

PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY

Meeting Date: March 14, 2023 [X] Consent [ ] Regular  
[ ] Ordinance [ ] Public Hearing

Department: Engineering & Public Works  
Submitted By: Engineering & Public Works  
Submitted For: Traffic Division

I. EXECUTIVE BRIEF

**Motion and Title: Staff recommends motion to approve:** a work order in the amount of \$495,829.38 to Palm Beach County’s (County) annual traffic signal contract dated August 23, 2022 (R2022-0791) with Gerelco Traffic Controls, Inc. (Gerelco) to construct a new mast arm traffic signal at the intersection of SW 18<sup>th</sup> Street and Bluewater Circle, County Intersection ID Number 67503 (Project).

**SUMMARY:** Approval of this work order will allow Gerelco to construct the Project. Staff conducted a signal warrant analysis at this location and determined the intersection met the required minimum warrants for traffic signal installation on January 15, 2019. Per County PPM CW-F-050, this work order exceeds the threshold relating to staff approvals of work orders to annual contracts, thus requiring approval from the Board of County Commissioners (BCC). Prior to this work order, none of Gerelco’s \$5,000,000 contract has been spent or encumbered. Gerelco is a Port St. Lucie based company with an office in Palm Beach County. The Office of Equal Business Opportunity has granted a waiver of the Affirmative Procurement Initiative based on the limited availability of highly specialized and qualified small, minority, and woman owned businesses to perform the specialized construction of traffic signals. District 4 (YBH)

**Background and Justification:** On August 23, 2022, the BCC approved the annual traffic signal contract with Gerelco to provide for and install various signal components for traffic control devices. The County is now requesting that Gerelco construct the Project in accordance with the work order. The estimated construction cost is \$396,663.50, including a contingency of \$99,165.88. The Engineering & Public Works Department recommends BCC approval.

**Attachments:**

- 1. Location Sketch
- 2. Work Order with Exhibit A
- 3. Office of Equal Business Opportunity Waiver

Recommended By: Ma [Signature] David [Signature] 2/18/2023  
YBH/TEL County Engineer Date  
Approved By: Pa [Signature] 2/16/23  
Assistant County Administrator Date

**II. FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

Fiscal Years	2023	2024	2025	2026	2027
Capital Expenditures	\$ 495,830	-0-	-0-	-0-	-0-
Operating Costs	-0-	-0-	-0-	-0-	-0-
External Revenues		-0-	-0-	-0-	-0-
Program Income (County)	-0-	-0-	-0-	-0-	-0-
In-Kind Match (County)	-0-	-0-	-0-	-0-	-0-
<b>NET FISCAL IMPACT</b>	<b>\$ 495,830</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>
# ADDITIONAL FTE					
<b>POSITIONS (Cumulative)</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>

Is Item Included in Current Budget? Yes  No   
 Does this item include the use of federal funds? Yes  No

**Budget Account No:**

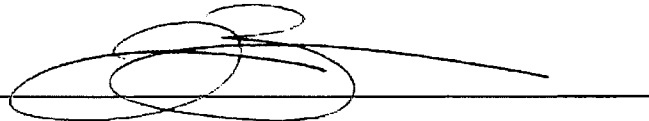
Fund 3500 Dept 361 Unit 2004-017 Object 6408 \$155,426.06  
 Fund 1201 Dept 360 Unit 3224-202 Object 6408 \$340,403.32

**Recommended Sources of Funds/Summary of Fiscal Impact:**

Transportation Improvement Fund  
 Traffic Signals - Countrywide  
 SW 18th Street and Wharfside/Blue Water Circle  
 County Transport Trust  
 Jpa & Developer Agreements/Trf  
 SW18th and Blue Water Circle/Boardwalk at 18th Street- Wharf

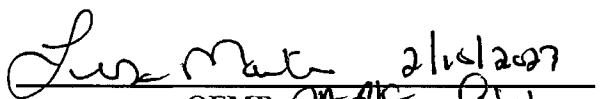
Construction Contract	\$ 396,663.50
Contingency	\$ 99,165.88
<b>Fiscal Impact</b>	<b>\$ 495,829.38</b>

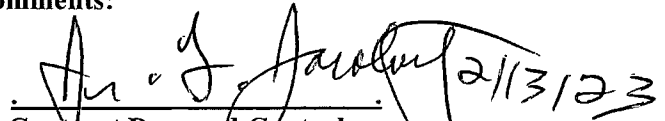
**C. Departmental Fiscal Review:**



**III. REVIEW COMMENTS**

**A. OFMB Fiscal and/or Contract Dev. and Control Comments:**

  
 OFMB *AD/S* *ESW*  
 2/14/23  
 2/9/23

  
 Contract Dev. and Control  
 2/13/23

**B. Approved as to Form and Legal Sufficiency:**

  
 Assistant County Attorney  
 2/16/23

**C. Other Department Review:**

\_\_\_\_\_  
 Department Director

This summary is not to be used as a basis for payment.

Location Map



**WORK ORDER TO THE ANNUAL TRAFFIC SIGNAL CONTRACT (R2022-0791) BETWEEN PALM BEACH COUNTY AND GERELCO TRAFFIC CONTROLS, INC. TO CONSTRUCT A MAST ARM TRAFFIC SIGNAL AT THE INTERSECTION OF SW 18<sup>th</sup> STREET AND BLUEWATER CIRCLE, PALM BEACH COUNTY INTERSECTION ID NUMBER 67503, SIGNAL PROJECT NUMBER 2019-742, PALM BEACH COUNTY, FLORIDA**

**THIS WORK ORDER TO THE ANNUAL TRAFFIC SIGNAL CONTRACT DATED AUGUST 23, 2022 (R2022-0791), is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2023, by and between Palm Beach County, a political subdivision of the State of Florida, by and through its Board of County Commissioners (COUNTY), and GERELCO TRAFFIC CONTROLS, INC., a Florida corporation with an address of 560 NW Enterprise Drive, Port Saint Lucie, FL 34986 (CONTRACTOR).**

**WITNESSETH**

**WHEREAS, on August 23, 2022, COUNTY and CONTRACTOR entered into an Annual Contract (R2022-0791) (CONTRACT) to provide for the furnishing and installation of various signal components for traffic control devices on a work order basis; and**

**WHEREAS, COUNTY desires CONTRACTOR to construct a mast arm traffic signal at the intersection of SW 18<sup>th</sup> Street and Bluewater Circle, Palm Beach County Intersection ID Number 67503, (PROJECT); and**

**WHEREAS, CONTRACTOR agrees to construct the PROJECT in accordance with the terms and conditions of the CONTRACT and as directed and accepted by the COUNTY; and**

**WHEREAS, pursuant to the CONTRACT, a cost not to exceed \$495,829.38 has been calculated by COUNTY and found to be appropriate compensation for the services to be performed by CONTRACTOR to construct the PROJECT.**

**NOW, THEREFORE, THIS INDENTURE WITNESSETH: That for and in consideration of the mutual benefits to flow from each to the other, the parties hereto agree as follows:**

- 1. The above recitals are true and correct and incorporated herein.**
- 2. CONTRACTOR agrees to provide services for the PROJECT in accordance with the CONTRACT and as further described in Exhibit A.**
- 3. COUNTY agrees to pay the CONTRACTOR a fee not to exceed \$495,829.38 to construct the PROJECT. Final payment shall be per documented quantities installed.**

IN WITNESS WHEREOF, the Board of County Commissioners of Palm Beach County, Florida, has made and executed this Work Order for the PROJECT, pursuant to the CONTRACT, on behalf of the COUNTY, and CONTRACTOR has hereunto set its hand the day and year above written.

OWNER:

Palm Beach County, a political subdivision of the State of Florida by and through its Board of County Commissioners

BY: \_\_\_\_\_  
Gregg K. Weiss, Mayor

ATTEST:  
Joseph Abruzzo  
Clerk of the Circuit Court & Comptroller

BY: \_\_\_\_\_  
Deputy Clerk

COUNTY SEAL

APPROVED AS TO TERMS AND CONDITIONS

BY: Motasem Al-Turk  
Motasem Al-Turk  
Traffic Division, Director

APPROVED AS TO FORM & LEGAL SUFFICIENCY:

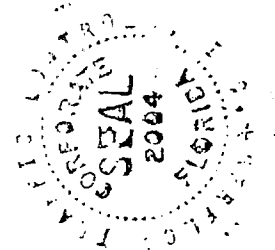
BY: \_\_\_\_\_  
Yelizaveta Herman  
Assistant County Attorney

CONTRACTOR:

Gerelco Traffic Controls, Inc., a Florida Corporation

BY: Kenneth A. Geremia, Jr.  
Kenneth A. Geremia, Jr.  
President

CORPORATE SEAL



WITNESS:

BY: O'teaka Lilly  
O'teaka Lilly  
(Printed Name)

BY: Maria Enriquez  
Maria Enriquez  
(Printed Name)

PALM BEACH COUNTY ENGINEERING & PUBLIC WORKS  
TRAFFIC DIVISION WORK ORDER / ANNUAL CONTRACT R2022-0791

PROJECT NAME: SW 18<sup>th</sup> Street and Bluewater Circle  
(PBC Intersection 67503)  
BUDGET LINE ITEM: 1201-360-3224-202-6408 & 3500-361-2004-017-6408  
KDO NUMBER: EN111222\*19  
PBC ENGINEERING ANNUAL SIGNAL CONTRACT NUMBER: 2022-0791  
PBC ENGINEERING PROJECT NUMBER: N/A  
PBC TRAFFIC DIVISION SIGNAL PROJECT NUMBER: 2019-742  
WORK ORDER NUMBER: G-01  
DATE: \_\_\_\_\_ COMMISSION DISTRICT: 4

TO: Kenneth A. Geremia, Jr., Gerelco Traffic Controls, Inc.

In accordance with the terms of your contract dated August 23, 2022, you are directed to provide the following supplies and services: Provide for the furnishing and installation of a mast arm traffic signal as shown on the Signal Plan on sheet T-4 of sheet T-10. and Bidtab. dated 12/06/2022.

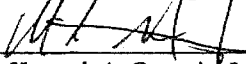
The above work shall be performed at: SW 18<sup>th</sup> Street and Bluewater Circle (PBC Intersection 67503).

STARTING: The contract duration for this work is 240 days. A separate Notice to Proceed ("NTP") letter will be issued directing the contractor to commence work within the time specified in the NTP letter. The total amount of this Work Order, at the contract prices, is estimated to be \$495,829.38, which includes \$99,165.88 contingency (see attached Bidtab for quantities). The Office of Equal Business Opportunity waived the API Requirements (see attached.)

This work shall be coordinated by, (48 hours prior notice to commencement of work):

Fattoush Jafar, P.E., Ph.D. Traffic Engineering & Operations Manager (561) 684-4030  
Name Title Telephone

Please indicate your receipt of this Work Order by signing and returning a duplicate copy.

  
President (772) 340-7474  
Name Kenneth A. Geremia, Jr. Title Telephone

Please sign below and submit with invoice at the completion of the project.  
Project completed in compliance with Contract and Project specifications.

\_\_\_\_\_  
Signature Title Telephone



PBCBCC-TRAFFIC DIVISION  
 2300 N. JOG ROAD  
 W.P.B., FL. 33411-2745  
 Phone: (561) 684-4030 Fax: (561) 478-5770

**GERELCO BIDTAB**  
**CONTRACT**  
**#2022052**

**DATE: 12/6/2022**

**SIGNAL PROJECT #:**

**INTERSECTION: SW 18th St. & Blue Water Cir**  
**INTERSECTION NO.# 67503**

ITEM NO.#	PRODUCT NAME	QTY	PRICE	LINE TOTAL
102-1-A	GENERAL MAINTENANCE OF TRAFFIC - [HR] [F&I]	16	\$121.00	\$1,936.00
102-1-C1	MAINTENANCE OF TRAFFIC (UTILITY LOCATION. SOFT DIG UP TO 10 FEET ) - [HR] [F&I]	32	\$350.00	\$11,200.00
102-14	MAINTENANCE OF TRAFFIC (TRAFFIC CONTROL OFFICER) - [HR] [F&I]	16	\$225.00	\$3,600.00
630-2-11-2	2" PVC (SCH 40) UNDERGROUND CONDUIT - [LF] [F&I]	768	\$8.30	\$6,374.40
630-2-11-2A	ADDITIONAL 2" PVC (SCH 40) CONDUIT, IN OPEN TRENCH - [LF] [F&I]	528	\$5.20	\$2,745.60
630-2-12-2-2	2-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE) - [LF] [F&I]	89	\$29.00	\$2,581.00
630-2-12-2-3	3-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE) - [LF] [F&I]	78	\$33.00	\$2,574.00
630-2-12-2-5	5-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE) - [LF] [F&I]	258	\$45.00	\$11,610.00
630-2-14-1	1" RIGID CONDUIT HOT DIPPED GALVANIZED CONDUIT SURFACE MOUNTED - [LF] [F&I]	40	\$33.20	\$1,328.00
632-7-1-19G	SIGNAL CABLE (SPAN LENGTH 751' - Greater) - [PI] [F&I]	1	\$11,400.00	\$11,400.00
632-7-1-4A	PEDESTRIAN SIGNAL CABLE - 4 CONDUCTOR - [PI] [F&I]	1	\$4,500.00	\$4,500.00
632-7-1-7	SIGNAL CABLE - 7 CONDUCTOR - [LF] [F&I]	550	\$5.70	\$3,135.00
632-7-1-7A	PEDESTRIAN SIGNAL CABLE - 7 CONDUCTOR - [PI] [F&I]	1	\$6,250.00	\$6,250.00
635-2-12-A	PULL BOX (17" x 30" x 12"D) HEAVY DUTY COVERS (TIER 15) - [EA] [F&I]	21	\$1,000.00	\$21,000.00
635-2-12-C	PULL BOX (30" x 48" x 24"D) HEAVY DUTY SPLIT COVERS (ITS) (TIER 15) - [EA] [F&I]	1	\$3,500.00	\$3,500.00
635-2-12-D	PULL BOX (17" x 30" x 24"D) HEAVY DUTY SPLIT COVERS (ITS) (TIER 15) - [EA] [F&I]	1	\$2,200.00	\$2,200.00
639-1-121	ELECTRICAL POWER SERVICE WITH METER BASE (UNDERGROUND) METER FURNISHED BY POWER COMPANY - [AS] [F&I]	1	\$1,325.00	\$1,325.00
639-2-1-3	ELECTRICAL SERVICE WIRE (SINGLE PHASE 3-WIRE, TRIPLEX) - [LF] [F&I]	175	\$5.50	\$962.50
639-3-11	ELECTRICAL SERVICE DISCONNECT (BREAKER BOX, SHEET T 6.2 OF PBC STANDARDS) - [EA] [F&I]	1	\$885.00	\$885.00
641-2-12-12	PRESTRESSED CONCRETE POLE (12' TYPE P-II) - [EA] [F&I]	1	\$1,250.00	\$1,250.00
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL WITH TRANSFORMER BASE (8 FEET ABOVE GROUND) - [EA] [F&I]	8	\$1,580.00	\$12,640.00

DATE: 12/6/2022

SIGNAL PROJECT #:

INTERSECTION:	SW 18th St. & Blue Water Cir
INTERSECTION NO.#	67503

ITEM NO.#	PRODUCT NAME	QTY	PRICE	LINE TOTAL
649-22-3	MAST ARM ASSEMBLY, FURNISH AND INSTALL ON EXISTING FOUNDATION, SINGLE ARM 40' (A40/S-P2/S) - [EA] [F&I]	1	\$28,841.00	\$28,841.00
649-22-3L	MAST ARM ASSEMBLY WITH STREET LIGHT, FURNISH AND INSTALL ON EXISTING FOUNDATION, SINGLE ARM 40' (A40/S-P2/S/L) - [EA] [F&I]	1	\$34,752.00	\$34,752.00
649-22-6L	MAST ARM ASSEMBLY WITH STREET LIGHT, FURNISH AND INSTALL ON EXISTING FOUNDATION, SINGLE ARM 50' (A50/S-P3/S/L) - [EA] [F&I]	2	\$39,712.00	\$79,424.00
649-2-16-50	DRILLED SHAFT FOUNDATION ASSEMBLY, 16' DEEP AND 5.0' DIAMETER, FURNISH AND INSTALL (DS/16/5.0) - [EA] [F&I]	4	\$18,500.00	\$74,000.00
650-1-13	TRAFFIC SIGNAL HEAD ALUMINUM (3-SECTION, 1-WAY) INCLUDES BACKPLATES - [AS] [F&I]	10	\$1,100.00	\$11,000.00
650-1-14	TRAFFIC SIGNAL HEAD ALUMINUM (4-SECTION, 1-WAY) INCLUDES BACKPLATES - [AS] [F&I]	2	\$1,350.00	\$2,700.00
653-191	PEDESTRIAN SIGNAL - COUNT DOWN (1-WAY) ALUMINUM - [EA] [F&I]	8	\$800.00	\$6,400.00
660-2-106-B	LOOP ASSEMBLY ( TYPE F - 46' ). - [EA] [F&I]	12	\$2,450.00	\$29,400.00
670-5-310-A	TRAFFIC CONTROLLER ASSEMBLY (TYPE 6 - INSTALL ONLY) - [AS] [I]	1	\$9,500.00	\$9,500.00
700-5-41	INTERNALLY ILLUMINATED SIGN (6') INSTALL ONLY - [EA] [I]	2	\$500.00	\$1,000.00
700-5-42	INTERNALLY ILLUMINATED SIGN (8') INSTALL ONLY - [EA] [I]	2	\$500.00	\$1,000.00
715-5-32	LUMINAIRE AND BRACKET ARM - GALV STEEL - [EA] [F&I]	3	\$1,350.00	\$4,050.00
665-1-31	Pedestrian Detector (Push Button) - Install Only - [EA] [I]	8	\$200.00	\$1,600.00
<b>TOTAL:</b>				<b>\$396,663.50</b>

<b>Comments:</b>	Bid Tab = 396,663.50 Contingency (25%) = \$99,165.88 Grand Total = \$495,829.38
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COMPONENTS OF CONTRACT PLANS  
SIGNALIZATION PLANS

# COUNTY OF PALM BEACH STATE OF FLORIDA

100% SIGNALIZATION PLANS  
DECEMBER 2022

## SW 18TH STREET AND BLUE WATER CIRCLE INTERSECTION ID NO. 67503 INTERSECTION IMPROVEMENT PROJECT

### INDEX OF SIGNALIZATION PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	SUMMARY OF QUANTITIES
T-3	GENERAL NOTES
T-4	SIGNALIZATION PLAN
T-5	INTERCONNECT PLAN
T-5	SIGNALIZATION DETAIL
T-6	ROADWAY IMPROVEMENTS
T-7	PAVEMENT MARKING IMPROVEMENTS
T-8	STANDARD MAST ARM TABULATION
T-9	STANDARD MAST ARM ASSEMBLIES DATA TABLE
T-10	UTILITY LOCATES
B-1	SOIL SURVEY SHEET

MARIA G. MARINO  
DISTRICT 1

GREGG K. WEISS  
DISTRICT 2

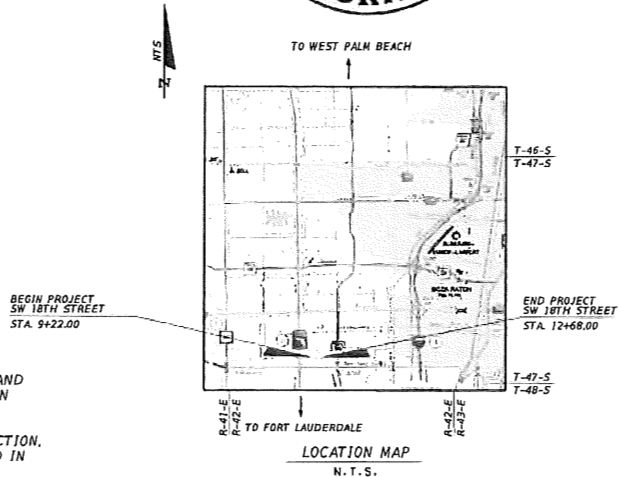
MARCI WOODWARD  
DISTRICT 4

MELISSA MCKINLAY  
DISTRICT 6

DAVE KERNER  
MAYOR - DISTRICT 3

MARIA SACHS  
VICE MAYOR - DISTRICT 5

MACK BERNARD  
DISTRICT 7



BENCHMARK DATUM IS REFERRED TO THE NORTH AMERICAN  
VERTICAL DATUM, 1988, AND EXPRESSED IN FEET.

PLANS PREPARED BY:



2035 Vista Parkway, West Palm Beach, FL 33411  
Phone No. 561.687.2220 -- Fax No. 561.687.1110  
E-Mail: WGI@wginc.com  
Vendor No. 65-0271367

ATTENTION IS DIRECTED TO THE FACT THAT  
THESE PLANS MAY HAVE BEEN CHANGED IN  
SIZE BY REPRODUCTION. THIS MUST BE  
CONSIDERED WHEN OBTAINING SCALED DATA.

I HEREBY CERTIFY THAT THE ATTACHED PLANS AND DESIGNS ARE IN  
SUBSTANTIAL COMPLIANCE WITH THE DESIGN STANDARDS AND  
CRITERIA IN EFFECT ON THIS DATE FOR PALM BEACH COUNTY AND  
THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION.

DATE

PROFESSIONAL ENGINEER  
BRETT A. FULLER, P.E. NO. 78486

### GOVERNING STANDARDS AND SPECIFICATIONS:

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND  
GOVERNED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION  
DESIGN STANDARDS DATED JULY, 2020, AND SUPPLEMENTS  
THERE TO. THE FLORIDA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,  
SUPPLEMENTS THERETO, AND SPECIAL PROVISIONS AS NOTED IN  
THE CONTRACT SPECIFICATIONS FOR THIS PROJECT.

### REVISIONS

LENGTH OF PROJECT		
	LN. FT.	MILES
ROADWAY	346	0.0655
BRIDGES	-	-
NET LENGTH OF PROJ.	346	0.0655
EXCEPTIONS	-	-
GROSS LENGTH OF PROJ.	346	0.0655

PALM BEACH COUNTY  
ENGINEERING AND PUBLIC WORKS  
ROADWAY PRODUCTION  
2800 N. JOO RD, WEST PALM BEACH, FLORIDA  
650 684-4150

DATE	BY	REVISION

SCALE: NTS  
APPROVED: [Signature]  
DESIGNED: [Signature]  
CHECKED: [Signature]  
DATE: 8/8/22

PROJECT: SW 18TH STREET AND BLUE WATER CIRCLE  
PROJECT NO. 67503

SHEET	T-1
OF	T-10

2022/12/08 10:45 AM 10/10/2022 10:45 AM

Exhibit A  
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**SUMMARY OF QUANTITIES**

PBC ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
<b>ROADWAY ITEMS</b>			
101-1	MOBILIZATION	LS	1
102-1-A	GENERAL MAINTENANCE OF TRAFFIC	HR	12
102-14	MAINTENANCE OF TRAFFIC (TRAFFIC CONTROL OFFICER)	HR	16
102-99	PORTABLE CHANGEABLE - VARIABLE MESSAGE SIGN (TEMPORARY)	ED	14
110-1-1	CLEARING & GRUBBING	LS	1
160-4	LBR 40-12" THICK LIMESTONE, CEMENTED COQUINA, OR SHELL ROCK	SY	104
285-713	OPTIONAL BASE, BASE GROUP 13	SY	104
334-1-13	SUPERPAVE ASPHALTIC CONC. TRAFFIC C	TN	4.5
337-7-82	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC B, FC-9.5, PG 76-22	TN	4.5
520-1-10	CONCRETE CURB AND GUTTER, TYPE F	LF	212
522-2	CONCRETE SIDEWALK, 6" THICK	SY	168
527-2	DETECTABLE WARNING	EA	8
<b>SIGNALIZATION ITEMS</b>			
620-1-1	GROUNDING ELECTRODE	EA	34
630-2-11-2	2" PVC (SCH 40) UNDERGROUND CONDUIT	LF	641
630-2-11-2A	ADDITIONAL 2" PVC (SCH 40) CONDUIT, IN OPEN TRENCH	LF	401
630-2-12-2-3	3-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE)	LF	78
630-2-12-2-5	5-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE)	LF	169
630-2-12-2-5	7-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE)	LF	89
630-2-14-1	1" RIGID CONDUIT HOT DIPPED GALVANIZED CONDUIT SURFACE MOUNTED	LF	40
632-7-1-4A	PEDESTRIAN SIGNAL CABLE - 4 CONDUCTOR	PI	1
632-7-1-7A	PEDESTRIAN SIGNAL CABLE - 7 CONDUCTOR	PI	1
632-7-1-19D	SIGNAL CABLE (SPAN LENGTH 451' - 550')	PI	1
633-1-122-12	FIBER OPTIC CABLE, (FSM) 12-COUNT (UNDERGROUND)	LF	10
633-1-122-48	FIBER OPTIC CABLE, (FSM) 48-COUNT (UNDERGROUND)	LF	198
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	24
633-2-32	FIBER OPTIC CONNECTION HARDWARE, F&I, TERMINATION	EA	96
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	EA	3
635-2-12-A	PULL BOX (17"x30"x12"D) HEAVY DUTY COVER (TIER 15)	EA	21
635-2-12-C	PULL BOX (30"x48"x24"D) HEAVY DUTY SPLIT COVER (ITS) (TIER 15)	EA	3
635-2-12-D	PULL BOX (17"x30"x24"D) HEAVY DUTY SPLIT COVER (ITS) (TIER 15)	EA	3

**PAY ITEM FOOTNOTES**

- 101-1: INCLUDES NPDES EROSION CONTROL MEASURES.
- 102-1: INCLUDES ALL PROVISION AND MAINTENANCE OF NECESSARY SIGNS, ADVANCED WARNING, VARIABLE MESSAGE BOARDS, ALL DETOUR SIGNS AND BARRICADES. SHALL INCLUDE THE COST OF ANY TEMPORARY PAVEMENT, TEMPORARY CONCRETE BARRIERS, TEMPORARY WIRE FACED WALL, ETC. AS REQUIRED.
- 110-4-10: INCLUDES COST OF REMOVAL OF EXISTING DRAINAGE STRUCTURES AND PIPES; ASPHALT PAVEMENT; CURBS; SIDEWALK; BASE; SOD; AND ANY OTHER ITEMS TO BE REMOVED THAT ARE NOT SPECIFICALLY COVERED UNDER ANOTHER SEPARATE PAY ITEM. INCLUDES ALL SAWCUTTING.
- 334-1-13 & 337-7-82: PRIME AND TACK COATS ARE INCIDENTAL TO ASPHALT CONSTRUCTION.
- 520-1-10: TYPE F CURB AND GUTTER SHALL INCLUDE THE COST OF BASE MATERIAL INSTALLATION FOR CURB PAD.
- 635-2-11: TYPICAL SIGNAL PULL BOXES SHALL BE 17"x30"x12" IN DIMENSION AND HEAVY DUTY TIER 15 OR HIGHER. LIDS TO BE MARKED "PBC TRAFFIC".
- 635-2-12: TYPICAL SIGNAL PULL BOXES SHALL BE 17"x30"x24" (SMALL) OR 30"x48"x24" (LARGE) AND HEAVY DUTY TIER 15 OR HIGHER. LIDS TO BE MARKED "PBC TRAFFIC ITS".
- 635-2-XX: TYPICAL LOOP SIZE IS 48' LONG.

**SUMMARY OF QUANTITIES**

PBC ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
<b>SIGNALIZATION ITEMS CONTINUED</b>			
639-1-121	ELECTRICAL POWER SERVICE WITH METER BASE (UNDERGROUND) METER FURNISHED BY POWER COMPANY	AS	1
639-2-1-2	ELECTRICAL SERVICE WRE (SINGLE PHASE 3-WIRE, TRIPLEX)	LF	175
639-3-11	ELECTRICAL SERVICE DISCONNECT (BREAKER BOX, SHT T 6.2 OF PBC STD)	EA	1
641-2-12-12	PRESTRESSED CONCRETE POLE (12' TYPE P-11)	EA	1
646-1-11	ALUM. SIGNALS POLE, PEDESTAL WITH TRANSFORMER BASE (8 FEET ABOVE GROUND)	EA	18
649-2-16-50	DRILLED SHAFT FOUNDATION ASSEMBLY, 16" DEEP & 5" DIAMETER, F&I(DS/16/5.0)	EA	4
649-22-3	MAST ARM ASSEMBLY, FURNISH AND INSTALL ON EXISTING FOUNDATION, SINGLE ARM 40' (A40/S-P2/S)	EA	1
649-22-3L	MAST ARM ASSEMBLY W/ STREET LIGHT, F&I ON EXISTING FOUNDATION, SINGLE ARM 40' (A40/S-P2/S/L)	EA	1
649-22-6L	MAST ARM ASSEMBLY W/ STREET LIGHT, F&I ON EXISTING FOUNDATION, SINGLE ARM 50' (A50/S-P3/S/L)	EA	2
650-1-13	TRAFFIC SIGNAL HEAD ALUMINUM (3-SECTION, 1-WAY) INCLUDES BACKPLATES	AS	10
650-1-14	TRAFFIC SIGNAL HEAD POLYCARBONATE WITH ALUM. TOP SECTION (4-SECTION, 1-WAY) INC. BACKPLATES	AS	2
653-191	PEDESTRIAN SIGNAL - COUNT DOWN (1-WAY) ALUMINUM	EA	8
660-2-106-B	LOOP ASSEMBLY (TYPE F - 46')	EA	12
665-1-11	PEDESTRIAN DETECTOR (PUSH BUTTON)	EA	8
670-5-310-A	TRAFFIC CONTROLLER ASSEMBLY, (TYPE 6 - INSTALL ONLY)	AS	1
<b>SIGNING AND PAVEMENT MARKING ITEMS</b>			
700-1-60	SINGLE POST SIGN, REMOVE	EA	2
700-5-41	INTERNALLY ILLUMINATED SIGN (6') INSTALL ONLY	EA	2
700-5-42	INTERNALLY ILLUMINATED SIGN (8') INSTALL ONLY	EA	2
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	40
710-70	EXISTING PAVEMENT MARKING REMOVAL	SF	
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF	671
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	148
711-11-141	THERMOPLASTIC, STANDARD, WHITE, SOLID, 2-4 DOTTED GUIDELINE/6-10 GAP EXTENSION, 6"	GM	0.043
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	EA	1
711-11-241	THERMOPLASTIC, STANDARD, YELLOW, 2-4 DOTTED GUIDE LINE/6-10 DOTTED EXTENSION LINE, 6"	GM	0.008
<b>LIGHTING ITEMS</b>			
715-11-119	LUMINAIRE & BRACKET ARM - ALUM. (8')	EA	3

- 649-XX-XXX: AT THE DISCRETION OF THE ENGINEER OF RECORD AND WITH MUTUAL AGREEMENT OF PBC TRAFFIC ENGINEERING FINAL LOCATIONS OF THE MAST ARMS MAY BE ADJUSTED IN THE FIELD IF THERE IS ANY CONFLICT WITH UTILITIES. SIGNAL CONTRACTOR SHALL VERIFY THE PROPOSED FOUNDATION ELEVATIONS.
- 650-1-XX: ALL TRAFFIC SIGNAL HEADS ARE TO BE CAST ALUMINUM. LED MODULES SHALL BE INSTALLED ON ALL SIGNAL DISPLAYS, INCLUDING ARROWS. THESE MODULES SHALL INCLUDE A MANUFACTURER'S WARRANTY OF AT LEAST 5 YEARS. THE MAXIMUM POWER RATING SHALL BE 10 WATTS FOR RED BALLS, 14 WATTS FOR GREEN BALLS, AND 7 WATTS FOR THE ARROWS. ALL SIGNAL HEADS SHALL HAVE TUNNEL VISORS AND BACK PLATES.
- 665-1-XX: ALL PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPLIANT. PBC PREFERS THE POLARA ENGINEERING INC BDL3 BULLDOG III SERIES PUSH BUTTON (APL 665-003-011) WITH COUNTY LOGO. CONTACT MANUFACTURER FOR THE CUSTOM ETCHED LOGO AND REFER TO BDL3-B-CE. COSTS OF PEDESTRIAN SIGN SHALL BE INCLUDED IN UNIT PRICE FOR PEDESTRIAN DETECTORS.
- 670-5-11A: CONTROLLER ASSEMBLY TO BE NAZTEC TYPE 5 CABINET. CABINET TO HAVE PERMANENT 30 AMP MANUAL TRANSFER SWITCH FOR PORTABLE GENERATOR.
- 700-5-XX: INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE DOUBLE SIDED AND FREE SWINGING MOUNTED EXCEPT. CONTRACTOR SHALL INSTALL ONE PHOTOCELL PER 115NS. ALL MOUNTING HARDWARE TO BE INCLUDED.
- 715-5-XX: LUMINAIRE ATTACHED TO SIGNAL POLES SHALL BE AUTOBAHN SERIES AT&2 LED (808-10SODRIVE CURRENT, 268 WATTAGE, R4 OPTIC, 120 VOLTS, 400K) AND EACH FIXTURE SHALL BE PROVIDED WITH PHOTOELECTRIC. A SEPERATE CIRCUIT/BREAKER SHALL BE PROVIDED IN THE SIGNAL DISCONNECT FOR MAST ARMS WITH LUMINAIRES, COST OF WHICH IS INCLUDED WITH PAY ITEM.


SW 18TH STREET AND BLUE WATER CIRCLE  
INTERSECTION ID No. 67503



2035 Vista Parkway  
West Palm Beach, FL 33411  
Phone No. 561-687-7200  
Fax No. 561-687-1110

EOR: Brett A. Fuller, P.E.  
P.E. License Number: 78496

NO.	REVISION	BY	DATE



PALM BEACH COUNTY  
ENGINEERING AND PUBLIC WORKS  
**ROADWAY PRODUCTION**  
3900 N. U.S. 1 N. WEST PALM BEACH, FLORIDA  
33409-4643 (407) 664-6353

SCALE: N.T.S.
APPROVED BY
DRAWN BY
CHECKED BY
DATE: 6/8/21

**SUMMARY OF QUANTITIES**

DESIGN FILE NAME: TAB0501.DWG  
PBC PROJECT NO.: 2019742

SHEET: T-2  
OF: T-10

**GENERAL NOTES**

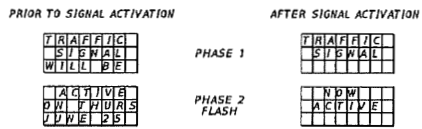
Exhibit A  
Page 6 of 13

1. CONTRACTOR SHOULD REVIEW AND ADHERE TO THE PALM BEACH COUNTY TRAFFIC SIGNAL INSTALLATION STANDARDS AND DETAILS 2022 (OR LATEST REVISED EDITION) AND THE FDOT ROADWAY DESIGN STANDARDS 2020-2021 (LATEST EDITION).
2. PRIOR TO EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE EOR AND PALM BEACH COUNTY TRAFFIC DIVISION EQUIPMENT SPECIFICATIONS OR DESIGN DATA FOR ALL MATERIAL PROPOSED FOR THE PROJECT. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO:
  - I. NON-STRUCTURAL SUBMITTALS
    - ALL GUIDE SIGN LEGENDS (IF DIFFERENT FROM DETAILED)
    - CONTROLLER CABINET AND ASSEMBLY
    - VIDEO DETECTION SYSTEM.
  - II. STRUCTURAL SUBMITTALS
    - SIGN STRUCTURES, INCLUDING CANTILEVER TRUSSES AND FOUNDATIONS
    - MAST ARM, POLE AND FOUNDATIONS
    - MAST ARM POLES WITH LUMINAIRE ATTACHMENTS SHALL BE PROVIDED WITH SHOP DRAWINGS AND CALCULATIONS.
3. SHOP DRAWINGS AND DESIGN DATA SHALL BE SUBMITTED ELECTRONICALLY TO THE EOR WITH A COPY SENT TO PALM BEACH COUNTY TRAFFIC DIVISION AT ENG-TRAFF-INSPECTION@PBCGOV.ORG, ALLOW 30 DAYS TURN AROUND FOR SUBMITTALS.
4. THE CONTRACTOR SHALL CONTACT PBC TRAFFIC OPERATIONS AT 561-233-3900 FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY SIGNAL EQUIPMENT OR IN ADVANCE OF ANY SIGNAL RELATED INSTALLATION WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD CHECKING INTERSECTION OPERATIONS AS THEY RELATE TO THE INSTALLATION OF MAST ARMS.
6. ALL PUBLIC LAND CORNERS AND MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED BY THE CONTRACTOR AS FOLLOWS: CORNERS AND MONUMENTS IN CONFLICT WITH THE WORK AND IN DANGER OF BEING DAMAGED, DESTROYED, OR COVERED HAVE TO BE PROPERLY REFERENCED BY A PROFESSIONAL LAND SURVEYOR. THIS SHALL BE DONE IN ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS OF THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS. PRIOR TO BEGINNING WORK AT THE SITE, THE CONTRACTOR SHALL RETAIN A LAND SURVEYOR TO REFERENCE THE RESTORE, UPON COMPLETION OF THE WORK, ALL SUCH CORNERS AND MONUMENTS. THE CONTRACTOR SHALL FURNISH, TO THE DISTRICT LOCATION SURVEYOR, A SIGNED AND SEALED COPY OF THE LAND SURVEYOR'S REFERENCE DRAWING.
7. ALL SURVEY BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS, EXCEPT THAT THE LAND SURVEYOR SHALL NOT BE REQUIRED TO RESTORE THE N.G.V.D. BENCH MARK UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL PROMPTLY TRANSMIT ALL DISPLACED OR DAMAGED N.G.V.D. DISCS TO THE DISTRICT LOCATION SURVEYOR, WHO WILL NOTIFY THE GEODETIC INFORMATION CENTER.
8. EXISTING COMMUNICATIONS OR COMMAND WIRE CONNECTIONS SHALL BE MAINTAINED AT ALL SIGNALIZED LOCATIONS DURING CONSTRUCTION. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, INTERCONNECT, RAILROAD FLASHING BEACONS, RAILROAD PREEMPTION, EMERGENCY VEHICLE PREEMPTION, AND SCHOOL ZONE FLASHERS. CONTRACTOR TO PROVIDE TEMPORARY LINES AND CONNECTIONS IF NECESSARY. COST OF MAINTAINING COMMUNICATION INCLUDING TEMPORARY CONNECTIONS SHALL BE INCLUDED IN PAY ITEM 102-1 NOT. A CELLULAR COMMUNICATION PLAN MAY NEED TO BE INSTALLED AND APPROVED BY THE COUNTY TO MAINTAIN CONTINUOUS COMMUNICATION THROUGHOUT THE PROJECT.
9. THE CONTRACTOR SHALL PREPARE TRAFFIC CONTROL PLANS AND SUBMIT THEM FOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD AND THE TRAFFIC DIVISION. NOT SECTION AT LEAST TWO (2) WEEKS IN ADVANCE OF PROPOSED WORK. NO LANE CLOSURES ARE ALLOWED DURING AM AND PM PEAK HOURS (BASED ON LANE CLOSURE ANALYSIS).
10. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY DIRECTIONAL BORING OR TRENCHING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS IN ACCORDANCE WITH SECTION 2-4 OF THE FDOT STANDARD SPECIFICATIONS.
11. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF EXISTING LOOP AND LEAD IN WIRE, OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL EXCAVATE BY HAND WHERE CONFLICTS MAY EXIST. DAMAGE TO LOOPS AND ANY SIGNAL EQUIPMENT CAUSED BY CONSTRUCTION OF THIS PROJECT SHALL BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.
12. MAST ARM CONCRETE FOUNDATION SHALL BE POURED IN A SINGLE POUR. FOUNDATIONS THAT DO NOT COMPLY WITH THIS REQUIREMENT SHALL BE COMPLETELY REMOVED AND RE-POURED AT THE CONTRACTOR'S EXPENSE. A DRILL SHAFT INSTALLATION PLAN SHALL BE PART OF THE SHOP DRAWINGS.
13. CONTRACTOR IS RESPONSIBLE FOR THE PROPER BOLT PROJECTION ABOVE FINISHED SIDEWALK GRADE. THE CONTRACTOR SHALL ENSURE THAT THE DRILL SHAFT AND BOLT PATTERNS ARE INSTALLED CORRECTLY SO THAT THE MAST ARM WILL BE ANGLED AS SHOWN ON THE PLANS.
14. FOR MAST ARM SIGNAL INSTALLATIONS, THE CONTRACTOR SHALL INSTALL WIRE MESH SUPPORT GRIPS FOR STRAIN RELIEF. ALL SIGNAL CABLE MUST BE HELD BY A STRAIN RELIEF (E.G. GRAND SC050FSS) ATTACHED TO THE J HOOK INSIDE OF A MAST ARM. TO USE APPROVED EQUIVALENT. SHOP DRAWINGS SHALL BE SUBMITTED TO PBC ENGINEER FOR PRE-APPROVAL. WRITTEN APPROVAL FOR SHOP DRAWINGS SHALL BE PROVIDED AT TIME OF FINAL SIGNAL INSPECTION.
15. THE DRILL SHAFT FOUNDATION SHALL BE FLUSH WITH THE SIDEWALK (GROUND LEVEL), NOT BELOW GROUND LEVEL. STRUCTURAL GROUT PAD MUST NOT EXTEND HIGHER THAN A 2" ELEVATION ABOVE FOUNDATION PER FDOT STANDARDS.
16. SIGNAL CABLE - CONTRACTOR SHALL INSTALL TRAFFIC SIGNAL CABLE IN ACCORDANCE WITH PBC STANDARDS. THERE SHALL BE NO SPLICING. IF CONTINUOUS RUNS ARE NOT POSSIBLE, THEN TERMINAL BLOCK SHALL BE USED.
17. CONTROLLER CABINET - THE CONTROLLER CABINET SHALL BE INSTALLED SUCH THAT THE CONTROLLER DOOR WILL OPEN AWAY FROM THE ROADWAY TRAVEL LANES AND POSITIONED TO ALLOW THE TECHNICIAN TO SEE THE INTERSECTION.
18. CONTRACTOR TO PROVIDE A MINIMUM 2 FEET CABLE SLACK AT ALL PULL BOXES AND HAND HOLES.
19. PEDESTRIAN SIGNALS - EACH PEDESTRIAN SIGNAL SHALL BE FED WITH ONE 7 CONDUCTOR CABLE FOR PED SIGNAL HEAD AND ONE 4 CONDUCTOR CABLE FOR THE PED, DETECTOR/PUSH BUTTON. THESE CABLES WILL RUN FROM EACH PEDESTRIAN SIGNAL/DETECTOR DIRECTLY TO CONTROL BOX WITH NO SPLICES.
20. POSITION PULL BOXES, CABINETS, POLES AND OTHER OBSTRUCTIVE ITEMS CLEAR OF CURB CUT RAMPS. PULL BOXES SHALL BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THEN PULL BOXES SHALL BE PLACED AT LEAST 10 FEET FROM THE EDGE OF PAVEMENT. PULL BOXES SHALL NOT BE LOCATED AT THE BOTTOM OF ANY DITCH OR RETENTION AREA/POND. ALL PULL BOXES SHALL HAVE A 1' WIDE (MIN.) X 6" DEEP CONTINUOUS CONCRETE APRON SLOPED AWAY FROM BOX (TYPICALLY 1%).
21. SPARE CABINET CONDUIT SHALL BE STUBBED AND CAPPED IN THE NEAREST PULL BOX. USE GEL CAPS FOR ANY SPARE/USED CONDUIT.
22. THE USE OF "JONES" PLUGS FOR SIGNAL INSTALLATIONS SHALL BE PROHIBITED.
23. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT.

24. THE CONTRACTOR SHALL VERIFY COLOR CODES OF SIGNAL CABLE WITH PALM BEACH COUNTY BEFORE ORDERING.
25. INSTALL PEDESTRIAN SIGNALS PER ADA CLEARANCES, PROVIDING CONTINUOUS UNOBSTRUCTED PEDESTRIAN/WHEELCHAIR CIRCULATION PATH TO PEDESTRIAN AREAS (PUSH BUTTON, RAMP, ETC).
26. THE T-BASE (PEDESTRIAN PEDESTAL BASE) SHALL BE ORIENTED SO THE TECHNICIAN CAN OPEN THE DOOR AND ALSO SEE ON-COMING TRAFFIC. CAULK AS NEEDED IF THERE IS A LARGE GAP BETWEEN CONCRETE FOUNDATION/SIDEWALK AND THE PEDESTAL BASE.
27. PEDESTAL POLE BASE NUT SHOULD BE LARGE ENOUGH TO COVER HOLE AND WASHER.
28. ALL SET SCREWS MUST BE INSTALLED (NONE SHOULD BE MISSING). MOST MANUFACTURERS HAVE THEM DESIGNED INTO THE P.E.D BASES FROM FACTORY. WHEN PEDESTAL POLE IS SET AT PROPER DIRECTION, DRILL AND TAP HOLE THRU BASE AND ALUMINUM CONDUIT. SET SCREWS SHOULD GO THROUGH SIDE OF BASE INTO PEDESTAL POLE TO PENETRATE INTO PIPE TO KEEP IT FROM ROTATING. USING A 1/2" X 20 SS HEX HEAD BOLT WILL LOCK THE PIPE FROM TURNING.
29. BOLTS SHOULD BE LONG ENOUGH TO PENETRATE THROUGH THE THREADED HOLE AND HOLD WASHER AND NUT.
30. CAULKING/SEALANT TO BE APPLIED AT ALL SIGNALS FLANGE CONNECTIONS, INCLUDING BUT NOT LIMITED TO THE TOP OF THE FLASHER SIGNAL.
31. THE CONTRACTOR SHALL BUILD NEW ELECTRICAL POWER SERVICE AND DISCONNECT ON MONUMENT WITH A MINIMUM HEIGHT OF EIGHT (8) FEET.
32. THE CONTRACTOR SHALL COORDINATE AND FIELD VERIFY LOCATION(S) OF ELECTRICAL SERVICE POINT PRIOR TO INSTALLING CONDUIT, DISCONNECT SWITCH, TRANSFORMER AND PULL BOXES.
33. POWER SOURCE ON MODIFICATIONS/UPGRADES TO EXISTING TRAFFIC SIGNALS A) IF ADDING LOAD, THEN ADD METER; B) IF NOT ADDING LOAD (IE JUST RELOCATING SAME EQUIPMENT) KEEP EXISTING POWER SOURCE. ALL NEW INSTALLED SIGNALS WILL BE METERED. CONTRACTOR SHALL COORDINATE WITH FPL FOR NEW INSTALLATION AS REQUIRED. ELECTRIC SERVICE TO BE SET UP IN CONTRACTOR'S NAME, THEN TRANSFERRED TO PBC TRAFFIC DIVISION AFTER 90 DAY BURN AND FINAL ACCEPTANCE.
34. THE CONTRACTOR SHALL COORDINATE WORK SCHEDULE, COORDINATE TIMING AND AUTHORIZATION OF POWER SERVICE WITH PALM BEACH COUNTY TRAFFIC ENGINEERING. CONTACT TIMING ENGINEER (561-594-4030) 2 WEEKS IN ADVANCE OF CONSTRUCTION AND TO COORDINATE TIMING CHANGES PRIOR TO LOOP DAMAGE. CONTACT PBC TRAFFIC OPERATIONS (561-233-3900) TO COORDINATE REPLACING THE OLD SCHOOL FLASHERS AND RETIMING THE NEW SCHOOL FLASHERS.
35. THE CONTRACTOR SHALL SUBMIT IN WRITING TO THE MAINTAINING AGENCY FOR FINAL INSPECTION ALLOW TWO (2) WEEKS FOR INSPECTION. TO SCHEDULE A SIGNAL INSPECTION, PLEASE EMAIL ENG-TRAFF-INSPECTION@PBCGOV.ORG IF YOUR PROJECT IS PART OF PBC ROADWAY PROJECT, THEN COPY IN CONSTRUCTION COORDINATOR/ROAD INSPECTOR.
36. AT THE TIME OF FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL FURNISH PALM BEACH COUNTY WITH TWO (2) COMPLETE COPIES OF SIGNED AND SEALED "AS-BUILT" PLANS AND CONSULTANT TO PROVIDE ELECTRONIC CADD FILES.
37. A 90 DAY BURN-IN PERIOD IS REQUIRED FOR ALL TRAFFIC SIGNAL EQUIPMENT. THE BURN-IN PERIOD WILL COMMENCE UPON A WRITTEN CONDITIONAL ACCEPTANCE BY THE COUNTY AND WILL TERMINATE NINETY (90) CONSECUTIVE DAYS, THEREAFTER, UNLESS AN EQUIPMENT MALFUNCTION OCCURS.
38. AFTER THE SIGNAL INSPECTION IS COMPLETED AND ALL OUTSTANDING ISSUES ARE RESOLVED (PUNCH LIST ITEMS COMPLETED), THE CONTRACTOR CAN REQUEST PBC TO SCHEDULE THE SIGNAL ACTIVATION. CONTRACTOR OR CEI SHALL REQUEST ACTIVATION TWO WEEKS IN ADVANCE.
39. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY TWO (2) FULL WORKING DAYS IN ADVANCE OF ANY EXCAVATION INVOLVING ITS UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION.

UTILITY OWNERS	CONTACT PERSON	PHONE
AT&T	GARTH BEDWARD	561-540-9263
CENTURYLINK	FRANCISCO AZURI	786-266-1713
COMCAST	PETER PIZZA	561-419-1612
FP&L DISTRIBUTION	PHILLIP PASCASIO	954-694-8366
FLORIDA PUBLIC UTILITIES	BILLY RODRIGUEZ	561-537-0468
MCIVERIZON	MARK BRODZINSKI	954-213-1959
PBC WATER UTILITIES	TISH STEINFELS	561-693-5109
PBC TRAFFIC ITS	DANIEL RODRIGUEZ	561-691-4365
PBC TRAFFIC OPERATIONS	SUPERINTENDENT	561-233-3900

40. WITH NEW TRAFFIC SIGNAL INSTALLATION AND PRIOR TO ACTIVATION: VARIABLE MESSAGE SIGNS SHALL BE INSTALLED SEVEN (7) DAYS BEFORE AND SEVEN (7) DAYS AFTER SIGNAL ACTIVATION AS FOLLOWS:



(DATE SHOWN IS AN EXAMPLE ONLY)

SW 18TH STREET AND BLUE WATER CIRCLE  
INTERSECTION ID No. 67503



2035 Vista Parkway  
West Palm Beach, FL 33411  
Phone No. 561-687-2200  
Fax No. 561-687-1110  
EOR: Brett A. Fuller, P.E.  
P.E. License Number: 78486

NO.	REVISION	BY	DATE



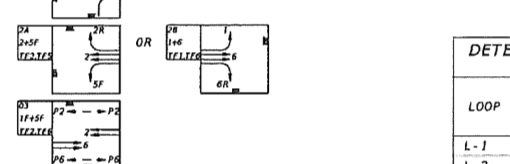
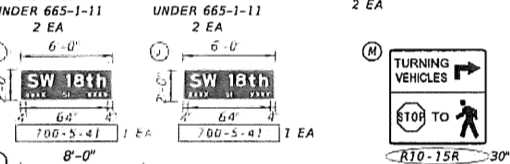
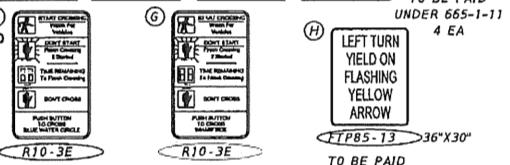
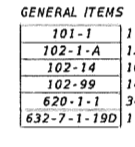
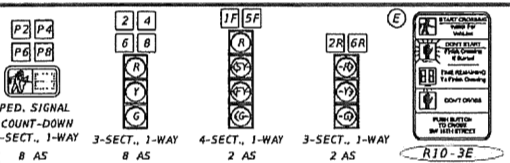
PALM BEACH COUNTY  
ENGINEERING AND PUBLIC WORKS  
ROADWAY PRODUCTION  
399 N. ROY RD. WEST PALM BEACH, FLORIDA  
33411-2642

SCALE: N.T.S.  
APPROVED: BAF  
DRAWN: CMJ  
CHECKED: BAF  
DATE: 6/14/21

**GENERAL NOTES**

DESIGN FILE NAME: GWTS001.DWG  
PBC PROJECT NO: 2018742

SHEET T-3  
OF T-10

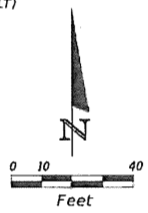
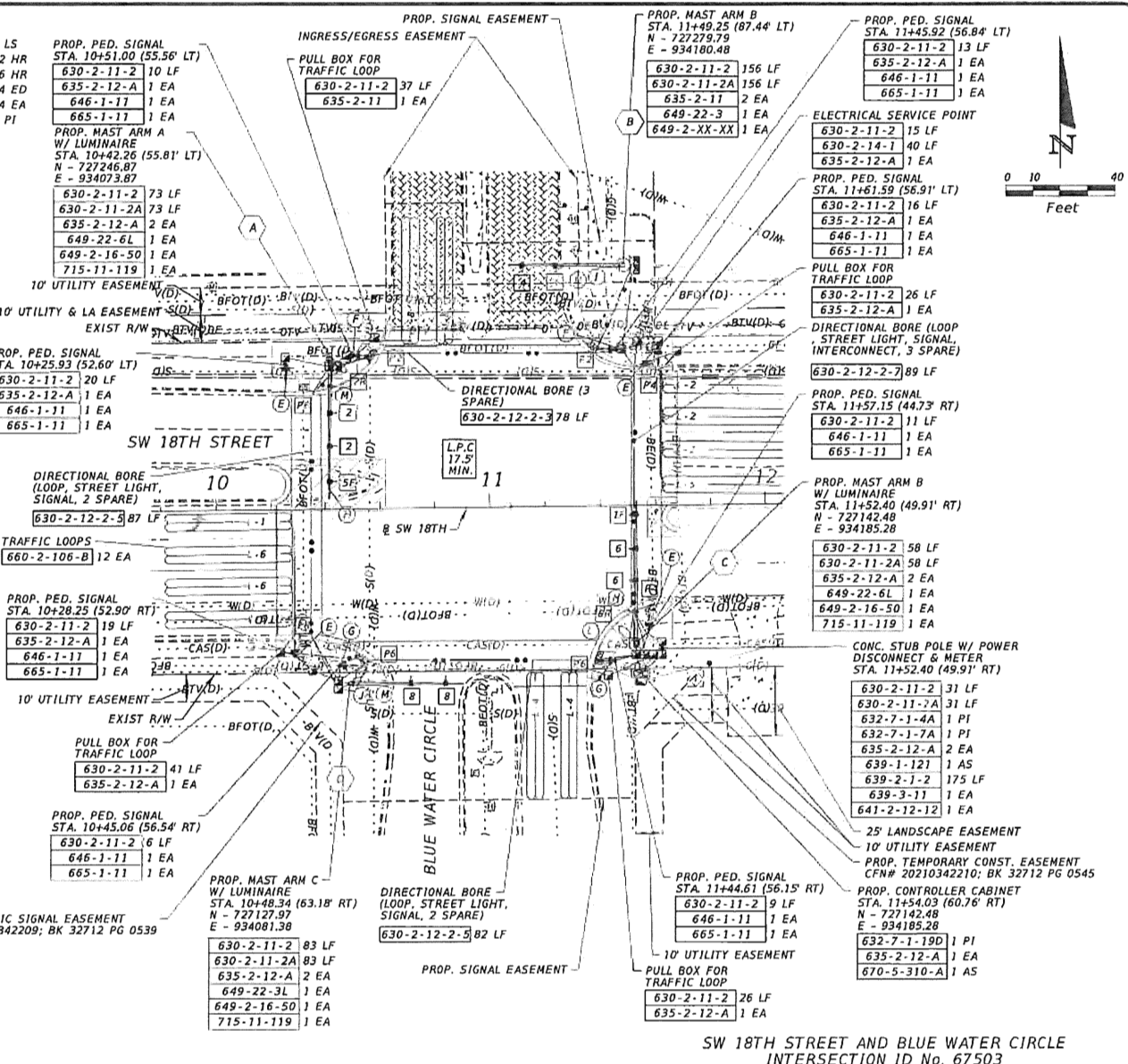


LOOP	NO. OF LOOPS	NO. OF NEW DETS
L-1	1	1
L-2	3	1
L-4	2	1
L-5	1	1
L-6	3	1
L-8	2	1

- GENERAL NOTES**
- MAJOR STREET: SW 18TH STREET  
MINOR STREET: BLUE WATER CIRCLE
  - MOVEMENT 2 & 6 TO FLASH YELLOW AND ALL OTHERS TO FLASH RED DURING FLASHING OPERATION. PEDESTRIAN SIGNALS SHALL BE DARK.
  - POSTED SPEED LIMIT  
SW 18TH STREET - 45 MPH  
BLUE WATER CIRCLE - 25 MPH  
NORTHERN DEVELOPMENT ENTRANCE - 25 MPH
  - FINAL SIGNAL TIMING TO BE PROVIDED BY PALM BEACH COUNTY TRAFFIC ENGINEERING DIVISION.
  - PROPOSED SIGNAL OPERATING PLANS 7.

**GENERAL ITEMS**

101-1	1 LS
102-1-A	12 HR
102-14	16 HR
102-99	14 ED
620-1-1	34 EA
632-7-1-19D	1 PT



SW 18TH STREET AND BLUE WATER CIRCLE INTERSECTION ID No. 67503

**IWGI**  
2035 Vista Parkway  
West Palm Beach, FL 33411  
Phone No. 561-687-2220  
Fax No. 561-687-1110  
EOR: Brett A. Fuller, P.E.  
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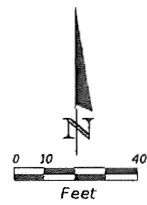
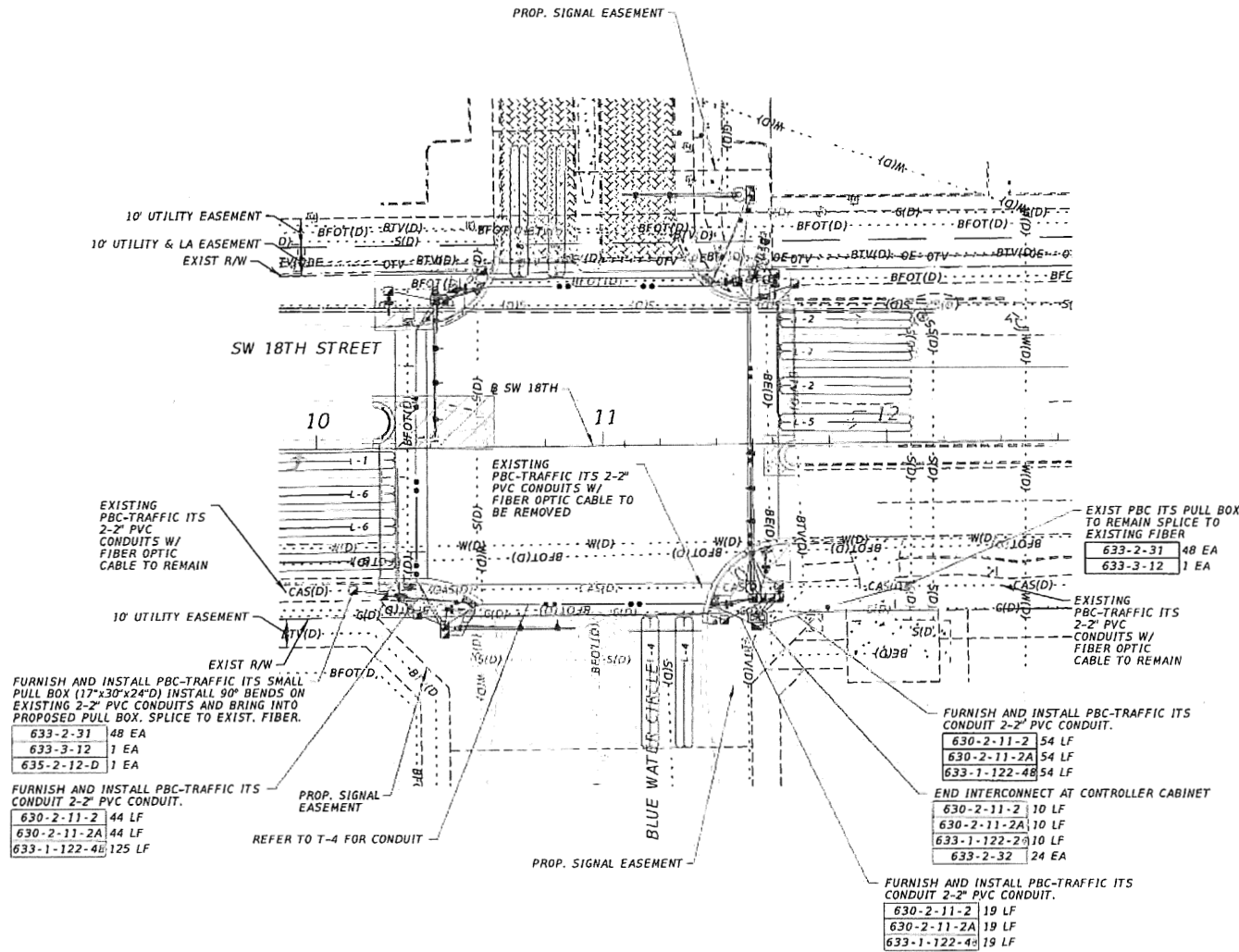
NO.	REVISION	BY	DATE

**PALM BEACH COUNTY**  
ENGINEERING AND PUBLIC WORKS  
**ROADWAY PRODUCTION**  
3300 N. JOO RD. WEST PALM BEACH, FLORIDA  
33411-4618

SCALE: 1"=40'  
APPROVED BAF  
DRAWN: CMJ  
CHECKED: BAF  
DATE: 6/8/21

**SIGNALIZATION PLAN**  
DESIGN FILE NAME: 201974  
PROJECT NO.: 201974  
DATE: 6/8/21

SHEET T-4  
OF T-10



FURNISH AND INSTALL PBC-TRAFFIC ITS SMALL PULL BOX (17\"x30\"x24\"D) INSTALL 90° BENDS ON EXISTING 2-2\" PVC CONDUITS AND BRING INTO PROPOSED PULL BOX. SPLICE TO EXIST. FIBER.

633-2-31	48 EA
633-3-12	1 EA
635-2-12-D	1 EA

FURNISH AND INSTALL PBC-TRAFFIC ITS CONDUIT 2-2\" PVC CONDUIT.

630-2-11-2	44 LF
630-2-11-2A	44 LF
633-1-122-4B	125 LF

FURNISH AND INSTALL PBC-TRAFFIC ITS CONDUIT 2-2\" PVC CONDUIT.

630-2-11-2	54 LF
630-2-11-2A	54 LF
633-1-122-4B	54 LF

END INTERCONNECT AT CONTROLLER CABINET

630-2-11-2	10 LF
630-2-11-2A	10 LF
633-1-122-2A	10 LF
633-2-32	24 EA

FURNISH AND INSTALL PBC-TRAFFIC ITS CONDUIT 2-2\" PVC CONDUIT.

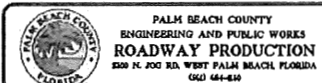
630-2-11-2	19 LF
630-2-11-2A	19 LF
633-1-122-4B	19 LF

SW 18TH STREET AND BLUE WATER CIRCLE  
INTERSECTION ID No. 67503



EOR: Brett A. Fuller, P.E.  
P.E. License Number: 78486

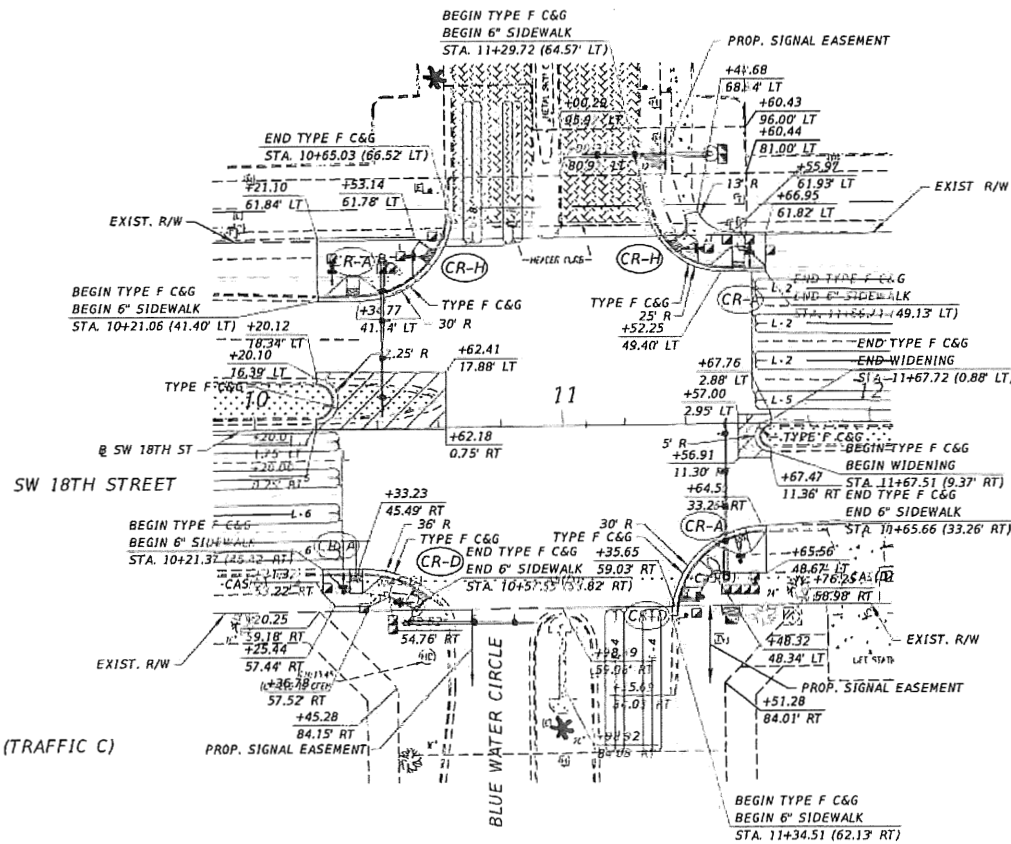
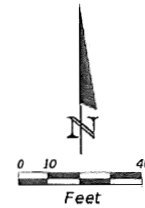
NO.	REVISION	BY	DATE



SCALE: 1\"=40'
APPROVED: [Signature]
DRAWN: [Signature]
CHECKED: [Signature]
DATED: 04/20/21

<b>INTERCONNECT PLAN</b>	
DESIGN FILE NAME PLANS002	PBC PROJECT NO. 2019742

SHEET: T-5
OF: T-10



LIMITS OF WIDENING

**WIDENING PAVEMENT DESIGN**

- 1" ASPHALTIC CONCRETE FC-9.5
- 1.5" SUPERPAVE ASPHALTIC CONCRETE (TRAFFIC C)
- OPTIONAL BASE 13
- 12" COMPACTED SUBGRADE (98% T180)

**SW 18TH STREET AND BLUE WATER CIRCLE  
INTERSECTION ID No. 67503**



3025 Vista Parkway  
West Palm Beach, FL 33411  
Phone No. 561-681-2220  
Fax No. 561-681-1116

EOR: Brett A. Fuller, P.E.  
P.E. License Number: 78486

NO.	REVISION	BY	DATE



PALM BEACH COUNTY  
ENGINEERING AND PUBLIC WORKS  
**ROADWAY PRODUCTION**  
300 N. ROO RD. WEST PALM BEACH, FLORIDA  
33411-4408

SCALE: 1"=40'
APPROVED BY:
DRAWN: CAJ
CHECKED: BAF
DATE: 6/2/21

**SIGNALIZATION DETAIL  
ROADWAY IMPROVEMENTS**

DESIGN FILE NAME: PLAMB01  
PBC PROJECT NO.: 2018142

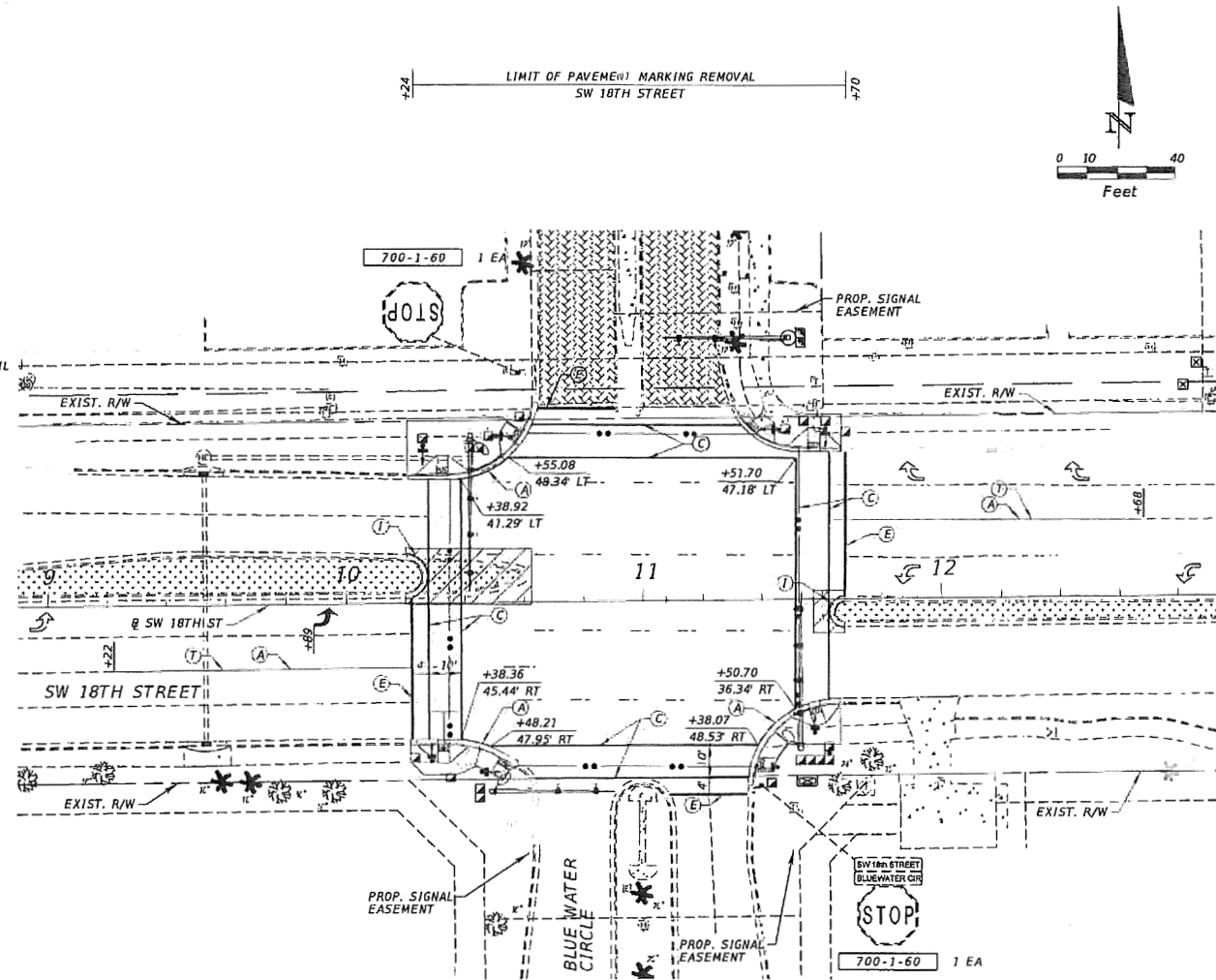
SHEET: T-6  
OF: T-10

SIGNING AND PAVEMENT MARKING PROJECT NOTES

1. PAVEMENT MARKINGS MUST BE IN ACCORDANCE WITH THE LATEST EDITIONS OF FDOT SPECIFICATIONS, MANUAL ON TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING AND GEOMETRICS.
2. MATCH EXISTING PAVEMENT MARKINGS AT THE BEGINNING AND END OF THE PROJECT. TREAT PAVEMENT MARKINGS TO BE REPLACED AS CONFLICTING PAVEMENT MARKINGS.
3. SEE THE GENERAL NOTES FOR UTILITY OWNERS AND CONTACT INFORMATION.
4. ALL PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, UNLESS OTHERWISE NOTED IN THE PLANS.
5. ANY EXISTING PAVEMENT MARKINGS TO REMAIN THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REFURBISHED WITH THERMOPLASTIC.
6. PAVEMENT MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING & GEOMETRICS No. T-P-21.
7. ALL STATION CALLOUTS REFER TO  $\phi$  CONSTRUCTION FOR SW 18TH STREET, UNLESS OTHERWISE NOTED.
8. REFURBISH APPROACH MARKINGS PER PALM BEACH COUNTY TYPICALS No. T-P-21.
9. REMOVE CONFLICTING PAVEMENT MARKINGS WITHIN LIMITS OF INTERSECTION.
10. STOP SIGN ASSEMBLIES AND STREET NAME SIGN ASSEMBLIES TO REMAIN IN PLACE UNTIL SIGNAL IS ACTIVATED.

STRIPPING KEY

- A = 6" SOLID WHITE
- B = 8" SOLID WHITE
- C = 12" SOLID WHITE
- D = 18" SOLID WHITE
- E = 24" SOLID WHITE
- F = 6" SKIP WHITE TYP (10'-30')
- G = 6" SKIP WHITE TYP (6'-10')
- H = 6" SKIP WHITE TYP (2'-4')
- I = 6" SOLID YELLOW
- J = 18" SOLID YELLOW
- K = 6" DOUBLE YELLOW
- L = 6" SKIP YELLOW TYP (10'-30')
- M = 6" SKIP YELLOW TYP (6'-10')
- N = 6" SKIP YELLOW TYP (2'-4')
- P = RPM BI-DIRECTIONAL AMBER/AMBER
- R = FOP WHITE
- S = FOP YELLOW
- T = RPM BI-DIRECTIONAL WHITE/RED
- U = RPM BI-DIRECTIONAL RED/YELLOW



SW 18TH STREET AND BLUE WATER CIRCLE  
INTERSECTION ID No. 67503

**IWGL**  
2035 Vista Parkway  
West Palm Beach, FL 33411  
Phone No. 561-287-2220  
Fax No. 561-687-1110  
EOR: Brett A. Fuller, P.E.  
P.E. License Number: 78486

NO.	REVISION	BY	DATE

**PALM BEACH COUNTY**  
ENGINEERING AND PUBLIC WORKS  
**ROADWAY PRODUCTION**  
1800 N. P.O. RD. WEST PALM BEACH, FLORIDA  
33411-4600

SCALE: 1"=40'
APPROVED BY: [Signature]
DRAWN: CMJ
CHECKED: BAF
DATE: 6/8/21

**SIGNALIZATION DETAIL**  
PAVEMENT MARKING IMPROVEMENTS

DESIGN FILE NAME: PLANS01.DWG  
PAC PROJECT NO.: 2018742  
DATE: 6/8/21

SHEET: T-7
OF: T-10





TO BE PROVIDED  
NEXT SUBMITTAL

SW 18TH STREET AND BLUE WATER CIRCLE  
INTERSECTION ID No. 67503



2035 Vista Parkway  
West Palm Beach, FL 33411  
Phone No. 561-487-3220  
Fax No. 561-487-1110

EOR: Brett A. Fuller, P.E.  
P.E. License Number: 78486

NO.	REVISION	BY	DATE



PALM BEACH COUNTY  
ENGINEERING AND PUBLIC WORKS  
ROADWAY PRODUCTION  
2000 N. FOO RD. WEST PALM BEACH, FLORIDA  
33411-4648

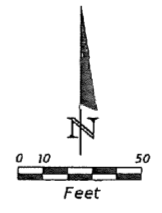
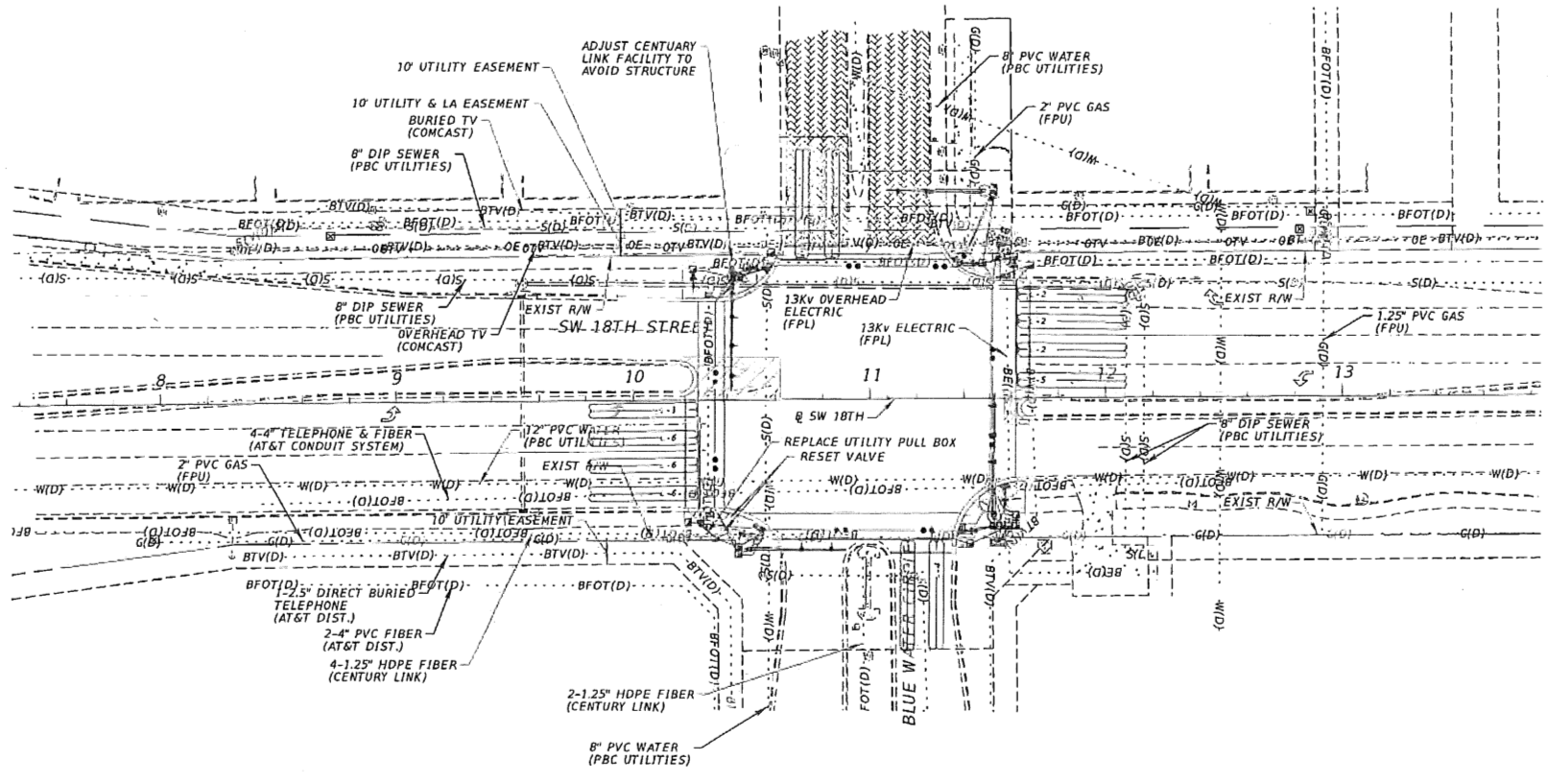
SCALE: N.T.S.  
APPROVED: BAF  
DRAWN: CHJ  
CHECKED: BAF  
DATE: 8/8/21

STANDARD MAST ARM  
ASSEMBLIES DATA TABLE

SHEET: T-9  
OF: T-10

DESIGN FILE NAME: H5555032.DGN  
PBC PROJECT NO.: 2018742

C:\pwworking\wgl\cortec\2018\03\H5555032.dgn



SW 18TH STREET AND BLUE WATER CIRCLE  
INTERSECTION ID No. 67503

**IWGL**  
2025 Vista Parkway  
West Palm Beach, FL 33411  
Phone No. 561-687-3220  
Fax No. 561-687-1110  
EOR: Brett A. Fuller, P.E.  
P.E. License Number: 78486

NO.	REVISION	BY	DATE

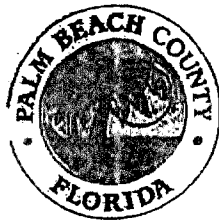
**PALM BEACH COUNTY**  
ENGINEERING AND PUBLIC WORKS  
**ROADWAY PRODUCTION**  
2300 N. 200 RD., WEST PALM BEACH, FLORIDA  
CALL 464-6348

SCALE: 1"=50'
APPROVED: BAF
DRAWN: CMG
CHECKED: BAF
DATE: 6/2/21

**UTILITY LOCATES**

DESIGN FILE NAME: PLANS13.DWG  
PBC PROJECT NO.: 2019742

SHEET: T-10
OF: T-10



INTER-OFFICE MEMORANDUM

REVISED

Office of  
Equal Business Opportunity  
50 South Military Trail, Suite 202  
West Palm Beach, FL 33415  
(561) 616-6840  
www.pbcgov.com/oebo

Date: Tuesday, February 5, 2019  
To: David Ricks, County Engineer  
Engineering and Public Works  
From: Tonya Davis Johnson, Director *T. Johnson*  
Office of Equal Business Opportunity  
Re: Request for Waiver of API Requirements Project #2019050  
Annual Traffic Signal Construction Contract IFB



Palm Beach County  
Board of County  
Commissioners  
  
Mack Bernard, Mayor  
Dave Kerner, Vice Mayor  
  
Hal R. Valeche  
  
Gregg K. Weiss  
  
Robert S. Weinroth  
  
Mary Lou Berger  
  
Melissa McKinlay

County Administrator  
Verdenia C. Baker

"An Equal Opportunity  
Affirmative Action Employer"



Your Request for Waiver of API Requirements for the above named project was received on January 31, 2019 and has been reviewed. It is the determination of the Office of Equal Business Opportunity (OEBO) that the request for Waiver of API Requirements is approved.

Our determination was made based upon our review of the OEBO database and the limited availability of sufficient and qualified S/M/WBEs providing the goods or services required by the contract.

I will recommend to the Goal Setting Committee the Waiver of API requirements for this renewal at the February 6, 2019 meeting.

If you have any questions, please contact Allen Gray at 561-616-6842 or email at [Allen.Gray@pbcgov.com](mailto:Allen.Gray@pbcgov.com)

Thank you.

cc: Allen Gray, Manager

Attachment