



CONTRACT PLANS

COUNTY PROJECT NUMBER 6015061

MANATEE COUNTY

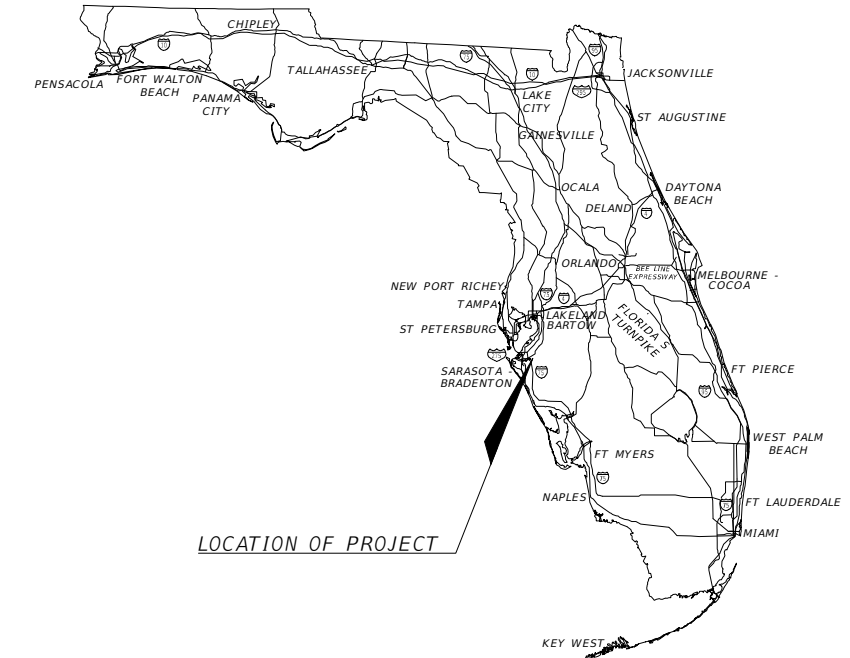
64TH STREET COURT EAST AND STATE ROAD 64

FDOT SEGMENT (13050000) MILEPOSTS 5.943 - 5.973
PERMIT NOS. 2020-A-194-00006 & 2020-D-194-00010

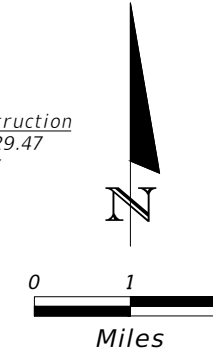
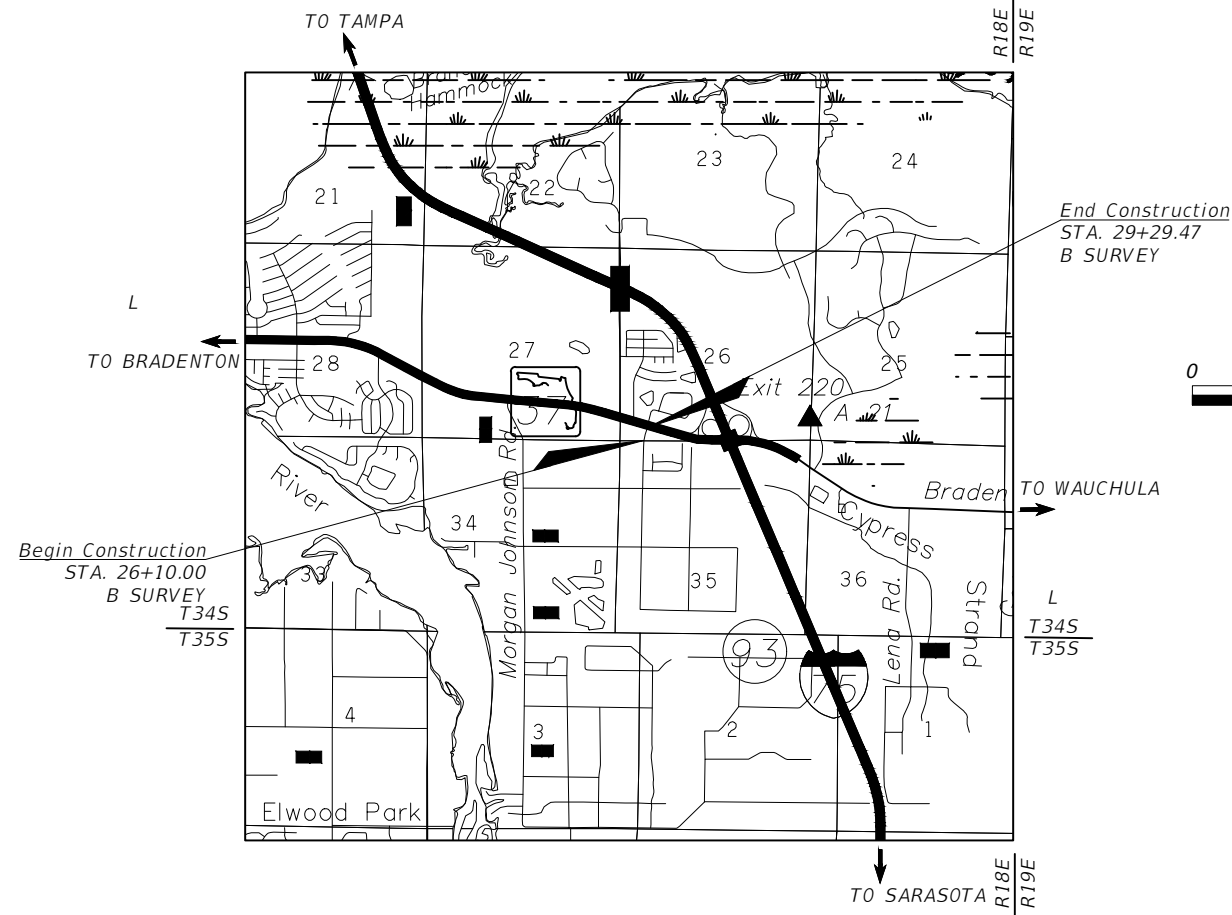
JUNE 2021

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
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2	SIGNATURE SHEET
3	SUMMARY OF PAY ITEMS & GENERAL NOTES
4	TYPICAL SECTION
5	EXISTING CONDITIONS
6	ROADWAY PLAN SHEET
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13	SIGNAL GENERAL NOTES
14	SIGNAL PAY ITEM NOTES
15	SIGNALIZATION PLAN
16	MAST ARM TABULATION
17-19	TEMPORARY TRAFFIC CONTROL



LOCATION OF PROJECT



ROADWAY SHOP DRAWINGS TO BE SUBMITTED TO:

AECOM
ATTN: DAREN CARRIERE
7650 W COURTNEY CAMPBELL CAUSEWAY
TAMPA, FLORIDA 33607
(813) 286-1711

PLANS PREPARED BY:

AECOM TECHNICAL SERVICES, INC.
7650 W. COURTNEY CAMPBELL CAUSEWAY
TAMPA, FL 33607-1462
(813) 286-1711

VENDOR NO. F952661922
CERTIFICATE OF AUTHORIZATION NO. 00008115

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

FINAL SUBMITTAL
DATED: 6/2/2021

GOVERNING DESIGN STANDARDS:

Florida Department of Transportation FY 2020-21 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs). Standard Plans for Road Construction and associated IRs are available at the following web site: <http://www.fdot.gov/design/standardplans>
Applicable IRs: IR536-001-01, IR521-001-01
For Manatee County Design Standards click on the "Highway & Traffic Manual with Complete Streets", "Stormwater Design Standards", and 2015 Pt. 1 Utility Standards. MCPW Standards" links at the following web site: https://www.mymanatee.org/departments/public_works/infrastructure_engineering
For the standard specifications for Road and Bridge Construction click on the "Specifications" link at the following web site: <http://www.fdot.gov/programmanagement/implemented/specbooks>

PROJECT LENGTH IS BASED ON $\frac{1}{4}$ OF SURVEY

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	319.47	0.061
BRIDGES	0.00	0.000
NET LENGTH OF PROJECT	319.47	0.061
EXCEPTIONS	0.00	0.000
GROSS LENGTH OF PROJECT	319.47	0.061

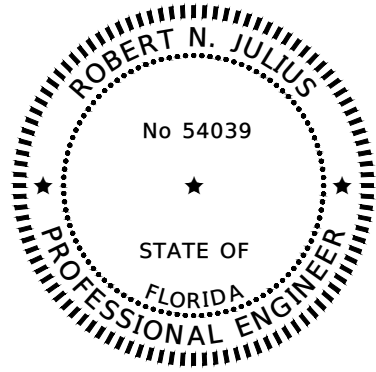
MANATEE COUNTY PROJECT MANAGER: DANIEL GARNER, P.E.

ROADWAY PLANS
ENGINEER OF RECORD: ROBERT JULIUS, P.E.

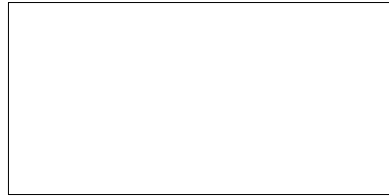
P.E. NO.: 54039

FISCAL YEAR	SHEET NO.
21	1

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



THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY:



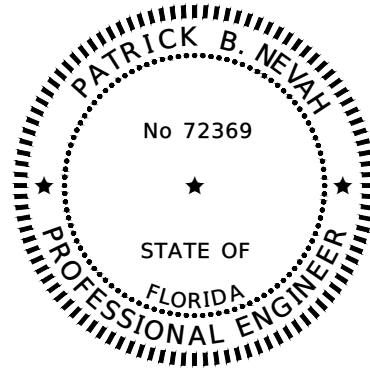
ON THE DATE ADJACENT TO THE SEAL
PRINTED COPIES OF THIS DOCUMENT ARE
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AND THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES.

AECOM TECHNICAL SERVICES, INC.
7650 WEST COURTNEY
CAMPBELL CAUSEWAY
TAMPA, FL 33607-1462
C.A. NO. 8115
ROBERT N. JULIUS, P.E. NO. 54039
PHONE: 813-286-1711

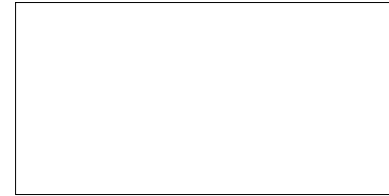
THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

ROADWAY PLANS

<u>SHEET NUMBER</u>	<u>SHEET DESCRIPTION</u>
1	KEY SHEET
2	SIGNATURE SHEET
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4	TYPICAL SECTIONS
6	ROADWAY PLAN SHEET
6A	PROFILE SHEET
7-8	DRAINAGE STRUCTURE SHEETS
9-10	ROADWAY CROSS SECTIONS
11	SIGNING & MARKING PLAN
17-19	TEMPORARY TRAFFIC CONTROL



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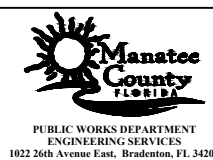
AECOM TECHNICAL SERVICES, INC.
7650 WEST COURTNEY
CAMPBELL CAUSEWAY
TAMPA, FL 33607-1462
C.A. NO. 8115
PATRICK B. NEVAH, P.E. NO. 72369
PHONE: 813-286-1711

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ROADWAY PLANS

<u>SHEET NUMBER</u>	<u>SHEET DESCRIPTION</u>
12	TABULATION OF QUANTITIES
13	GENERAL NOTES
14	PAY ITEM NOTES
15	SIGNALIZATION PLAN
16	MAST ARM TABULATION

SCALE		AS NOTED		ROBERT N. JULIUS, P.E. P.E. NO. 54039		DATE		04/2019		DESIGN ENGINEER		ROBERT N. JULIUS, P.E.		SHEET NO.	
DESIGNED BY		RNJ		AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462		PROJECT NO.		6096460		FL. LICENSE NO.		54039		64TH ST. CT. E. AND SR 64 SIGNATURE SHEET	
DRAWN BY		PSF		(813) 286-1711		CERTIFICATE OF AUTHORIZATION: 8115								2	
CHECKED BY															
No.		REVISIONS		DATE		BY									



PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	
			P	F
101-1	MOBILIZATION	LS	1	
102-1	MAINTENANCE OF TRAFFIC	LS	1	
104-10-3	SEDIMENT BARRIER	LF	600	
110-1-1	CLEARING AND GRUBBING	LS	1	
110-4-10	REMOVAL OF EXISTING CONCRETE	SY	200	
120-1	REGULAR EXCAVATION	CY	65	
120-6	EMBANKMENT	CY	125	
160-4	STABILIZATION TYPE B	SY	660	
285-711	BASE OPTIONAL 12" LIMEROCK	SY	479	
334-1-14	SUPERPAVE (TRAFFIC D)	TN	127.80	
337-7-83	FRICTION COURSE FC-12.5 (1 1/2") (PG 76-22)	TN	132.56	
400-0-11	CONCRETE CLASS NS, GRAVITY WALL	CY	6	
425-1-351	INLETS, CURB, TYPE P-5, (<10')	EA	4	
425-1-521	INLETS, DT BOT, TYPE C, (<10')	EA	1	
425-2-61	MANHOLE, TYPE P-8, <10'	EA	1	
430-94-2	DESILT EXISTING PIPE 36"	LF	54	
430-175-230	PIPE CULVERT, CONC., ELLIP., (24"x38")	LF	26	
430-175-215	PIPE CULVERT, CONC., ELLIP., (12"x18")	LF	517	
430-982-633	MITERED END SECTION, CD, (24"x38")	EA	2	
430-984-623	MITERED END SECTION, SD, (12"x18")	EA	1	
515-2-111	PEDESTRIAN RAILING	LF	74	
520-1-7	CURB & GUTTER (TYPE E)	LF	153	
520-1-10	CURB & GUTTER (TYPE F)	LF	474	
522-1	SIDEWALK CONCRETE (4" THICK)	SY	216	
527-2	DETECTABLE WARNING	SF	40	
570-1-2	PERFORMANCE TURF (SODDING)	SY	595	
700-1-60	REMOVE SINGLE POST SIGN	EA	1	
706-3	REFLECTIVE PAVEMENT MARKERS			
	YELLOW / YELLOW	EA	66	
	WHITE / RED	EA	12	
711-11-125	THERMO, WHITE, SOLID, 24" FOR STOP BAR & CROSSWALK	LF	189	
711-11-141	THERMO, STD, 2-4 DOTTED GUIDE LINE, WHITE, 6"	GM	0.043	
711-11-170	THERMO, STD, WHITE, ARROW	EA	4	
711-11-224	THERMO, STD, YELLOW, SOLID, 18"	LF	50	
711-11-241	THERMO, STD, 2-4 DOTTED GUIDE LINE, YELLOW, 6"	GM	0.031	
711-14-123	THERMO, PREFORMED, WHITE, SOLID, 12" FOR CROSSWALK	LF	151	
711-16-101	THERMO, OTHER SURFACE, WHITE, SOLID, 6"	GM	0.132	
711-16-201	THERMO, OTHER SURFACE, YELLOW, SOLID, 6"	GM	0.173	

PAY ITEM NOTES

- 102-1 INCLUDES TEMPORARY PAVEMENT, TEMPORARY FENCING, AND RELOCATING FENCE. ALSO INCLUDES ALL INCIDENTAL ITEMS NECESSARY FOR IMPLEMENTING AND MAINTAINING THE TRAFFIC CONTROL PLAN NOT ITEMIZED UNDER INDIVIDUAL PAY ITEMS.
- 104-XX-XX ESTIMATED FOR PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION AND SHALL BE USED AT LOCATIONS DESCRIBED IN THE CONTRACTORS APPROVED EROSION CONTROL PLAN OR AS DIRECTED BY THE ENGINEER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN FOR APPROVAL PRIOR TO START OF CONSTRUCTION.
- 110-1-1 CONTRACTOR TO CLEAR AND GRUBB ALL AREAS THAT WILL BE DISTURBED WITHIN THE RIGHT OF WAY.
- 334-1-14 INCLUDES 88.33 TN OVERBUILD FOR ADJUSTING THE ROADWAY CROWN.
- 425-2-61 COST OF THE MANHOLE SHALL INCLUDE ITEMS NECESSARY TO REMOVE EXISTING PIPE AND TO PROVIDE COLLARS FOR THE EXISTING PIPE AT THE INTERFACE OF THE NEW STRUCTURE. COLLAR METHOD SHALL CONFORM TO FDOT STANDARDS.
- 570-1-2 ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE SODDED.

COST TO REPAIR / CONSTRUCT PAVEMENT OVER THE PROPOSED 6" WATER MAIN (SEE POTABLE WATER UTILITY PLANS) SHALL BE INCLUDED IN THE COST OF THE WATER MAIN. PAVEMENT THICKNESS SHALL CONFORM TO THE TYPICAL SECTION PAVEMENT THICKNESS SHOWN WITHIN THE ROADWAY CONSTRUCTION PLANS.

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, ALL FINISH GRADE ELEVATIONS REFER TO THE TOP OF FINISHED ASPHALT, CONCRETE, OR GRADED EARTHWORK.
2. 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 CONTRACTOR SHALL NOTIFY THE COUNTY SURVEYOR WITHOUT DELAY BY TELEPHONE.
3. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SPECIAL PROVISIONS OF THIS CONTRACT WHICH REQUIRES THE PREPARATION AND APPROVAL OF AN EROSION CONTROL PLAN THAT ADDRESSES THE PREVENTION, CONTROL, AND ABATEMENT OF WATER POLLUTION.
4. THE CONTRACTOR IS TO VERIFY ALL UTILITIES WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION ACTIVITIES. SUNSHINE ONE CALL (1-800-432-4770)
5. UTILITY OWNERS:

<u>COMPANY</u>	<u>TELEPHONE NUMBER</u>
FRONTIER	DENISE HUTTON (941) 906-6722
FLORIDA POWER & LIGHT	GREG COKER (941) 723-4430
TECO PEOPLES GAS	DAN SHANAHAN (941) 342-4006
MANATEE COUNTY UTILITIES	KATHY MCMAHON (941) 792-8811 EXT 5002
CHARTER COMMUNICATIONS	JAMES FLEMING (941) 213-0877
6. EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
7. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND THE FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION, WITH REVISIONS 1 & 2.
8. PAVEMENT MARKINGS SHALL BE PLACED AS SHOWN IN THE PLANS AND THE APPROPRIATE FDOT DESIGN STANDARDS INDEX.
9. PAVEMENT MARKING DIRECTIONAL ARROWS SHALL BE SPACED AS PER FDOT PLANS INDEX 711-001.
10. REFER TO FDOT STANDARD PLANS INDEX 706-001 FOR RAISED PAVEMENT MARKER PLACEMENT DETAILS.
11. ALL CROSSWALK MARKINGS SHALL BE PREFORMED THERMOPLASTIC (PFTP).
12. ALL PERMANENT PAVEMENT MARKINGS PLACED WITHIN THE FDOT RIGHT OF WAY SHALL BE THERMOPLASTIC.
13. ALL PERMANENT PAVEMENT MARKINGS PLACED WITHIN THE MANATEE COUNTY RIGHT OF WAY SHALL BE THERMOPLASTIC EXCEPT WHEN OTHERWISE NOTED IN PLANS WHERE PAINT OR PERMANENT TAPE IS SPECIFIED.
14. ALL THERMOPLASTIC PAVEMENT MARKINGS SHALL BE CERTIFIED LEAD FREE.

TRAFFIC CONTROL GENERAL NOTES

TEMPORARY TRAFFIC CONTROL SHALL CONFORM TO THE LATEST FDOT STANDARD PLANS INDEX 102-600 SERIES.

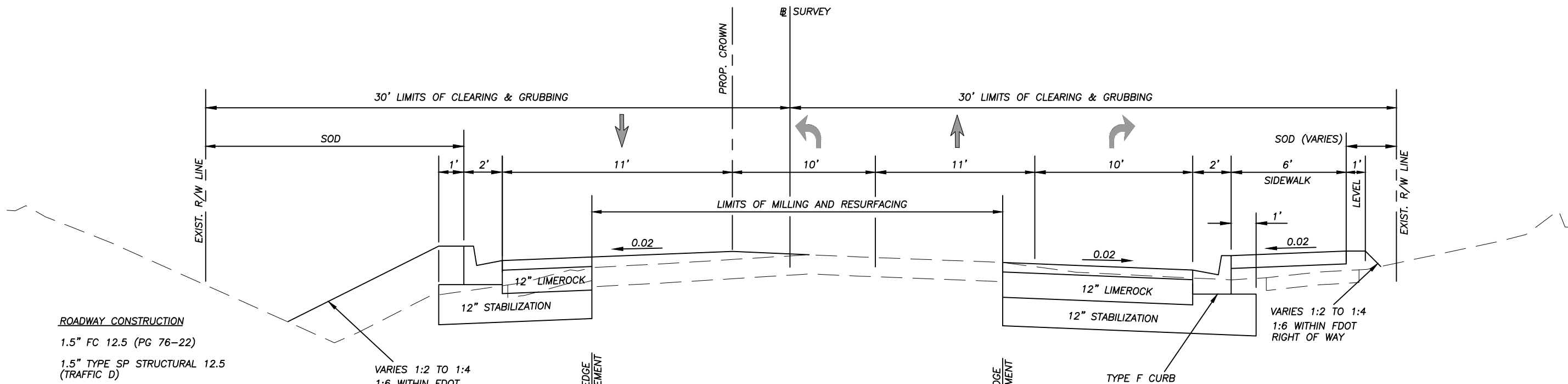
CONTRACTOR SHALL SUBMIT TTC PLAN TO MATT MERUCCI (matt.merucci@mymanatee.org) (941) 708-7450 ext. 7342 AT MANATEE COUNTY FOR APPROVAL.

NO ROAD CLOSURES OR DETOURS WILL BE ALLOWED UNLESS ACCEPTED BY MANATEE COUNTY.

No.	REVISIONS	DATE	BY	SCALE	AS NOTED	DESIGNED BY	RNJ	DRAWN BY	PSF	CHECKED BY		DATE	04/2019	PROJECT NO.	6096460	DESIGN ENGINEER	ROBERT N. JULIUS, P.E.	FL. LICENSE NO.	54039	64TH ST. CT. E. AND SR 64 SUMMARY OF PAY ITEMS & GENERAL NOTES	SHEET NO.	3



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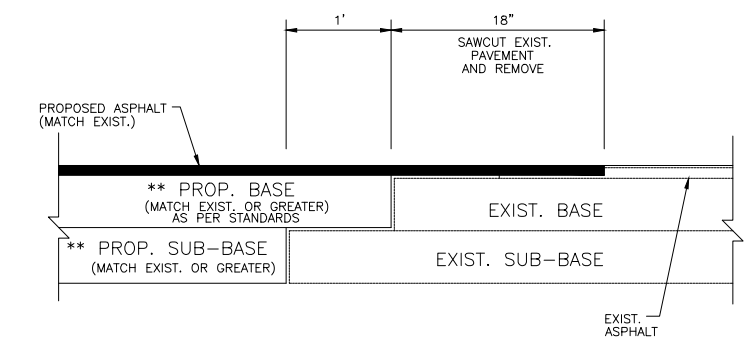


ROADWAY CONSTRUCTION
 1.5" FC 12.5 (PG 76-22)
 1.5" TYPE SP STRUCTURAL 12.5 (TRAFFIC D)
 OPTION BASE GROUP 11 (12" LIMEROCK)
 12" TYPE B STABILIZATION (LBR 60)

ROADWAY MILLING
 MILL EXISTING ASPHALT PAVEMENT (1.5" AVG. DEPTH)
 FRICTION COURSE 1.5" FC 12.5 (PG 76-22)

VARIES 1:2 TO 1:4
 1:6 WITHIN FDOT
 RIGHT OF WAY


64TH STREET COURT EAST
 STA. 26+10.00 - STA. 29+29.47
 TYPICAL SECTION
 DESIGN SPEED 35 MPH
 N.T.S.



** NOTE: CONNECTION TO OLDER (SUBSTANDARD THICKNESS) ROADS MAY REQUIRE THICKER PROPOSED BASE AND SUB-BASE TO MEET CURRENT STANDARDS.

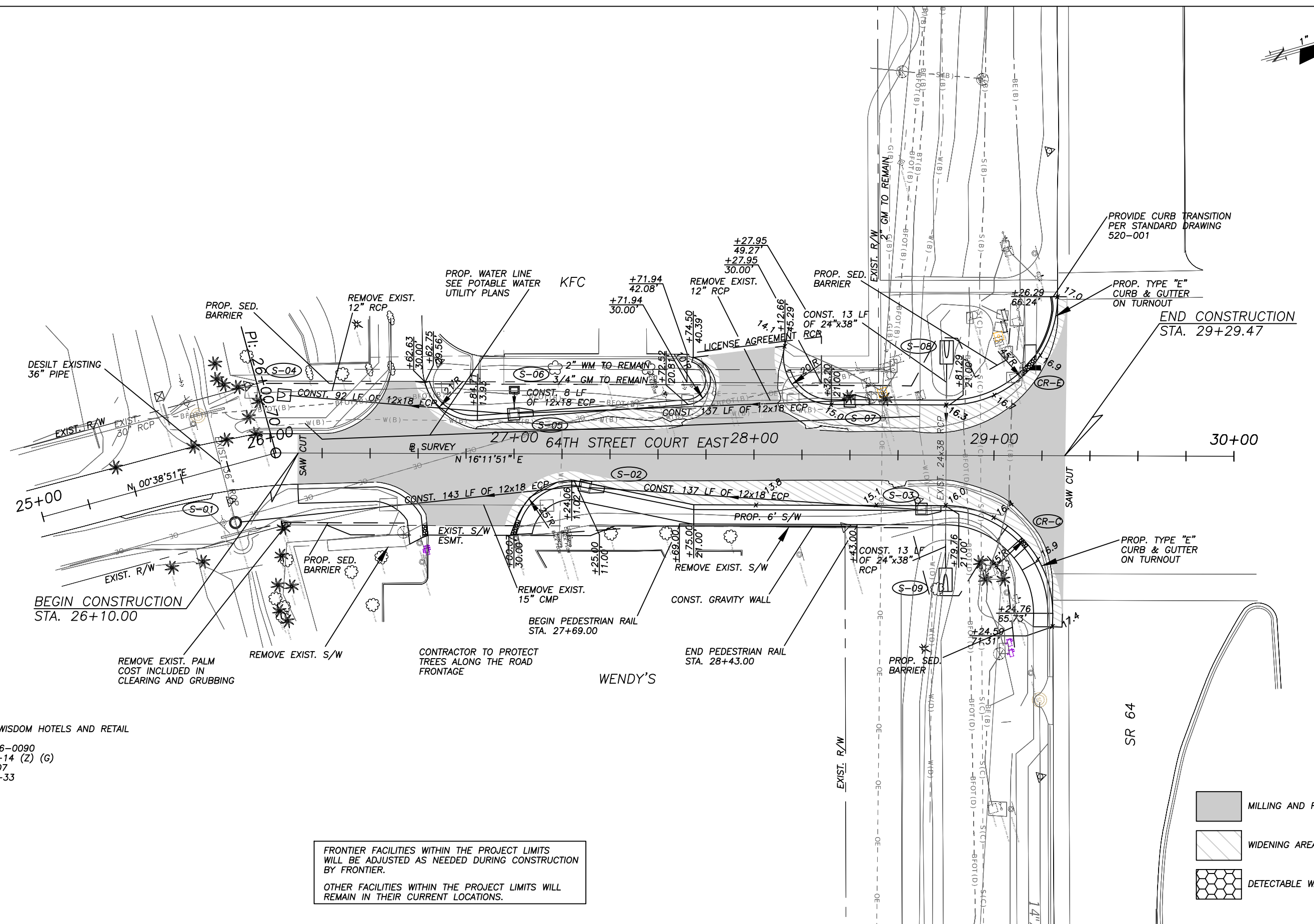
SIGNAGE AND MARKING PLAN SHALL ACCOMPANY CONSTRUCTION PLAN.

MODIFIED ROAD CONNECTION DETAIL
 N.T.S.

SCALE		AS NOTED		ROBERT N. JULIUS, P.E. P.E. NO. 54039		DATE 05/2019		 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208		DESIGN ENGINEER ROBERT N. JULIUS, P.E.		64TH ST. CT. E. AND SR 64 TYPICAL SECTION		SHEET NO.	
DESIGNED BY		RNJ		AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462		PROJECT NO. 6015061				FL. LICENSE NO. 54039				4	
DRAWN BY		PSF		(813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115											
CHECKED BY															
No.		REVISIONS		DATE		BY									




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1" = 40'



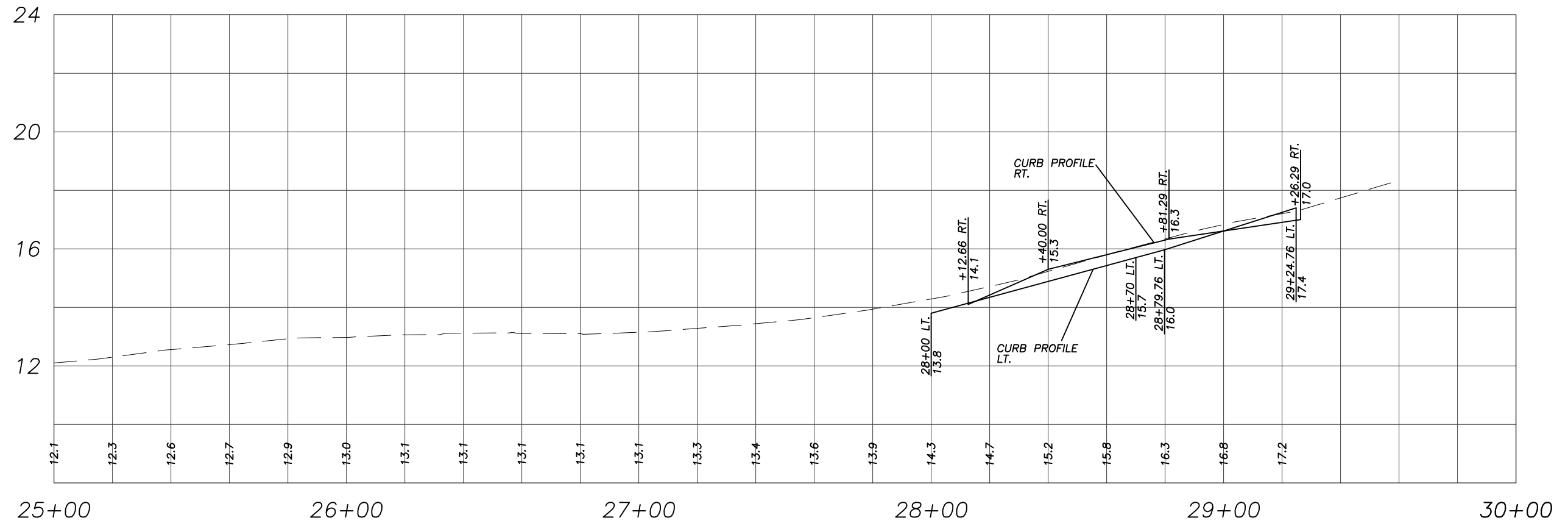
FUTURE WISDOM HOTELS AND RETAIL
 PLN 1806-0090
 PDC-18-14 (Z) (G)
 PA-18-07
 ORD-18-33

FRONTIER FACILITIES WITHIN THE PROJECT LIMITS
 WILL BE ADJUSTED AS NEEDED DURING CONSTRUCTION
 BY FRONTIER.
 OTHER FACILITIES WITHIN THE PROJECT LIMITS WILL
 REMAIN IN THEIR CURRENT LOCATIONS.


-  MILLING AND RESURFACING AREA
-  WIDENING AREA
-  DETECTABLE WARNING

SCALE		AS NOTED		ROBERT N. JULIUS, P.E. P.E. NO. 54039		DATE		05/2019		 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208		DESIGN ENGINEER		ROBERT N. JULIUS, P.E.		64TH ST. CT. E. AND SR 64 PLAN SHEET (1)		SHEET NO.	
DRAWN BY		RNJ		AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115		PROJECT NO.		6015061				FL. LICENSE NO.		54039				6	
CHECKED BY		RNJ																	
No.		REVISIONS		DATE		BY													

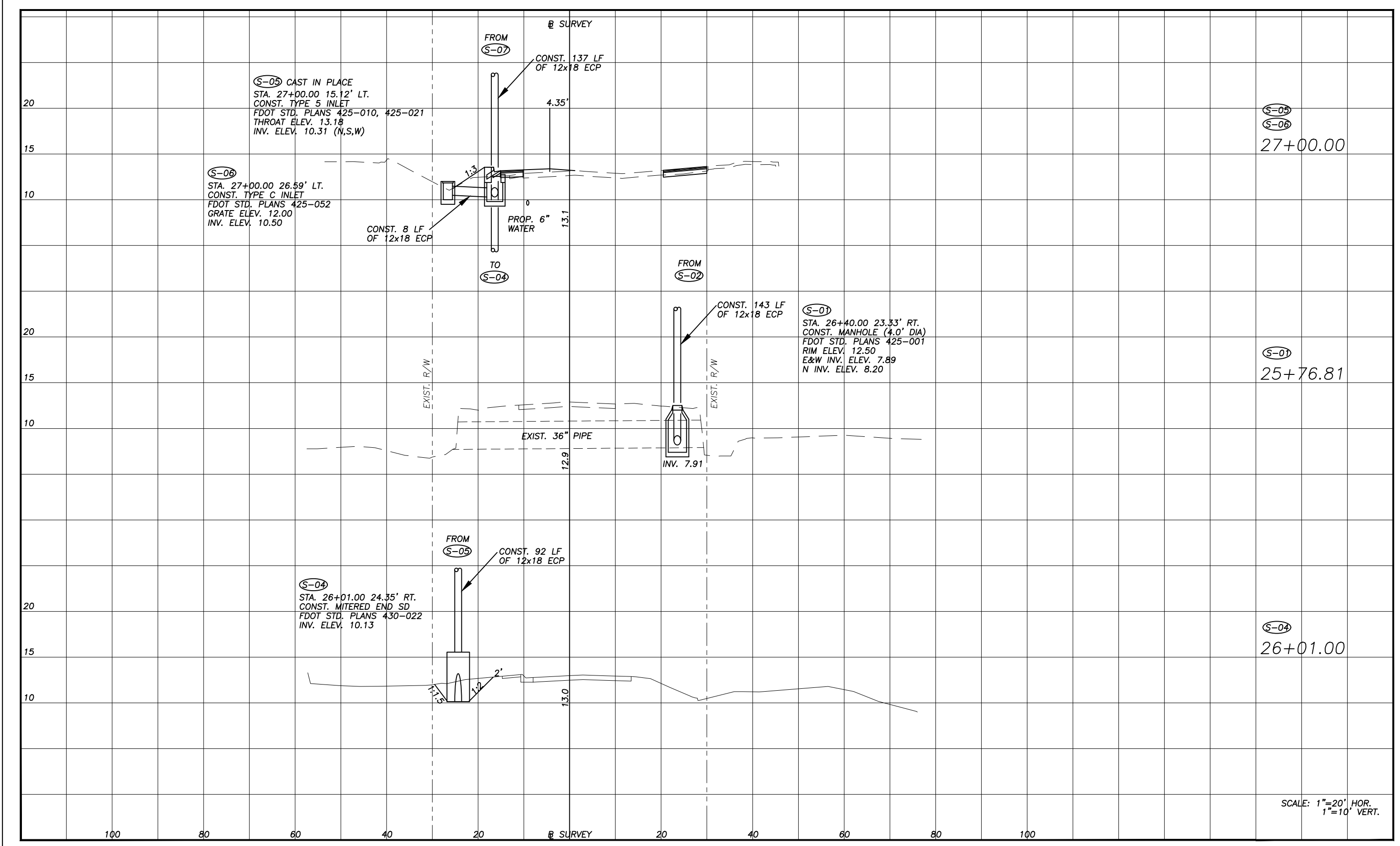
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SCALE: 1"=40' HORZ.
1"=4' VERT.

SCALE AS NOTED				ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115		DATE 05/2019		 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER ROBERT N. JULIUS, P.E. FL. LICENSE NO. 54039		64TH ST. CT. E. AND SR 64 PROFILE SHEET		SHEET NO. 6A
DESIGNED BY RNJ				PROJECT NO. 6015061									
DRAWN BY PSF													
CHECKED BY													
No.	REVISIONS			DATE	BY								

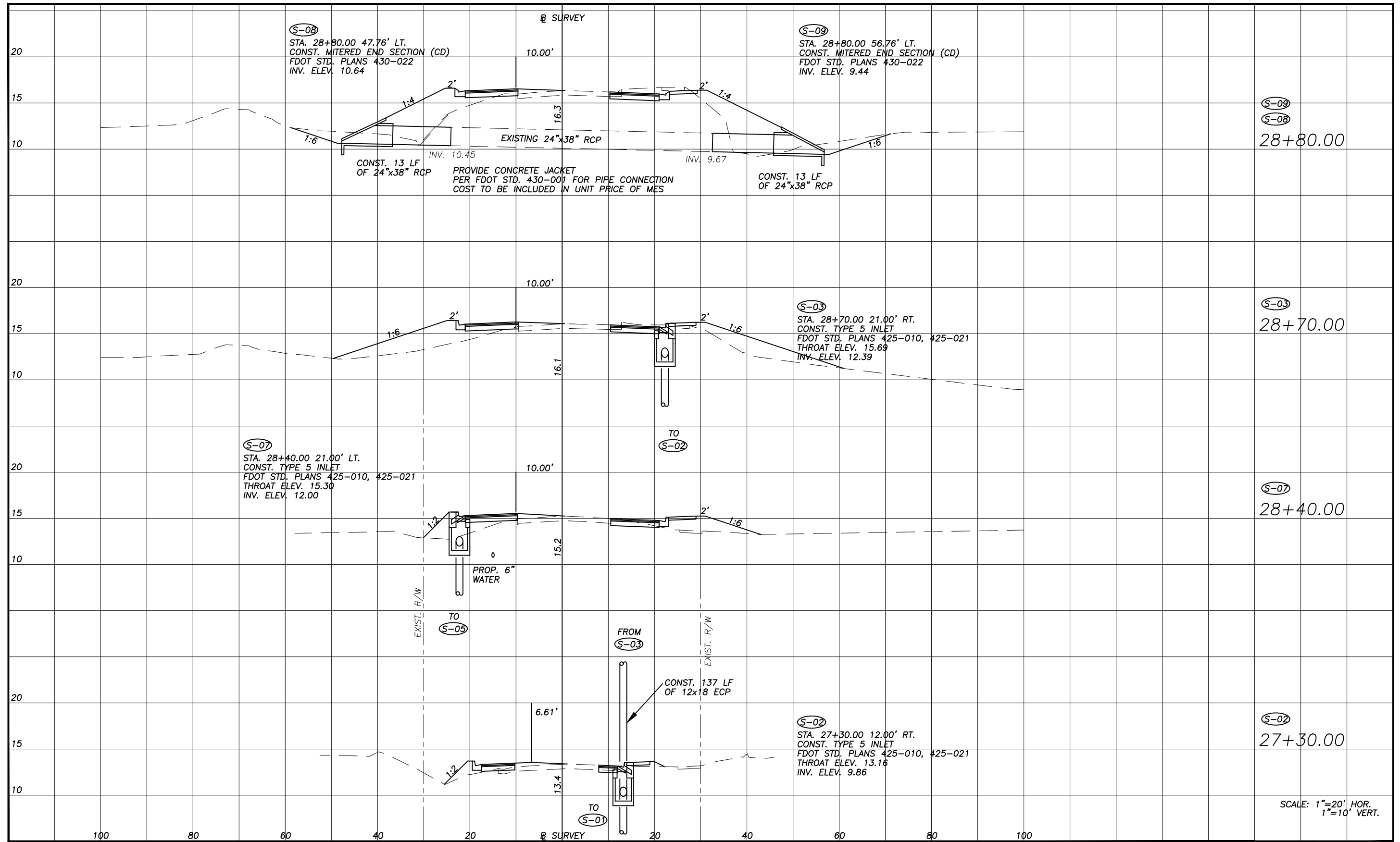
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SCALE: 1"=20' HOR.
1"=10' VERT.

SCALE AS NOTED DESIGNED BY RNJ DRAWN BY RNJ CHECKED BY		ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115		DATE 05/2019 PROJECT NO. 6015061		 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208		DESIGN ENGINEER ROBERT N. JULIUS, P.E. FL. LICENSE NO. 54039		64TH ST. CT. E. AND SR 64 DRAINAGE STRUCTURE SHEET		SHEET NO. 7	
No.	REVISIONS	DATE	BY										

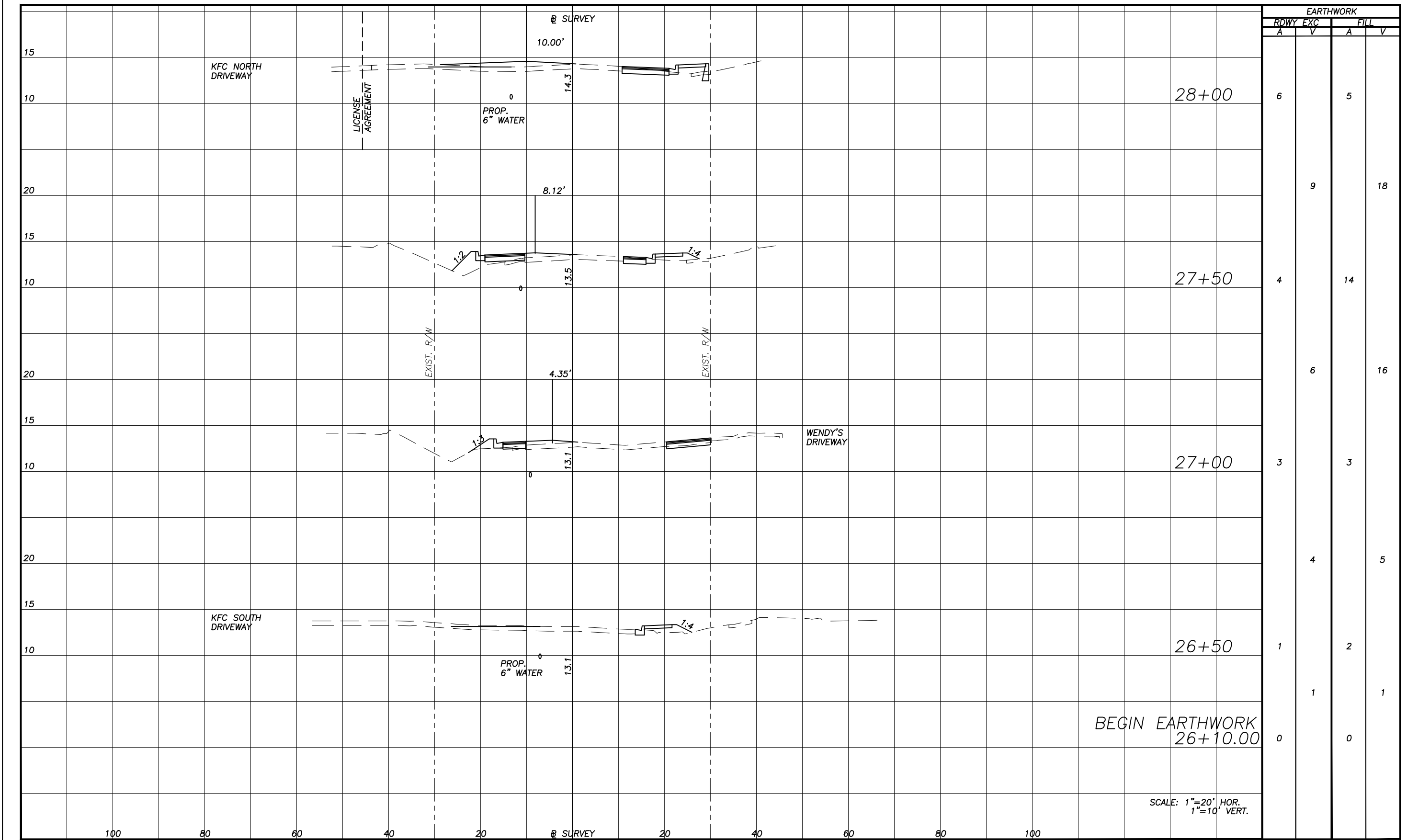
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1"=10' VERT.

SCALE AS NOTED DESIGNED BY RNJ DRAWN BY RNJ CHECKED BY		ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115		DATE 05/2019 PROJECT NO. 6015061		 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208		DESIGN ENGINEER ROBERT N. JULIUS, P.E. FL. LICENSE NO. 54039		64TH ST. CT. E. AND SR 64 DRAINAGE STRUCTURE SHEET		SHEET NO. 8	
No.	REVISIONS	DATE	BY										


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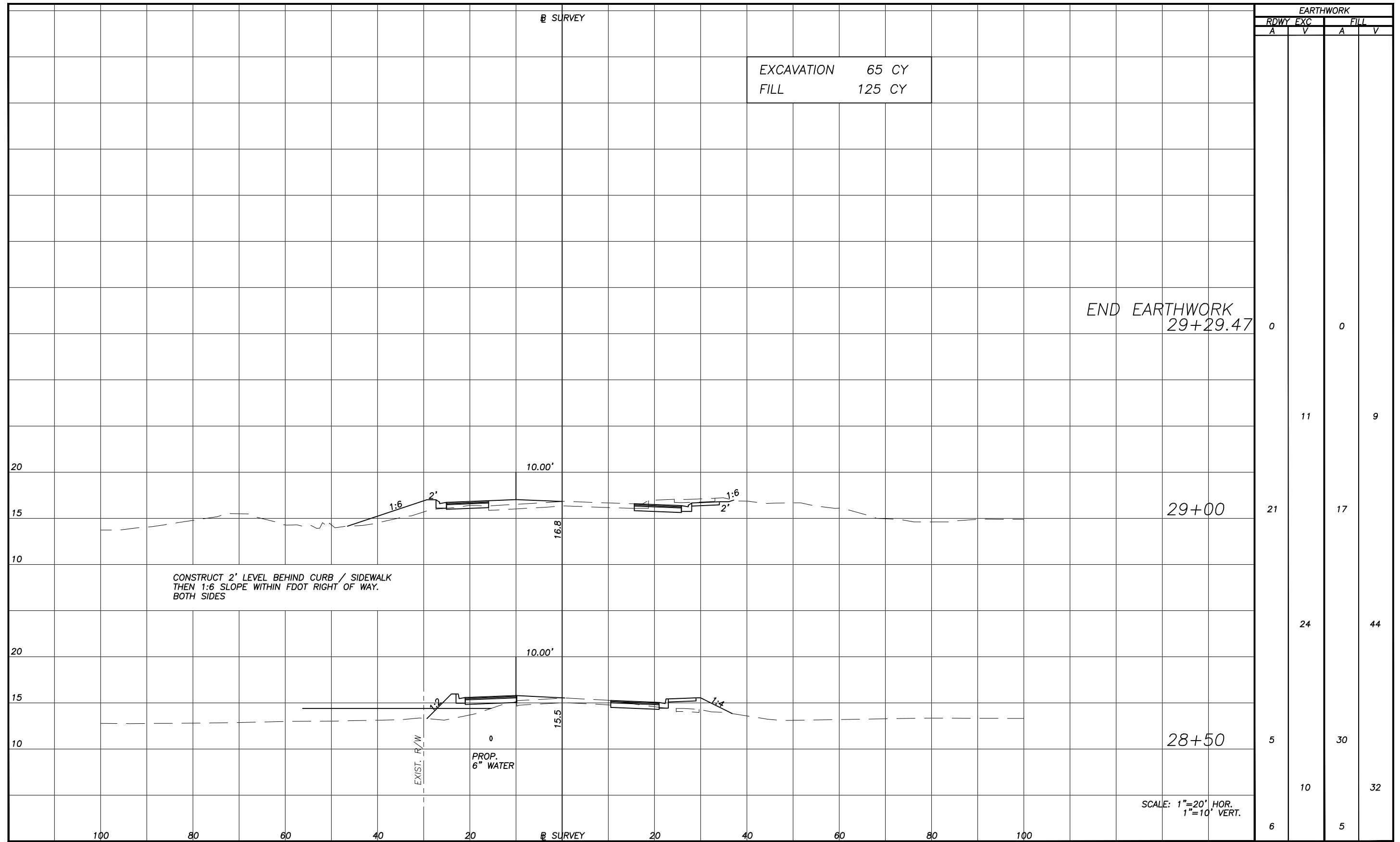
EARTHWORK			
RDWY EXC		FILL	
A	V	A	V
6		5	
	9		18
4		14	
	6		16
3		3	
	4		5
1		2	
	1		1
0		0	

BEGIN EARTHWORK
26+10.00

SCALE: 1"=20' HOR.
1"=10' VERT.

SCALE: AS NOTED DESIGNED BY: RNJ DRAWN BY: RNJ CHECKED BY:		ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115	DATE: 05/2019 PROJECT NO.: 6015061	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER: ROBERT N. JULIUS, P.E. FL. LICENSE NO.: 54039	64TH ST. CT. E. AND SR 64 CROSS SECTIONS	SHEET NO.: 9
No.	REVISIONS	DATE	BY				

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EXCAVATION 65 CY
 FILL 125 CY


END EARTHWORK
 29+29.47

CONSTRUCT 2' LEVEL BEHIND CURB / SIDEWALK
 THEN 1:6 SLOPE WITHIN FDOT RIGHT OF WAY.
 BOTH SIDES

PROP.
 6" WATER

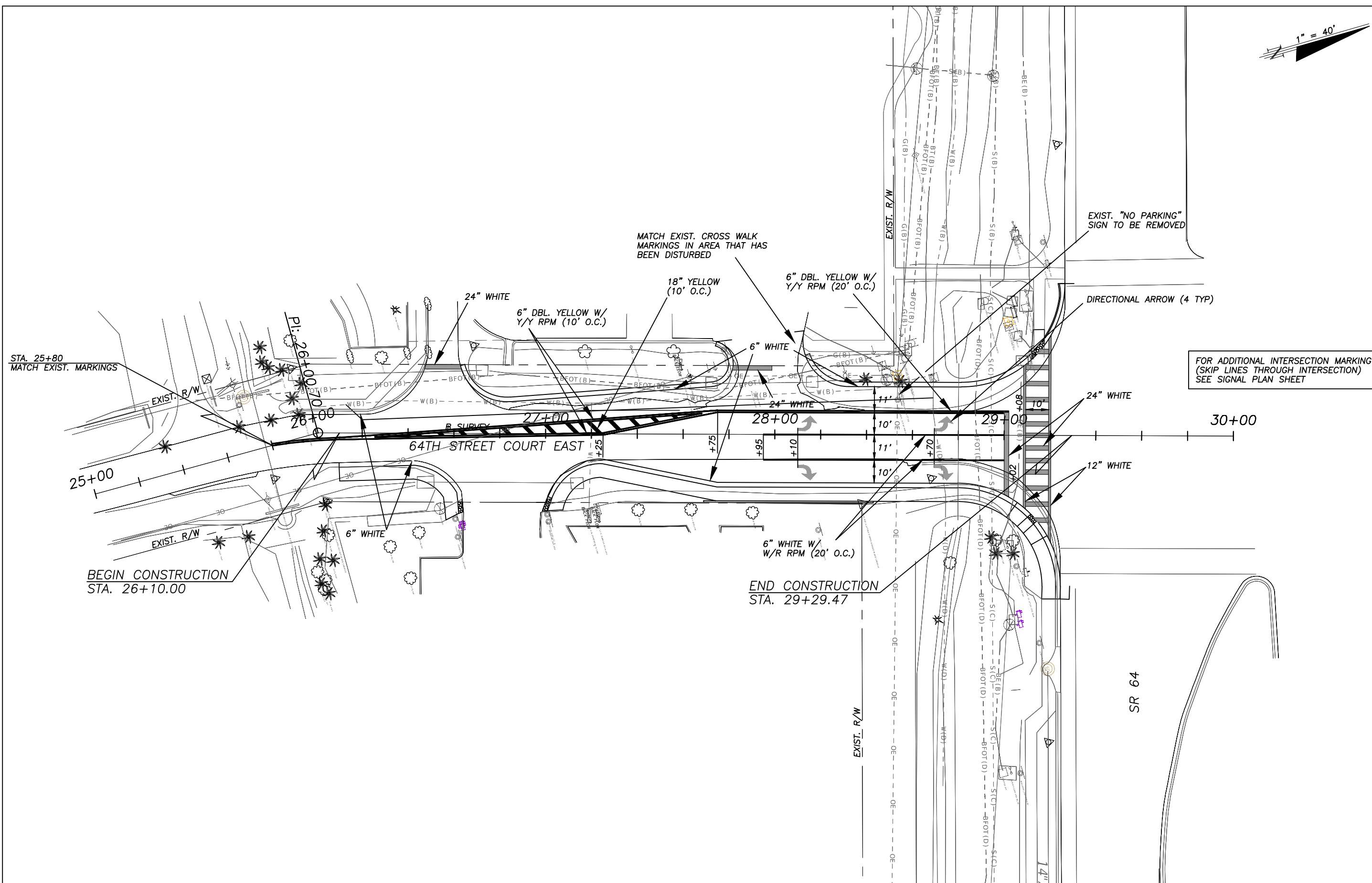
SCALE: 1"=20' HOR.
 1"=10' VERT.

EARTHWORK			
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21	17	11	9
5	30	24	44
6	5	10	32


SCALE AS NOTED DESIGNED BY RNJ DRAWN BY RNJ CHECKED BY		ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115	DATE 05/2019 PROJECT NO. 6015061	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER ROBERT N. JULIUS, P.E. FL. LICENSE NO. 54039	64TH ST. CT. E. AND SR 64 CROSS SECTIONS	SHEET NO. 10
No.	REVISIONS	DATE	BY				

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1" = 40'




FOR ADDITIONAL INTERSECTION MARKING (SKIP LINES THROUGH INTERSECTION) SEE SIGNAL PLAN SHEET

SCALE: AS NOTED DESIGNED BY: RNJ DRAWN BY: RNJ CHECKED BY:		ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115		DATE: 05/2019 PROJECT NO.: 6015061		 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208		DESIGN ENGINEER: ROBERT N. JULIUS, P.E. FL. LICENSE NO.: 54039		64TH ST. CT. E. AND SR 64 SIGNING & MARKING PLAN		SHEET NO.: 11	
No.	REVISIONS	DATE	BY										

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TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			15														PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL						
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF	80														80		80	
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	LF	80														80		80	
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, F&I	PI	1														1		1	
632-7-6	SIGNAL CABLE, REMOVE- INTERSECTION	PI	1														1		1	
633-8-1	MULT-CONDUCTOR COMMUNICATION CABLE, F&I	LF	105														105		105	
635-2-11	PULL & SPLICE BOX, F&I, 17"X30" COVER SIZE	EA	4														4		4	
635-2-12	PULL & SPLICE BOX, F&I, 24"X36" COVER SIZE	EA	2														2		2	
646-1-11	ALUMINUM SIGNALS POLE, F&I, PEDESTAL	EA	2														2		2	
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	EA	2														2		2	
650-1-14	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 1 WAY	AS	2														2		2	
650-1-19	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 5 SECTION, 1 WAY	AS	2														2		2	
650-1-60	VEHICULAR TRAFFIC SIGNAL, REMOVE- POLES TO REMAIN	AS	2														2		2	
653-1-11	PEDESTRIAN SIGNAL, F&I, LED COUNTDOWN, 1 WAY	AS	2														2		2	
660-4-42	VEHICLE DETECTION SYSTEM- VIDEO, RELOCATE ABOVE GROUND EQUIPMENT	EA	2														2		2	
660-4-51	VEHICLE DETECTION SYSTEM- VIDEO, ADJUST/MODIFY CABINET EQUIPMENT	EA	1														1		1	
660-4-52	VEHICLE DETECTION SYSTEM- VIDEO, ADJUST/MODIFY ABOVE GROUND EQUIPMENT	EA	2														2		2	
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	EA	2														2		2	
670-5-400	TRAFFIC CONTROLLER ASSEMBLY, MODIFY	AS	1														1		1	
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	EA	1														1		1	
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA	1														1		1	

				SCALE AS NOTED	PATRICK B. NEVAH, P.E. P.E. No 72369 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115	DATE 12/2020	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER PATRICK B. NEVAH, P.E.	TABULATION OF QUANTITIES	SHEET NO. 12
No.	REVISIONS	DATE	BY	CHECKED BY P. O'SHEA	PROJECT NO. 6015061			FL. LICENSE NO. P.E. No 72369		


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GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT MANATEE COUNTY TRAFFIC DESIGN DIVISION BEFORE STARTING WORK. COUNTY STANDARD UPDATES OR OTHER INFORMATION SHALL BE OBTAINED. AT LEAST FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT GERARDO TRAVERSO, P.E., PMP, OF THE MANATEE COUNTY TRAFFIC DESIGN DIVISION, AT (941) 749-3500, EXT. 7859 TO INFORM HIM OF CONSTRUCTION OPERATIONS.
2. ONE WEEK PRIOR TO THE BEGINNING OF THE TRAFFIC SIGNAL INSTALLATION, LOOP CUTTING, OR TURN ON OF A NEW SIGNAL, THE CONTRACTOR SHALL NOTIFY:

MANATEE COUNTY PROJECT MANAGEMENT DIVISION
1026 26TH AVENUE EAST
BRADENTON, FLORIDA 34208
PHONE: 941-708-7420

MANATEE COUNTY TRAFFIC DESIGN DIVISION
2101 47TH TERRACE EAST
BRADENTON, FLORIDA 34203
PHONE: 941-708-7510, EXT. 7859
3. THE CONTRACTOR SHALL PERFORM ALL WORK AS PER LATEST F.D.O.T. SPECIFICATIONS AT TIME OF BID, INCLUDING THE LATEST DESIGN STANDARDS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS WITH CURRENT SUPPLEMENTAL SPECIFICATIONS THERETO. F.D.O.T. SPECIFICATIONS SHALL BE FOLLOWED. WHEN F.D.O.T. AND MANATEE COUNTY SPECIFICATIONS DIFFER, THE MORE STRINGENT SPECIFICATIONS WILL TAKE PRECEDENCE. MANATEE COUNTY TRAFFIC SPECIFICATIONS SHALL BE OBTAINED BY THE CONTRACTOR FROM THE PROJECT MANAGEMENT DIVISION.
4. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR THE SIGNAL MAINTENANCE, TIMING AND OPERATION OF ALL SIGNALS AND SIGNAGE FROM THE COMMENCEMENT OF WORK TO FINAL ACCEPTANCE OF THE PROJECT (I.E.: LANE OR PAVEMENT MODIFICATIONS, PEDESTRIAN MODIFICATIONS). MANATEE COUNTY WILL ASSIST IN PROVIDING EXISTING SYSTEM TIMING WHEN POSSIBLE.
5. THE CONTRACTOR SHALL HAVE AN I.M.S.A. CERTIFIED LEVEL II (ELECTRONICS OR ELECTRICAL TECHNICIAN) ON THE JOB SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. ALL SIGNAL INSTALLATION TECHNICIANS SHALL HAVE A MINIMUM OF I.M.S.A. LEVEL I CERTIFICATION. CERTIFICATIONS OF ALL TECHNICIANS SHALL BE PROVIDED TO THE COUNTY PRIOR TO BEGINNING WORK. UPON PROJECT COMMENCEMENT, THE SIGNAL SUBCONTRACTOR SHALL BE AVAILABLE TO RESPOND TO ALL SIGNAL RELATED MALFUNCTIONS AND POWER OUTAGES. THE CONTRACTOR SHALL MAINTAIN AN ADEQUATE REPAIR INVENTORY, EQUIPMENT, AND NEARBY PERSONNEL TO RESPOND AND CORRECT TRAFFIC SIGNAL MALFUNCTIONS AND MOT RELATED PHASING AND TIMING ISSUES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE A QUALIFIED SIGNAL TECHNICIAN WHO CAN RESPOND WITHIN A MINIMUM OF TWO HOURS, 24 HOURS A DAY, 7 DAYS A WEEK. FAILURE TO MEET THE TIME REQUIREMENTS SHALL GIVE THE COUNTY, AT ITS DISCRETION, THE RIGHT TO REQUEST ASSISTANCE FROM THE MANATEE COUNTY SHERIFF'S DEPARTMENT TO CONTROL TRAFFIC FOR THE PERIOD OF TIME UNTIL THE CONTRACTOR RESPONDS AND MAKES THE NEEDED REPAIRS. THE COST FOR THE MANATEE COUNTY SHERIFF'S OFFICE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
6. PRIOR TO ORDERING MATERIALS, THE SIGNAL CONTRACTOR SHALL CONTACT THE TRAFFIC OPERATIONS DIVISION TO VERIFY CURRENT COLOR CODES FOR SIGNAL CABLE AND TO VERIFY THAT ALL EQUIPMENT TO BE ORDERED COMPLIES WITH MANATEE COUNTY EQUIPMENT AND DESIGN STANDARDS REQUIREMENTS.
7. WHEN A CONTRACTOR IS WORKING ON A SIGNAL IN AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, INSTALLING SIGNAL EQUIPMENT, LOOPS, HOMERUNS OR TURNING ON OF NEW SIGNAL) WHERE A LANE IS CLOSED, THE PROJECT MANAGER MAY REQUIRE AN OFF DUTY LAW ENFORCEMENT OFFICER TO DIRECT TRAFFIC. THE HOURLY RATE OF PAY FOR AN OFF DUTY LAW ENFORCEMENT OFFICER CAN BE OBTAINED FROM THE LOCAL LAW ENFORCEMENT OFFICE. THE COST OF THE OFFICER, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. FIVE WORKING DAYS PRIOR TO THE FINAL INSPECTION THE CONTRACTOR SHALL FURNISH THE INSPECTOR THREE COMPLETE SETS OF AS-BUILT PLANS AND I.M.S.A. INSPECTION FORMS TO THE MANATEE COUNTY TRAFFIC DESIGN DIVISION. ONE COMPLETE SET SHALL ALSO BE FURNISHED TO THE PROJECT MANAGEMENT DIVISION AND TRAFFIC DESIGN DIVISION MANAGER AT 2101 47TH TERRACE EAST, BRADENTON, FLORIDA 34201. THE AS-BUILT PLANS SHALL CLEARLY INDICATE THE LOCATION OF THE INSTALLED POLES, CONDUIT, PULL BOXES, GROUND RODS, VIRTUAL LOOPS, ETC. MEG READINGS FOR GROUND RODS SHALL ALSO BE INCLUDED.
9. UPON PASSING THE FINAL INSPECTION THE CONTRACTOR SHALL SEND A WRITTEN REQUEST TO THE MANATEE COUNTY TRAFFIC OPERATIONS DIVISION, 2904 12TH STREET COURT EAST, BRADENTON, FLORIDA 34208 (ATTN: MR. AARON BURKETT) TO TRANSFER MAINTENANCE FROM THE CONTRACTOR TO MANATEE COUNTY. MANATEE COUNTY WILL RESPOND WITHIN 5 WORKING DAYS TO ESTABLISH A TIME TABLE FOR THE TRANSFER OF MAINTENANCE RESPONSIBILITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL POWER COMPANY PROVIDING ELECTRICAL POWER TO DETERMINE IF A SERVICE PROCESSING FEE IS REQUIRED. ANY FEE SHALL BE INCLUDED AS PART OF PAYMENT FOR THE ELECTRICAL POWER SERVICE ASSEMBLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS OF THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION, INSPECTION AND ENERGIZING OF THE NEW POWER SERVICE IN A TIMELY MANNER IN ORDER TO PROMOTE PROJECT COMPLETION WITHIN CONTRACT TIME.
11. THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR, VIA SUNSHINE STATE ONE CALL OF FLORIDA, INC., IN COORDINATION WITH UNDERGROUND AND OVERHEAD UTILITY OWNERS. A MINIMUM OF 2 FULL BUSINESS DAYS PRIOR TO DIGGING IS REQUIRED.
12. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS IN ADVANCE OF POLE SETTING OPERATIONS WHERE CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED AND IN ALL CASES WHERE JOINT USE POLES ARE CALLED FOR.
13. THE CONTRACTOR SHALL HAND DIG THE FIRST 48 INCHES OF THE HOLE FOR THE POLE FOUNDATION OR CONDUIT RUN WHERE UTILITIES ARE IN CLOSE PROXIMITY.
14. ALL MATERIALS, EQUIPMENT, AND OTHER CONTRACTOR SUPPLIED ITEMS SHALL BE INSTALLED AND MAINTAINED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY MANATEE COUNTY.
15. #14 XHHW PULL WIRE SHALL BE INSTALLED IN ALL CONDUITS. AT LEAST 2 FEET OF PULL WIRE SHALL BE ACCESSIBLE AT EACH CONDUIT TERMINATION AND SECURED IN THE PULL BOX OR PLACE OF TERMINATION.
16. UNLESS OTHERWISE NOTED ALL REMOVED EQUIPMENT EXCEPT CONCRETE POLES SHALL BE TURNED OVER TO MANATEE COUNTY AND DELIVERED TO THE TRAFFIC OPERATIONS DIVISION LOCATED AT 2404 12TH STREET COURT EAST, BRADENTON, FLORIDA 34208, AS DIRECTED BY THE ENGINEER. CONCRETE POLES SHALL BE DISPOSED OF BY THE SIGNAL CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR.
17. ALL ELECTRICAL WIRING SHALL COMPLY WITH ALL APPLICABLE PROVISIONS PROVISIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION.
18. GROUNDING: ALL ITEMS SHALL BE GROUNDED IN ACCORDANCE WITH F.D.O.T. SPECIFICATION SECTION 620 AND THE CURRENT SUPPLEMENTS THERETO AT TIME OF BID. ALL COSTS FOR GROUNDING SHALL BE INCLUDED IN THE COST OF THE ITEM BEING GROUNDED. ALL GROUND ROD ASSEMBLIES FOR POLES, SERVICES, CABINETS, AND OTHER RELATED EQUIPMENT SHALL BE BONDED TOGETHER TO FORM AN INTEGRATED GROUNDING SYSTEM USING #6 AWG THHN COPPER WIRE. THE UPPER END OF ALL GROUND RODS SHALL BE 6 INCHES BELOW GROUND ELEVATION. MARK GROUND ROD LOCATION WITH PERMANENT MARKER SUCH AS AN EPOXIED STICKER LOCATED ON THE NEAREST CURB, AND PROVIDE AS-BUILT DRAWINGS WITH THE LOCATION OF GROUND RODS MARKED. GROUNDING CONDUCTOR MUST BE #6 OR LARGER BARE COPPER.
19. CONNECTING DEVICES SHALL BE NON-CORROSIVE SPLIT BOLTS, CLAMPS, PRESSURE CONNECTORS, OR OTHER APPROVED MEANS TO ENSURE A POSITIVE CONNECTION.
20. GROUND RESISTANCE TESTER, OR OTHER APPROVED MEANS WILL BE USED TO ACQUIRE THE GROUND ROD RESISTANCE. A MEMBER OF THE TRAFFIC OPERATIONS DIVISION STAFF SHALL BE PRESENT DURING THE TEST.
21. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR BORING.
22. CONTRACTOR SHALL SUPPLY ALL MATERIAL SUBMITTALS TO MANATEE COUNTY TRANSPORTATION MAINTENANCE PRIOR TO CONSTRUCTION FOR APPROVAL. CONTRACTOR SHALL SUPPLY INSPECTIONS AND AS BUILT DOCUMENTS TO MANATEE COUNTY FOR APPROVAL.
23. THE CONTRACTOR SHALL COORDINATE WITH MANATEE COUNTY'S TRAFFIC DESIGN DIVISION (941-708-7510, EXT. 7859), AT LEAST TWO WEEKS, BEFORE ANY CABINET MODIFICATIONS ARE TO BE PERFORMED. MANATEE COUNTY ENGINEERING DIVISION PERSONNEL WILL REVIEW, ASSIST AND PROVIDE TECHNICAL SUPPORT RELEVANT TO ANY FIELD MODIFICATIONS THAT ARE NECESSARY. THE CONTRACTOR MAY OPTION OUT OF THIS PROPOSITION, IF THEY FEEL ASSISTANCE AND OVERSIGHT ARE NOT NECESSARY.
24. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RIGHT-OF-WAY USE PERMITS WITH MATT MERUCCI, MANATEE COUNTY PUBLIC WORKS INFRASTRUCTURE INSPECTION OFFICER, AT (941) 708-7450, EXT. 7342.
25. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING BOND REQUIREMENTS WITH JANE OLIVER, MANTEE COUNTY PUBLIC WORKS SENIOR ADMINISTRATIVE SPECIALIST, AT (941) 708-7450, EXT. 7613.
26. THE CONTRACTOR SHALL COORDINATE ACTIVITIES WITH ALL OTHER CONTRACTORS OPERATING IN THE PROJECT AREA.
27. AT THE COMPLETION OF THE PROJECT, PROVIDE AS-BUILT PLANS IN ELECTRONIC FORM (PDF) TO: FDOT TRAFFIC OPERATIONS RENJAN JOSEPH, P.E., TSM&O ENGINEER, 801 N. BROADWAY AVE, P.O. BOX 1249, BARTOW, FL 33830-1249. EMAIL: RENJAN.JOSEPH@DOT.STATE.FL.US, PHONE: 863-519-2746.
28. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAILBOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAMGED ITEMS DUE TO THEIR CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.

				SCALE	PATRICK B. NEVAH, P.E.	DATE	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER	GENERAL NOTES	SHEET NO.
				AS NOTED	P.E. NO. 72369	12/2020		PATRICK B. NEVAH, P.E.		13
				DESIGNED BY	AECOM TECHNICAL SERVICES, INC.	PROJECT NO.		FL. LICENSE NO.		
				P. NEVAH	7650 WEST COURTNEY CAMPBELL CAUSEWAY	6015061		P.E. No. 72369		
				D. POWELL	TAMPA, FL 33607-1462					
				CHECKED BY	(813) 286-1711					
No.	REVISIONS	DATE	BY	P. O'SHEA	CERTIFICATE OF AUTHORIZATION: 8115					


PAY ITEM NOTES

1. 630-2-11: USE A MINIMUM 2" DIAMETER SCHEDULE 40 PVC CONDUIT FOR ALL SIGNAL, PEDESTRIAN, AND DETECTION FUNCTIONS. CONDUIT FOR POWER SERVICE WIRE INTO THE CONTROLLER ASSEMBLY SHALL BE 2-2" SCHEDULE 40 PVC. USE 2" CONDUIT FOR COMMUNICATIONS. POLYESTER MEASURING PULL WIRE SHALL BE INSTALLED IN ALL SPARE CONDUITS. AT LEAST 2 FEET OF PULL WIRE SHALL BE ACCESSIBLE. PAYMENT FOR CONDUIT PLACED UNDERGROUND WILL BE BASED ON THE HORIZONTAL LENGTH OF THE TRENCH MEASURED IN A STRAIGHT LINE BETWEEN THE CENTERS OF PULL BOXES, CABINETS, POLES, ETC., IN A LINEAR FEET REGARDLESS OF THE LENGTH OR NUMBER OF CONDUITS IN THE SAME TRENCH. NO ADDITIONAL PAYMENT WILL BE MADE FOR MULTIPLE RUNS OF CONDUIT WITHIN A TRENCH. MULTIPLE RUNS ARE LABELED ON THE PLANS.
2. 630-2-12: USE MINIMUM 2" DIAMETER HDPE SDR 11 CONDUIT FOR ALL SIGNAL, PEDESTRIAN, AND DETECTION FUNCTIONS. USE 2-2" CONDUIT FOR COMMUNICATIONS. POLYESTER MEASURING PULL WIRE SHALL BE INSTALLED IN ALL CONDUITS. AT LEAST 2 FEET OF PULL WIRE SHALL BE ACCESSIBLE. PAYMENT FOR CONDUIT PLACED UNDERGROUND WILL BE BASED ON THE HORIZONTAL LENGTH OF THE BORE MEASURE IN A STRAIGHT LINE BETWEEN THE CENTERS OF PULL BOXES, CABINETS, POLES, ETC., IN A LINEAR FEET REGARDLESS OF THE LENGTH OR NUMBER OF CONDUITS INSTALLED. NO ADDITIONAL PAYMENT WILL BE MADE FOR MULTIPLE CONDUITS IN THE SAME BORE. MULTIPLE RUNS ARE LABELED ON THE PLANS.

THIS PAY ITEM INCLUDES A LOCATE WIRE SYSTEM. THE LOCATE WIRE SYSTEM INCLUDES LOCATE WIRE, WIRE GROUNDING UNITS (WGU), GROUND RODS, AND ALL MISCELLANEOUS ITEMS NEEDED FOR A COMPLETE AND ACCEPTED LOCATE SYSTEM.

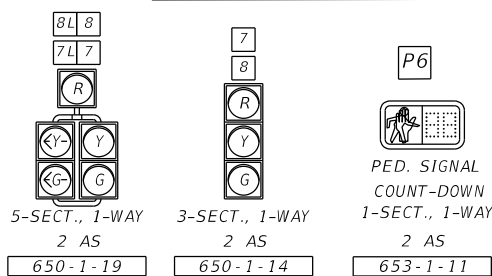
3. 632-7-1: VERIFY THE COLOR CODE OF SIGNAL CABLE WITH MANATEE COUNTY PRIOR TO WIRING THE INTERSECTION. USE A MINIMUM OF IMSA CERTIFIED AWG #14, 7 CONDUCTOR STRANDED SIGNAL CABLE FOR SIGNAL HEADS. SIGNAL CABLE SHALL BE INSTALLED AS A CONTINUOUS RUN FROM THE SIGNAL CABINET TO THE VEHICLE SIGNAL HEAD. THE PEDESTRIAN HEAD SHALL USE AWG #14 SHIELDED, 5 CONDUCTOR WIRE FROM THE SIGNAL CABINET TO EACH PEDESTRIAN SIGNAL HEAD AND AWG #14 SHIELDED, 1 PAIR WITH GROUND WIRE FROM THE SIGNAL CABINET TO THE PEDESTRIAN BUTTON.
4. 632-7-6: THIS ITEM IS FOR THE REMOVAL OF EXISTING SIGNAL CABLE SERVICING THE EXISTING TRAFFIC SIGNALS BEING REMOVED.
5. 633-8-1: THE CCTV MULTI-CONDUCTOR COMMUNICATION CABLE SHALL BE TYPE OSP FLODDED CORE CAT6 ETHERNET CABLE FOR VIDEO AND UPS DATA. THE CONTRACTOR SHALL COORDINATE WITH THE COUNTY PRIOR TO ORDERING THE CABLE.
6. 635-2-11 & 635-2-12: ALL PULL BOXES AND LIDS SHALL BE OF TRAFFIC BEARING POLYMER TYPE (QUAZITE OR EQUIVALENT) CONCRETE CONSTRUCTION. PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, PULL BOXES SHALL BE PLACED A MINIMUM OF 7 FEET FROM EDGE OF PAVEMENT. THE TOP OF THE LID SHALL HAVE THE FOLLOWING IDENTIFICATION PERMANENTLY CAST INTO THE TOP SURFACE IN STAMPED RAISED LETTERS, ACCORDING TO THE APPLICATION FOR WHICH IT IS TO BE USED: "MANATEE COUNTY TRAFFIC SIGNAL" FOR SIGNALIZED INTERSECTION APPLICATIONS; STANDARD PULL BOX DIMENSIONS SHALL BE 17"X30".
7. 646-1-11: USE BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOORS FOR PEDESTRIAN PEDESTALS. INSIDE DIAMETER OF PEDESTALS SHALL BE FOUR INCHES (4").

8. 650-1-14 & 650-1-19: SIGNAL HEADS SHALL BE RIGIDLY MOUNTED TO MAST ARMS. USE SIGNAL HEAD SUPPORTING TUBE THAT IS CAPABLE OF ADJUSTING VERTICALLY A MINIMUM OF 1.5 FEET. DO NOT USE PLASTIC GARBAGE BAGS AS A COVERING FOR CONCEALING SIGNAL HEADS. PAY ITEMS INCLUDE THE COST OF TUNNEL VISORS AND BACK PLATES. BACKPLATES SHALL BE LOUVERED ALUMINUM WITH A 2 INCH YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER.
9. 650-1-60: THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING SIGNAL ATTACHMENT ITEMS.
10. 660-4-51, 660-4-52: THESE PAY ITEMS SHALL INCLUDE ALL CABINET AND OVERHEAD ADJUSTMENTS/MODIFICATIONS TO DETECT VEHICLES IN THE RECONSTRUCTED NORTHBOUND 64TH STREET LANES FOR A COMPLETE AND ACCEPTABLE VIDEO DETECTION SYSTEM. THE CONTRACTOR SHALL COORDINATE WITH MANATEE COUNTY.
11. 670-5-400: THIS ITEM IS FOR ANY MODIFICATION REQUIRED TO THE EXISTING TRAFFIC SIGNAL CONTROLLER TO ADD VEHICLE MOVEMENTS 3 & 7, ADJUST TIMINGS FOR PEDESTRIAN MOVEMENT P6 AND THE ADDITION OF A CCTV.
12. 682-1-113: THE CONTRACTOR SHALL FURNISH AND INSTALL AN IP CCTV CAMERA COMPATIBLE WITH THE MANATEE COUNTY ATMS SYSTEM. THE CCTV CAMERA SHALL BE A BOSCH VGS-AUTODOME MODEL ITS1080P-30x4. THIS ITEM SHALL INCLUDE MOUNTING HARDWARE AND INSTALLED ON THE EXISTING MAST ARM ASSEMBLY PER THE CCTV MANUFACTURE'S RECOMENDATIONS. THIS ITEM SHALL INCLUDE ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE CCTV INSTALLATION AND INCLUDES ANY MANATEE COUNTY REQUIRED PERFORMANCE TESTING.
13. 684-1-1: THE CONTRACTOR SHALL FURNISH AND INSTALL A MANAGED ETHERNET SWITCH COMPATIBLE WITH THE MANATEE COUNTY ATMS SYSTEM. THE ETHERNET SWITCH SHALL BE RUGGEDCOM R5G920P, MODEL# 6GK60920PS23-0BA0-Z-A05+B05+C02+D02. THIS ITEM SHALL INCLUDE A RUGGEDCOM MODEL RPS 1300 EXTERNAL POWER SUPPLY.

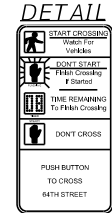
SCALE				DESIGN ENGINEER		 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER PATRICK B. NEVAH, P.E. FL. LICENSE NO. P.E. No. 72369	SHEET NO. 14
AS NOTED				DATE				
DESIGNED BY				12/2020		<h2>PAY ITEM NOTES</h2>		
DRAWN BY				PROJECT NO.				
CHECKED BY				6015061				
P. O'SHEA				CERTIFICATE OF AUTHORIZATION: 8115				
No.	REVISIONS	DATE	BY					

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SIGNAL HEAD DETAILS



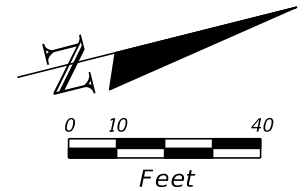
PEDESTRIAN SIGN DETAIL



VIDEO VEHICLE DETECTION ASSIGNMENT			
CAMERA DETECTOR	DETECTION ZONE	CONNECT TO MOVEMENT	TURN DELAY TIME (SECS.)
EX VID 1	DZ-3	8	-
	DZ-8	8	8
EX VID 2	DZ-4	7	--
	DZ-4R	7	8
	DZ-7	7	3

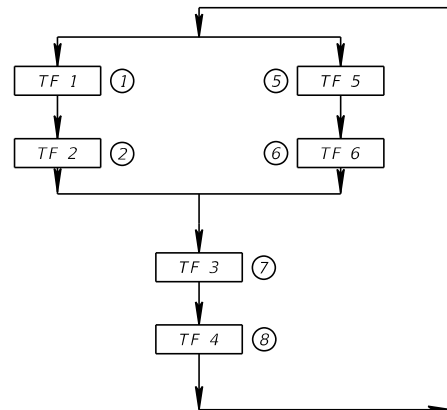
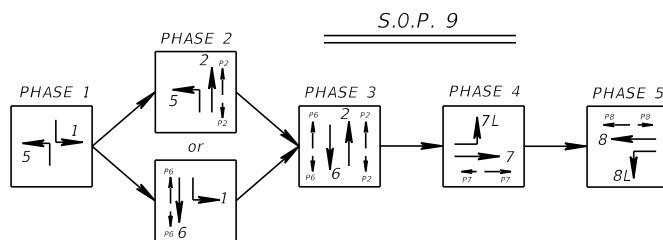
DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

NOTE: REQUEST UPDATED SIGNAL TIMINGS FROM FDOT TSM&O ENGINEER-ARTERIALS (863-519-2219) WHEN ALL LANES, STRIPING, SIGNALS AND PEDESTRIAN FACILITIES ARE IN THEIR FINAL CONFIGURATION AND THE SIGNAL IS OPERATING AS DESIGNED. PROVIDE FDOT WITH ALL "AS-BUILT" INFORMATION NECESSARY TO DEVELOP THE BASIC SIGNAL TIMING PARAMETERS AND ALLOW THREE (3) WEEKS FOLLOWING THE REQUEST FOR FDOT TO DEVELOP THE UPDATED TIMINGS PROGRAM THE CONTROLLER PER THE TIMINGS PROVIDED BY FDOT.



CONTROLLER OPERATION NOTES:

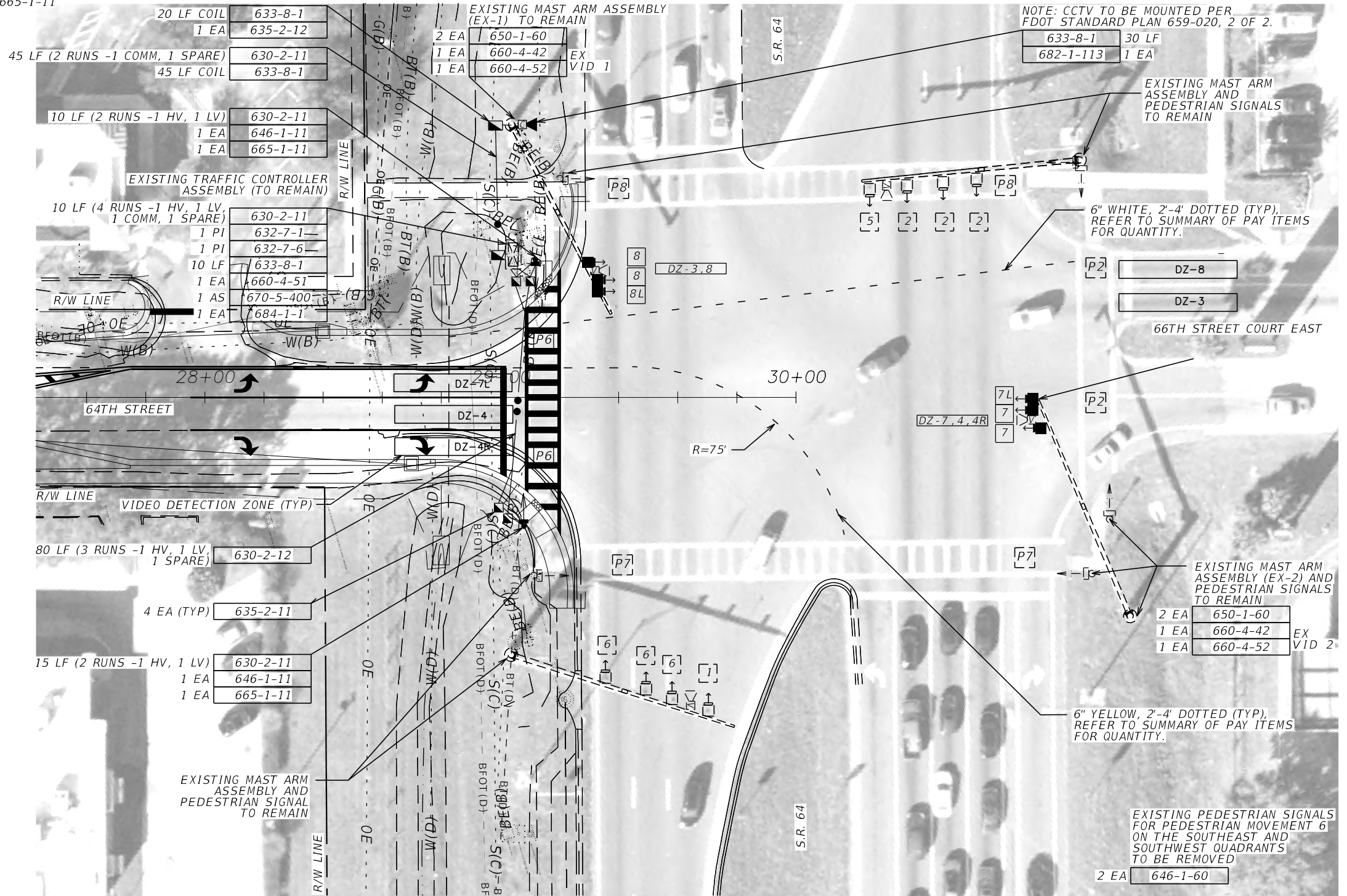
- MAJOR STREET IS SR 64, MOVEMENTS 2 AND 6 AND MINOR STREET IS 64TH STREET/66TH STREET COURT EAST MOVEMENTS 7 & 8.
- SIGNAL OPERATING PLAN NO. 9 SHALL BE USED.
- EACH PHASE/MOVEMENT SHALL BE WIRED FROM THE SIGNAL TO THE CONTROLLER AS A SEPARATE PHASE/MOVEMENT. THIS INCLUDES LEFT TURN MOVEMENTS. EACH LEFT TURN MOVEMENT SHALL HAVE CONDUCTORS AVAILABLE FOR PROTECTED AND PERMISSIVE OPERATIONS.
- VEHICLE DETECTION ZONE SIZES ARE 6' x 40'.
- WHEN SIGNAL IS IN FLASHING MODE, MOVEMENTS 2 AND 6 SHALL FLASH YELLOW. ALL OTHER MOVEMENTS TO FLASH RED.



CONTROLLER TIMING PLAN

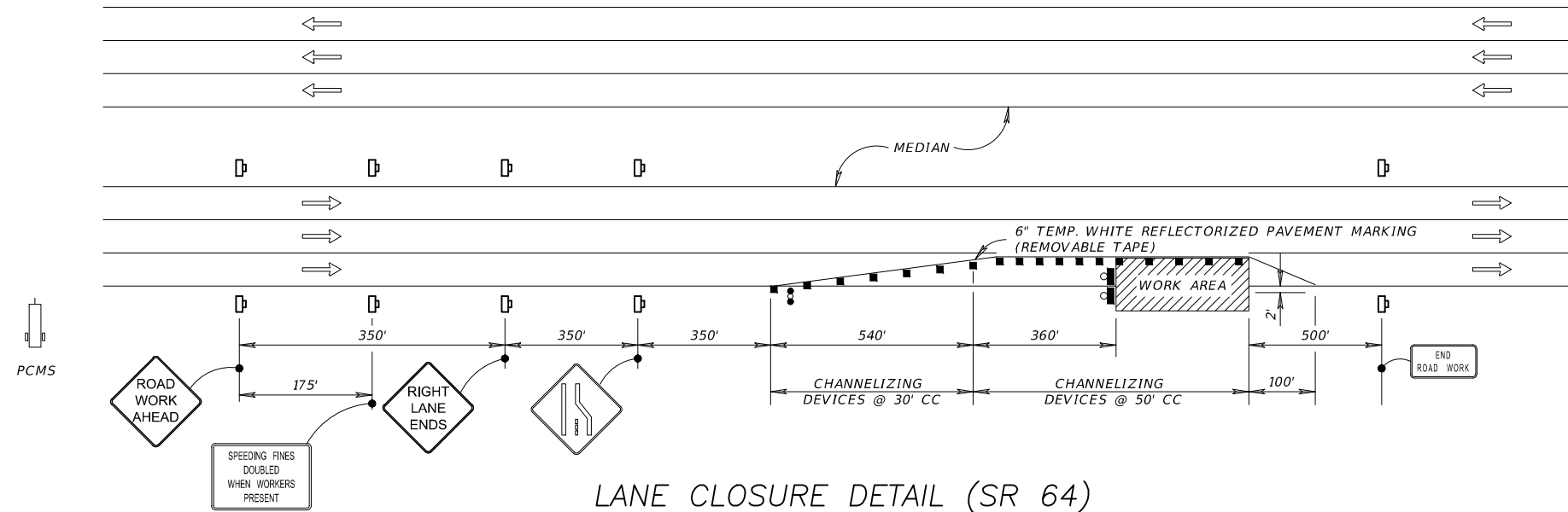
MOVEMENT NUMBER	CONTROLLER TIMINGS (SECONDS)							
	1	2	3	4	5	6	7	8
DIRECTION	EBL	WB	-	-	WBL	EB	NB	SB
TURN TYPE	PROTECTED	-	-	-	PROTECTED	-	LEAD	LAG
MINIMUM GREEN (INITIAL)	5	15	-	-	5	15	7	7
EXTENSION	3.0	5.0	-	-	3.0	5.0	3.0	3.0
YELLOW	5.2	5.2	-	-	5.2	5.2	4.0	4.0
ALL RED	3.0	2.0	-	-	3.0	2.0	4.1	4.1
MAXIMUM GREEN 1	25	75	-	-	20	75	20	30
MAXIMUM GREEN 2	35	90	-	-	25	90	30	45
PEDESTRIAN WALK	-	7	-	-	-	7	9	7
FLASHING DON'T WALK	-	22	-	-	-	21	48	43
DETECTOR MEMORY	-	-	-	-	-	-	-	-
DET. CROSS SWITCH	-	-	-	-	-	-	-	-
DUAL ENTRY	-	ON	-	-	-	ON	-	-
VEHICLE RECALL	-	MIN	-	-	-	MIN	-	-
CNA	-	-	-	-	-	-	-	-
REST IN WALK	-	-	-	-	-	-	-	-

TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY THE PROJECT ENGINEER. EXISTING TIMINGS NOT INDICATED ARE TO REMAIN. POSTED SPEED LIMIT FOR SR 64 IS 45 MPH. NO POSTED SPEED LIMIT FOR 64TH STREET/66TH STREET COURT EAST (30 MPH ASSUMED).



SCALE	AS NOTED	DESIGNED BY	PATRICK B. NEVAH, P.E. P.E. No 72369	DATE	12/2020	DESIGN ENGINEER	PATRICK B. NEVAH, P.E.	SHEET NO.	15
DRAWN BY	D. POWELL	CHECKED BY	P. O'SHEA	PROJECT NO.	6015061	FL. LICENSE NO.	P.E. No 72369		
REVISIONS		DATE	BY	CERTIFICATE OF AUTHORIZATION: 8115		PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208		SIGNALIZATION PLAN	

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LANE CLOSURE DETAIL (SR 64)

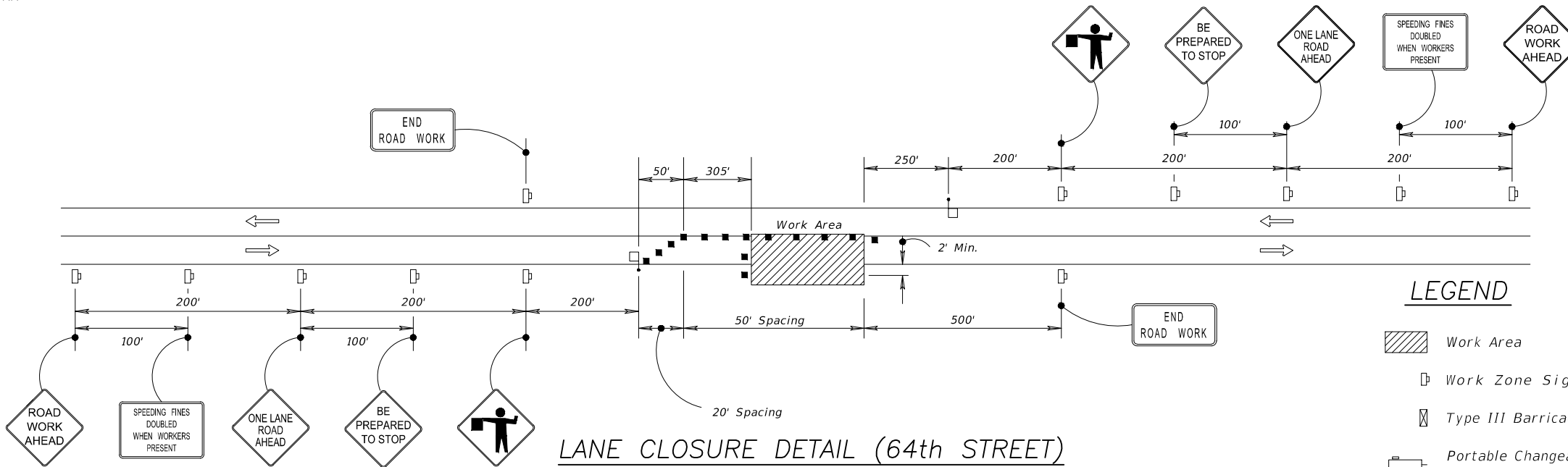
REGULATORY SPEED (POSTED) = 45MPH
NTS

MESSAGES TWO WEEKS PRIOR CONST.

MESSAGE 1: RT LANE CLOSED SR 64
MESSAGE 2: XX/XX/XX TO XX/XX/XX

MESSAGES DURING CONST.

MESSAGE 1: RT LANE CLOSED SR 64
MESSAGE 2: USE CAUTION



LANE CLOSURE DETAIL (64th STREET)

REGULATORY SPEED (POSTED) = 30MPH
NTS

LEGEND

- Work Area
- Work Zone Sign
- Type III Barricade
- Portable Changeable (Variable) Message Sign
- Channelizing Device (See STD. PLANS 102)
- Flagger
- Advanced Warning Arrow Board
- Lane Identification and Direction of Traffic

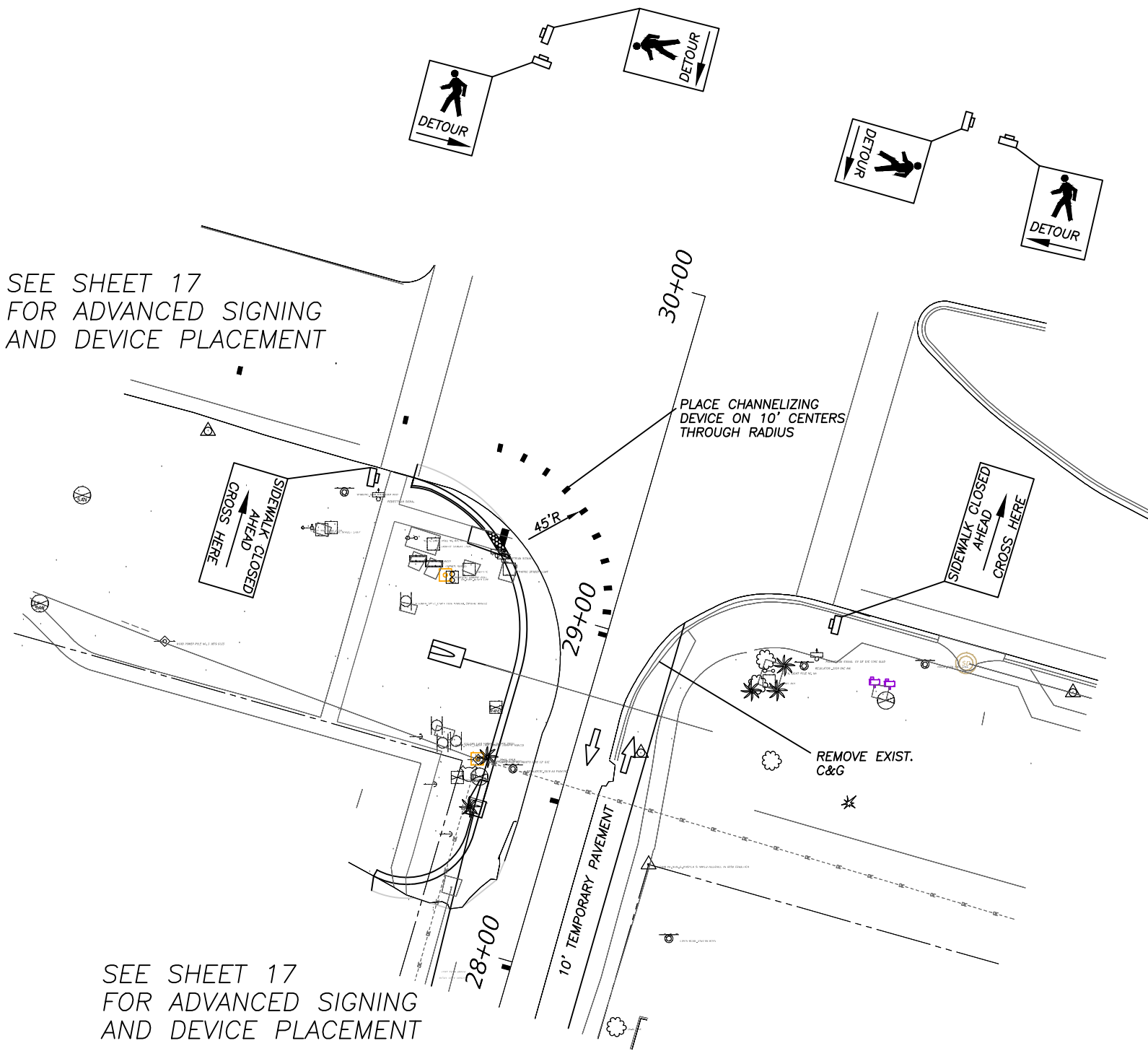
GENERAL NOTES

1. THE REGULATORY SPEED SHALL BE MAINTAINED DURING CONSTRUCTION.
2. TEMPORARY TRAFFIC CONTROL SHALL CONFORM TO FDOT STANDARD PLANS 102 SERIES.
3. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS IN ADVANCED OF ANY LANE CLOSURES.
4. NOTIFY ALL LOCAL EMERGENCY MANAGEMENT AGENCIES OF ALL SCHEDULED LANE CLOSURES TWO WEEKS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
5. LANE CLOSURES ON SR64 SHALL BE ALLOWED FROM 7:00 PM TO 7:00 AM.
6. PEDESTRIAN CROSSING CLOSURE SHALL COMPLY WITH FDOT STANDARD DRAWING 102-660.

SCALE: AS NOTED		DESIGNED BY: RNJ		DRAWN BY: RNJ		CHECKED BY:		ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115	DATE: 05/2019 PROJECT NO.: 6015061	PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER: ROBERT N. JULIUS, P.E. FL. LICENSE NO.: 54039	64TH STREET AND SR 64 TEMPORARY TRAFFIC CONTROL	SHEET NO.: 17
No.	REVISIONS	DATE	BY										

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

SEE SHEET 17
FOR ADVANCED SIGNING
AND DEVICE PLACEMENT



SEE SHEET 17
FOR ADVANCED SIGNING
AND DEVICE PLACEMENT

PHASE I

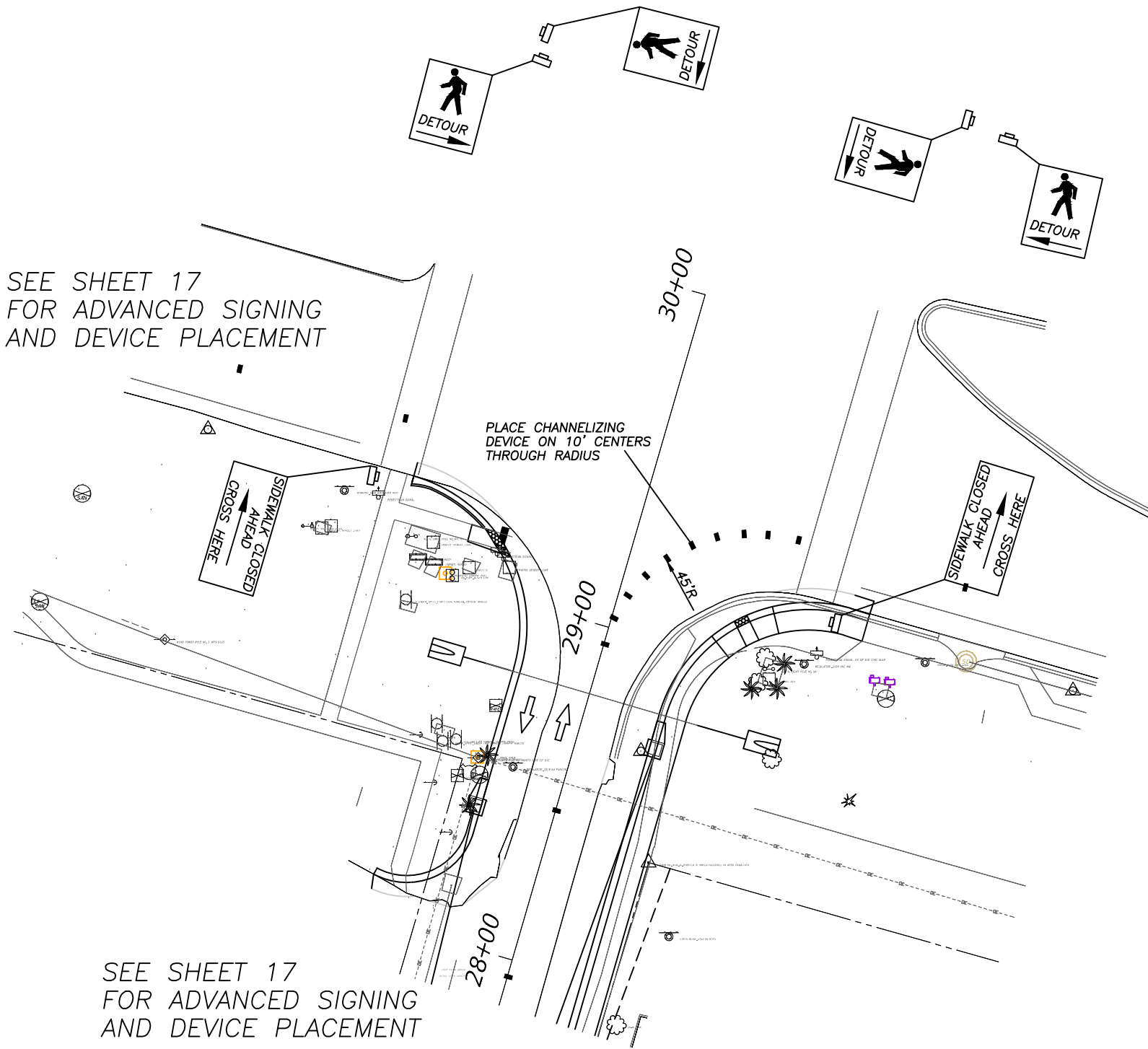
1. REMOVE PORTION OF EXISTING CURB. PLACE TEMPORARY PAVEMENT LT.
2. CLOSE OUTSIDE EASTBOUND LANE ON SR 64.
3. SHIFT TRAFFIC EAST TO TEMPORARY PAVEMENT ON 64TH STREET.
4. CONSTRUCT LEFT CURB, ASSOCIATED WIDENING, AND DRAINAGE.

No.		REVISIONS		DATE	BY	SCALE	AS NOTED	DESIGNED BY	RNJ	DRAWN BY	RNJ	CHECKED BY		SCALE	AS NOTED	DESIGNED BY	RNJ	DRAWN BY	RNJ	CHECKED BY		DATE	05/2019	PROJECT NO.	6015061	DESIGN ENGINEER	ROBERT N. JULIUS, P.E.	FL. LICENSE NO.	54039	64TH STREET AND SR 64 TEMPORARY TRAFFIC CONTROL	SHEET NO.	18
							ROBERT N. JULIUS, P.E. P.E. NO. 54039 AECOM TECHNICAL SERVICES, INC. 7650 WEST COURTNEY CAMPBELL CAUSEWAY TAMPA, FL 33607-1462 (813) 286-1711 CERTIFICATE OF AUTHORIZATION: 8115																									



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SEE SHEET 17
FOR ADVANCED SIGNING
AND DEVICE PLACEMENT




SEE SHEET 17
FOR ADVANCED SIGNING
AND DEVICE PLACEMENT

PHASE II

1. SHIFT TRAFFIC WEST TO NEWLY CONSTRUCTED 64TH ST.
2. CONSTRUCT RIGHT CURB, ASSOCIATED WIDENING, AND DRAINAGE.

PHASE III

1. PLACE FINAL FRICTION COURSE.
2. PLACE FINAL MARKINGS.

No.		REVISIONS		DATE	BY	SCALE	AS NOTED	DESIGNED BY	ROBERT N. JULIUS, P.E. P.E. NO. 54039	DATE	05/2019	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	DESIGN ENGINEER	ROBERT N. JULIUS, P.E.	64TH STREET AND SR 64 TEMPORARY TRAFFIC CONTROL	SHEET NO.	19
						DRAWN BY	RNJ	CHECKED BY	RNJ	PROJECT NO.	6015061		FL. LICENSE NO.	54039			

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