CS-13-94

CHANGE ORDER APPROVAL FORM

RECEIVED
COUNTY MANAGER'S
OFFICE
14 JAN 22 PM 4:11

PROJECT: 14th Street @ Lime Street

Intersection Improvements Project

CHANGE ORDER NUMBER: 2

DATE: 12/19/13

CONTRACT NUMBER: CM1954

TO CONTRACTOR: Kirby Development, Inc.

Reason for Change Order: IP Radio model version not clearly noted in the plans; additional 35 days for delivery of Signal IP Radios. Substantial completion was achieved on 09/30/13. The number of calendar days from substantial completion to final completion increased from 45 days to 80 days.

RECEIVED
CONTRACT MANAGEMENT
2014 JAN -8 AM 10:23

Original Contract Sum.....	$	219,237.35
Net Change by Previous Change Order/Supplemental Agreement.	$	1,417.27
Contract Sum Prior to This Change Order.....	$	220,654.62
Amount of This Change Order (Add/Deduct).....	$	.00
New Contract Sum Including this Change Order.....	$	220,654.62

The contract for substantial completion will be (increased) (~~decreased~~) (~~unchanged~~) by 35 days;
Substantial Completion: 09/30/13; Final Completion: 12/19/2013

APPROVED BY: _____ DATE: 1/7/14
Project Manager (Department Head)

APPROVED BY: _____ DATE: 1/22/14
Contract Manager

APPROVED BY: _____ DATE: 1-23-14
Director of Office of Management & Budget

1/23/14

APPROVED BY: _____ DATE: 1/23/14
County Manager

ACCOUNT NO.: 41151541-563100-14LIM

RECEIVED
OFFICE OF CLERK OF COURTS
NASSAU COUNTY, FLORIDA
14 JAN 24 PM 4:34

SECTION 00 63 63

CHANGE ORDER REQUEST FORM

(Instructions on 00 63 63-2) No. 002

PROJECT

DATE OF ISSUANCE 12/19/2013 EFFECTIVE DATE 11/14/2013

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS

COUNTY Contract / Purchase Order No.: NC13-005 / CM1954

CONTRACTOR Kirby ENGINEER / ARCHITECT Parsons Brinckerhoff

You are directed to make the following changes in the Contract Documents.

Description: Additonal 35 days for delivery of Signal IP Radios

Reason for Change Order: IP Radio model version not clearly noted in the plans

Attachments: (List documents supporting change) 2 (time log & product info)

CHANGE IN CONTRACT PRICE: Original Contract Price $ 219,237.35	CHANGE IN CONTRACT TIMES: Original Contract Times Substantial Completion: 150 days Ready for Final Payment: 45 days (days or dates)
Net change from previous Change Orders No. 1 to No. 1 $ 1,417.27	Net change from previous Change Orders No. ___ to No. ___ 0 (days)
Contract Price prior to this Change Order $ 220,654.62	Contract Times Prior to this Change Order Substantial Completion: 139 days Ready for Final Payment: 45 days (11/14/2013) (days or dates)
Net Increase (decrease) of this Change Order $ 0	Net Increase (decrease) of this Change Order 35 days (days)
Contract Price with all approved Change Orders $ 220,654.62	Contract Times with all approved Change Orders Substantial Completion: 139 (09/30/2013) Ready for Final Payment: 80 days (12/19/2013) (days or dates)

RECOMMENDED:	APPROVED:	ACCEPTED:
By: Matthew L. Burrell	By:	By: Peter B. Kirby
Engineer/Architect (Authorized Signature)	COUNTY (Authorized Signature)	Contractor (Authorized Signature)
Date: 12-19-13	Date: 1/23/14	Date: 12-26-2013

14th and Lime Contract Time

Time Began	5/15/2013
Days To Substantial Completion	*139*
Substantial Completion Date	9/30/2013
Days to Final Acceptance	45
End of Contract Time	11/14/2013
Work Order #2 - 35 days	12/19/2013

Description/Reason for Work Order #2

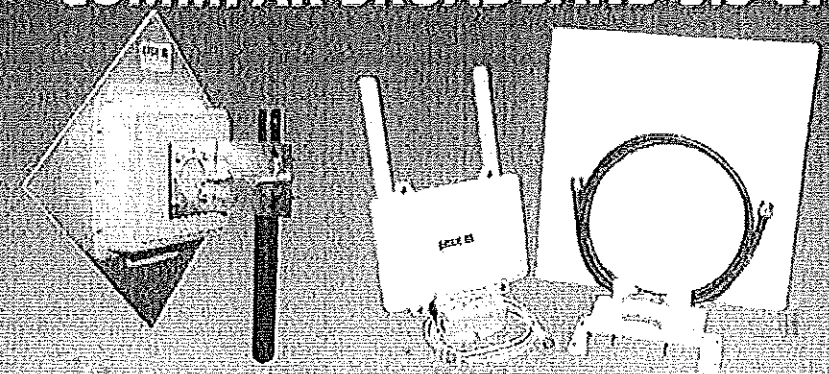
Work order #2 was needed due to the Traffic Signal IP Radios specified in the plans as not being clearly defined as being the Integrated version. The non-integrated antenna version was ordered and shipped. Upon installation, the County requested that the integrated version be installed. The radios had to be shipped back, re-ordered, and delivered to the Contractor and then installed on the project to close out the contract. The Radios are special order items that require lengthy manufacturing time and are not in-stock/available items.

14th at Lime Street Contract Time

Date	Contract Day	Date	Contract Day	Date	Contract Day	Date	Contract Day	Date	Contract Day	Date	Contract Day	Date	Contract Day
5/15/2013	1	6/18/2013	35	7/22/2013	69	8/25/2013	103	9/28/2013	137	11/1/2013	171	12/5/2013	205
5/16/2013	2	6/19/2013	36	7/23/2013	70	8/26/2013	104	9/29/2013	138	11/2/2013	172	12/6/2013	206
5/17/2013	3	6/20/2013	37	7/24/2013	71	8/27/2013	105	9/30/2013	139	11/3/2013	173	12/7/2013	207
5/18/2013	4	6/21/2013	38	7/25/2013	72	8/28/2013	106	10/1/2013	140	11/4/2013	174	12/8/2013	208
5/19/2013	5	6/22/2013	39	7/26/2013	73	8/29/2013	107	10/2/2013	141	11/5/2013	175	12/9/2013	209
5/20/2013	6	6/23/2013	40	7/27/2013	74	8/30/2013	108	10/3/2013	142	11/6/2013	176	12/10/2013	210
5/21/2013	7	6/24/2013	41	7/28/2013	75	8/31/2013	109	10/4/2013	143	11/7/2013	177	12/11/2013	211
5/22/2013	8	6/25/2013	42	7/29/2013	76	9/1/2013	110	10/5/2013	144	11/8/2013	178	12/12/2013	212
5/23/2013	9	6/26/2013	43	7/30/2013	77	9/2/2013	111	10/6/2013	145	11/9/2013	179	12/13/2013	213
5/24/2013	10	6/27/2013	44	7/31/2013	78	9/3/2013	112	10/7/2013	146	11/10/2013	180	12/14/2013	214
5/25/2013	11	6/28/2013	45	8/1/2013	79	9/4/2013	113	10/8/2013	147	11/11/2013	181	12/15/2013	215
5/26/2013	12	6/29/2013	46	8/2/2013	80	9/5/2013	114	10/9/2013	148	11/12/2013	182	12/16/2013	216
5/27/2013	13	6/30/2013	47	8/3/2013	81	9/6/2013	115	10/10/2013	149	11/13/2013	183	12/17/2013	217
5/28/2013	14	7/1/2013	48	8/4/2013	82	9/7/2013	116	10/11/2013	150	11/14/2013	184	12/18/2013	218
5/29/2013	15	7/2/2013	49	8/5/2013	83	9/8/2013	117	10/12/2013	151	11/15/2013	185	12/19/2013	219
5/30/2013	16	7/3/2013	50	8/6/2013	84	9/9/2013	118	10/13/2013	152	11/16/2013	186		
5/31/2013	17	7/4/2013	51	8/7/2013	85	9/10/2013	119	10/14/2013	153	11/17/2013	187		
6/1/2013	18	7/5/2013	52	8/8/2013	86	9/11/2013	120	10/15/2013	154	11/18/2013	188		
6/2/2013	19	7/6/2013	53	8/9/2013	87	9/12/2013	121	10/16/2013	155	11/19/2013	189		
6/3/2013	20	7/7/2013	54	8/10/2013	88	9/13/2013	122	10/17/2013	156	11/20/2013	190		
6/4/2013	21	7/8/2013	55	8/11/2013	89	9/14/2013	123	10/18/2013	157	11/21/2013	191		
6/5/2013	22	7/9/2013	56	8/12/2013	90	9/15/2013	124	10/19/2013	158	11/22/2013	192		
6/6/2013	23	7/10/2013	57	8/13/2013	91	9/16/2013	125	10/20/2013	159	11/23/2013	193		
6/7/2013	24	7/11/2013	58	8/14/2013	92	9/17/2013	126	10/21/2013	160	11/24/2013	194		
6/8/2013	25	7/12/2013	59	8/15/2013	93	9/18/2013	127	10/22/2013	161	11/25/2013	195		
6/9/2013	26	7/13/2013	60	8/16/2013	94	9/19/2013	128	10/23/2013	162	11/26/2013	196		
6/10/2013	27	7/14/2013	61	8/17/2013	95	9/20/2013	129	10/24/2013	163	11/27/2013	197		
6/11/2013	28	7/15/2013	62	8/18/2013	96	9/21/2013	130	10/25/2013	164	11/28/2013	198		
6/12/2013	29	7/16/2013	63	8/19/2013	97	9/22/2013	131	10/26/2013	165	11/29/2013	199		
6/13/2013	30	7/17/2013	64	8/20/2013	98	9/23/2013	132	10/27/2013	166	11/30/2013	200		
6/14/2013	31	7/18/2013	65	8/21/2013	99	9/24/2013	133	10/28/2013	167	12/1/2013	201		
6/15/2013	32	7/19/2013	66	8/22/2013	100	9/25/2013	134	10/29/2013	168	12/2/2013	202		
6/16/2013	33	7/20/2013	67	8/23/2013	101	9/26/2013	135	10/30/2013	169	12/3/2013	203		
6/17/2013	34	7/21/2013	68	8/24/2013	102	9/27/2013	136	10/31/2013	170	12/4/2013	204		

ETHERNET | COMMPAK BROADBAND | 5.8 GHZ

COMMPAK BROADBAND 5.8 GHz



5.8 GHZ BROADBAND ADVANTAGES

The ENCOM COMMPAK Broadband 5.8 GHz system offers our highest bandwidth availability along with industry leading reliability and security. With usable bandwidth up to 108Mbps, the COMMPAK Broadband 5.8 Ghz system is designed for long range outdoor broadband backhaul applications. Point-to-point and point-to-multipoint topologies are supported.

These hardened outdoor units are available with an integrated 23dB panel antenna or a connectorized version for external antennas. The COMMPAK Broadband 5.8 system allows you to extend your network, add video surveillance at remote sites and create MESH networks in the most challenging urban environments.

APPLICATIONS

- Video Surveillance
- High Speed Backhaul links
- Building to Building Connectivity
- T1/E1 Replacement
- Mobile Networking
- Eliminate Fiber Optic lines
- Wi-Fi Hotspots
- MESH Networking

ENCOM ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (E-OFDM)

ENCOM has made significant improvements on a widely accepted technology (OFDM) to create the most powerful and reliable broadband solutions on the market. With E-OFDM, we resist interference, maximize bandwidth, and offer unsurpassed reliability.

SUPERIOR WIRELESS PERFORMANCE

A high powered 400mW transmitter is combined with a highly selective receiver (- 97d8 RX Sens.) to provide carrier class wireless performance with range up to 20 Miles (LOS).

DYNAMIC FREQUENCY SELECTION:

ENCOM broadband access points continually scan the band for spectrum usage and seamlessly switch to the 'clearest' RF channel to maintain maximum throughput and reliability..

SECURITY:

Wireless network security is critical to network reliability. All ENCOM broadband systems are equipped with the most advanced security features available. This includes: WPA2 (256 AES), WPA, WEP, MAC Authentication, Radius Server Authentication.

EN-STREAM PROTOCOL:

All ENCOM broadband systems can be 802.11 a/b/g compliant, however utilizing our proprietary EN-Stream protocol increases bandwidth and security on the wireless network.

ADAPTIVE MODULATION:

ENCOM broadband wireless systems continually monitor the RF link quality and automatically adjust the modulation and date rate to maximize link performance.

ENVIRONMENTALLY HARDENED OUTDOOR RADIOS

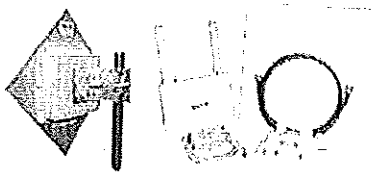
All COMMPAK Broadband products are designed specifically for long range outdoor wireless applications. Our products meet the NEMA operating temperature specs of -40°C to +80°C.

SIMPLE INSTALLATION:

ENCOM broadband radios are available with integrated panel antennas or as connectorized units for use with external antennas. Simple and accurate antenna alignment tools ensure rapid deployment.

PLUG & PLAY

ETHERNET 5.8 GHz SPECIFICATIONS



5.8 GHz FEATURES

- E-OFDM Technology
- Dynamic Frequency Selection
- Up to 108 Mbps data rates
- Up to 20 miles range
- 802.11 a/b/g compliant
- Secure Wireless networking WPA2, WPA, MAC and RADIUS authentication
- EN-Stream Protocol (proprietary)
- Environmentally Hardened Outdoor Units Operating Temperature: (-40°C to +80°C)
- Built-in diagnostics tools: Antenna Alignment, Bandwidth test, Frequency usage.
- Integrated antennas or connectorized versions
- Plug and Play solutions

SEAMLESS INTEGRATION · PLUG & PLAY · QUICK INSTALLATION · EXPANDABLE

SECURITY (ENCRYPTION)

- AES-CCM Encryption
- 64 bit, 128bit WEP Encryption
- WPA
- WPA2
- TKIP
- MAC / RADIUS Server authentication
- EAP-tls / EAP-passthrough

DATA RATES

- 1 Mbps, 2 Mbps, 5.5 Mbps, 6 Mbps, 9 Mbps, 11 Mbps ,12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps and 108 Mbps Through Air Rate

NETWORKING FEATURES

- STP (Spanning Tree Protocol)
- DHCP Server or Client
- NTP Network Time Protocol
- Firewall and NAT
- Routing
- QOS
- VPN
- VLAN
- SNMP
- Bandwidth test tool

INTERFACE

- Industrial Weatherproof 10/100 Base-T Ethernet (RJ45)
- 150' Cat5e or better Industrial Outdoor rated cable included

WIRELESS INTERFACE

- 802.11 a/b/g or EN-Stream Proprietary protocol for greater security
- Dynamic Frequency Selection
- 5 MHz, 10MHz and 20MHz channels available
- Antenna Alignment tool available via software

MANAGEMENT

- IP discovery tool with remote management
- Remote SSH
- SNMP
- FTP

WIRELESS MODULATION

- OFDM and/or DSSS

RADIO SPECIFICATIONS

1 Mbps	-97dBm	12 Mbps	-91dBm
2 Mbps	-96dBm	18 Mbps	-90dBm
5.5 Mbps	-95dBm	24 Mbps	-86dBm
6 Mbps	-94dBm	36 Mbps	-83dBm
9 Mbps	-93dBm	48 Mbps	-77dBm
11 Mbps	-92dBm	54 Mbps	-74dBm

RADIO TRANSMIT POWER

23 dBm 400mW

ANTENNAS

- Omni, Yagi and Panel Antennas available with up to 23dBi gain (See Antenna Kits for ordering)
- N Female Connector
- Integrated Flat Panel Antennas available with up to 23dBi gain

POWER

- Power over Ethernet injector with lightning and surge protection included
- POE input voltage: 100 to 240 VAC
- POE output voltage: 1 A @ 18 VDC
- Power Consumption: 0.5A transmit 0.2A standby (9W max 8W typical 3W standby) @18VDC

ENCLOSURE

POLE MOUNT / WALL MOUNT

- Die Cast Aluminum
- Dimensions: 8.5" x 7" x 2"
- Weight: 3 lbs
- IP67 Weatherproof Rating

INTEGRATED ANTENNA

- UV Stabilized Plastic with Die Cast Aluminum
- Dimensions: 13" x 13" x 3"
- Weight: 5 lbs
- IP67 Weatherproof Rating

ENVIRONMENTAL SPECIFICATIONS

- Operating Temperature: -30°C to +60°C
- Storage Temperature: -40°C to +80°C
- Humidity (non-condensing): 5% to 95%

ACCESSORIES INCLUDED

- Pole Mounting Hardware
- 150' Cat5e or better Industrial Outdoor rated cable with weatherproof connector
- PoE Injector with lightning and surge protection
- 6' Ethernet Crossover Cable
- Plug and Play Capability

WARRANTY

- 1 year limited

**ENCOM reserves the right to make changes to specifications of products described in this data sheet at any time without notice.

7, 640-42 Avenue NE
Calgary, AB Canada T2E 7J9
encomwireless.com

P: (403) 230-1122
F: (403) 276-9575
encom@encomwireless.com

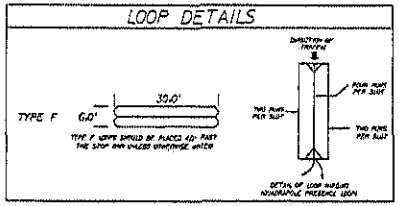
ENCOM™ Wireless Data Solutions

Leading the Way in Wireless Communication for Traffic Applications

SIGNALIZATION GENERAL NOTES:

1. VERIFY COLOR CODES FOR BOTH SIGNAL AND INTERCONNECT CABLE WITH THE LOCAL MAINTAINING AGENCY BEFORE ORDERING.
2. THERE SHALL BE NO LOOP LEAD-INS AND SIGNAL CABLE IN THE SAME CONDUIT OR PULL BOX.
3. SPARE CONDUIT RUNS FROM THE CONTROLLER BASE SHALL BE TERMINATED ONE EACH IN THE NEAREST LOOP LEAD-IN PULL BOX AND SIGNAL CABLE PULL BOX.
4. WHEN JACKING CONDUIT UNDER PAVEMENT, A FDOT APPROVED GUIDANCE BORING SYSTEM MAY BE USED IN ACCORDANCE WITH SECTION 555 OF THE FDOT SPECIFICATIONS AS AN ALTERNATE METHOD OF CONSTRUCTION.
5. ALL TYPE F LOOPS SHALL BE MODIFIED TO 30 FEET IN LENGTH AND SHALL EXTEND 4 FEET IN FRONT OF STOP BAR.
6. UNLESS SPECIFIED OTHERWISE IN THE PLANS, ALL PULL BOX COVERS TO BE FURNISHED AND INSTALLED SHALL BE NON-METALLIC WITH THE APPROPRIATE LABEL.
7. GROUT PADS SHALL NOT BE INSTALLED. IN RURAL AREAS (AND WHERE POSSIBLE IN URBAN AREAS), THE TOP OF THE FOUNDATION SHOULD BE GREATER THAN 12" ABOVE FINISH GRADE.
8. ALL TRAFFIC SIGNAL STRUCTURES SHALL NOT BE PAINTED OTHER THAN WITH A GALVANIZED COATING AS REQUIRED PER THE FDOT SPECIFICATIONS.
9. CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA, INC. AS REQUIRED BY CHAPTER 556 OF THE FLORIDA STATUTES.
10. UTILITY CONTACT INFORMATION CAN BE LOCATED ON THE INDIVIDUAL UTILITY SCHEDULES AS SHOWN IN SECTION 7-11.6.3 OF THE FDOT SPECIFICATIONS.
11. VERIFY VERTICALLY AND HORIZONTALLY (VVH) EXISTING UTILITIES PRIOR TO ANY DIRECTIONAL OR JACK AND BORES.
12. ALL CONDUIT TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. DO NOT OPEN ANY AREA THAT CANNOT BE BACKFILLED IN THE SAME DAY/NIGHT OPERATION.
13. EACH LOOP SHALL BE TREATED AS AN INDIVIDUAL LOOP WITH SEPARATE LEAD-INS FROM SPLICE POINT TO CABINET TERMINAL.
14. IF REQUIRED, PROVIDE THE NECESSARY EQUIPMENT FOR SUPPORTING EXISTING UTILITIES AND/OR SIGNAL POLES DURING CONSTRUCTION OF NEW MAST ARMS AND MAST ARM FOUNDATIONS. COORDINATE THIS EFFORT WITH THE UTILITY COMPANIES AND/OR THE LOCAL MAINTAINING AGENCY.
15. SIGN PANEL INSTALLATION TO INCLUDE ALL ATTACHMENT HARDWARE REQUIRED FOR INSTALLING SIGNS.
16. INSPECT THE TRAFFIC SIGNALS IN ACCORDANCE WITH FDOT SPECIFICATION 105-5.10. COORDINATE THE INSPECTION WITH THE ENGINEER AT LEAST 10 DAYS IN ADVANCE. NASSAU COUNTY ENGINEERING DEPARTMENT SHALL ALSO BE CONTACTED 10 DAYS BEFORE THE INSPECTION IS TO BE PERFORMED SO THEY MAY BE PRESENT.
17. USE PED BUTTON EXTENDERS AS NECESSARY WHEN PLACING PEDESTRIAN DETECTORS SO THAT THE DETECTORS ARE WITHIN 10" OF FLAT SIDEWALK.
18. PAYMENT FOR ELECTRICAL SERVICE WIRE NOT IN THE VERTICAL ASSEMBLY WILL BE PAID FOR PER LINEAR FEET FOR EACH WIRE REQUIRED.
19. THE COST OF WEATHERHEAD FOR ABOVE GROUND CONDUIT SHALL BE INCLUDED UNDER PAY ITEM 630-1-11.
20. NOTIFY CHARLES HOUSTON WITH NASSAU COUNTY ENGINEERING DEPARTMENT AGENCY AT (904)491-7330 48 HOURS IN ADVANCE OF BEGINNING SIGNAL WORK TO OBSERVE INSTALLATION IF DESIRED.
21. THE COST OF REMOVING EXISTING PULL BOXES TO BE INCLUDED UNDER PAY ITEM SERIES 635-.
22. CONTACT THE COMPANY PROVIDING ELECTRICAL POWER TO DETERMINE IF A SERVICE PROCESSING FEE IS REQUIRED. IF REQUIRED, FEE SHALL BE INCLUDED UNDER PAY ITEM SERIES 639-1.
23. REFER TO ROADWAY PLAN SET FOR MAINTENANCE OF TRAFFIC PLAN.
24. LEAVE A 45 FOOT LENGTH OF ELECTRICAL SERVICE WIRE IN PULL BOX ADJACENT TO FPU'S POWER SOURCE POLE. FPU TO CONNECT THIS WIRE TO THEIR TRANSFORMER.
25. USE LOW PROFILE RIG FOR POLE FOUNDATION WORK.

LOOP DETAILS



SPECIAL NOTES:

1. VERIFY ALL SIGNAL POLE AND ROADWAY ELEVATIONS PRIOR TO POLE PLACEMENT.
2. ALL PEDESTRIAN PHASES TO BE PUSH BUTTON ACTUATED.
3. WHEN USING DEWATERING PUMPS, AVOID DIRECT DISCHARGE INTO SURFACE WATERS OR WETLANDS, INCLUDING NO DIRECT DISCHARGE INTO INLETS. DISCHARGE WATER SHOULD BE ALLOWED TO PERCOLATE INTO THE GROUND OR BE COLLECTED FOR TREATMENT PRIOR TO DISCHARGE FOR DEWATERING DURING MAST ARM FOUNDATION INSTALLATION.
4. ALL SIGNAL CABLE SHALL BE TAGGED IN THE TERMINAL COMPARTMENT OF THE MAST ARMS AS WELL AS IN THE CONTROLLER CABINET. ALL LOOP LEAD-INS SHALL BE TAGGED IN THE PULL BOXES AS WELL AS IN THE CONTROLLER CABINET.
5. ELEVATION SHOWN AT MAST ARM POLE LOCATION IS PROPOSED TOP OF FOUNDATION ELEVATION.

PAY ITEM NOTES:

1. 650-51-311: TRAFFIC SIGNAL BACKPLATES SHALL BE PROVIDED FOR THE EAST AND WEST APPROACHES.
2. 650-51-511: TRAFFIC SIGNAL BACKPLATES ARE NOT REQUIRED.
3. 670-5-110: FURNISH AND INSTALL A NAZTEC TS2 TYPE 2 CONTROLLER & TYPE VI CABINET WITH ETHERNET, LCD. THE CONTROLLER ASSEMBLY SHALL BE FULLY COMPATIBLE WITH THE NAZTEC STREETWISE OPERATING SYSTEM AND CONSIST OF THEFOLLOWING:

   1- NAZTEC TS2 TYPE 2 SECONDARY CONTROLLER ETHERNET
   1- "A" ADAPTER CABLE FOR TS2 CONTROLLER TO TYPE 1 CABINET
   1- TYPE VI CABINET ASSEMBLY
   1- NAZTEC TS2 MMU MODEL 516 LCD, IP
   1- NAZTEC TS2 BIU MODEL 130
   1- AUTOMATIC GENERATOR HOOK-UP
   16- NEMA LOAD SWITCHES
   1- NEMA FLASHER
   6- FLASH TRANSFER RELAYS
   1- LUMINAIRE INTERFACE ON POWER PANEL
   1- NAZTEC TS2 CABINET POWER SUPPLY
   1- 16 CHANNEL DETECTOR RACK
   1- 2 CHANNEL OPTICOM RACK & FIELD PANEL
   1- 4 CH PED ISOLATION CARD
   1- 16 CHANNEL LOOP DETECTOR PANEL WITH 16 SRA-GLC SURGE ARRESTORS
   1- SET OF FL DOT SPEC LOAD RESISTORS FOR BACK PANEL
   1- BALL BEARING ROLLER DRAWER
   1- MANUAL CORD
   6- NAZTEC TS2 TIME/DELAY 2 CHANNEL DETECTOR LCD
   2(a)- IP RADIOS (ENDOM COMPAK BB58 15.8 GHZ) BROADBAND ETHERNET RADIO)
   1(b)- ETHERNET SWITCH (CISCO IE-3000-8TC SWITCH AND PWR-IE3000-AC MODULE)
   1(c)- ETHERNET SWITCH (CISCO EXPANSION MODULE IE-3000-8TM)

   (a) ONE TO BE INSTALLED ON THE MAST ARM POLE AT THE LIME STREET/14TH STREET INTERSECTION AND ONE TO BE INSTALLED ON THE MAST ARM POLE LOCATED IN THE NORTHEAST QUADRANT OF THE LIME STREET/8TH STREET INTERSECTION AS INDICATED ON THE SIGNILIZATION PLAN SHEETS.
   (b) TO BE INSTALLED IN THE CONTROLLER AT THE LIME STREET/14TH STREET INTERSECTION.
   (c) ATTACH THE CISCO EXPANSION MODULE IE-3000-8TM TO THE EXISTING CISCO IE-3000-4TC SWITCH LOCATED IN THE CONTROLLER IN THE NORTHEAST QUADRANT OF THE LIME STREET/8TH STREET INTERSECTION.

4. 670-5-410: FOR THE WORK ASSOCIATED WITH INSTALLING THE CISCO EXPANSION MODULE IN THE CABINET AT THE LIME STREET/8TH STREET INTERSECTION.
5. 685-107: THE CONTRACTOR SHALL FURNISH TO THE COUNTY EITHER THE DET4C CLAMP-ON GROUND RESISTANCE TESTER, THE DET24C CLAMP-ON GROUND RESISTANCE TESTER OR THE FLUKE 1630 EARTH GROUND CLAMP METER.
6. 699-1-1: INTERNALLY ILLUMINATED STREET SIGNS SHALL BE ILLUMINATED WITH LED LIGHTS.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

peters yaffee
TRANSPORTATION & TRAFFIC ENGINEERING
7404 FULLERTON STREET, SUITE 251
JACKSONVILLE, FL 32256
CERTIFICATE OF AUTHORIZATION 28258
RUSSELL YAFFEE, P.E. #45513

NASSAU COUNTY ENGINEERING
NASSAU COUNTY FLORIDA
CONSTRUCTION PLANS FOR:
LIME STREET

GENERAL NOTES

SHEET NO.
T-3

User: 9/24/2008 10:53:38 AM P:\NCE-009, Nassau County CEI, Contract\Lime Street and 14th\Design\Lime Street GN.dgn

SECTION 00 65 16

CERTIFICATE OF SUBSTANTIAL COMPLETION

Project: 14th Street at Lime Street Intersection improvements

Project No.: CM1954 Contract No.: NC13-005

This Certificate of Substantial Completion applies to:

[x] All work under Contract [ ] Portion of work described as follows:

The Work to which this Certificate applies has been inspected by authorized representatives of the COUNTY and the CONTRACTOR and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on : 9/30/2013
DATE

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within 45 days of the above date of Substantial Completion.

The date of Substantial Completion is the date upon which all guarantees and warranties begin.

SIGNED:

NASSAU COUNTY CONSTRUCTION INSPECTOR

By: [signature] DATE: 10-11-13

NASSAU COUNTY PROJECT MANAGER

By: [signature] DATE: 10-11-13

Engineer of Record

~~NASSAU COUNTY ROAD & BRIDGE REPRESENTATIVE~~

By: [signature] DATE: 10/11/13

Keith Jackson NC Road + Bridge Rep

~~ENGINEER OF RECORD~~:

[signature]

By: Darren Marsh DATE: 10-11-13

CONTRACTOR:

Kirby Development, Inc

By: [signature] DATE: 10-11-13

CM1954

SECTION 00 65 19

CERTIFICATE OF FINAL COMPLETION

Project: 14th Street at Lime Street Intersection Improvements

Purchase Order No.: CM1954 Contract No.: NC13-005

This Certificate of Final Completion applies to:

The Work under this Contract has been inspected by authorized representatives of the COUNTY and the CONTRACTOR and all Work is hereby declared to be complete in accordance with the Contract Documents on: 12/19/2013

DATE

SIGNED:

PARSONS BRINCKERHOFF
NASSAU COUNTY CONSTRUCTION INSPECTOR

By: Mateo A Bunel DATE: 12-19-2013

NASSAU COUNTY PROJECT MANAGER

By: [signature] DATE: 12-19-2013

NASSAU COUNTY ROAD & BRIDGE REPRESENTATIVE

By: [signature] DATE: 12-19-2013

ENGINEER OF RECORD:

[signature]

By: Connolly & Wicker Inc. DATE: 12.30.2013

CONTRACTOR:

Kirby Development Inc

By: Peter B. Kirby DATE: 12-19-2013