



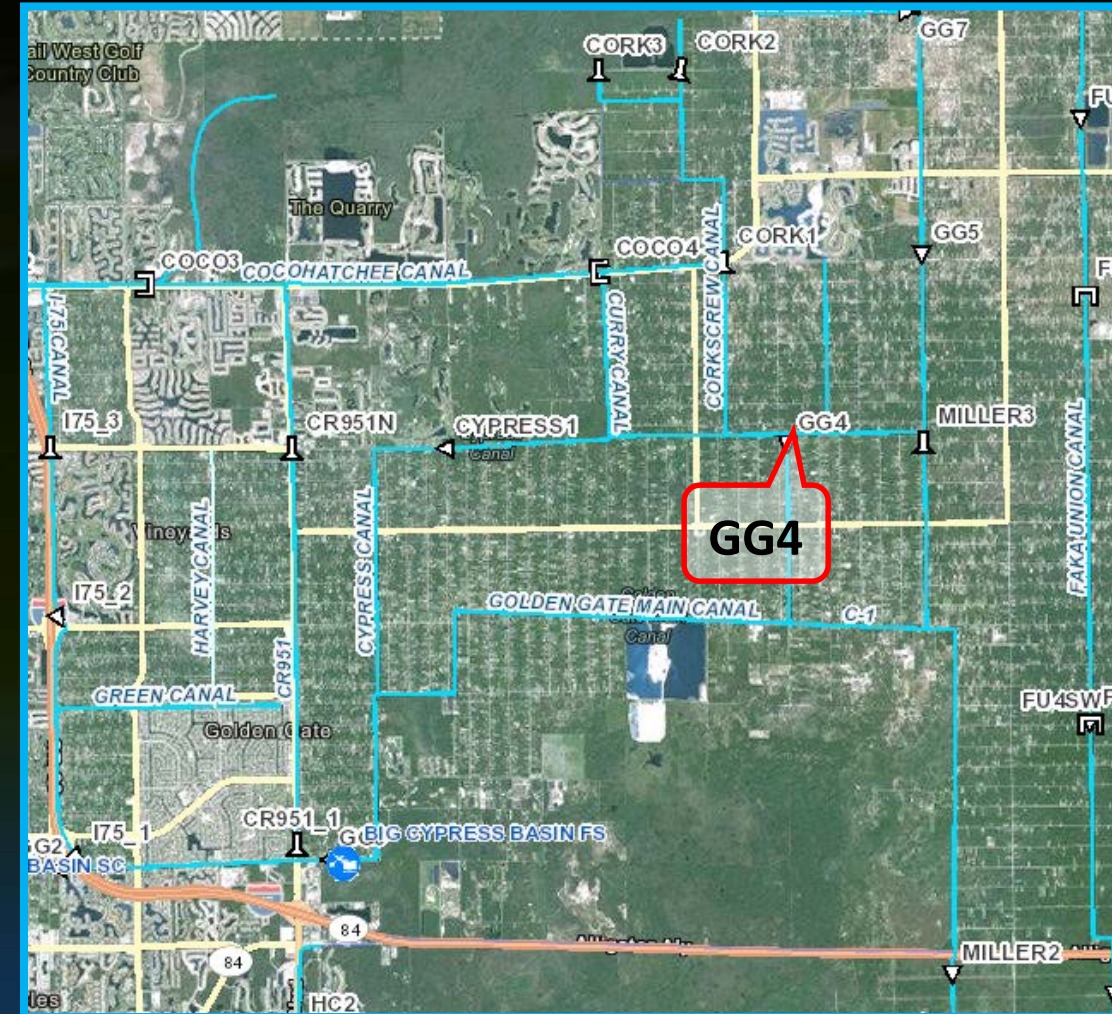
Big Cypress Basin Capital Project Update

Lucine Dadrian, P.E.
Project Management Section Administrator
Engineering and Construction Bureau

October 25, 2018

Golden Gate Weir 4 Replacement

Original GG4 Facing North



Golden Gate Weir 4 Replacement

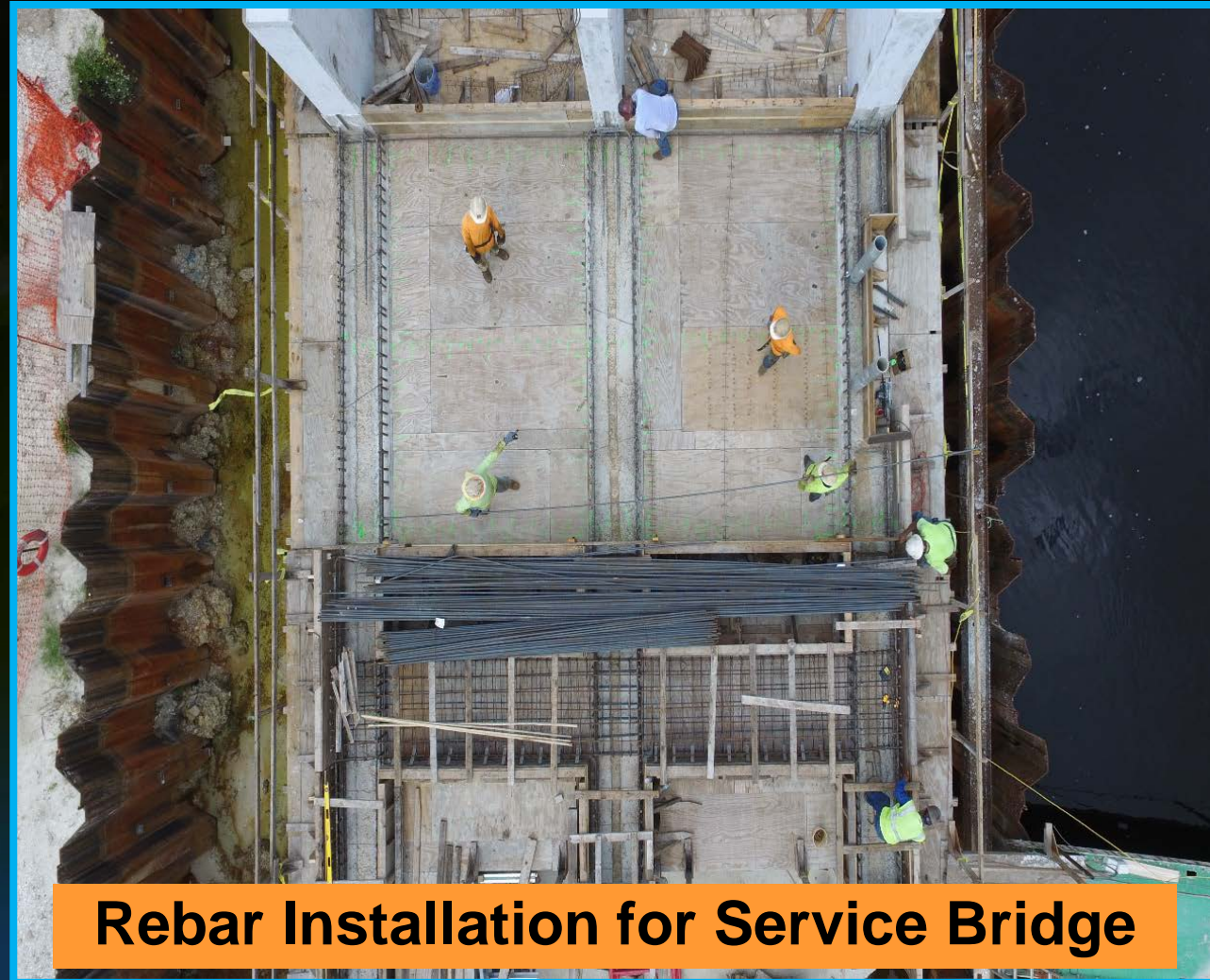
- Project awarded to Zep Construction for \$4,710,000
- NTP Sep 29, 2017 with a contract duration of 620 days
- Change order 1 added 60 days to contract for H-pile modification
- Current committed amount is for Construction, CMS & EDC
- Project is 54% complete

Fiscal Year	Budget	Committed
2014/2015	\$127,800	\$173,490
2015/2016	\$450,000	\$427,313
2016/2017	\$461,900	\$906,990
2017/2018	\$4,000,000	\$3,150,000
2018/2019	\$1,646,360	\$1,646,360
Total	\$6,686,060	\$6,304,153

Golden Gate Weir 4 Replacement



Overall Site Condition



Rebar Installation for Service Bridge

Golden Gate Weir 4 Replacement



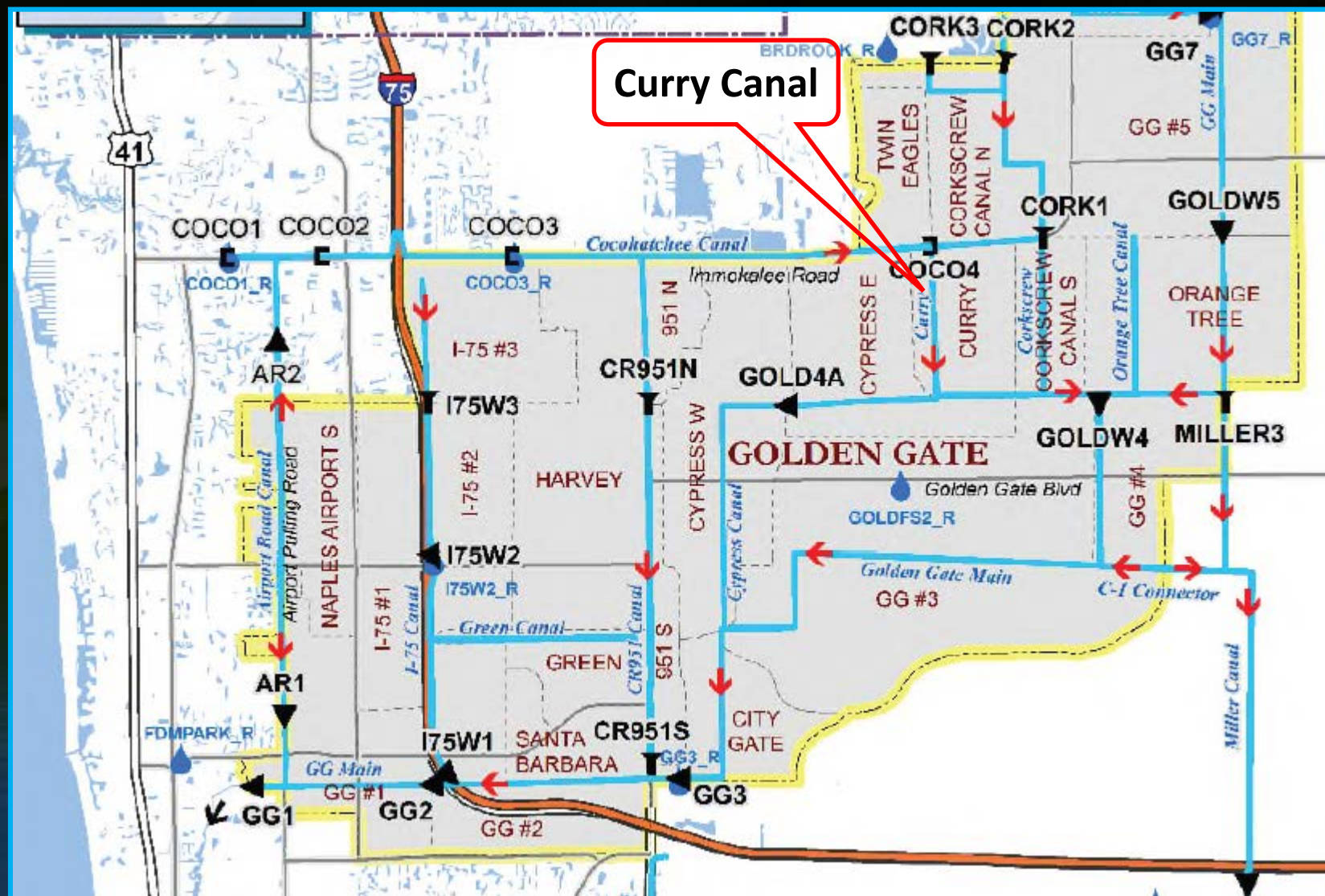
Rebar Installation for Service Bridge

Golden Gate Weir 4 Replacement



Temporary Weir Set for Wet Season

Curry Canal Structure



Curry Canal Structure



- Project awarded to Thomas Marine, Inc. for \$1,681,500
- Flow ready on April 26, 2018
- Substantial Completion - 90 day delay due to actuator motor
- Final Completion – 60 day delay
- Project is expected to be completed by November 2018

Fiscal Year	Budget	Committed
2015/2016	\$50,000	\$81,811
2016/2017	\$500,000	\$31,375
2017/2018	\$2,100,000	\$1,884,884
Total	\$2,650,000	\$1,998,070

Curry Canal Structure

CONTROL BUILDING SET IN PLACE

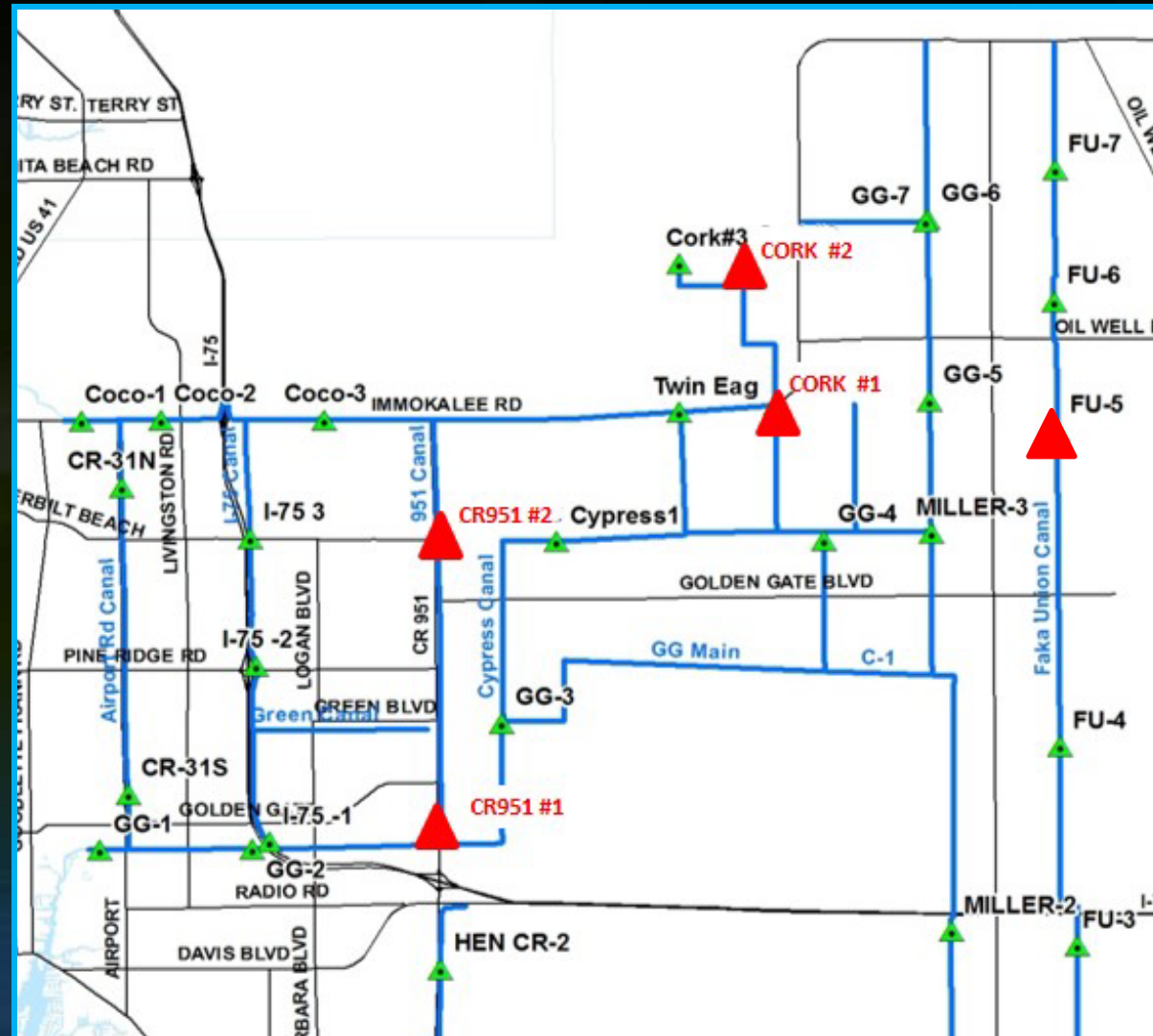


- Preliminary walkthrough was conducted on August 29, 2018
- Additional site work to be completed include:
 - Actuator Installation
 - Solar panel installation
 - FPL Power to site

Curry Canal Structure



Electrification & Remote Operations



Electrification & Remote Operations

- **CORK2** – add powered operations and remote operation capability
- **CORK1, CR951-1, CR951-2** – add powered operations only
- **New generator building and generator for FU5**
- **Design work order executed with CSA Central in Sep 2017, total work order amount \$433,979**
- **Final design submittal in review in Dec**
- **Anticipated bid date in Jun/Jul 2019**

Fiscal Year	Budget	Committed
2016/2017	\$600,000	\$424,931
2017/2018	\$0	\$9,048
2018/2019	\$1,300,000	
Total	\$1,900,000	\$433,979



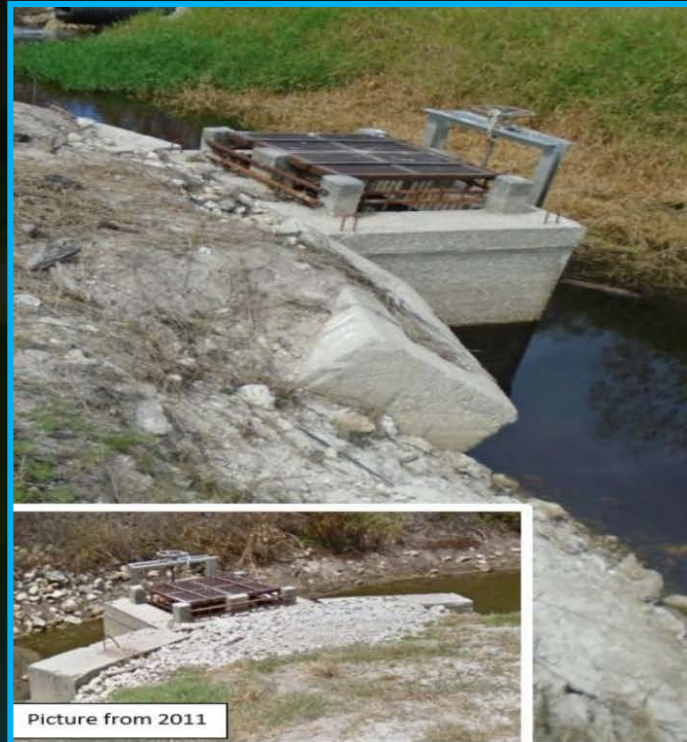
Structure Inspection Program

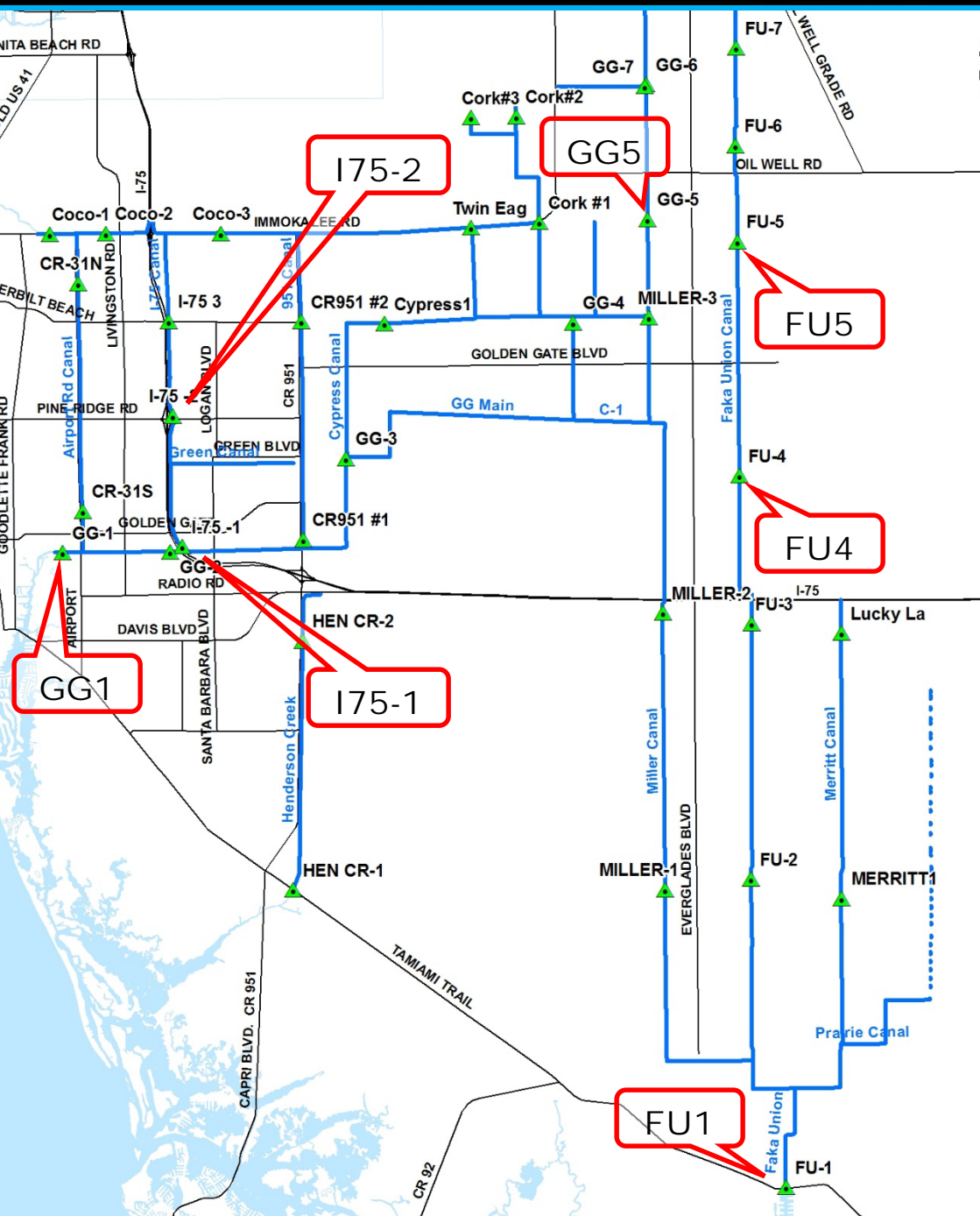
Structure Number	Overall C-Rating	Structure Type	Structure Address
CORK3	C-4	Culvert	Westerly Terminus of 43rd Avenue NW
GG-7	C-4	Spillway	Golden Gate Main Canal
MILLER3	C-4	SPILLWAY	Miller Canal
CR31N	C-3	Weir	Airport Rd Canal
COCO1	C-3	Spillway	Cocohatchee Canal
COCO2	C-3	Spillway	Cocohatchee Canal
COCO3	C-3	Spillway	Cocohatchee Canal
CORK1	C-3	Culvert	Corkscrew Canal crossing of CR846
CORK2	C-3	Culvert	North Side of 43rd Avenue NW
CR31S	C-3	Weir	Airport Road Canal
CR951-1	C-3	Culvert	CR951 Canal
CR951-2	C-3	Culvert	CR951 Canal
GG-2	C-3	Spillway	Golden Gate Main Canal
GG-3	C-3	Spillway	Golden Gate Canal
GG-6	C-3	Spillway	Golden Gate Main Canal
HC-1	C-3	Spillway	Henderson Creek Weir No.1
HC-2	C-3	Spillway	Henderson Creek Canal
I75-3	C-3	Culvert	I-75 Canal
TWIN EAGLES	C-3	Spillway	Cocohatchee Canal

Structure Inspection Program

FY18 C4 Inspection Ratings:

- **Miller #3** - issues with gate operation of weir gates 1 & 3. Infrastructure currently troubleshooting with FS staff
- **Cork3** - wingwall displacement, still in evaluation
- **GG7** - gate operation & position indication issues, FS repair





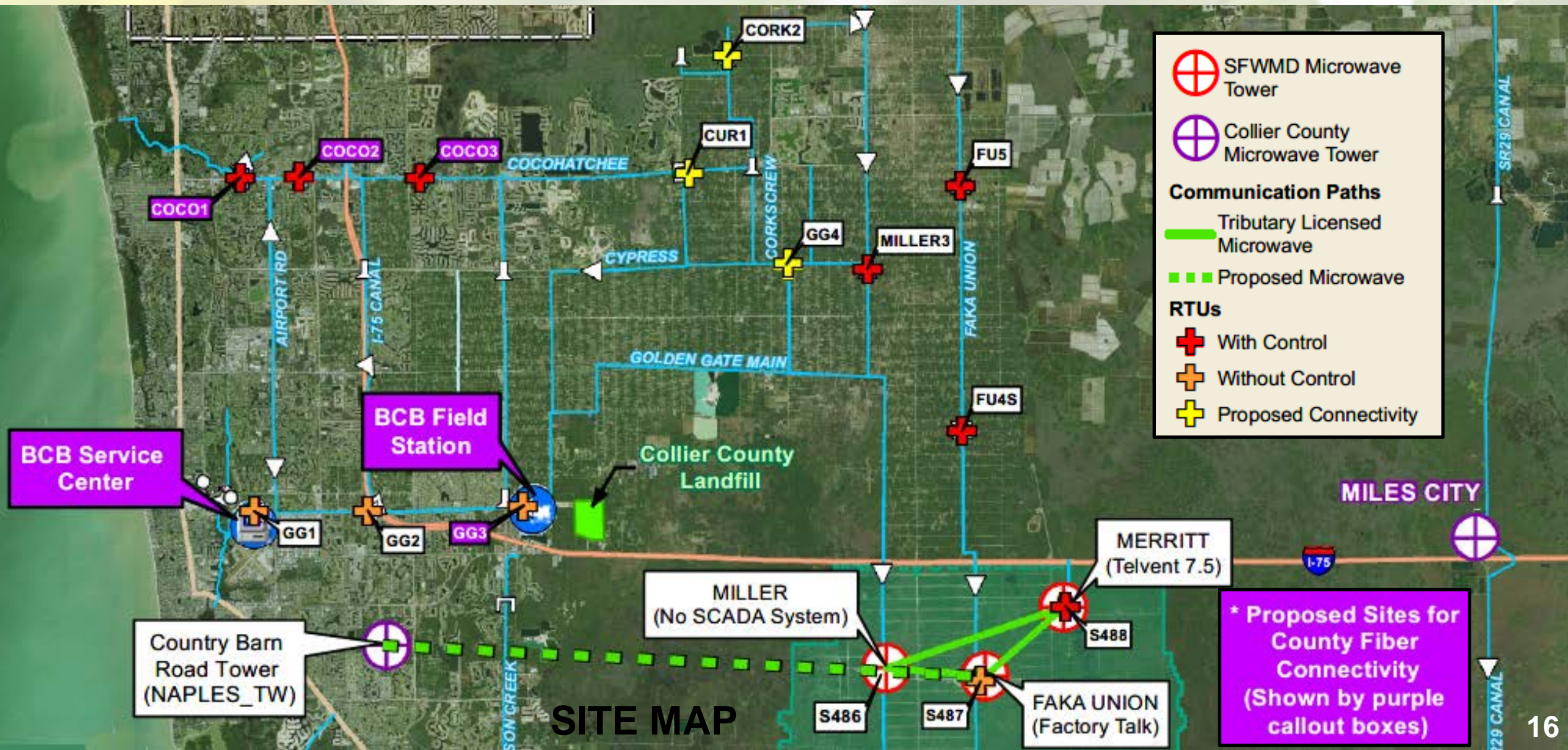
Structure Inspection Program

FY19 Structure Inspections:

- Topside Inspections by Infrastructure Management
- Underwater Inspections by Underwater Engineering Services, Inc. for \$59,579
- 7 sites: FU-1, FU-4, FU-5, I75-1, I75-2, GG-1, & GG-5

Fiscal Year	Budget	Committed
2017/2018	\$225,000	\$186,917
2018/2019	\$225,000	\$59,579
Total	\$450,000	\$246,496

Remote Monitoring and Communication



Remote Monitoring and Communication

- Phase 2 includes telemetry installations and site work at the following structures: COCO1, COCO2, COCO3, FU4S, FU5, GG1
- Includes 6 concrete antenna poles, two antennas per pole, cables to shelters, and 24 gate level-indicator housings & conduit
- Level instrumentation to be purchased from and installed by SCADA
- Contract executed with Current Connections for \$450,000 and 300 days
- Notice to Proceed - Jul 10, 2018
- CMS Work Order negotiated for \$42,259



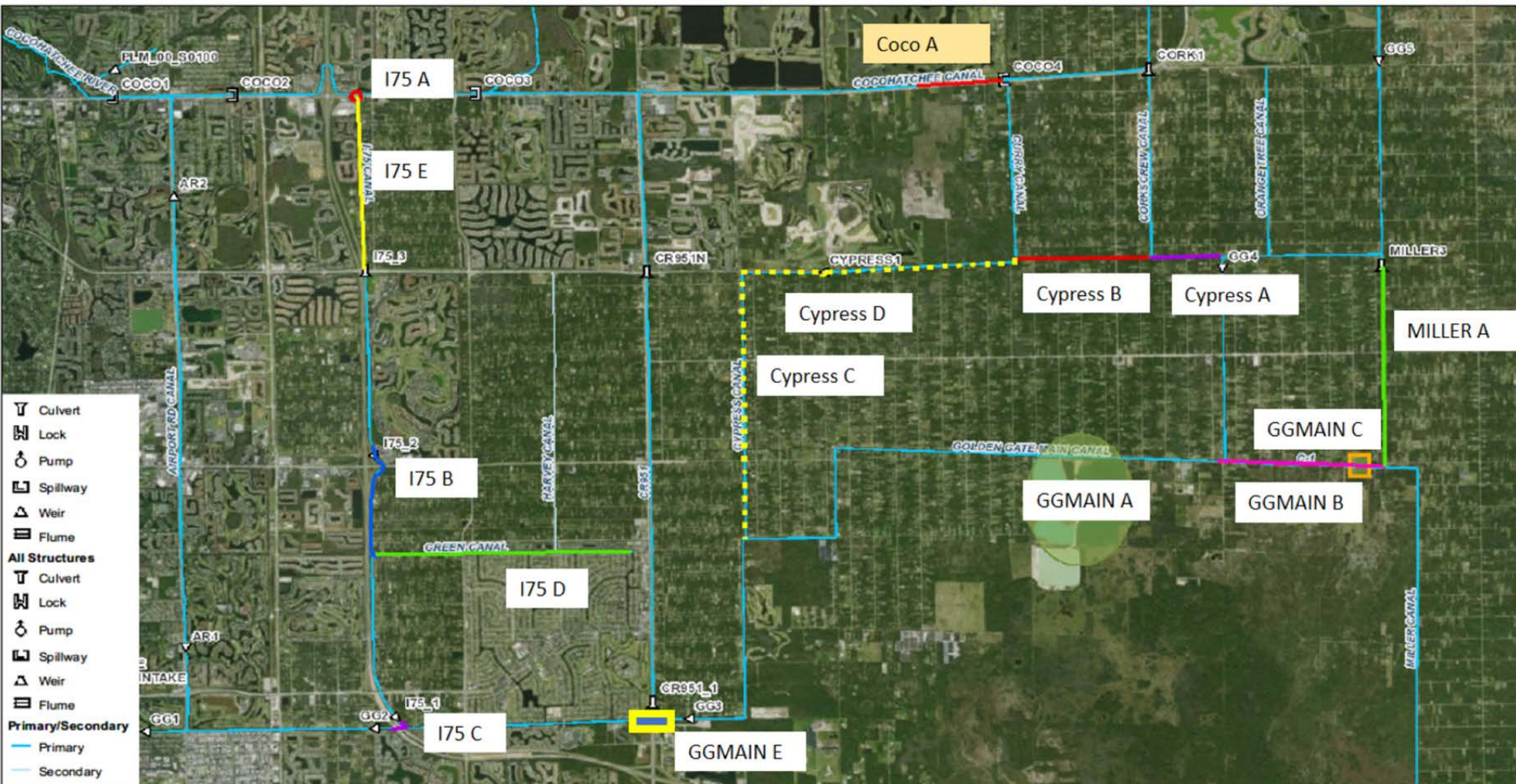
Remote Monitoring and Communication

- **Phase 3 scope includes:**
 - **Radios and Antennas at Miller 3, GG2, and GG4**
 - **Fiber installation at COCO1, COCO2, COCO3, GG3, BCB Service Center and BCB Field Station**
 - **Microwave link between County Barn Road Tower and FAKA Union Tower**
 - **Base Stations and Antennas purchased**

Scope	Estimate
Radios & Antennas	\$44,900
Fiber Installation	\$80,100
Microwave Link	\$450,000
Total	\$575,000

Fiscal Year	Budget	Committed
2016/2017	\$400,000	\$83,000
2017/2018	\$476,911	\$450,000
2018/2019	\$575,000	\$16,997
Total	\$1,451,991	\$549,997

LOS Canal Assessments & Improvements

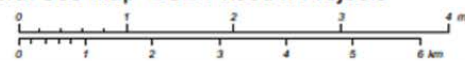


Prioritized Canal Systems:

- I75 Canal
- Miller Canal
- C1 Connector Canal
- Cypress Canal

General Use Map- BCB Phase II Projects

South Florida Water Management District
3301 Gun Club Rd, West Palm Beach, Florida 33406
(561) 686-6800, www.sfwmd.gov



DISCLAIMER:
This map is a conceptual or planning tool only. The South Florida Water Management District does not guarantee or make any representation regarding the information contained herein. It is not self-acting or binding, and does not affect the interests of any persons or properties, including any present or future right or use of real property.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

	LOS Reprioritization of Canal and Structure Improvements	LF	Type	Cost
I75 Conveyance Improvements				
	Cocohatchee culvert connection (County Project)		Culvert	\$ 500,000
	Assessment of I75 Conveyance Improvements		Assessment	\$ 120,000
	Cocohatchee to I75-3 Weir Vanderbilt Rd	10,200	Excavation	\$ 386,364
	Pine Ridge Rd to Green Canal (7,400 LF) Excavation	7,400	Excavation	\$ 280,303
	Green Canal	14,460	Hydraulic Dredging	\$ 821,591
	GGM Junction		Excavation & Riprap	\$ 200,000
	Potential removal of I75-1 Weir		Demolition	\$ 1,000,000
Miller Canal Improvements				
	Assessment of Miller Conveyance Improvements		Assessment	\$ 50,000
	Miller 3 to C1 Connector Canal Junction (12,000 LF) Excavation	12,000	Excavation	\$ 454,545
	SE 28 th Ave to Alligator Alley (9,400 LF) Excavation	9,400	Excavation	\$ 356,061
C1 Connector Canal Assessments and Improvements				
	Assessment of C1 Connector Canal/GG/Cypress (East) Conveyance Improvements for a new way out		Assessment	\$ 120,000
	C1 Conveyance Improvements (9,000 LF)	9,000	Hydraulic Dredging	\$ 511,364
	Road Crossing Culvert Improvements			\$ 3,000,000
	C1 New Water Control Structure (Similar to Curry with Remote Ops) \$2.5M		New Structure	\$ 2,500,000
Cypress Canal Improvements				
	Assessment of Cypress Canal Improvements (\$75K)		Assessment	\$ 75,000
	Vanderbilt Rd Expansion and canal relocation south by County			\$ -
	Cypress1 Structure relocation west of Expansion \$2.5M		New Structure	\$ 3,000,000
	Vanderbilt Rd to Golden Gate Canal (16,000 LF) Hydraulic Dredging	16,000	Hydraulic Dredging	\$ 909,091
	Curry Canal to GG4 (11,600 LF) Excavation	11,600	Excavation	\$ 439,394
				\$ 14,723,712

LOS Canal Assessments & Improvements

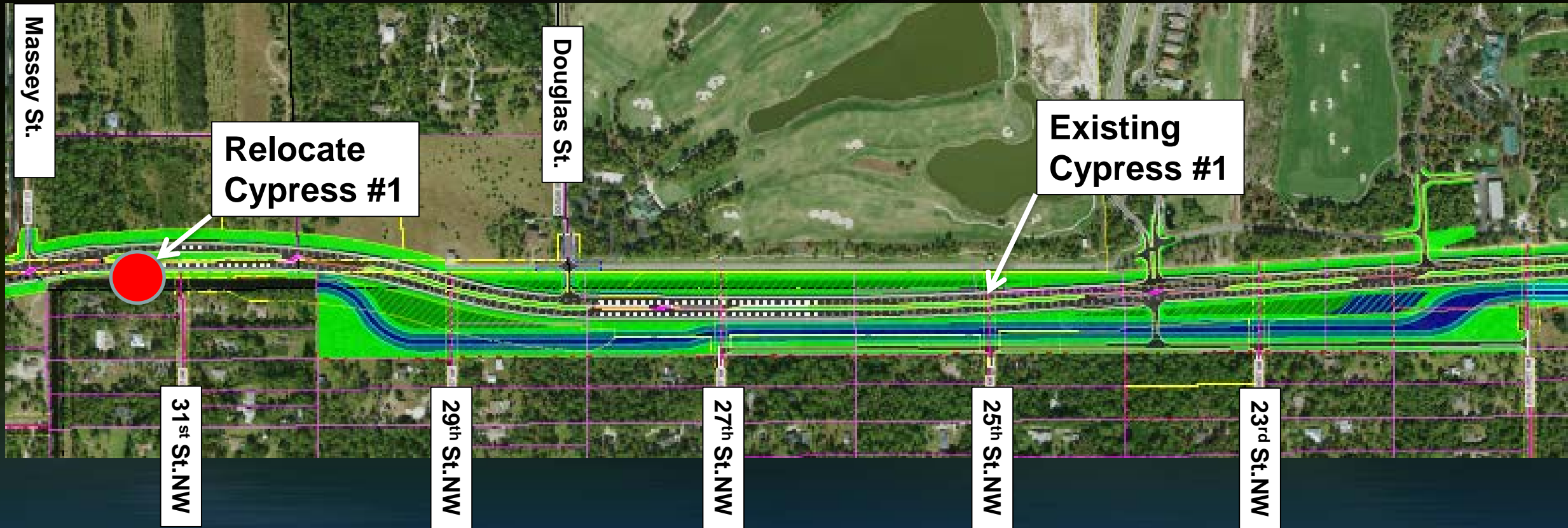
Project Name	Conceptual Scope	Scope Updates
I-75 / Cocohatchee Canal Connection	Provide a connection (discharge line, approximately 680 LF, 30 inch Diameter) from the top end of I-75 Canal into the Cocohatchee Canal	<ul style="list-style-type: none"> Contract with Collier County in FY19
Acquire Land / Easements	Green Canal, C-1 Connector Canal, and Cypress Canal have minimal to no access for widening and/or working from land	<ul style="list-style-type: none"> Hydraulic Dredge and/or Purchase lands for widening of canals Requires land for material disposal areas for sediment processing
Golden Gate Main Regional Storage Improvements	Provide a controlled connection into two mining lakes (470 acres) located adjacent to the Golden Gate Main Canal. The inclusion of these lakes will increase system storage capacity and help attenuate peak flood stages during major storm events.	<ul style="list-style-type: none"> No ownership of Regional Quarry for storage Request Collier County to negotiate with owner for storage capacity and overflow weir into Belle Meade Possible cost share with Collier County

Cypress #1 Structure Relocation



Fiscal Year	Budget	Committed
2018/2019	\$400,000	\$0
Total	\$400,000	\$0

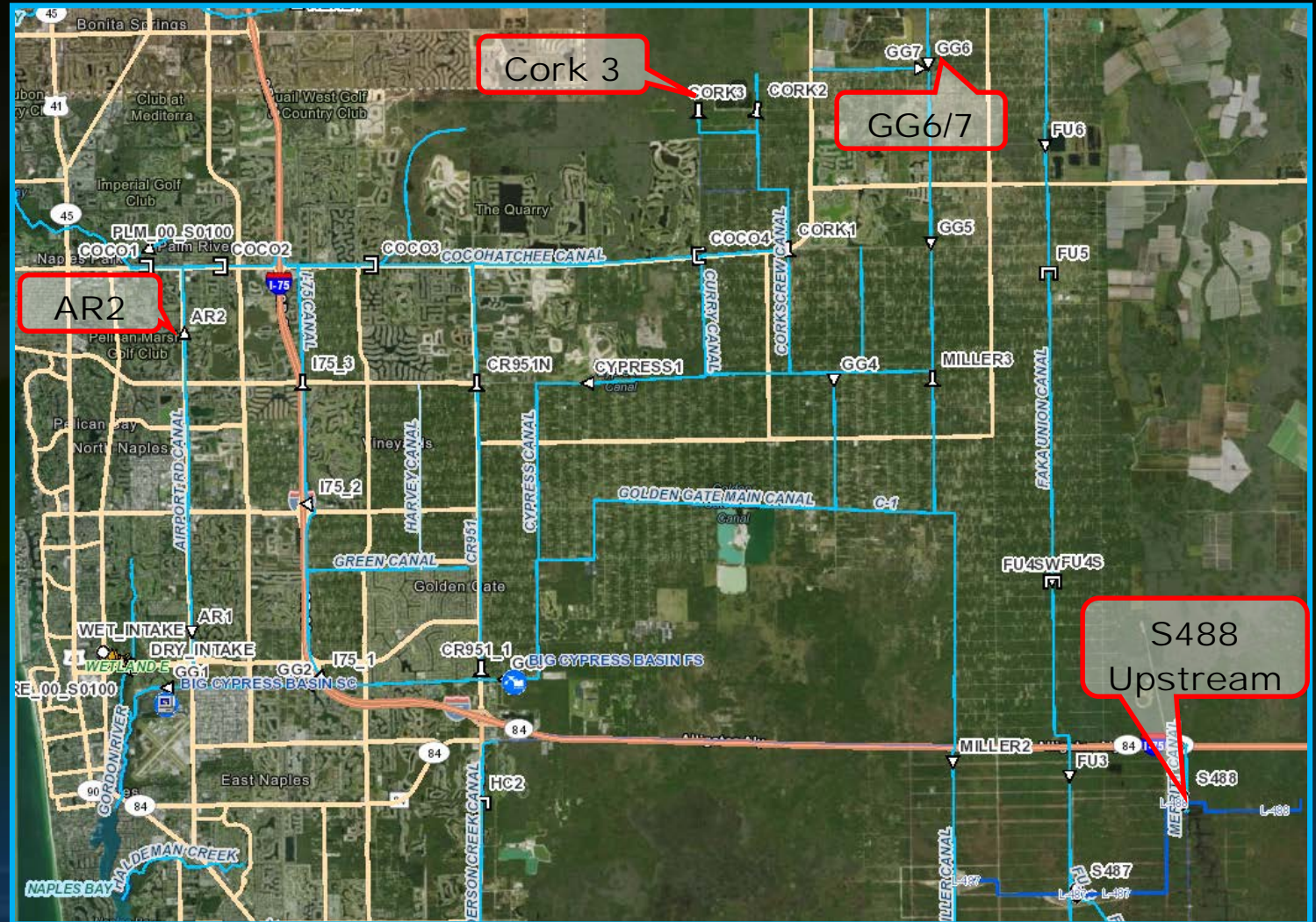
Cypress #1 Structure Relocation



SCADA Replacements

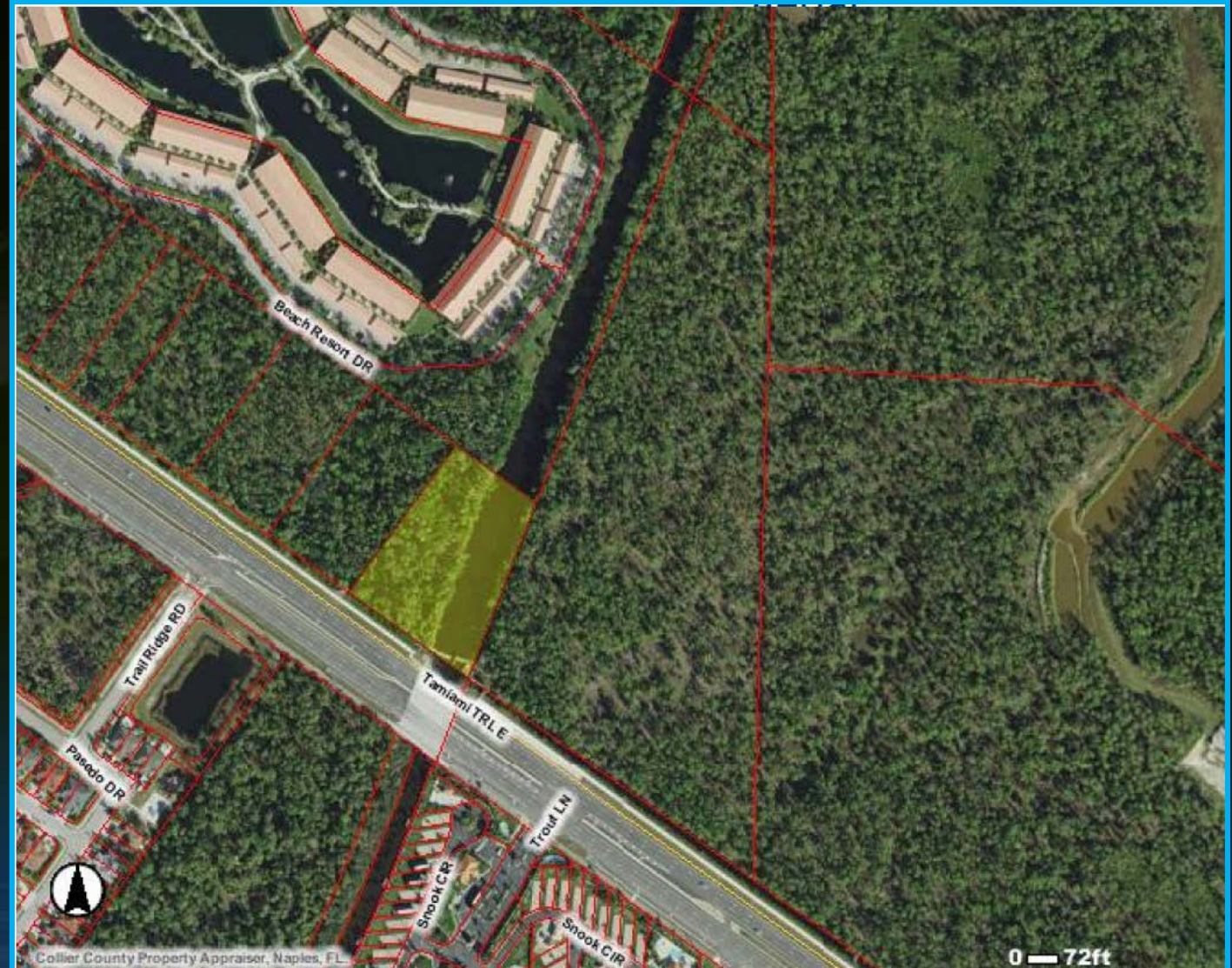
SCADA Replacements for the following sites:

- Airport Pulling Road North HW/TW
- S488 Upstream
- GG6/GG7 TW
- Cork 3



Henderson Creek Land Purchase

- Currently no land ownership around Henderson Creek 1 Structure and headwater stilling well
- Request approval to negotiate with willing seller
- Request approval to transfer \$150,000 in funds from Electrification Project



Approved Fiscal Year 2018-2019 Capital Budget

BCB Capital Projects	Fiscal Year 2018-19 Adopted	Transfers In / Out	Fiscal Year 2018-19 Modified Adopted	Contractual Commitments	Available Funds	Additional Funding Needs	Reason Funds Needed
Structure Inspection Program	\$225,000	\$0	\$225,000	\$59,579	\$165,421	\$0	
SCADA Replacements	\$426,000	\$0	\$426,000	\$0	\$426,000	\$0	
Remote Monitoring and Communications	\$575,000	\$0	\$575,000	\$16,997	\$558,003	\$0	
Golden Gate Weir #4 Replacement	\$1,646,360	\$0	\$1,646,360	\$1,646,360	\$0	\$186,757	Project Management Support
Cypress #1 Replacement	\$400,000	\$0	\$400,000	\$0	\$400,000	\$0	
Electrification Project- Cork 1/2, CR951 1/2, FU5 Generator	\$1,300,000	\$0	\$1,300,000	\$0	\$1,300,000	\$0	
1-75 / Cocohatchee Canal Interconnect	\$500,000	\$0	\$500,000	\$0	\$500,000	\$0	
Canal Improvements	\$0	\$0	\$0	\$0	\$0	\$0	
Henderson Creek 1 - Land	\$0	\$0	\$0	\$0	\$0	\$150,000	Land Negotiation
Total - Capital Projects	\$5,072,360	\$0	\$5,072,360	\$1,772,936	\$3,349,424	\$336,757	

Proposed 5-year Capital Improvement Plan

BCB Capital Projects	Fiscal Year 2018-19 Adopted	Fiscal Year 2019-20 Preliminary	VARIANCE	Fiscal Year 2020-21	Fiscal Year 2021-22	Fiscal Year 2022-23	Fiscal Year 2023-24
Structure Inspection Program	\$225,000	\$0	(\$225,000)	\$0	\$0	\$225,000	\$225,000
SCADA Replacements	\$426,000	\$121,000	(\$305,000)	\$133,000	\$145,000	\$0	\$0
Remote Monitoring and Communications	\$575,000	\$500,000	(\$75,000)	\$0	\$0	\$0	\$0
Golden Gate Weir #4 Replacement	\$1,646,360	\$0	(\$1,646,360)	\$0	\$0	\$0	\$0
Cypress Canal Weir #4A1 Retrofit	\$400,000	\$1,000,000	\$600,000	\$1,500,000	\$0	\$0	\$0
Cork 1 & 2 and CR951 1 & 2 Electrification	\$1,300,000	\$0	(\$1,300,000)	\$0	\$0	\$0	\$0
I-75/Coco Interconnect	\$500,000	\$0	(\$500,000)	\$0	\$0	\$0	\$0
Canal Improvements	\$0	\$1,200,000	\$1,200,000	\$2,050,000	\$1,800,000	\$2,900,000	\$0
C-1 Connector Canal Control Gate	\$0	\$500,000	\$500,000	\$1,000,000	\$1,000,000	\$0	\$0
Cork 3 Replacement	\$0	\$0	\$0	\$500,000	\$400,000	\$600,000	\$0
I-75-1 Weir Removal	\$0	\$0	\$0	\$200,000	\$1,000,000	\$0	\$0
Faka Union Canal Weir #6 Replacement	\$0	\$0	\$0	\$0	\$0	\$400,000	\$350,000
Faka Union Canal Weir #7 Replacement	\$0	\$0	\$0	\$0	\$0	\$500,000	\$750,000
Golden Gate Canal Weir #5 Replacement	\$0	\$0	\$0	\$0	\$0	\$700,000	\$1,000,000
BCB Capital Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$3,084,346
Total	\$5,072,360	\$3,321,000	(\$1,751,360)	\$5,383,000	\$4,345,000	\$5,325,000	\$5,409,346

Recommended Action

Request direction for the following project adjustments:

- **Move funding to Golden Gate 4 Replacement project budget in the amount of \$186,757 from the Electrification Project, and**
- **Move funding for Henderson Creek 1 land negotiations in the amount of \$150,000 from the Electrification Project.**

Questions?



GG4