

## **Board of County Commissioners**

Regular Meeting
Thursday, December 15, 2016
5:30 P.M.

School Board Administrative Complex



#### ROAD PRIORITIZATION

Kevin Kirby, Assistant County Manager
December 15, 2016



### FIVE YEAR WORK PLAN

| PROJECT NAME                                  | 2016   | 2017            | 2018 | 2019 | 2020 | 2021 |
|---|--|-----------------|------|------|------|------|
| FDOT FUNDED PROJECTS                          |  |                 |      |      |      |      |
| Herlong 1                                     | COMPLETED  |                 |      |      |      |      |
| Herlong 2                                     |  |                 | Q1   |      |      |      |
| Old Wire 3                                    |  | Q1              |      |      |      |      |
| Bell  |  | Q2              |      |      |      |      |
| Real  | Q4   |                 |      |      |      |      |
| Sisters Welcome                               | COMPLETED  |                 |      |      |      |      |
| Suwannee Valley                               | COMPLETED  |                 |      |      |      |      |
| King/Mauldin                                  | The state of the s | Q1              |      |      |      |      |
| Moore Rd                                      |  | Q1              |      |      |      |      |
| CR 241  |  |                 | Q1   |      |      |      |
| Mt Carmel/Troy                                |  |                 | Q1   |      |      |      |
| Callahan                                      |  | Q1              |      |      |      |      |
| CR 242  |  |                 |      | Q1   |      |      |
| Cypress Lake                                  |  |                 |      | Q4   |      |      |
| BND Sidewalk (VossUS90                        |  |                 |      |      |      | Q3   |
| BND Sidewalk (SSSR47)                         |  |                 |      |      |      | Q3   |
| Turner Rd. Sidewalk(US90 to Battlehill Ln.    |  |                 |      |      |      | Q3   |
| COUNTY FUNDED PROJECTS                        |  |                 |      |      |      |      |
| Brim  | Q4   |                 |      |      |      |      |
| Mt Carrie                                     | Q4   |                 |      |      |      |      |
|   |  |                 |      |      |      |      |
| All dates are estimated CONSTRUCTION start, a | nd depend on Right of  | Way Acquisition |      |      |      |      |
|   |  |                 |      |      |      |      |
|   |  |                 |      |      |      |      |
|   |  |                 |      |      |      |      |



#### **FUNDING SOURCES**

FLORIDA DEPARTMENT OF TRANSPORTATION

**SCRAP**—Small County Road Assistance Program

Resurfacing existing roads

Funding 100%

**SCOP**---Small County Outreach Program

Rehabilitation, Widening, Resurfacing, Unpaved

to Paved

Funding 75%



#### **FUNDING SOURCES**

CIGP---County Incentive Grant Program
Relieve Congestion
Funding 50%

TAP---Transportation Alternative Program Part of Local Agency Program (LAP)

**Federal Monies** 

Funds Sidewalks, Trails, Storm Water, etc.

Funding 100%



#### ROAD CLASSIFICATIONS

- ARTERIAL
- COLLECTORMAJORMINOR
- LOCAL



#### ARTERIAL

Large Volumes/Long Distances

Life Span 15 Years

95 Miles in County

Maintain 6 Miles Annually = \$1.477 Million

#### **ARTERIAL ROADS CHART #1**

#### **Arterials**

| Quadrant | Name                      | Туре | Length<br>(FT) | Area<br>(SY) | Length<br>(Miles) |   |
|----------|---------------------------|------|----------------|--------------|-------------------|---|
| SE       | CR 18                     |      | 23971.2        | 59475        | 4.54              |   |
| SW       | CR 18                     |      | 28195.2        | 75187        | 5.34              |   |
| SW       | Tustenuggee (CR 131)      | AVE  | 77088          | 209851       | 14.6              |   |
| SE       | CR 240 (Myrtis)           | RD   | 7444.8         | 16544        | 1.41              |   |
| SW       | CR 240                    |      | 62990.4        | 153977       | 11.93             |   |
| SW       | CR 242                    |      | 30412.8        | 74342        | 5.76              |   |
| sw       | CR 242 A                  |      | 11352          | 27850        | 2.15              |   |
| SE       | CR 245                    |      | 69326.4        | 184870       | 13.13             | · |
| NW       | CR 250                    |      | 61195.2        | 163187       | 11.59             |   |
| SW       | CR 252                    |      | 30412.8        | 74342        | 5.76              |   |
| SE       | CR 252                    |      | 46728          | 122012       | 8.85              |   |
| sw       | CR 252B                   |      | 11246.4        | 29990        | 2.13              |   |
| sw       | Sister's Welcome (CR 341) | RD   | 25344          | 68288        | 4.8               |   |
| SW       | Bascom Norris             | DR   | 14256          | 38016        | 2.7               |   |

499963 1297933 94.69

TOTAL 94.69

**TOTAL \$ \$ 22,163,650.00** 

LIFESPA N (YEARS) 15

TOTAL
COST
PER
YEAR \$ 1,477,576.67



COLLECTOR

Connects arterial and local

Short trips/moderate speeds and volumes

Two Categories—Major/Minor

# MAJOR COLLECTOR ROADS CHART #2

| lajor Collector |                         |            |                       |              |                 |  |
|-----------------|-------------------------|------------|-----------------------|--------------|-----------------|--|
| Quadrant        |                         | Туре       | Loueth                | A            | Laureth         |  |
| ą               | Name                    | _          |                       | Area<br>(SY) | Length          |  |
| SE              | ACADEMIC                | AVE        | (FT)<br><b>5702.4</b> | 12564        | (Miles)<br>1.08 |  |
| SW              | BIRLEY                  | _          | 27561.6               | 61248        | 5.22            |  |
| NW              | BROWN                   | ROA<br>D   |                       | 50336        | 3.9             |  |
| sw              | CALLAHAN                | AVE        | 2904                  | 5808         | 0.55            |  |
| SE              | COUNTRY CLUB<br>(CR133) | ROA<br>D   | 37699.2               | 100531       | 7.14            |  |
| sw              | CR 138                  |            | 34320                 | 91520        | 6.5             |  |
| sw              | CR 238 (ELIM<br>CHURCH) | ROA<br>D   | 45936                 | 122496       | 8.7             |  |
| SW              | CR 778                  |            | 17107.2               | 45619        | 3.24            |  |
|                 | CR 245A                 |            | 10507.2               |              | 1.99            |  |
| NW              | CR 25A                  |            | 16368                 | 43648        | 3.1             |  |
|                 | CR 349                  |            | 28459.2               | 75891        | 5.39            |  |
| NW              | CR 6                    | STR<br>EET | 14784                 | 37781        | 2.8             |  |
| SW              | DYAL                    | AVE        | 5966.4                | 12596        | 1.13            |  |
| NW              | FALLING CREEK           | ROA<br>D   | 34320                 | 78173        | 6.5             |  |
| NE              | GUM SWAMP<br>(CR250)    | ROA<br>D   | 64680                 | 146105       | 12.25           |  |
| sw              | HOPE HENRY              | STR<br>EET | 6600                  | 13200        | 1.25            |  |
| SW              | ICHETUCKNEE             | _          | 27297.6               | 60661        | 5.17            |  |
| sw              | KOONVILLE<br>(CR252A)   | ROA<br>D   | 14784                 | 36139        | 2.8             |  |
| NW              | LASSIE BLACK            | STR<br>EET | 26980.8               | 67692        | 5.11            |  |
| sw              | MARVIN BURNETT          | D          | 3748.8                | 10063        | 0.71            |  |
| NW              | NASH                    | ROA<br>D   | 19588.8               | 54413        | 3.71            |  |
| NW              | NOEGEL (CR 135)         | ע          | 23760                 | 58080        | 4.5             |  |
| NW              | SUWANNEE<br>VALLEY      | ROA<br>D   | 26400                 | 59869        | 5               |  |
| SE              | TIMBERWOLF              | DRI<br>VE  | 6652.8                | 15154        | 1.26            |  |
| NW              | TURNER                  | AVE        |                       | 26975        | 2.09            |  |
| NW              | WHITE SPRINGS           | AVE        | 12144                 | 26987        | 2.3             |  |
|                 |                         |            | 545899                | 1336900      | 103.39          |  |

TOTAL MILES 103.39

TOTAL \$ 24,152,650.00

LIFESP AN (YEARS ) 20

# MINOR COLLECTOR ROADS CHART #3

#### **Minor Collector**

| Quadra |                   |          | Length  |         | Length  |   |
|--------|-------------------|----------|---------|---------|---------|---|
| nt     | Name              | Туре     | (FT)    |         | (Miles) |   |
| SE     | ALFRED MARKHAM    | STR      | 9979.2  | 23284.8 | 1.89    |   |
| sw     | ARLINGTON         | BLV<br>D | 7392    | 17248   | 1.4     |   |
| SW     | ARROWHEAD         | TER      | 4012.8  | 8025.6  | 0.76    |   |
| SW     | BARWICK           | TER      | 5649.6  | 10043.7 | 1.07    |   |
| SW     | BRIM              | STR      | 13728   | 0       | 2.6     |   |
| SW     | CANNON CREEK      | DR       | 5649.6  | 11299.2 | 1.07    |   |
| NW     | COMBS             | TER      | 11140.8 | 25685.7 | 2.11    |   |
| SW     | DEKLE             | TER      | 7920    | 15840   | 1.5     |   |
| SE     | FAMILY            | RD       | 14414.4 | 30430.4 | 2.73    |   |
| SW     | FINLEY LITTLE     | LN       | 5280    | 11733.3 | 1       |   |
| SW     | GODBOLD           | AVE      | 3960    | 8800    | 0.75    |   |
| SW     | HERLONG           | STR      | 32366.4 | 0       | 6.13    |   |
| SW     | HOWELL            | STR      | 10348.8 | 20881.6 | 1.96    |   |
| SW     | JAFUS             | AVE      | 5332.8  | 10665.6 | 1.01    |   |
| SW     | KICKLIGHTER       | RD       | 3643.2  | 7286.4  | 0.69    |   |
| SW     | KING              | AVE      | 14467.2 | 32551.2 | 2.74    |   |
| SW     | KIRBY AVE         | AVE      | 5332.8  | 12146.9 | 1.01    |   |
| NW     | LAKE CITY         | AVE      | 4910.4  | 12003.2 | 0.93    |   |
| NW     | LEONIA            | WAY      | 2217.6  | 5174.4  | 0.42    |   |
| SW     | LITTLE            | RD       | 12724.8 | 28277.3 | 2.41    |   |
| SW     | MAULDIN           | AVE      | 13358.4 | 29685.3 | 2.53    |   |
| NE     | MCCLOSKEY         | AVE      | 17212.8 | 41597.6 | 3.26    |   |
| SW     | MICHIGAN          | STR      | 2059.2  | 4880.3  | 0.39    |   |
| NW     | MOORE             | RD       | 17635.2 | 37229.9 | 3.34    |   |
| SW     | MOUNT CARMEL      | AVE      | 8712    | 18392   | 1.65    |   |
| SW     | NEWARK            | DR       | 15681.6 | 38332.8 | 2.97    |   |
| SW     | OLD WIRE          | RD       | 24288   | 64768   | 4.6     |   |
| SE     | RACETRACK (133 B) | LN       | 5525    | 12277.8 | 1.0     |   |
| SW     | SABRE             | AVE      | 7920    | 17600   | 1.5     |   |
| SW     | THOMPKINS         | LP       | 3062.4  | 7087.8  | 0.58    |   |
| SW     | TOMMY LITES       | STR      | 13780.8 | 33686.4 | 2.61    |   |
| SW     | TROY              | STR      | 8712    | 19360   | 1.65    |   |
| SW     | UPCHURCH          | AVE      | 4224    | 8565.33 | 0.8     |   |
| SW     | WASHINGTON        | AVE      | 5280    | 12906.7 | 1       |   |
| SW     | WESTER            | DR       | 10401.6 | 23114.7 | 1.97    |   |
| SW     | WILSON SPRINGS    | RD       | 20011.2 | 48916.3 | 3.79    |   |
| NW     | WINFIELD          | STR      | 6705.6  | 15206.8 | 1.27    |   |
|        | CR 241            |          | 10982.4 | 21757.4 | 2.08    |   |
| sw     | WALTER            | AVE      | 7920    | 19360   | 1.5     |   |
| SW     | BISHOP            | AVE      | 8606.4  | 22950.4 | 1.63    |   |
| sw     | JUNCTION          | RD       | 8341    | 20389.1 | 1.58    |   |
| NW     | QUEEN             | RD       | 11616   | 25813.3 | 2.2     |   |
|        | CR133b            |          |         | •       |         | • |

412506 835255 78.13 TOTAL MILES

YEAR \$

TOTAL \$ \$ 21,067,721.40

LIFESPA N
(YEARS) 25

TOTA L
COST PER

842,708.86



#### LOCAL CLASSIFICATION

#### LOCAL

Provides initial access to collector and arterial roadways.

325 miles in County

35 year life span

\$2.617 million annually to maintain 11 miles

#### LOCAL ROADS CHART #4

#### Locals

| per Year   |
|------------|
|            |
|            |
|            |
| 177,576.67 |
| 207,632.50 |
| 342,708.86 |
| _          |
| 317,333.73 |
|            |
|            |
|            |
|            |
|            |

TOTAL MILES 600

TOTAL
COST
PER
YEAR \$ 6,145,251.75



 TOTAL NEEDED ANNUALLY TO MAINTAIN CURRENT INVENTOR

\$6.1 MILLION



#### ROAD MAINTENANCE

 LEVELING/RESURFACING (LR) \$185,000/MILE

 MILLING/RESURFACING (MR) \$185,000/MILE

 WIDENING/REBUILDING/RESURFACING (WRR) \$300,000/MILE



#### ROAD ANALYSIS

 PAVEMENT SURFACE EVALUATION RATING SYSTEM (PASER)

 COLUMBIA COUNTY ENGINEERING PAVEMENT ASSESSMENT (CEPA)



#### PASER SYSTEM

 EACH ROAD IS GIVEN A SCORE OF 1-10 UTILIZING 10 DIFFERENT CATEGORIES

– HIGHER SCORE = BETTER CONDITION

| Surface<br>Rating | Visible Distress*   | General Condition/ Treatment Measure                                |
|-------------------|---|---|
| 10<br>Excellent   | None.   | New construction.   |
| 9<br>Excellent    | None.   | Recent overlay. Like new.   |
| 8<br>Very Good    | No longitudinal cracks except reflection of paving joint. Occasional transverse cracks, widely spaced. All cracks sealed or tight.  | Recent sealcoat or new cold mix. Little or no maintenance required. |
| 7<br>Good         | Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks. Transverse cracks, little or slight crack raveling. No patching or very few patches in excellent condition. | First signs of aging. Maintain with routine crack filling.          |

<sup>\*</sup>Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.

| Surface<br>Rating | Visible Distress*   | General Condition/ Treatment Measure   |
|-------------------|---|--|
| 6<br>Good         | Slight raveling and traffic wear.  Longitudinal cracks. First sign of block cracking. Slight to moderate flushing or polishing. Occasional patching in good condition.  | Shows signs of aging. Sound structural condition. Could extend life with sealcoat.         |
| 5<br>Fair         | Moderate to severe raveling. Longitudinal and transverse cracks show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge wedging in good condition. | Surface aging. Sound structural condition.  Needs sealcoat or thin non-structural overlay. |

<sup>\*</sup>Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.

| Surface<br>Rating | Visible Distress*   | General Condition/ Treatment Measure  |
|-------------------|---|---|
| 4<br>Fair         | Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking with wheel path. Block cracking. Patching in fair condition. Slight rutting or distortions.                      | Significant aging and first signs of need of strengthening. Would benefit from a structural overlay.                |
| 3<br>Poor         | Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking. Patches in fair to poor condition. Moderate rutting or distortion. Occasional potholes. | Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay. |

<sup>\*</sup>Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.

| Surface<br>Rating | Visible Distress*   | General Condition/ Treatment Measure   |
|-------------------|---|--|
| 2<br>Very Poor    | Alligator cracking. Severe distortions.  Extensive patching in poor condition.  Potholes. | Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective. |
| 1<br>Failed       | Severe distress with extensive loss of surface integrity.                                 | Failed. Needs total reconstruction   |

<sup>\*</sup>Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.



#### **CEPA SYSTEM**

 EACH ROAD GIVEN A SCORE OF 1-4 ON 18 CATEGORIES

HIGHER NUMBER = WORSE CONDITION



#### CEPA CATEGORIES

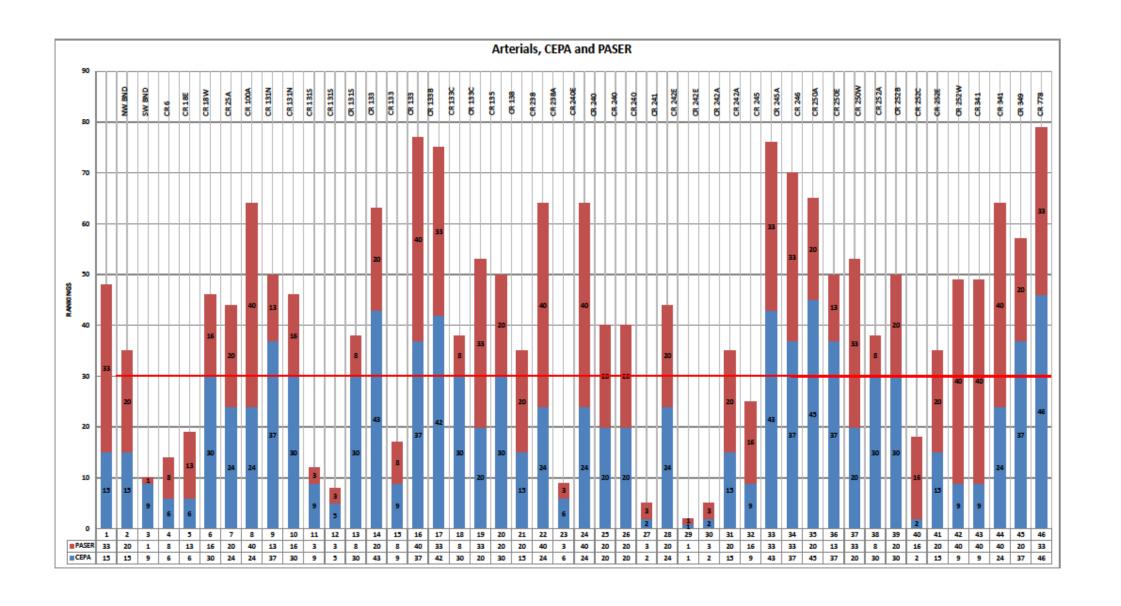
- A. Physical Condition of Paved Road
- B. Estimated Repairs Cost
- C. Right of Way FIELD
- D. Right of Way OFFICE
- E. Asphalt Thickness
- F. Base Thickness
- G. Public Works Asphalt Repair Maintenance Logs
- H. Roadway Travel Lane Widths
- Visual/Observed Possible Dangerous Driving Conditions (Safety Conditions)



#### CEPA CATEGORIES

- J. Accident per Timeframe per Daily Traffic Count
- K. ADT
- L. Classification of Roadway
- M. Through Road/Dead End
- N. Roadway Life Project
- O. Percent of Loss of Accessibility for Emergency Services Response Vehicles
- P. Number of Residents Affected
- Q. Special Areas
- R. Funding Percent from Outside Sources

#### **ARTERIAL ROADS GRAPH #1**

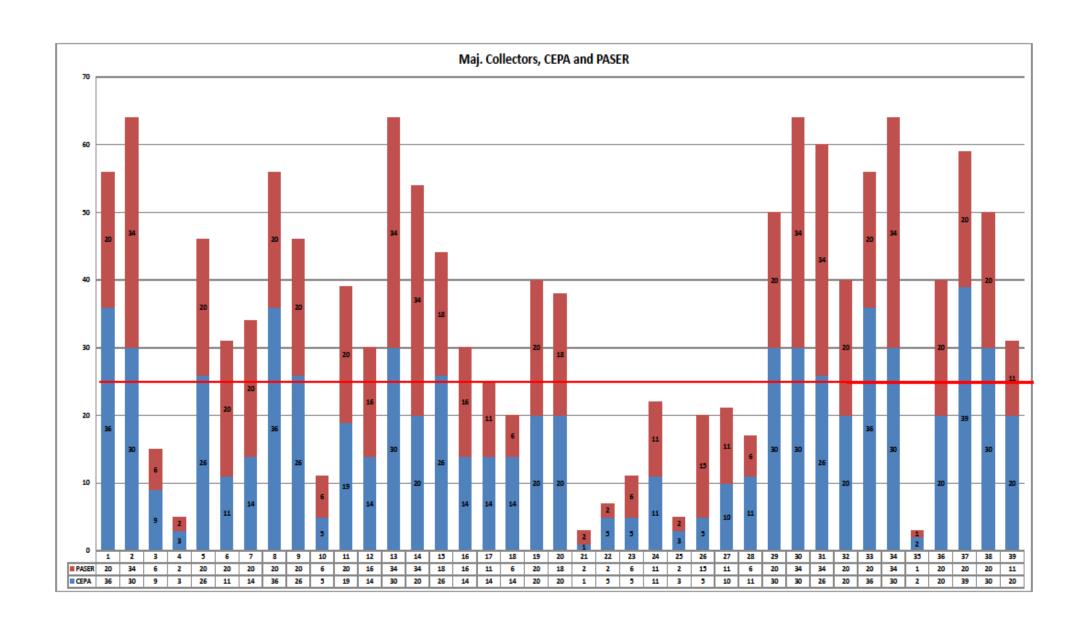




#### ARTERIAL RANKINGS

- CR 242E --- CR 131 TO US 441
- CR 131S --- OLD BELLAMY TO CR 18
- CR 240E --- CR 245 TO COUNTY LINE
- CR 6 --- COUNTY LINE TO US 441
- CR 131S ---CR 242 TO US 441
- CR 18E --- US 441 TO COUNTY LINE
- CR 133 --- CR 252 TO US 90
- CR 252C ----CR 252W TO CR 252B
- CR 18W --- US 27 TO US 441
- CR 245 --- COUNTY LINE TO WASHINGTON

#### **COLLECTOR ROADS GRAPH #2**





## MAJOR COLLECTOR RANKINGS

- SW BIRLEY--- CR 242W TO GABRIEL
- SW ARLINGTON
- NW WINFIELD
- SW KICKLIGHTER ---CR 341 TO CANNON CREEK
- SW BIRLEY --- CR 242W TO CF 252W
- SW BIRLEY--- GABRIEL TO US90
- CANNON CREEK --- KICKLIGHTER TO ARROWHEAD



#### RECOMMENDATIONS

SCRAP
 CR 242E (FROM CR 131 TO US 441)
 NW WINFIELD

SCOP

CR 133 (FROM CR 252 TO US 90)
SW BIRLEY (FROM CR 242W TO CR 252W)



#### RECOMMENDATIONS

CIGP

TOMPKINS ROAD
DAIRY ROAD

TAP

BASCOM NORRIS (VOSS TO US 90)
BASCOM NORRIS (SOUTHSIDE SPORTSCOMPLEX TO SR 47)

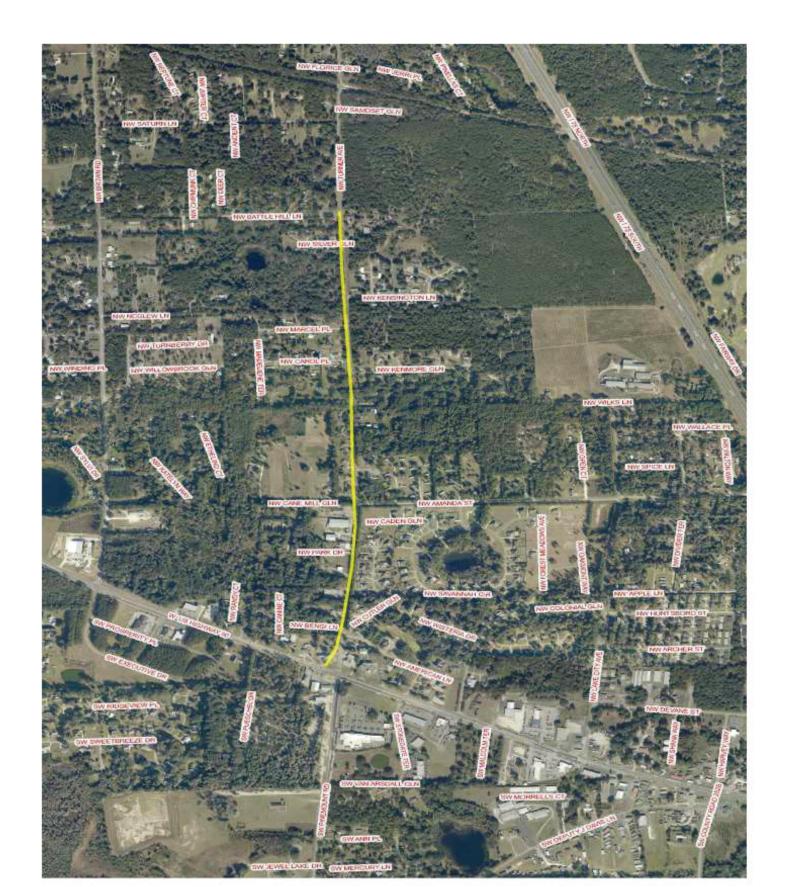
TURNER ROAD (US 90 TO BATTLEHILL)

FT. WHITE COMMUNITY (EXTEND ON SR 47 TO FT. WHITE LIBRARY) \$103,226

FT. WHITE TRAIN DEPOT IMPROVEMENTS (PARKING, LIGHTING, SIDEWALKS) \$108,891



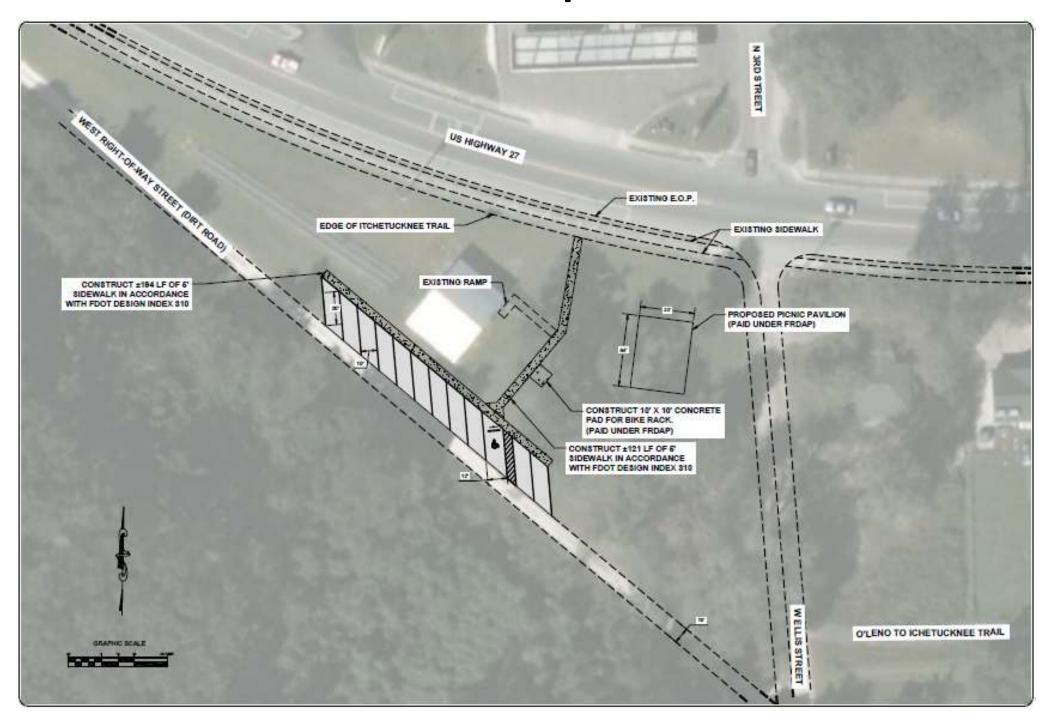




## Ft. White Library



## Train Depot





## **Board of County Commissioners**

Regular Meeting
Thursday, December 15, 2016
5:30 P.M.

School Board Administrative Complex

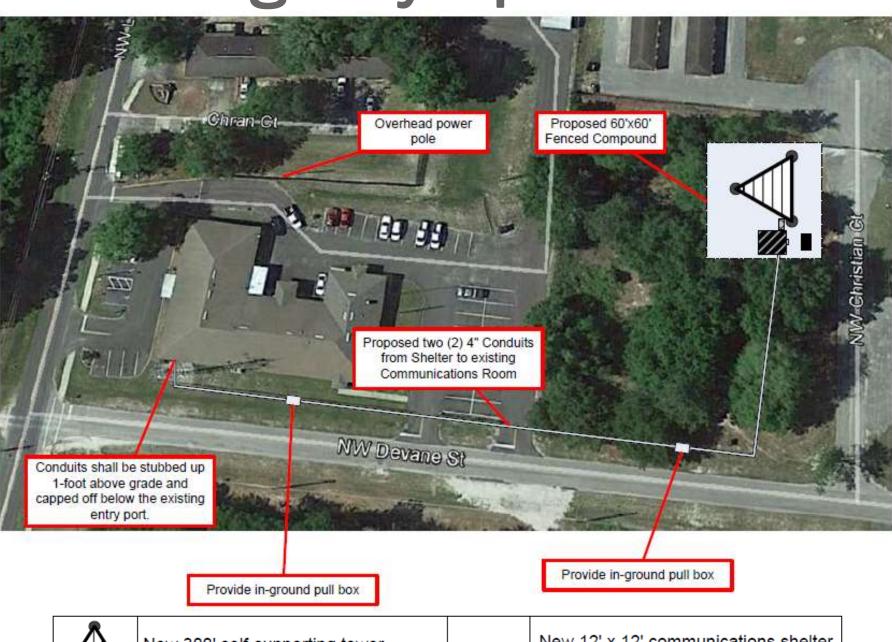


## Motorola Agreement: 2016-R

- Communications Site Development Agreement with Motorola Solutions, Inc. - \$1,277,888.00
- > Three (3) new towers
  - Emergency Operations Center
  - Columbia County Sheriff's Office
  - Deep Creek Fire Department
- New communications shelters and generators for each location and Lulu Fire Department.



## Motorola Agreement: 2016-R Emergency Operations Center



| $ar{I}$  | New 300' self-supporting tower per specifications       | <b>///</b> | New 12' x 12' communications shelter per specifications |
|----------|---|------------|---|
| <b>-</b> | New waveguide ice bridge as required per specifications |            | New diesel generator per specifications                 |



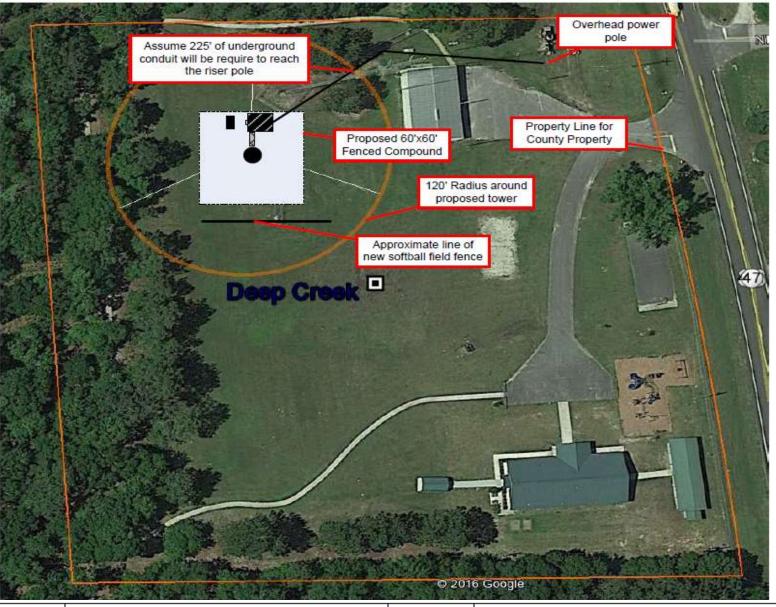
## Motorola Agreement: 2016-R Columbia County Sheriff's Office



|   | New 155 self-supporting tower per specifications        | N | New 12' x 12' communications shelter per specifications |  |
|---|---|---|---|--|
| _ | New waveguide ice bridge as required per specifications |   | New diesel generator per specifications                 |  |



## Motorola Agreement: 2016-R Deep Creek Fire Department



| •        | New 300' guyed tower per specifications                 | <b></b> | New 12' x 12' communications shelter per specifications |
|----------|---|---------|---|
| <b>=</b> | New waveguide ice bridge as required per specifications |         | New diesel generator per specifications                 |



## Motorola Agreement: 2016-R Lulu Fire Department



| •            | Existing 150' monopole tower to remain                  |
|--------------|---|
| -            | New waveguide ice bridge as required per specifications |
| $\mathbb{Z}$ | New 12' x 12' communications shelter per specifications |
|              | New diesel generator per<br>specifications              |



# Motorola Agreement: 2016-R Pricing Summary

Communications Site Development Project
Pricing Worksheet Summary

| Communications Site Development Project Pricing Worksheet Summary |                |  |
|---|----------------|--|
| Site of Work  | Total Costs    |  |
| EOC   | \$414,190.21   |  |
| Deep Creek  | \$380,445.20   |  |
| CCSO  | \$307,861.17   |  |
| Lulu  | \$183,318.41   |  |
| BONDING   | \$3,541.00     |  |
| SUBTOTAL  | \$1,289,355.99 |  |
| Discounts or Trade-Ins  | -\$11,468.00   |  |
| PROJECT TOTAL   | \$1,277,887.99 |  |

\*If Site Development is awarded to Motorola Solutions, Inc., Columbia County will receive a technology credit of \$300,000 for the purchase of our P25 Radio Solution, as well as \$500.00 off every P25 APX radio subscriber purchased.

Motorola Solutions' proposal and pricing is valid 90 days from the date of our response.



# External Budget Amendment BA# 17-18

- Purchase Two (2) Fire Engines: \$297,561.00 each.
- Purchase Two (2) Brush Trucks: approx. \$85,000.00 each.
  - > \$12,500.00 of cost may be funded by Grant from Florida Forestry Service
  - Refurbish Two (2) Tanker Trucks: approx. \$120,000.00 each.

> Total Cost: \$969,122.00