

### **OVERHEAD VS UNDERGROUND**

BARRER ISLANDS, FPL REPORTS & HURRICANE IRMA

### THE TOWN OBTAINED DIRECT FEEDBACK FROM OTHER BARRIER ISLAND COMMUNITIES

JUPITER ISLAND, GOLDEN BEACH, LONG BOAT KEY, JUPITER
 INLET COLONY, BAL HARBOUR, GULFSTREAM

#### COMMON THEMES:

- UNDERGROUND AREAS OF TOWNS DID VERY WELL,
   SOME INCURRED ZERO DOWNTIME
- NO DAMAGE TO GROUND BASED TRANSFORMERS
- NO STORM SURGE AND NO FLOODING
- REMAINING OVERHEAD UTILITIES INCURRED DAMAGED
- DAMAGE ON MAINLAND, OR RESTORATION CAUSE OF OUTAGES

### UNDERGROUND SYSTEMS OUTPERFORM OVERHEAD CONSISTENTLY OVER A 5 YEAR PERIOD.

FROM THE 2015 FP&L COMPANY DISTRIBUTION RELIABILITY REPORT:

- OVERHEAD CUSTOMERS WERE WITHOUT POWER FOR 108.1 MINUTES, COMPARED TO 19.4 MINUTES FOR UNDERGROUND CUSTOMERS.
- OVERHEAD CUSTOMERS HAD 1.35 SERVICE INTERRUPTIONS, COMPARED TO .4 FOR UNDERGROUND CUSTOMERS.
- OUTAGES LASTED 80 MINUTES FOR OVERHEAD CUSTOMERS, COMPARED TO 48.7 FOR UNDERGROUND CUSTOMERS.
- TO COMPLETELY RESOLVE AN OUTAGE, IT TOOK 161 MINUTES FOR AN OVERHEAD SYSTEM, COMPARED TO 205 MINUTES FOR AN UNDERGROUND SYSTEM.

#### FP&L COMMENTS FROM THE 2016 REPORT:

 A REVIEW OF HURRICANE MATTHEW OUTAGE TICKETS FOR FEEDERS AND LATERALS INDICATES THAT UNDERGROUND FACILITIES PERFORMED BETTER THAN OVERHEAD FACILITIES.

# TOWNWIDE UNDERGROUNDING PROJECT SCOPE

- **✓ KIMLEY-HORN**
- CMAR: BURKHARDT & WHITING TURNER
- ✓ NUMEROUS SPECIALTY SUB CONTRACTORS
- ✓ FPL, ATT, COMCAST

- ✓ PUBLIC INFRASTRUCTURE
- ✓ TOWN OF PALM BEACH DEPARTMENTS
- ✓ UUTF. MAYOR AND TOWN COUNCIL
- ✓ NUMEROUS INDIVIDUALS & COMMUNITY GROUPS





#### **CONSTRUCTION – PHASE X – SCHEDULE AT A GLANCE**

#### Construction Impact

- Light
- Medium
- Heavy

- 1. Conduit Installation
- 2. Splice Box Installation
- 3. Set Concrete Pads
- 4. Set Transformers
- 5. Pull Wire/Terminate Primary
- 6. Pull ATT/Comcast Wire, Set Pedestals
- 7. Cut Over / Overhead Removal for ATT & Comcast
- 8. Energize the Underground System
- 9. Demo Overhead / Remove Poles / Final Restoration

Concept, Master Plan, Cost Estimates

Sequencing, Phasing, Data Collection, Surveys, Design Base Map Development, Procurement, Easements

#### **Assessments**

- As of September 15, 2017, <u>11%</u> of Town-wide assessable parcels elected to prepay w/\$10,237,460 collected. Adding in the Town's payment of \$2,797,291 totals <u>\$13,034,751</u> in prepaid assessments.
- Residents interested in prepaying an assessment can do so up until the Town issues long term general obligation bonds to finance the project.

#### **Project Schedule and Budget**

- 4.0% overall project budget expended.
  - 16.4% of overall project design is complete (Phases 1&2 of 8).
  - Phase 1 North Construction is <u>16%</u> complete.
  - Phase 1 South Construction is <u>18%</u> complete.
- Despite Irma, CMARs report Phase 1 of the project remains on schedule with no incurred costs due to the storm.

#### Phase 1 North Construction (Onondaga Avenue to the Palm Beach Inlet)

- North construction is <u>16%</u> complete and on schedule.
- Burkhardt Construction continues Horizontal Directional Drilling (HDD) for conduit placement on North Ocean and on Onondaga. This activity began in August and will continue through remainder of November.
- While not part of the Undergrounding project, Public Works Water Main replacement proceeding in parallel, ex: N. Ocean & Debra Ln.

#### Phase 1 South Construction (Sloan's Curve to the south town limit)

- South construction is <u>18%</u> complete and on schedule.
- Whiting Turner Construction continues with numerous water main deflections along South Ocean Boulevard.
- FPL feeder and primary conduit installations in progress from the Town's southern limits proceeding North to Sloan's curve.
- Ibis Isle FPL, Comcast and ATT conduit installed.

Phase 2 Design (Onondaga South to Ocean Terrace; Sloan's Curve to the bend of S. County Road/S. Ocean Blvd in the South.)

- North & South design are each 31% complete and on schedule.
  - Boundary surveys completed.
  - Kimley-Horn submitted Phase 2 base map design to FPL.
  - FPL design in progress.
- Next Step > The Town is asking property owners to volunteer easements in support of the project.

#### **Peer Review**

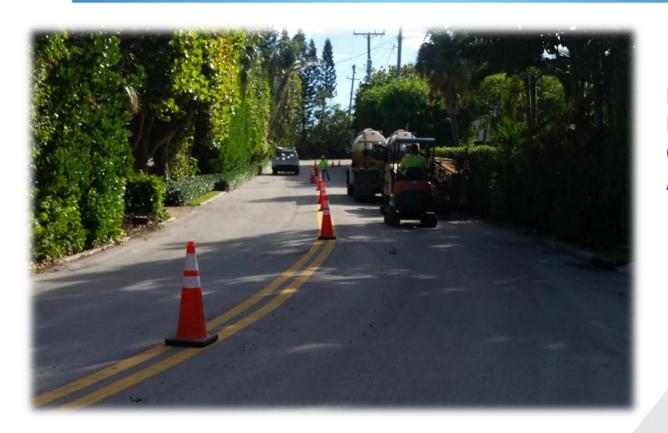
- The Peer Review of the Underground Utilities Master Plan:
  - Draft review in progress with final presentation scheduled for the December 12<sup>th</sup> Town Council.

# PHASE 1 NORTH



# UNDERGROUNDING OF UTILITIES PROJECT PHASE 1 NORTH





Horizontal Directional Drilling operation at N. Ocean and Onondaga Ave.





# UNDERGROUNDING OF UTILITIES PROJECT PHASE 1 NORTH







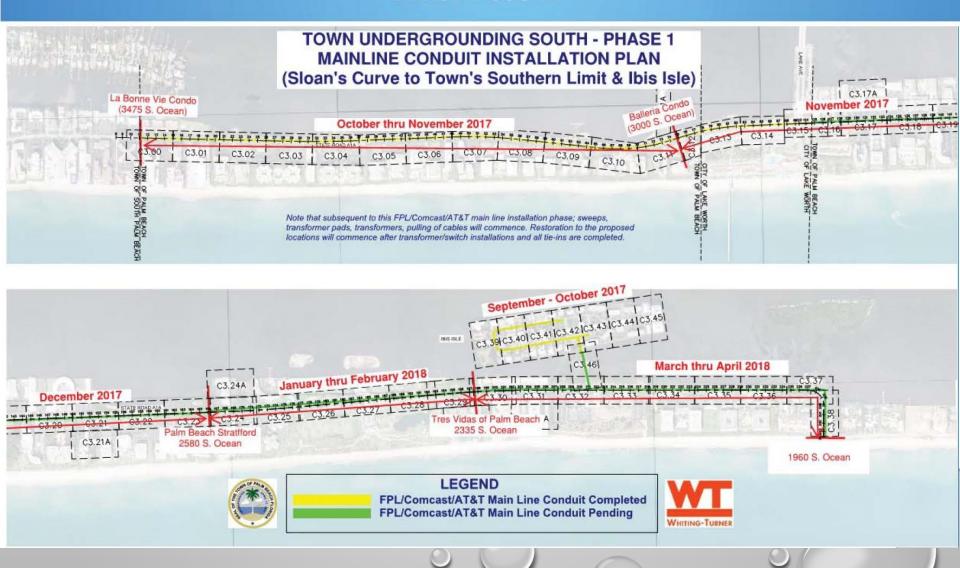
Public Works Project - Water Main installation along North Ocean Blvd. at East Inlet Dr.





# PHASE 1 SOUTH

# UNDERGROUNDING OF UTILITIES PROJECT PHASE 1 SOUTH



#### **Outreach and Communications**

- Residents have participated in a series of monthly recurring community meetings with the construction crews to remain updated on the project.
- Project website provides updated information and important contacts.
  - http://undergrounding.info/connect/
  - Opt in for eMail updates on the website or leave a business card

