOR.

7. THE CONTRACTOR SHALL AVOID AND/OR PROTECT ALL TREES AND ROOTS BY HAND DIGGING OR OTHER APPROVED MEANS.

8. THE CONTRACTOR SHALL CONTACT TECO ELECTRIC TO CREATE POWER DROPS FROM THE EXISTING POWER LINES.

9. THE CONTRACTOR SHALL EXERCISE ALL APPROPRIATE SAFETY MEASURES WHEN WORKING IN OR AROUND AREAS OF OVERHEAD ELECTRICAL/TRANSMISSION LINES OR UNDERGROUND UTILITIES. HAND DIGGING SHALL BE USED AROUND ALL KNOWN AND LOCATED UTILITIES.

10. ANY DAMAGE CAUSED BY THE CONTRACTOR, HILLSBOROUGH COUNTY, OR CITY OF TAMPA ASSETS SHALL BE IMMEDIATELY REPORTED TO THE RESPECTIVE ENTITY AND RESTORED TO THEIR ORIGINAL CONDITIONS BY THE CONTRACTOR.

11. ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY UTILITY-OWNED INFRASTRUCTURES SHALL BE IMMEDIATELY REPORTED TO THE SUNSHINE STATE ONE CALL OF FLORIDA INC. AT (800) 432-4770 AND RESTORED TO THEIR ORIGINAL CONDITIONS BY THE CONTRACTOR.

12. ALL ELECTRICAL EQUIPMENT SHALL BE WEATHER RESISTANT.

13. WHEN MINIMUM REQUIRED CONDUIT BURY DEPTHS CAN NOT BE MAINTAINED DUE TO CONFLICTS WITH DRAINAGE OR OTHER UTILITIES, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD FOR APPROVAL OF ALTERNATIVE BURY DEPTH AND/OR CONSTRUCTION METHOD.

14. THE CONTRACTOR SHALL SUBMIT THE AS-BUILT PLANS TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FINAL ACCEPTANCE. THESE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED P.E. REPRESENTING THE CONTRACTOR FIRM. THE CITY OF TAMPA TRAFFIC SECTION WOULD LIKE THE AS-BUILT PLANS IN AN ELECTRONIC FORMAT (AUTOCAD).

15. THE CONTRACTOR SHALL DIRECTIONAL BORE ONLY THE SPECIFIED LENGTHS AS SHOWN IN THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER OF RECORD.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SERVICE PROCESSES OR CONNECTION FEES THAT ARE REQUIRED. THE CONTRACTOR SHALL CONTACT THE TRAFFIC SIGNAL SHOP SUPERVISOR WITH THE CITY OF TAMPA AT 813-622-1966 OR 813-622-1969 TO INITIATE ELECTRICAL SERVICE. FOUR WEEKS OF ADVANCE NOTICE ARE REQUIRED. THE COST OF ANY SUCH FEE SHALL BE INCLUDED AS PART OF PAYMENT FOR ELECTRICAL POWER SERVICE ASSEMBLY. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COORDINATING POWER SOURCE LOCATION AND ADDRESSES AT ALL EQUIPMENT SITES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL COMPLY WITH THE INDEX# 17504 SERVICE POINT DETAILS AND THE INDEX# 17736 ELECTRIC POWER SERVICE FROM THE 2014 FDOT DESIGN STANDARDS OR AS RECOMMENDED BY THE POWER COMPANY.

17. ALL FIBER OPTIC PULL BOXES AND SPLICE BOXES SHALL HAVE "CITY OF TAMPA ITS" AND ALL ELECTRICAL SERVICE POWER PULL BOXES SHALL HAVE "TAMPA ELECTRIC POWER" STAMPED ON THE COVER. THE LETTER SIZE SHALL BE A MINIMUM OF TWO INCHES TALL

18. THE CONTRACTOR SHALL INSTALL GROUNDING AND LIGHTNING TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS) PROTECTION ON ALL CABINETS INSTALLATION AS PER SECTION 620 AND SECTION 785 OF THE FDOT STANDARD SPECIFICATIONS.

19. ALL EXISTING CCTV CAMERAS IN THE CORRIDOR SHALL STAY OPERATIONAL THROUGHOUT THE CONSTRUCTION OF THE ROAD. ANY DAMAGE CAUSED BY THE CONTRACTOR THAT MAY INTERRUPT THE OPERATION AND CONNECTIVITY OF THESE CAMERAS WITH THE CITY OF TAMPA CONTROL CENTER SHALL BE REPORTED IMMEDIATELY TO THE CITY OF TAMPA REPRESENTATIVE AND RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST,

20. HANG DIG THE FIRST 4' AT EACH POLE. BACKFILLING AROUND POLE SHALL CONFORM TO SECTION 125 OF THE STANDARD SPECIFICATIONS.

21. A RADIO PATH ANALYSIS SHALL BE CONDUCTED BY THE CONTRACTOR AND RESULTS REVIEWED AND APPROVED BY THE CITY TO DETERMINE THE EFFECTIVENESS OF REQUIRED RADIOS.

22. SHOP DRAWINGS REQUIRED FOR APPROVAL ON CABINETS AND CCTV POLE PRIOR TO PLACING ORDER.
- PAY ITEM NOTES
1. ITEM 630-2-11: THE CONTRACTOR SHALL ENSURE THAT THE STANDARD ROUTE MARKER OR THE ELECTRONIC ROUTE MARKER USED FOR THE CONDUIT LOCATE SYSTEM IS LABELED AND IDENTIFIED AS A "CITY OF TAMPA FIBER OPTIC CABLE MARKER" AND INCLUDES THE CITY OF TAMPA'S LOGO, CONTACT INFORMATION, AND TELEPHONE NUMBER TO CALL PRIOR TO ANY INSTALLATION. HIGH-DENSITY POLYETHYLENE (HDPE) SDR 11 CONDUIT IS TO BE USED FOR THE UNDERGROUND ITS CONDUIT INSTALLATION. ALL HDPE SDR 11 CONDUIT CONNECTIONS SHALL BE JOINED PER MANUFACTURER'S COUPLING METHOD. ALL BACKBONE UNDERGROUND CONDUIT INSTALLATION SHALL INCLUDE FOUR TWO INCH CONDUITS. DO NOT INSTALL POWER CONDUIT INTO FIBER OPTIC PULL BOX OR FIBER OPTIC SPLICE BOX. TONE WIRE WILL BE PULLED CONTINUOUSLY WITH ALL FIBER OPTIC CABLE IN AN ADJACENT CONDUIT. AT TIE-IN LOCATIONS BETWEEN BORED CONDUIT AND TRENCHED CONDUIT, A FUSION COUPLER SHALL BE USED. THE FUSION COUPLER IS INCIDENTAL TO THIS PAY ITEM. ROUTE MARKERS TO BE FOR ASSOCIATED REQUIREMENT I.E. POWER OR FIBER OPTIC OR COPPER COMMUNICATIONS.

2. ITEM 630-2-14: THE CONTRACTOR SHALL INSTALL RIGID GALVANIZED CONDUIT FOR EVERY ABOVE GROUND INSTALLATION. RGS CONDUITS SHALL BE USED, AS INDICATED IN THE PLANS.

3. 635-2-12: A SPARE OF 2" INTO PULL BOX SHALL BE INCLUDED FOR FUTURE USE/CONNECTION.

4. ITEM 639-1-410: THE EXISTING ELECTRICAL POWER SERVICE SHALL BE ADJUSTED AND MODIFIED AS NECESSARY BY THE CONTRACTOR TO PROVIDE SPLIT SERVICE FOR CONTROLLER AND CCTV WITH 2 SPARE BARS.

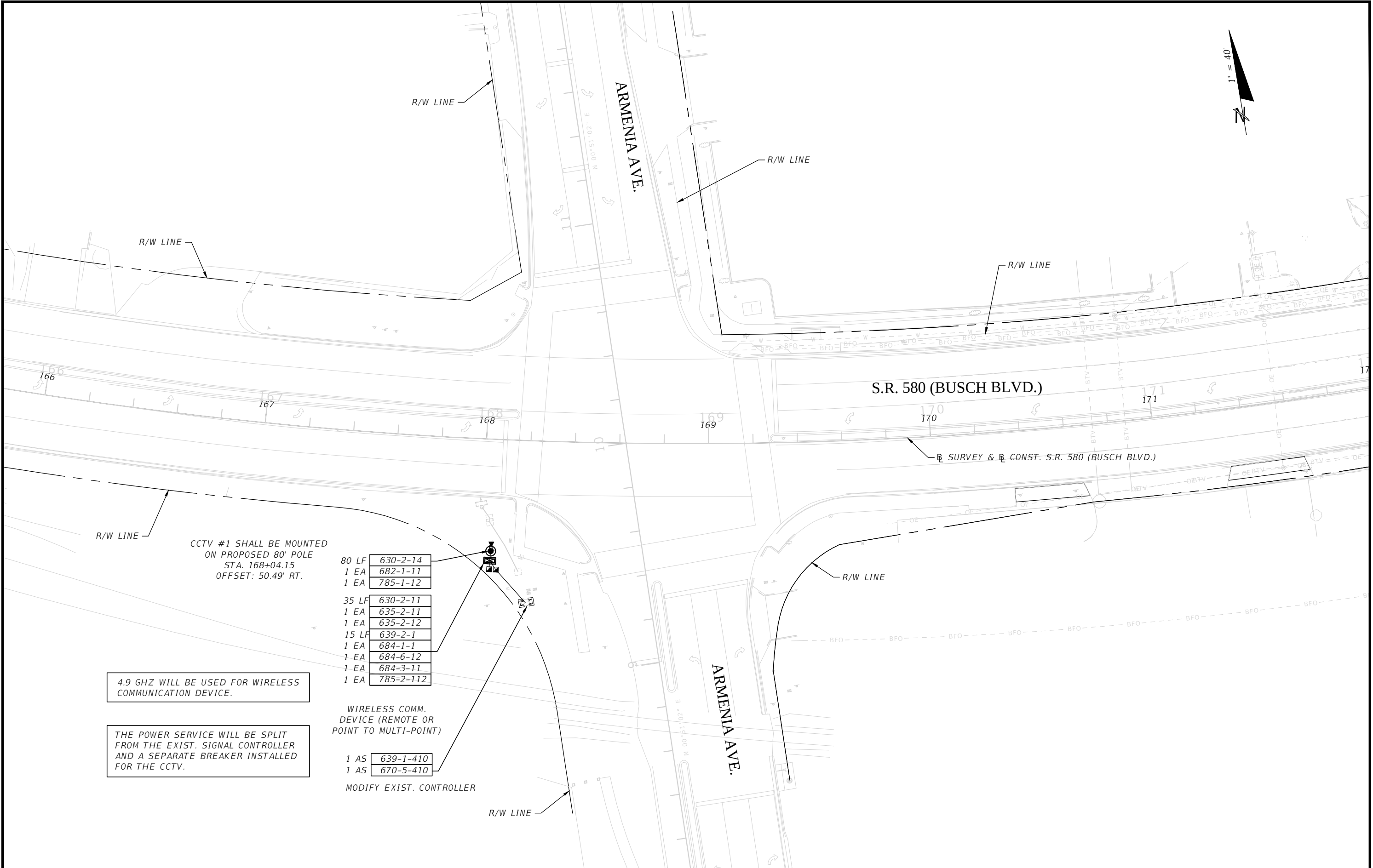
5. ITEM 639-2-1: THE ELECTRICAL SERVICE WIRE FOR CCTV APPLICATIONS SHALL BE AT A MINIMUM 8 AWG STRANDED COPPER, WITH XHHW INSULATION, RATED AT 600 V IN DRY AND WET CONDITIONS.

6. ITEM 682-1-11: THE CONTRACTOR SHALL USE THE 2014 DESIGN STANDARDS INDEX 18100, 18101, 18102, 18104, 18105, 18107, 18108, 18110 AND 18111 FOR INSTALLATION DETAILS. ALL CLOSED CIRCUIT TELEVISION (CCTV) CAMERA POLES SHALL BE INSTALLED AT A MINIMUM DISTANCE OF 4 FEET AWAY FROM THE FACE OF CURB WITHOUT OBSTRUCTING THE SIDE WALK TRAIL, AND 20 FEET AWAY FROM THE OVERHEAD ELECTRIC FACILITIES. THE CCTV SYSTEM SHALL INCLUDE CABLES, CONNECTORS AND ANCILLARY EQUIPMENT NECESSARY FOR COMMUNICATION FROM THE DEVICE TO THE ITS CABINET AS WELL AS FROM ITS CABINET TO TRAFFIC CONTROLLER CABINET. THE COAXIAL CABLE TERMINATIONS SHALL BE FACTORY MADE QUALITY AND PERMANENT. THE COAXIAL CABLE CONNECTOR SHALL BE CRIMP OR COMPRESSION CONNECTOR STYLE.

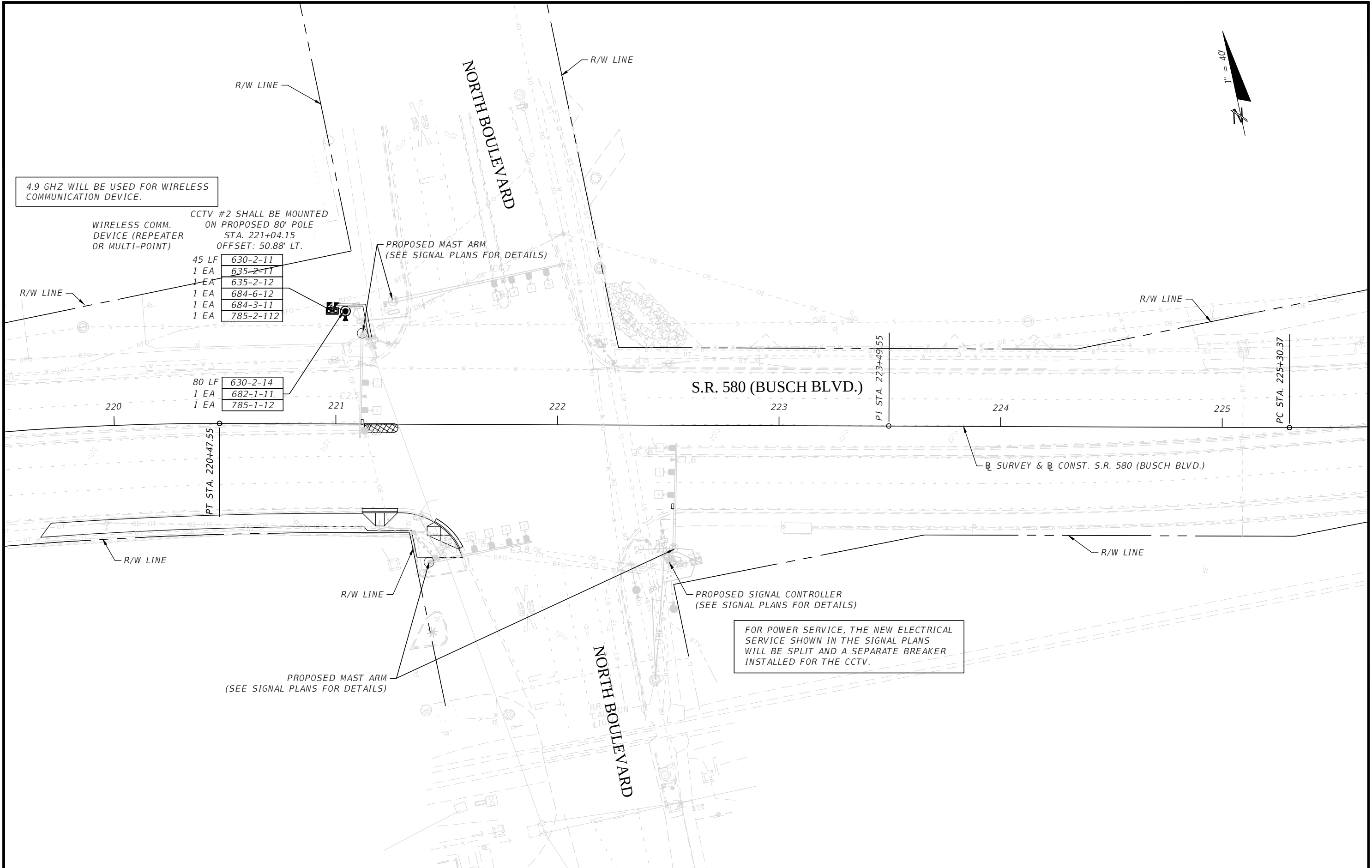
7. ITEM 684-1-1: THE CONTRACTOR SHALL PROVIDE HARDENED MANAGED FIELD ETHERNET SWITCHES (MFES) THAT INCLUDE A MINIMUM OF SIX 10/100 BASE COPPER PORTS AND TWO 10/100 BASE FULL DUPLEX OPTICAL PORTS. ALL MFES COPPER PORTS SHALL COMPLY WITH FDOT STANDARD SPECIFICATIONS. ALL MFES OPTICAL PORTS SHALL BE TYPE LC ONLY. ALL MFES SHALL BE COMPATIBLE WITH THE CITY OF TAMPA'S EXISTING DEVICES.

8. ITEM 684-6-11 AND 684-6-12: THE CONTRACTOR SHALL COMPLETE ALL REQUIRED TESTING, RADIO SITE SURVEY AND RADIO FREQUENCY ANALYSIS TO VERIFY A SOLID STABLE WIRELESS COMMUNICATIONS PATH FOR THE PLACEMENT OF WIRELESS COMMUNICATION DEVICE PRIOR TO ACQUISITION AND INSTALLATION OF THE WIRELESS EQUIPMENT. THIS TESTING SHALL BE PERFORMED BEFORE THE INSTALLATION OF THE CCTV POLES AND FOUNDATIONS TO ENSURE THAT COMMUNICATIONS PATH IS FEASIBLE AS THE WIRELESS DEVICES WILL BE ATTACHED TO THESE POLES. THE TESTING SHALL BE WITNESSED AND APPROVED BY THE CEI, EOR, AND THE CITY OF TAMPA PRIOR TO ACQUISITION AND INSTALLATION. THIS PAY ITEM SHALL INCLUDE ALL LABOR AND MATERIALS REQUIRED TO ATTACHED EXTERIOR CONDUIT MOUNTING TO GALVANIZED POLE. INCLUDING SS BANDING, BANDING STRAPS, CONDUIT BRACKETS, AND ANY ADDITIONAL MATERIAL REQUIRED TO MAKE THE EXTERIOR MOUNT FOR RADIO CABLE. SHALL INCLUDE ALL THE MATERIAL REQUIRED TO INSTALL THE RADIO PANEL ANTENNAS.

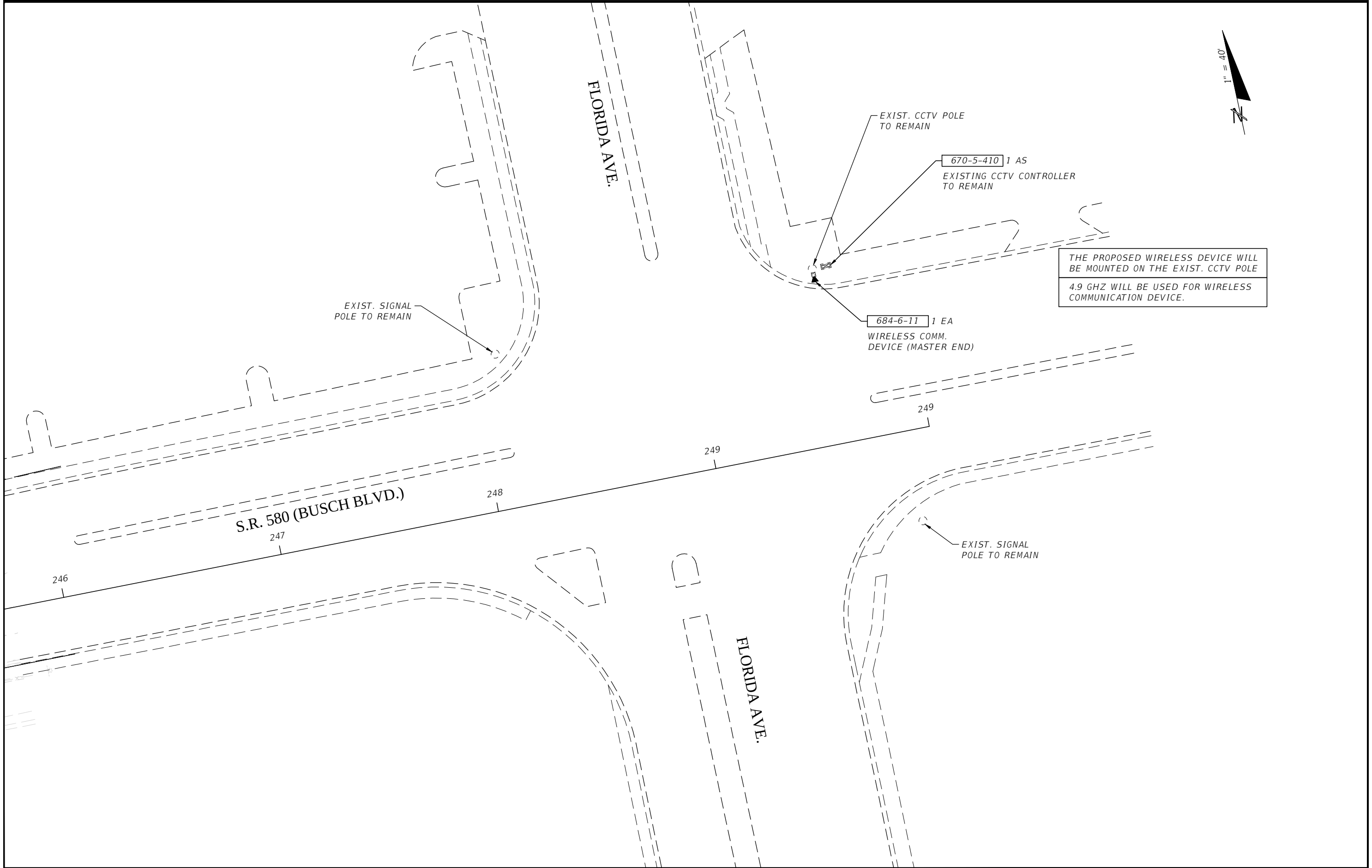
9. ITEM 684-3-11: THE DIGITAL VIDEO ENCODERS SHALL BE COMPATIBLE WITH THE CITY OF TAMPA'S EXITING DEVICES.
- | | | | | | | | | | |
|-----|------|-----|-----------|-------|-------|--|---|----------------------|---------------------------------------|
| 3 | | | | DES: | RBC | <div>ICON10006 NORTH DALE MABRY HIGHWAY, SUITE 201TAMPA, FL 33618TELEPHONE (813) 962-8689FAX (813) 963-1610</div> <div>CONSULTANT GROUP INCORPORATED</div> | BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS | W.O. | MICHELLE H. SCHOFFNER, P.E. NO. 51977 |
| 2 | | | | DRN: | RBC | | | | |
| 1 | | | | CKD: | RDM | | | | |
| No. | DATE | BY: | REVISIONS | DATE: | 04/13 | CERTIFICATE OF AUTHORIZATION NO 8230 | GENERAL NOTES | Sh. 17-3
of 17-13 | |
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3				DES:	RBC	ICON10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13	CERTIFICATE OF AUTHORIZATION NO 8230	ITS PLAN (1)	Sh. IT-4 Of IT-13	MICHELLE H. SCHOFNER, P.E. NO. 51977



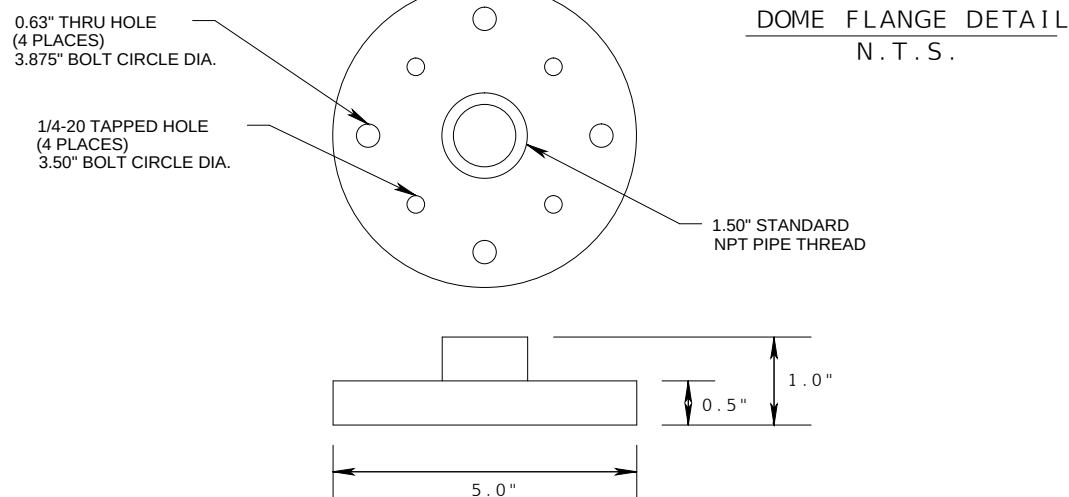
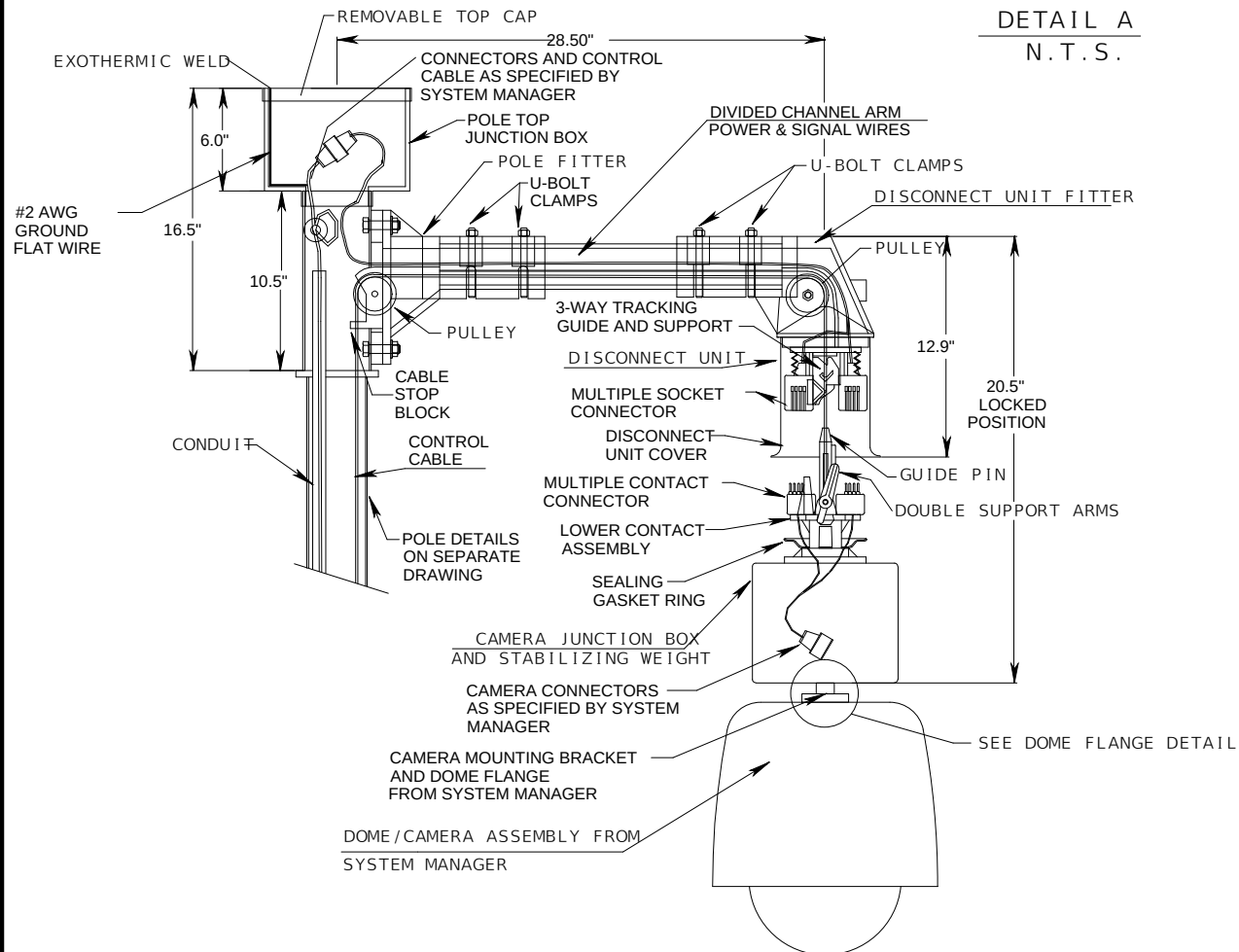
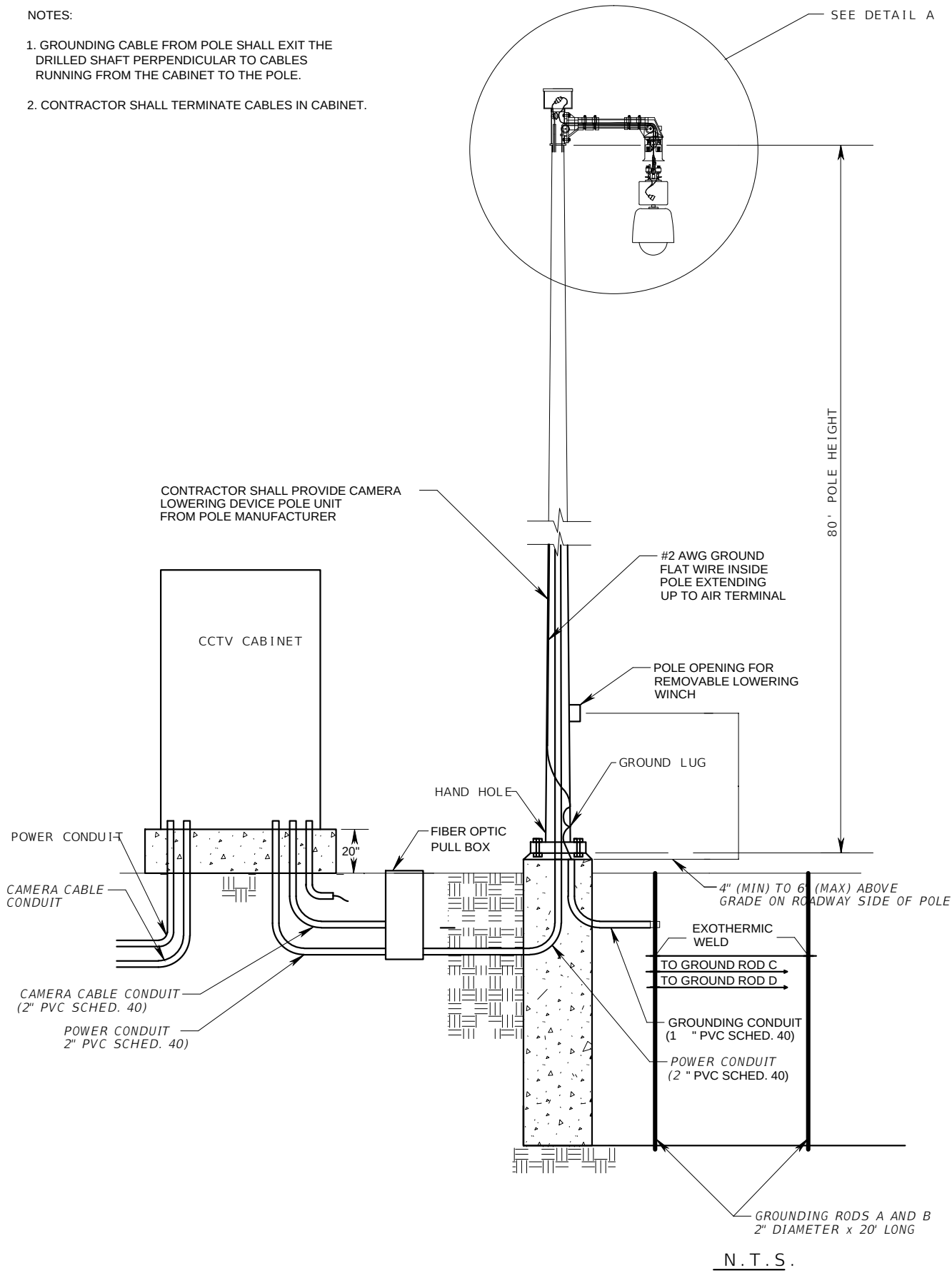
3				DES:	RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE (813) 962-8689 FAX (813) 963-1610 CERTIFICATE OF AUTHORIZATION NO 8230	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						ITS PLAN (2)	Sh. 1T-5 Of 1T-13		



3				DES:	RBC	ICON CONSULTANT GROUP INCORPORATED 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 TELEPHONE: (813) 962-8689 FAX: (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	MICHELLE H. SCHOFNER, P.E. NO. 51977
2				DRN:	RBC				
1				CKD:	RDM				
No.	DATE	BY:	REVISIONS	DATE:	04/13				
						CERTIFICATE OF AUTHORIZATION NO 8230	ITS PLAN (3)	Sh. 17-6 Of 17-13	

NOTES:

1. GROUNDING CABLE FROM POLE SHALL EXIT THE DRILLED SHAFT PERPENDICULAR TO CABLES RUNNING FROM THE CABINET TO THE POLE.
2. CONTRACTOR SHALL TERMINATE CABLES IN CABINET.



3				DES: RBC	ICON 10006 NORTH DALE MABRY HIGHWAY, SUITE 201 TAMPA, FL 33618 CONSULTANT GROUP INCORPORATED TELEPHONE (813) 962-8689 FAX (813) 963-1610	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	
2				DRN: RBC				
1				CKD: RDM				
No.	DATE	BY:	REVISIONS	DATE: 04/13		CERTIFICATE OF AUTHORIZATION NO 8230	CCTV POLE DETAILS	

FOUNDATION NOTES:

- Concrete: Class IV (Drilled Shaft) with a minimum 4,000 psi compressive strength at 28 days for all environment classifications.
- Reinforcing Steel: ASTM A615 Grade 60.
- Anchor Bolts: ASTM F1554 Grade 55 with ASTM A563 Grade A heavy-hex nuts and plate washers. ASTM F2329 galvanization.
- Install Anchor Bolts in accordance with Section 649-5 of the Specifications.
- Foundation applies to slopes 1:4 or flatter.
- The foundation for the CCTV structure shall be constructed in accordance with Section 455 of the Specifications except that no payment for the foundation shall be made under Section 455.

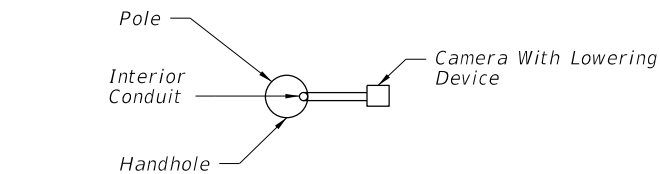
INSTALLATION NOTES:

- Cable Supports: Electrical Cable Guides and Eyebolts.
 - Locate top and bottom cable guides within the pole aligned with each other.
 - Position one cable guide 2" below the handhole.
 - Position other cable guide 1" directly below the top of the tenon.
 - Position Park Stands 2" below the top of the handhole.
- Lowering Device Installation Notes:
 - Place the lowering cable that moves within the pole in an interior conduit to prevent it from tangling or interfering with any electrical wire that is in the pole. Ensure that any electrical wire within the pole is routed securely and free from slack.
 - Mount lowering arm perpendicular to the roadway or as shown in the plans. Position CCTV pole so that the camera can be safely lowered without requiring lane closures.
 - Coordinate all lowering device hardware requirements (including Tenon, Tenon mounting plates, parking stands, etc.) with lowering device manufacturer.
- Pole Installation Notes:
 - Install pole plumb.
 - The pole shall not be erected until the foundation concrete has achieved 70% of the minimum specified 28 day compressive strength.
- Refer to Index No. 18108 for conduit and cabinet mounting details.

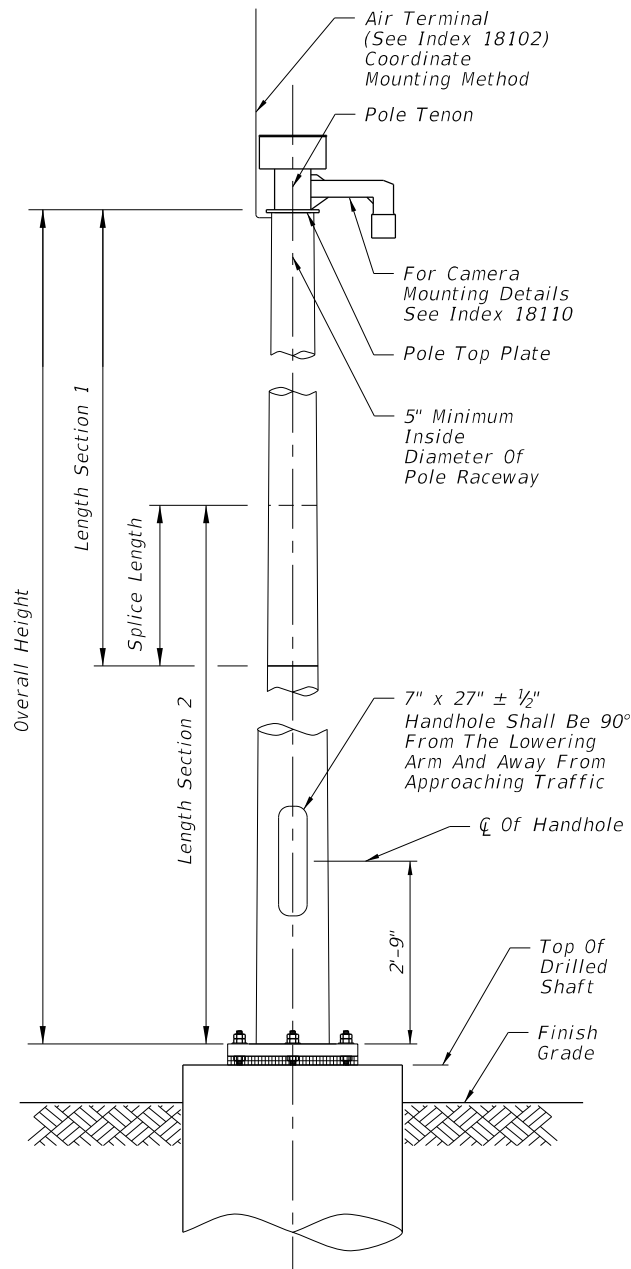
POLE NOTES:

- The pole shaft shall be round or 16 sided or more and shall be tapered with the diameter changing at a rate of 0.14 inches per foot.
- Pole shaft shall be comprised of two sections (with telescopic field splice).
- Use only circumferential welds at base.
- Up to two longitudinal seam welds are permitted.
- Longitudinal seam welds within 6" of circumferential welds shall be complete penetration welds. Longitudinal seam welds on female section of telescopic field splices shall be complete penetration welds for the splice length plus six inches. All other areas, size the partial penetration welds to at least 60% of the pole tube thickness.
- Perform all welding in accordance with the American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition). For additional welding requirements see AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, Section 5.15, Welded Connections.
- Identification tag:
Furnish each pole with a 2"x4" (max.) aluminum identification tag, secured to pole with stainless steel screws.
Locate inside pole and visible from handhole.
Provide Financial Project ID, pole height, manufacturer's name, yield strength (Fy of steel) and pole base wall thickness.
- Except for Anchor Bolts, all bolt hole diameters shall be equal to the bolt diameter plus 1/16", prior to galvanizing. Hole diameters for anchor bolts shall not exceed the bolt diameter plus 1/2".
- The CCTV pole does not meet the requirements of a standard CCTV pole and shop drawings are necessary.
- Pole Material Specifications:
 - Pole:
ASTM A1011 Grade 50, 55, 60 or 65 (less than 1/4") or
ASTM A572 Grade 50, 60 or 65 (greater than or equal to 1/4") or
ASTM A595 Grade A (55 ksi yield) or Grade B (60 ksi yield).
 - Steel Plates and Pole Cap: ASTM A36 or ASTM A709 Grade 36.
 - Weld Metal: E70XX.
 - Bolts: ASTM A325, Type 1.
Nuts: ASTM A563.
Washers: ASTM F-436.
 - Handhole frame: ASTM A709 Grade 36 or ASTM A36.
 - Handhole cover: ASTM A1011 Grade 50, 55, 60 or 65.
 - Stainless steel screws: AISI Type 316.
 - Galvanization:
Nuts, bolts and washers: ASTM F2329.
All other steel: ASTM A123.
- Additional wire access holes not shown in this Design Standard shall not exceed 1½" in diameter.
- Verify CSL access tubes will not interfere with anchor bolt installation before excavating the shaft. When CSL access tube locations conflict with anchor bolt locations, move the CSL access tube location ± two inches along the inner circumference of the reinforcing cage. Notify the Engineer before excavating the shaft if the CSL access tube locations cannot be moved out of conflict with anchor bolt locations.

3				DES:	3409 West Lemon Street Tampa, FL 33609 VOLKERT Certificate of Authorization 4641 Phone: 813.875.1365 Fax: 813.874.7656	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS	W.O.	KENNETH B. DRAKE, P.E. NO. 37258
2				DRN:				
1				CKD:			Sh. IT-8	
No.	DATE	BY:	REVISIONS	DATE:		CCTV POLE GENERAL NOTES	Of	



ORIENTATION VIEW



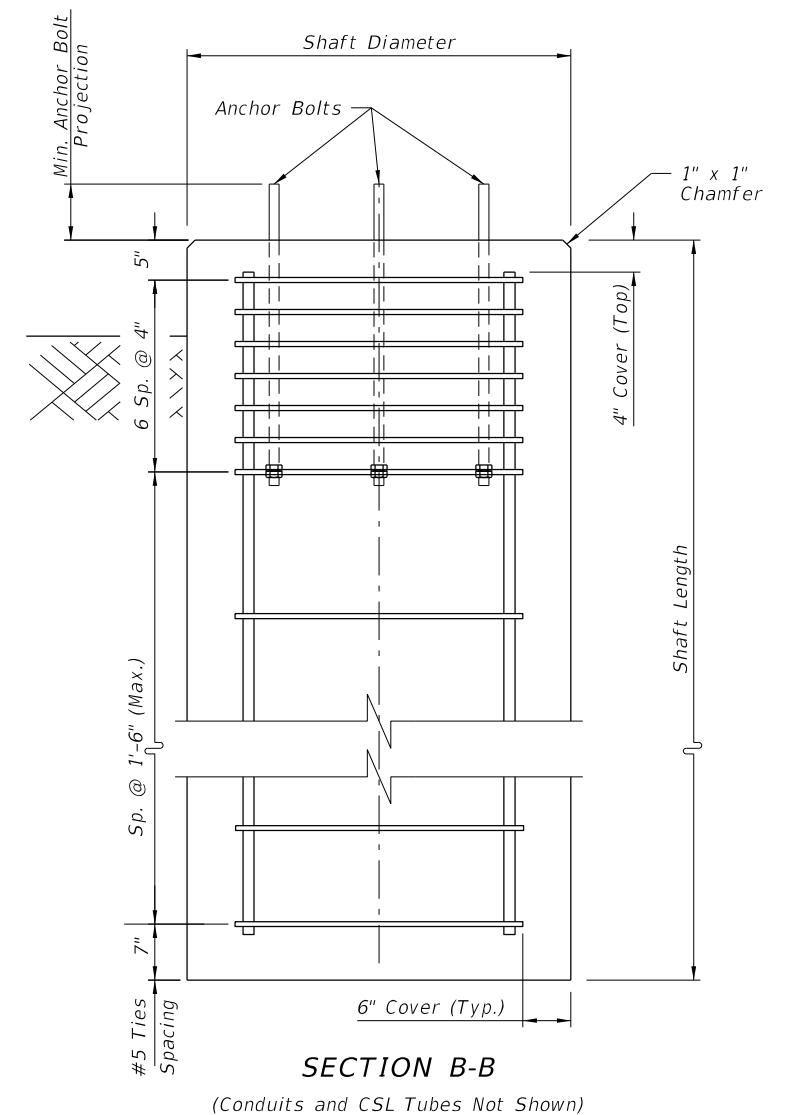
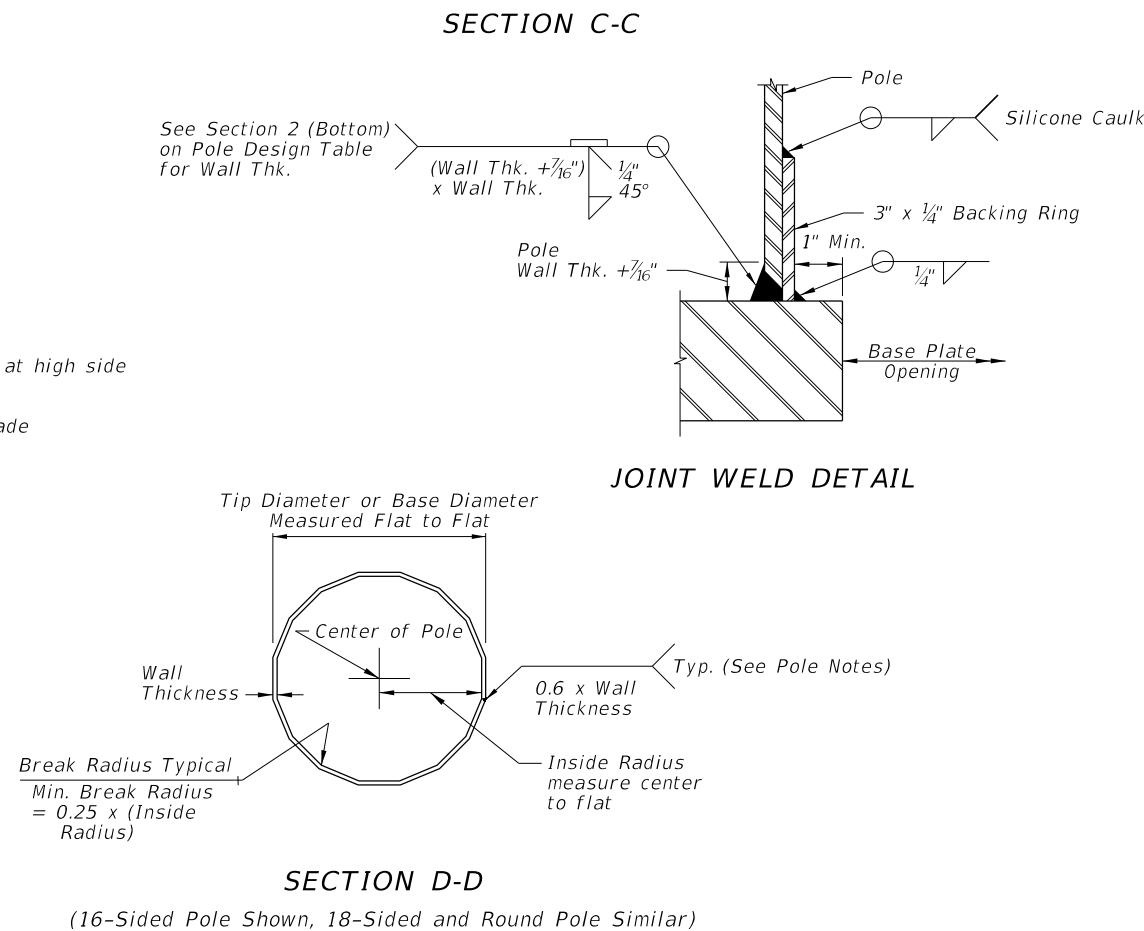
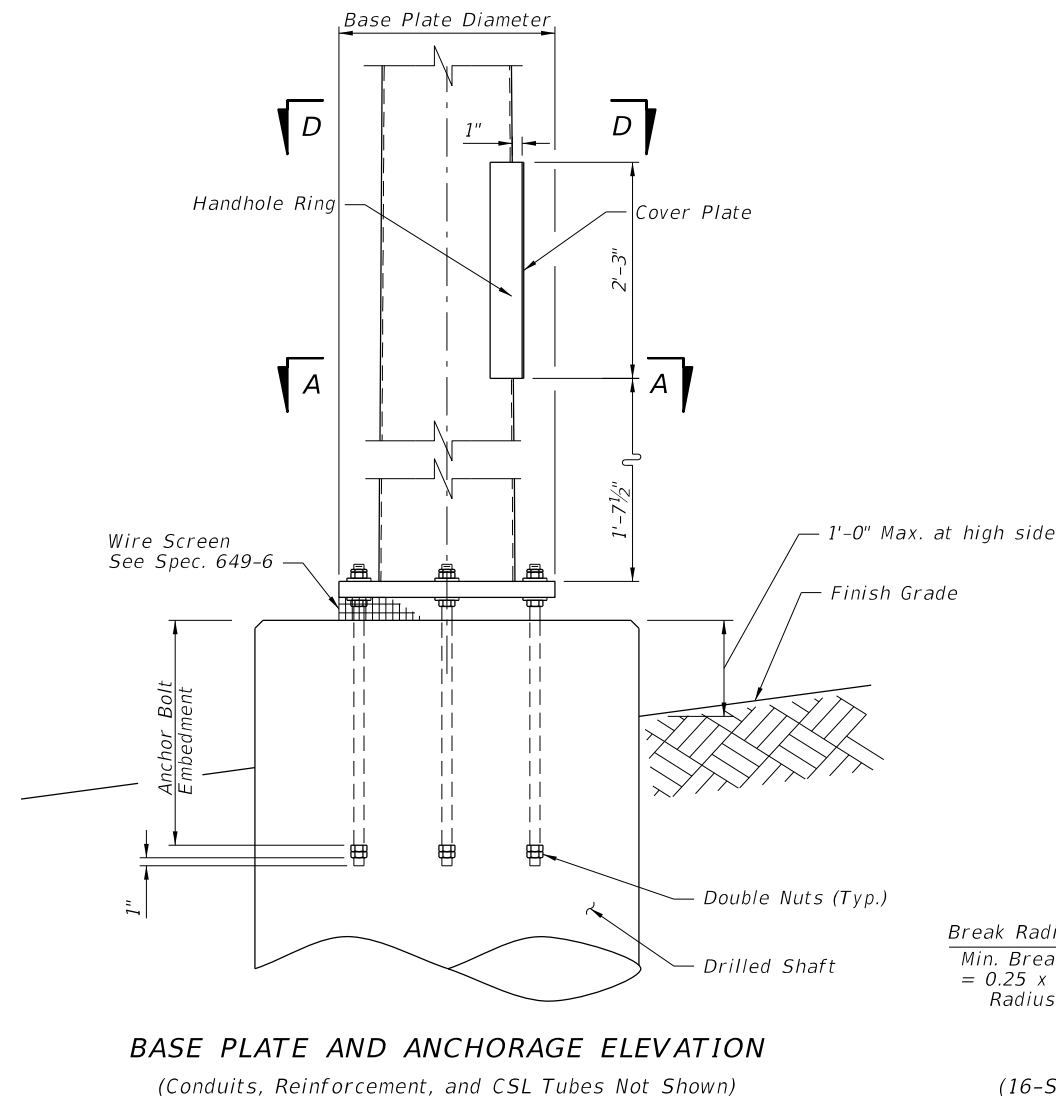
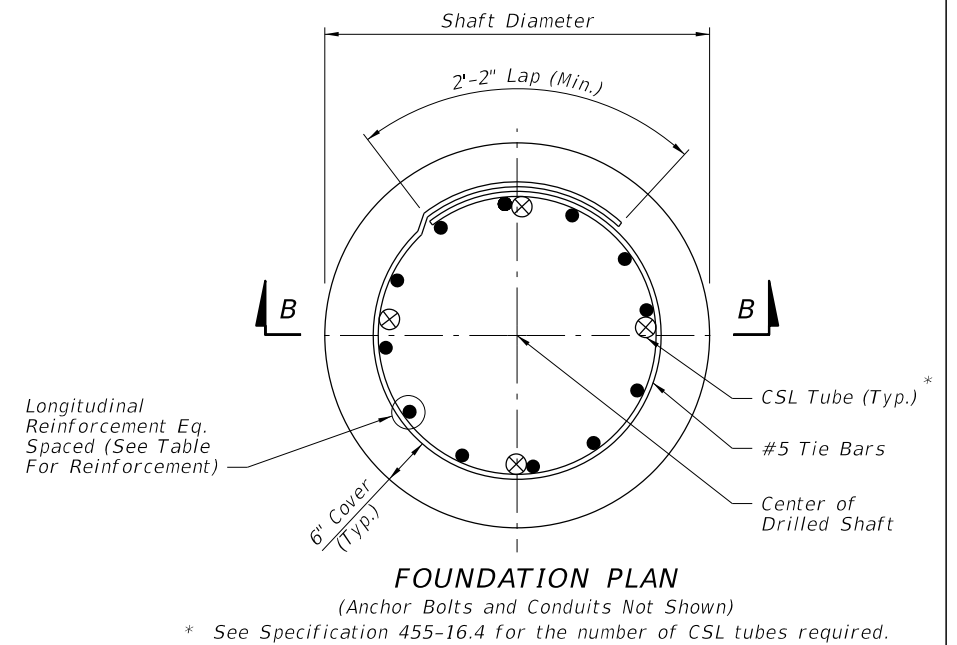
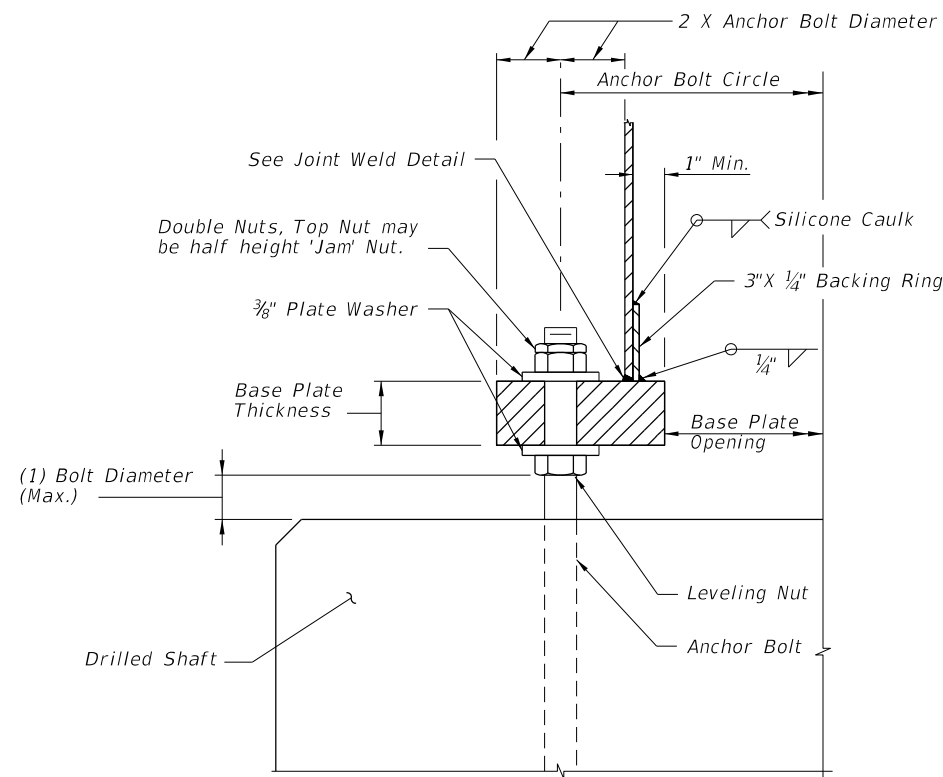
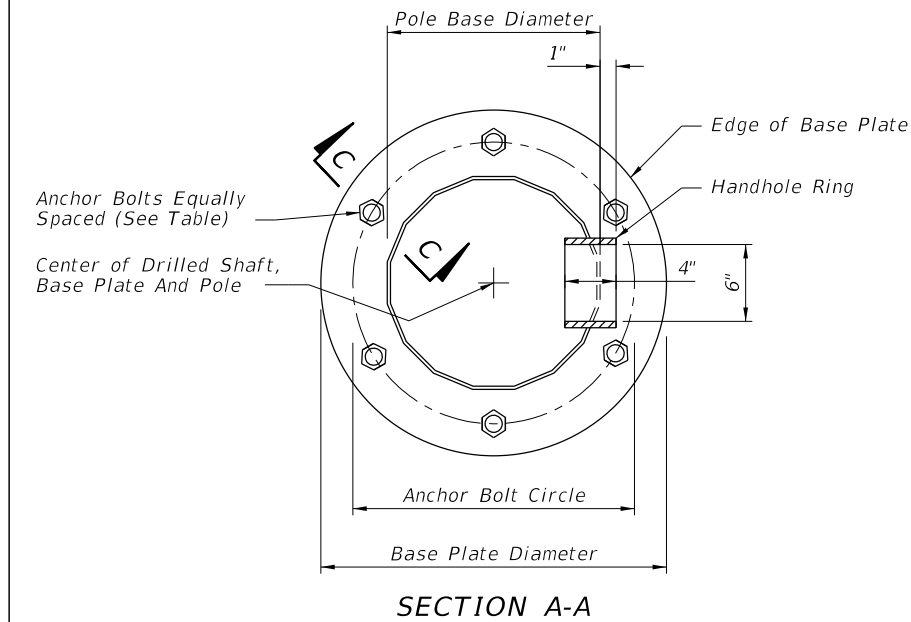
ELEVATION WITH LOWERING DEVICE

SHAFT DESIGN TABLE			
Pole Overall Height (ft)	Shaft Diameter	Shaft Length	Longitudinal Reinforcement
80	5'-0"	15'-0"	(14) #14

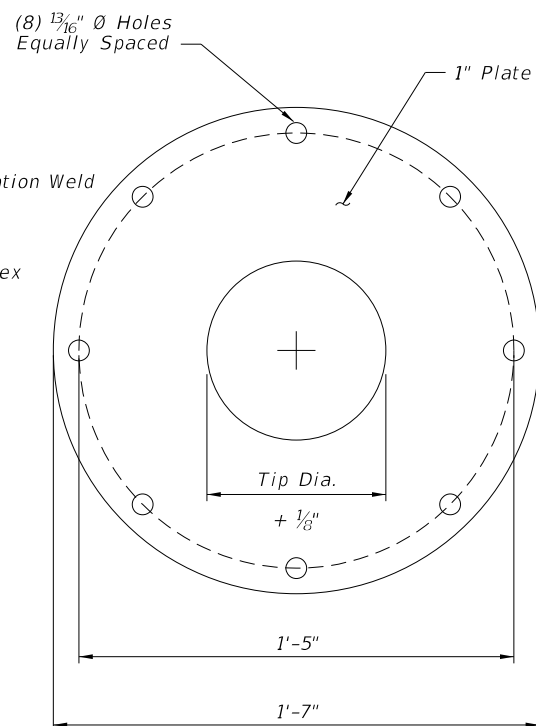
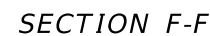
BASE PLATE AND ANCHOR BOLT DESIGN TABLE							
Pole Overall Height (ft)	Base Plate Diameter (in.)	Base Plate Thickness (in.)	Anchor Bolt Circle (in.)	No. Bolts	Anchor Bolt Diameter (in.)	Anchor Bolt Embedment (in.)	Minimum Anchor Bolt Projection (in.)
80	41	2.5	34	6	1.75	37.5	10.5

POLE DESIGN TABLE*									
Pole Overall Height (ft)	Section 1 (Top)				Section 2 (Bottom)				Joint
	Length	Wall Thickness (in.)	Tip Dia. (in.)	Base Dia. (in.)	Length	Wall Thickness (in.)	Tip Dia. (in.)	Base Dia. (in.)	Minimum Splice Length (in)
80	40'-0"	0.4375	16.675	22.275	43'-3"	0.4375	20.945	27	39

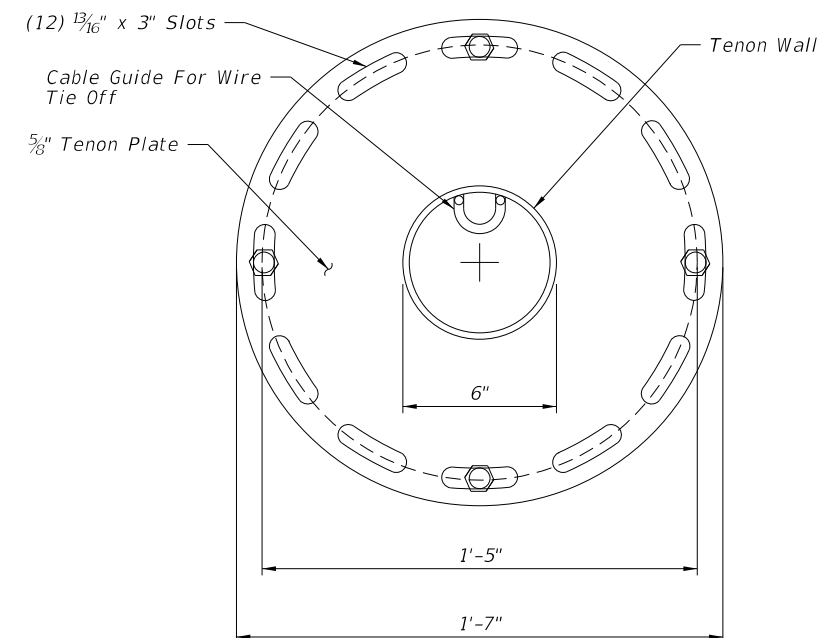
* Diameter Measured Flat to Flat



3				DES:		VOLKERT Certificate of Authorization 4641 3409 West Lemon Street Tampa, FL 33609 Phone: 813.875.1365 Fax: 813.874.7656	BUSCH BLVD. PEDESTRIAN & SIGNALIZATION IMPROVEMENTS CCTV POLE BASE PLATE AND FOUNDATION DETAILS	W.O.	KENNETH B. DRAKE, P.E. NO. 37258
2				DRN:				Sh. IT-10	
1				CKD:				Of	
No.	DATE	BY:	REVISIONS	DATE:					



POLE
TOP PLATE DETAIL

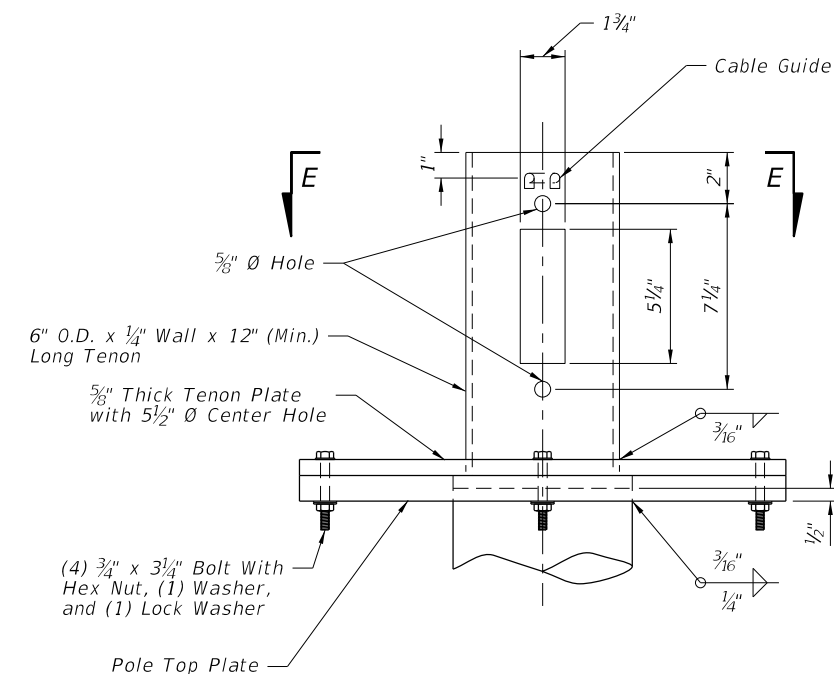


SECTION E-E

HANDHOLE DETAIL



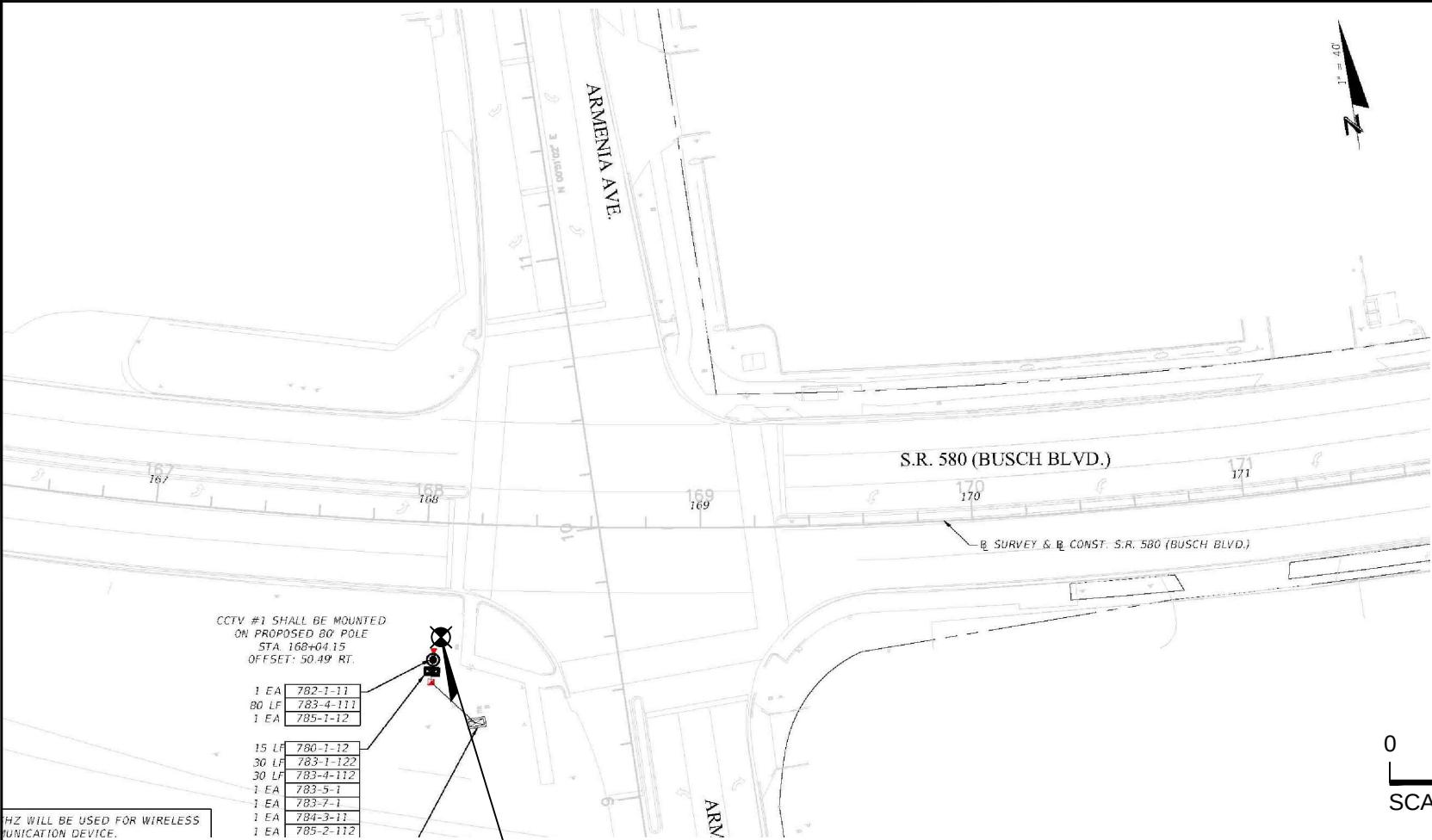
PARK STAND DETAIL



POLE TENON ASSEMBLY DETAIL
(POLE WITH LOWERING DEVICE)

Note: Install all handhole and opening covers prior to shipping. For Poles with Lowering Device, install Pole Cap Plate when Tenon Assembly is not installed.

3				DES:	
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B-6

CCTV Pole

BORING NO. = B-6
STA. 168+05, 42' RT
DATE = 3/5/13

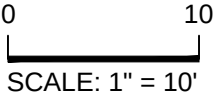
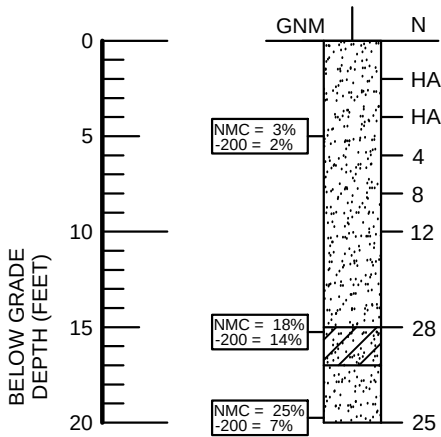


TABLE SOIL PARAMETERS										
BORING ID	ELEV. RANGE NGVD, FT	DEPTH RANGE, FT	SPT "N" VALUE RANGE	UNIFIED SOIL CLASSIFICATION	APPROXIMATE SOIL UNIT WEIGHT (PCF)		SOIL ANGLE OF FRICTION (DEGREES)	COHESION (PSF)	EARTH PRESSURE COEFFICIENT	
					SATURATED	SUBMERGED			ACTIVE (Ka)	PASSIVE (Kp)
B-6	-----	0-6	HA-4	SP/SP-SM/SP-SC	100.0	37.6	28	0	0.361	2.77
	-----	6-15	8-12	SP/SP-SM/SP-SC	105.0	42.6	29	0	0.347	2.88
	-----	15-17	28	SC	115.0	52.6	32	0	0.307	3.25
	-----	17-20	25	SP/SP-SM/SP-SC	115.0	52.6	32	0	0.307	3.25

LEGEND

-  (SP/SP-SM/SP-SC) GRAY, PALE BROWN, OR BROWN FINE SAND TO SLIGHTLY SILTY OR CLAYEY FINE SAND.
-  (CL/CH) PALE BROWN TO BROWN SANDY CLAY TO CLAY.
-  (SC) PALE BROWN TO BROWN CLAYEY FINE SAND.
-  (CL) PALE BROWN, BROWN, OR REDDISH BROWN SANDY CLAY.
-  (LS) PALE BROWN WEATHERED LIMESTONE

- NOTES:**
-  SPT BORING LOCATION
-  SPT N-VALUE
-  HAND AUGER
-  WITH CLAY CLOGS
-  WEIGHT OF HAMMER
-  GROUNDWATER NOT MEASURED

BORING LOCATIONS ARE APPROXIMATE.

GRANULAR MATERIALS- RELATIVE DENSITY	SPT (BLOWS/FT)
VERY LOOSE	LESS THAN 4
LOOSE	5-10
MEDIUM	11-30
DENSE	31-50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	SPT (BLOWS/FT)
VERY SOFT	LESS THAN 2
SOFT	3-4
FIRM	5-8
STIFF	9-15
VERY STIFF	16-30
HARD	30-50
VERY HARD	GREATER THAN 50

DATE	NAME	REVISION	APPROVED BY:



MC SQUARED, INC.
Geotechnical Consultants
5808 Breckenridge Parkway, Suite-A
Tampa, Florida 33610
Ph:813-623-3399 Fax:813-623-6636

FLORIDA ENGINEERING CERTIFICATE
OF AUTHORIZATION No. 9191
Kermit Schmidt, P.E.
FLORIDA LICENSE No. 45603

	NAME	DATE
DESIGNED BY:	IR	03/13
DRAWN BY:	IR	03/13
CHECKED BY:	KS	03/13
SUPERVISED BY:		

REPORT OF CORE BORINGS/BORING LOCATION PLAN		PROJECT NO.	SHEET NO.
W. Busch Blvd. Pedestrian Safety Improvements (N. Armenia Ave. to N. Florida Ave.) Tampa, FL		T021225.045	IT-12

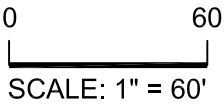
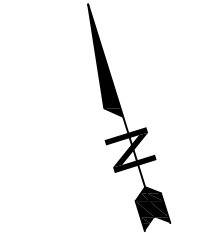


TABLE SOIL PARAMETERS										
BORING ID	ELEV. RANGE NGVD, FT	DEPTH RANGE, FT	SPT "N" VALUE RANGE	UNIFIED SOIL CLASSIFICATION	APPROXIMATE SOIL UNIT WEIGHT (PCF)		SOIL ANGLE OF FRICTION (DEGREES)	COHESION (PSF)	EARTH PRESSURE COEFFICIENT	
					SATURATED	SUBMERGED			ACTIVE (Ka)	PASSIVE (Kp)
B-4	-----	0-9.5	HA-2	SP/SP-SM/SP-SC	100.0	37.6	28	0	0.361	2.77
	-----	9.5-12	2	CL/CH	105.0	42.6	0	250	1.00	1.00
	-----	12-22	9-13	SP/SP-SM/SP-SC	110.0	47.6	30	0	0.333	3.00
	-----	22-26.5	3	SC	100.0	37.6	28	0	0.361	2.77
	-----	26.5-30	50/6"	LS	135.0	72.6	0	15000	1.00	1.00

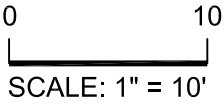
- | | | | |
|---|---|---|--|
|  | (SP/SP-SM/SP-SC) PALE BROWN, GRAY, OR BROWN FINE SAND, SLIGHTLY SILTY FINE SAND TO SLIGHTLY CLAYEY FINE SAND. |  | (CL/CH) PALE BROWN TO BROWN SANDY CLAY TO CLAY. |
|  | (SC) PALE BROWN TO BROWN CLAYEY FINE SAND. |  | (CL) PALE BROWN CALCAREOUS CLAY WITH WEATHERED LIMESTONE FRAGMENTS |
|  | (LS) PALE BROWN HIGHLY WEATHERED LIMESTONE | | |

NOTES:

	SPT BORING LOCATION	A	WITH TRACES TO SOME LIMESTONE FRAGMENTS
N	SPT N-VALUE	GNM	GROUNDWATER NOT MEASURED
HA	HAND AUGER		

BORING LOCATIONS ARE APPROXIMATE.

GRANULAR MATERIALS- RELATIVE DENSITY	SPT (BLOWS/FT)
VERY LOOSE	LESS THAN 4
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VERY SOFT	LESS THAN 2
SOFT	3-4
FIRM	5-8
STIFF	9-15
VERY STIFF	16-30
HARD	30-50
VERY HARD	GREATER THAN 50



DATE	NAME	REVISION	APPROVED BY:	 MC SQUARED, INC. Geotechnical Consultants 5808 Breckenridge Parkway, Suite-A Tampa, Florida 33610 Ph:813-623-3399 Fax:813-623-6636	FLORIDA ENGINEERING CERTIFICATE OF AUTHORIZATION No. 9191 Kermit Schmidt, P.E. FLORIDA LICENSE No. 45603	NAME		DATE	REPORT OF CORE BORINGS/BORING LOCATION PLAN W. Busch Blvd. Pedestrian Safety Improvements (N. Armenia Ave. to N. Florida Ave.) Tampa, FL	PROJECT NO. T021225.045	SHEET NO. IT-13
						DESIGNED BY:	IR	07/13			
						DRAWN BY:	IR	07/13			
						CHECKED BY:	KS	07/13			
				SUPERVISED BY:							