2016 AASHTO Right of Way, Utilities, Outdoor Advertising Control & National Alliance of Highway Beautification Agencies Conference

Sunday, May 1–Thursday, May 5
Rosen Centre Hotel
Orlando, Florida
Innovations in Utility Relocations- Case Studies in Cost and Time Savings

Janice Sands Ash, P.E.
President

The Ash Group, Inc.

► 2016 AASHTO ROWUOAC & NAHBA Conference
Joint Utility Trench Projects (JUT)
- US 41 (951 to Greenway)
- The Links

Joint Utility Bores
- Allen’s Creek
- Matlache Pass
- Gasparilla Island Bridge
REQUIREMENTS FOR SUCCESS

- Limited ROW
- Willing Parties
- Flexible Contracting Arrangements
- Champion UAO
Design Shared Costs

- Due Diligence and Investigation (Shared Cost)
- Client Meeting Time (Shared Cost)
- Design, Permitting, Survey (Shared Cost)
- Submittal of Permitting Applications (Shared Cost)
- Pre-Application (ERP) Meetings (Shared Cost)
- Follow Up Project Management (Shared Cost)
Construction Shared Costs

- Staging Area Costs (Shared Cost)
- Deployment of Equipment (Shared Cost)
- Deployment of Material (Shared Cost)
- Inspector on Site (Shared Cost)
- Set Up and Pilot Bore (Shared Cost)
- Material (Utility Owners Cost)
- Restoration and Removal (Shared Cost)
- Final Survey and As-Builts (Shared Cost)
Shared Costs = Cost Savings

Conduit & Vault Installation One Contractor (Shared Cost)

Construction Inspection Observation (Shared Cost)

Directional Bores & Open Trenching (Shared Cost)

Project Management Invoicing (Shared Cost)

Total Footage “X” # of Conduits & Size (Percentage)

ERP & FDOT Permitting As-builts (Shared Cost)

Material Procurement (UAO Cost)
JOINT UTILITY TRENCH (JUT) PROCESS
Coordinating with UAO’s Involved in “JUT”
JUT Design and Project Milestones
UAO Lead/Joint Trench Agreements
Common Understanding of Services Lines
JUT Design Examples and Elements
Coordination, Cooperation & Communication
(US-41) from E. of SR-951 to E. of Greenway Rd.

- 3.5 mile project 6 lanes for 2.7 miles 4 Lanes 2 Lanes
- Design Elements Drainage Gravity/Sound Walls Bridge Reconstruction Shared Multi-Use Path Box Culvert Extension/Replacement
- Project Started Design Bid Build
- Original Drainage Included French Drain System

- CenturyLink – Lead UAO
- Comcast Cable
- CenturyLink/Qwest
- Marco Island Cable/Summit-Broadband
- The District School Board of Collier County.
- FPL at Henderson Creek Bore
Typical Phase II X-Section
Typical JUT Cross-Section
(US-41) from E. of SR-951 to E. of Greenway Rd.

- 6 Utilities
- Design and Permitting Cost Savings
  - 65%
- Construction Cost Savings
  - 75%
- Time Savings
  - 1 year

- CenturyLink – Lead UAO
- Comcast Cable
- CenturyLink/Qwest
- Marco Island Cable/Summit-Broadband
- The District School Board of Collier County.
- FPL at Henderson Creek Bore
The Links

- 1.3 miles Relocation of utilities
  - western corridor
  - Courtney Campbell Causeway
  - Tampa International Airport
- Relocations completed prior to FDOT NTP
- Minimize Risk of utility damage during FDOT construction
- 8 foot Corridor
The Links

- TECO/ Peoples Gas
- Bright House Networks, Inc.
- TECO Energy
- Verizon
- Tampa Water/Wastewater Department

10 UTILITIES TOTAL
The Links  Cost and Time Savings

- Design  
  - 45%
- Permitting  
  - 80%
- Construction  
  - 70%
- Time Saving  
  - 2 years

- FHWA Award for Utility Innovations

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Joint Utility Subaqueous Bores

Clearwater, Pinellas County
US Hwy 19 at Allen’s Creek

Six Utility Owners:
- Duke Energy
- Bright House Networks
- Verizon
- Knology
- Level 3 Communication
- FPL FiberNet

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Allen’s Creek Joint Utility Bore

- 1,001 Linear Feet, 103 Feet Below Allen’s Creek
- Nine Conduits – (4) 8” HDPE, (5) 6” HDPE
- Tight Corridor Below Proposed Bridge Pilings
Matlacha Bridge Replacement

Matlacha, Lee County
CR-78 (Pine Island Rd)
Bridge Replacement

Three Utility Owners:
- CenturyLink
- Comcast
- Lee County Electric Cooperative

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Matlacha Joint Utility Bore

- 1,193 Linear Feet long, 111 feet beneath Matlacha Pass
- Three conduits – (2) 6” HDPE, and 8” HDPE
- Matlacha Pass National Wildlife Refuge & Aquatic Preserve

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Boca Grande Joint Utility Bores

Placida, Charlotte County Business \nBoca Grande Causeway at Gasparilla Sound

Two Utility Owners
Three Separate Bores:

- CenturyLink
- Comcast
Boca Grande JUB (South Bridge)

- 995 Linear Feet long, 66 feet beneath Gasparilla Sound
- Two conduits – (2) 6” HDPE
- Gasparilla Island Bridge Authority

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Boca Grande JUB (Middle Bridge)

- 1,092 Linear Feet long, 63 feet beneath Gasparilla Sound
- Two conduits – (2) 6” HDPE
- Gasparilla Island Bridge Authority
Boca Grande JUB (North Bridge)

- 1,220 Linear Feet long, 68 feet beneath Gasparilla Sound
- Two conduits – (2) 6” HDPE
- Gasparilla Island Bridge Authority
Utility Owners Who Have Benefited in Joint Utility Bores With Shared Costs

- Progress Energy
- BrightHouse Networks
- CenturyLink
- Verizon
- TECO-Peoples Gas
- Comcast
- Level Three Communications
- Knology
- FPL FiberNet
- Lee County Electric Cooperative
Questions
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THANK YOU!

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