

INFRASTRUCTURE SALES TAX



PROJECT #16208

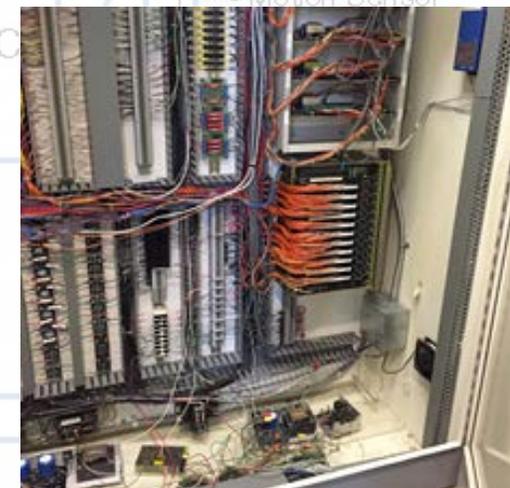
MAIN COUNTY COURT HOUSE – ELECTRONICS & SECURITY SYSTEM
RENEWAL AND REPLACEMENT

PROJECT HISTORY

The Main County Courthouse has an extensive electronic security and fire alarm system, which provides for the safety of judges, staff and the public; it supports the movement of inmates for Court activities, protects the County's property, evidence, and records within the facility.

PLC I/O DATA/CONTROLS

- Door Position Switch
- Door Lock Bolt Position Switch
- Door Lock Keeper Switch
- Door Lock Outboard
- Door Card Reader Alarm
- Door Card Reader Access Granted
- Door Card Reader Access Denied
- Biometric Scanner Access Granted
- Biometric Scanner Access Denied
- Rollup Door Motor (up/open)
- Rollup Door Motor (down/close)
- Rollup Door Motor (stop)
- Intercom Panic
- Duress Button
- Motion Sensor



The SYSTEMS

The electronics and fire alarm systems are fully integrated via a custom programmed PLC known as the “Data Concentrator” and are comprised of the following systems:

- 1. CCTV Surveillance and Video Management System (VMS);
- 2. Security Management System (SMS), including Command Center Operator Workstations;
- 3. Programmable Logic Controllers (PLCs);
- 4. Duress;
- 5. Elevator Override Control;
- 6. Card Access;
- 7. Intercom System;
- 8. Fire Alarm System

PLC-5/80 DATA CONCENTRATOR

- Door Position Switch
- Door Lock Keeper Switch
- Door Lock Solenoid
- Door Card Reader Alarm
- Door Card Reader Access Granted
- Door Card Reader Access Denied
- Biometric Scanner Access Granted
- Biometric Scanner Access Denied
- Rollup Door Motor (up/open)
- Rollup Door Motor (down/close)
- Rollup Door Motor (stop)
- Intercom Panic



The SYSTEMS

These systems have been in place since 1993 (except the fire system, which had a partial upgrade in 2009). Reliability has become an issue, as well as availability of parts needed to keep all systems in operation.



PROJECT SCOPE

The scope of the project includes Security Systems replacements at the Main County Courthouse, The State Attorney's/Public Defenders Building and The Central Energy Plant building. Systems to be replaced includes the Security Management System, Access Control System, CCTV system, Duress System, Intercom, Elevator Override, and Fire Alarm as previously identified.

The Project will also include addressing the emergency egress procedures for the facility, as well as a build-out for the expansion of the 4th floor Command Center.

PLC I/O DATA/CONTROLS

- Door Position Switch
- Door Lock Bolt Position Switch
- Door Lock Solenoid
- Door Card Reader Alarm
- Door Card Reader Access Granted
- Door Card Reader Access Denied
- Biometric Scanner Access Granted
- Biometric Scanner Access Denied
- Rollup Door Motor (up/open)
- Rollup Door Motor (down/close)
- Rollup Door Motor (stop)
- Intercom Panic
- Duress Button
- Motion Sensor
- Tamper Switch
- Light (on)
- Elevator Floor Call
- Elevator Door Close
- Elevator Stop
- Loop Detectors

PROJECT FUNDING

The project is funded with a combination of Infrastructure Sales tax and Ad Valorem funds. The combined total IST, and Ad Valorem funding available for this project is \$16,452,328. Total IST funds are \$12,999,700, which are comprised of FY17 IST funds of \$1,300,000 and FY18 IST funds of \$8,699,700 and FY 19 IST funds of \$3,000,000. Ad Valorem funds are \$3,449,845

JACOBS Courthouse Electronics System R&R/Command Center - Rich Avery

Cost Control > Budgets > All

Op...	Budget Code	Description	Original Budget	Current Budget	Projected Budget	Commit'd Costs	Uncommitted	Projected Cost	Under/Over	Cost To Date	Cost To Complete
			\$1,258,561	\$1,431,186	\$1,431,186	\$1,228,166	\$0	\$1,295,496	(\$135,690)	\$828,063	\$467,433
Group1:	CO										
	CO.CO10.0001.0410.D17B.4900	Courthouse Electronic System R&R/Command Center - Command Center Expansion, ESS R&R - General Fund (D17B)	\$0	\$2,783	\$2,783	\$2,783	\$0	\$2,783	\$0	\$2,783	\$0
	CO.CO10.3804.0411.B510.4902	Courthouse Electronic System R&R/Command Center - Command Center Expansion, ESS R&R - Ad Valorem (B510)	\$1,441,000	\$1,458,046	\$1,458,046	\$1,538,612	\$0	\$1,538,612	\$80,566	\$80,566	\$1,458,046
	CO.CO10.3950.0411.0004.4902	Courthouse Electronic System R&R/Command Center - Building Structure	\$10,783,500	\$12,146,523	\$12,146,523	\$12,146,523	(\$24,102)	\$12,122,421	(\$24,102)	\$818,146	\$11,304,275
	CO.CO10.9999.0411.0004.4902	Future Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO14.3950.0411.0004.4902	Courthouse Electronic System R&R/Command Center - Art In Public Places	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO16.2950.0411.0004.4902	Courthouse Electronic System R&R/Command Center - Builders Risk Insurance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO40.3950.0411.0004.4902	Courthouse Electronic System R&R/Command Center - Special Inspection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO50.3804.0411.B510.4902	Courthouse Electronic System R&R/Command Center - Construction Material Testing - Ad Valorem (B510)	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO50.3950.0411.0004.4902	Courthouse Electronic System R&R/Command Center - Construction Materials Testing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO60.3950.0411.0004.4902	Courthouse Electronic System R&R/Command Center - Utility Fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO70.3804.0411.B510.4902	Courthouse Electronic System R&R/Command Center - Telephone System - Ad Valorem (B510)	\$109,341	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	CO.CO70.3804.0411.B526.4902	Courthouse Electronic System R&R/Command Center - Telephone System - Ad Valorem (B526)	\$110,659	\$80,566	\$80,566	\$0	\$0	\$0	(\$80,566)	\$0	\$0
	CO.CO70.2950.0411.0004.4902	Courthouse Electronic System R&R-Data Network	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Group1:	FE		\$12,449,500	\$13,687,918	\$13,687,918	\$13,687,918	(\$24,102)	\$13,663,816	(\$24,102)	\$901,495	\$12,762,321

PLC I/O DATA/CONTROLS

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- Motion Sensor
- Tamper Switch
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- Elevator Floor Call
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- Elevator Stop
- Loop Detectors

I/O MODULES

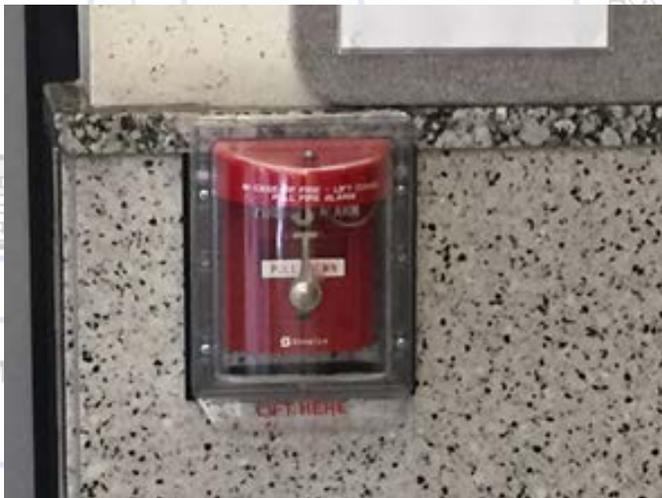
THE COMMAND CENTER EXPANSION

As mentioned, the project scope includes an expansion of the PBSO 4th floor command center. The command center serves as the primary security monitoring center for the complex and is manned 24/7. The area selected for the expansion is located on the balcony directly adjacent to the existing command center and the main atrium.



PROJECT HISTORY - CONSULTANT SERVICES

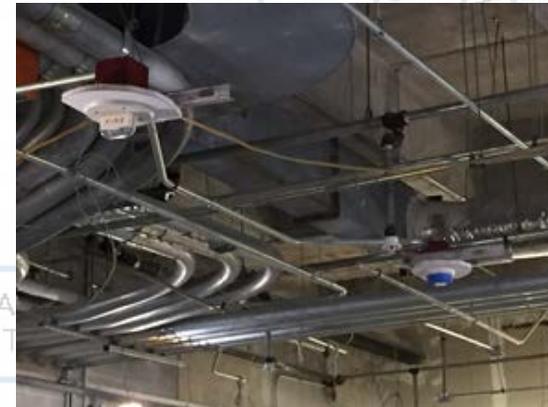
In January 2015, The Board of County Commissioners approved a Contract with Kimley-Horn and Associates, Inc. to provide planning and engineering services associated with electronics and security systems replacement projects



Kimley-Horn and Associates, Inc. Planning Support Services

Tasks performed by Kimley-Horn and Associates included:

1. Existing Conditions and Document Review;
2. Facilities and System Functional Requirements Review;
3. Functional Assessment Report



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Consultant Services

In February 2016, Kimley-Horn delivered their final report wherein they recommended replacement of the existing systems based on reaching the conclusion that the current SMS solution and subsystems at the MCCH were at their end-of-life and the hardware associated with these subsystems are no longer supported by the respective manufacturers.

Kimley-Horn

Consultant Design Services

In November 2016 The Board of county Commissioners approved and entered into a contract with TLC Engineering for Architecture. Tasks to be completed by TLC included professional design services for the renewal/replacement of security electronic systems, completion of a life safety study required for permitting, and design services for expanding the existing 4th floor command center.

TLC ENGINEERING SOLUTIONS

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Construction Management Services

In February 2017, The BOCC approved and entered into a contract with Hedrick Brothers Construction Co., Inc. for Construction Management – Pre-Construction Services. In December 2018, The BOCC approved the GMP Amendment No. 1 for \$13,580,467 establishing a Guaranteed Maximum Price for Construction. The Notice to proceed was issued on Jan 7, 2019.



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CONSTRUCTION MANAGEMENT SERVICES – CONTINUED

The Construction Manager completed final negotiations with subcontractors and has issued subcontracts. Primary Permits were received from the City of West Palm Beach. The product submittals and shop drawings phase is ongoing. Sub-contractor site surveys investigations have been completed.



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 - Door Lock Releaser Switch
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 - Door Card Reader Access Granted
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CONSTRUCTION MANAGEMENT SERVICES – 4TH FLOOR COMMAND CENTER – PHASE I

Construction activities for the command center expansion is underway. The shell of the expansion area has been constructed, interior wall framing, electrical conduit, drywall, painting and installation of the raised flooring is substantially complete. Modular furniture has been delivered and is currently being installed. It is anticipated that a TCO will be obtained by mid July, after which PBSO staff and equipment will be relocated to the new space and renovation of the existing space (Phase II) will commence.



CONSTRUCTION MANAGEMENT SERVICES – ELECTRONICS R&R

At present the CM continues with the product submittal and shop drawing process for the electronic systems. It is expected that the CM will commence with physical installation activities by the beginning of July 2019.

