UTILITY COORDINATION BEST PRACTICES – Interactive State Comparison Forum

YOUR SPEAKERS

Mark Pitchford – Maser Consulting, PA
Director, National GeoSpatial Services
(727) 348-3906
mpitchford@maserconsulting.com

Robert Memory – Amec Foster Wheeler
Utilities Coordination Manager
(919) 765-0078
robert.memory@amecfw.com

Moderator: Guy Rezendes – Massachusetts DOT
State Utility Engineer
(857)368-9489
guy.rezendes@state.ma.us
To make this session successful, we want your input

- What works in your state?

- Sign-in sheet
What is Utility Coordination Best Practices?

Managing Utility Conflicts to Achieve the 3 C’s:

1. Communication
2. Coordination
3. Cooperation

“TRB’s second Strategic Highway Research Program (SHARP 2) – Renewal Project R15B: Identification of Utility Conflicts and Solutions Projects, which explored best practices on the use of utility conflict matrices (UCM), developed training materials and implementation guidelines on concept.”
What is Utility Coordination Best Practices?

- Managing Utility Conflicts to Achieve the 3 C’s
- Relocate conflicting utilities prior to construction
- The use of Subsurface Utility Engineering (SUE)
- Recognize the importance of long-range highway/utility coordination
- Involve utility companies in the design phase of highway projects
Utility Coordination...where is S.U.E.?

• Is your state DOT centralized or de-centralized?
  • Centralized –
    • Location Survey?
    • Utilities?
    • Highway/Road Design?
  • De-centralized –
    • Is there consistency from region to region?
    • Who dictates policy for utilities?
    • Does anyone measure construction cost over runs?
    • Rural Regions/Districts vs. Urban Regions/Districts, is there a difference?
Utility Coordination...got conflicts?

• The discipline of subsurface utility engineering has been around since the 1980’s
• Because ASCE 38-02 exists, every professional engineer impacting the underground with their design, should follow best practices
• If your DOT is resolving utility conflicts without using subsurface utility engineering, your not using best practices.
• Without the implementation of a subsurface utility engineering process, conflict resolution will yield less than expected positive results
Utility Coordination...reduce costs?

• Data provides information and information is king, therefore, if Utility Coordinators had the benefit of accurate utility information collected using a rigorous subsurface utility engineering process, they would be kings!

• Imagine resolving conflicts with road designers and utility representatives using intellectually superior information.
  • Would time for resolving utility disputes be reduced?
  • Would we have more cooperation between stakeholders?
  • Would we reduce redundant and excessive communication?

• Why wouldn’t we all adopt a new fresh look at what utility engineering is all about?
Utility Engineering Best Practices?

• Why not create a department within DOT’s called Utilities Engineering?
  • Manage new utility installation in right of ways
  • Manage permitting, removal and new construction
  • Manage utility design
  • Manage utility coordination
  • Manage subsurface utility engineering

• What is Best Practices anyways?
Right of Way and Utilities Guidelines and Best Practices
This manual, *Avoiding Utility Relocations*, was prepared for the Federal Highway Administration (FHWA) in accordance with Research Development and Technology Transfer Order DTFH61-01-P-00237, pursuant to recommendations in 2000 by the AASHTO Highway Subcommittee on Right of Way and Utilities and by the AASHTO/FHWA European Scanning Team on Right of Way and Utilities.
OTHER SOURCES

• The Anatomy of Utility Coordination
• Identification of Utility Conflicts and Solutions
• Utility Coordination Scoping Project
• Best Practice in Utility Conflicts Management – Texas A&M
• Guideline for the Coordination of Utility Relocation Flow Chart
• Utility Coordination for Capital Improvements
• A Survey of Utility Coordination Practices in the Toronto Area
• Practices for Utility Coordination in Transit Projects
• EUROPEAN RIGHT-of-WAY and UTILITIES BEST PRACTICES
• ASCE Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data
We all have challenges “SNAFU”

- Lack of resources
- Utility Companies won’t stick to commitments
- Not enough time allotted to meet construction schedules
- The unknowns
- Lack of upfront planning during design phase
- Not committed to using SUE (DON’T UTILIZE INFORMATION PROVIDED BY SUE INVESTIGATION)
- Can’t purchase R/W for utilities (R/W delays by Utility Co.)
- Permits
- Lack of communication between utility companies
- Lack of communication within state DOT internal units
- No Consistency
- State DOT approach is to relocate all utilities during construction
- Just to busy to busy to deal with it.................................
Solutions Can Backfire

• We already know the DOT’s have problems challenges, lets work toward solutions to correct the problems. Are do we really know the problems?

• Throwing solutions at a problem when you haven’t defined the root of the problem will not correct the problem. Before you can develop and implement “Best Practices,” define the problems to implement solutions.
What is a defined Problem?

Nuclear Power Plan

Raccoon

2017 ROWUOAC Conference
How Do We Implement Best Practices?

- If it works, *don’t reinvent the wheel*
- Have a plan
- Develop a written defined Process for your state
- Don’t be hesitant to change - “That’s the way we’ve always done it……Really? Yep! It isn’t (ain’t) working….”
- Be the leader, take ownership, be the change
- Implement the current best practices and define the process into your program.
- Share information (what worked, delays & mistakes)
SEE HANDOUTS

Define the written process

- UTILITIES UNIT TIP PROJECT PROCESS (R, U, HIGH IMPACT BRIDGE)

- UTILITIES ANALYSIS AND ROUTING REPORT (final)
A schedule should be determined in this Conference that will clear the conflicts prior to the contract availability date or contract completion date as reflected in the highway project proposal scope of work. After a schedule has been determined, you should diligently pursue clearing the conflict and adhering to your schedule in order not to impact the highway construction project. COMPANY NAME has indicated **DATE** will be their start date and their facilities will be relocated by no later than **DATE**.
It is crucial that your company relocate the conflicting facilities in accordance with your relocation schedule as provided to the Department. Failing to meet your relocation deadline will be a direct contributing factor to delaying the subject project. In addition, if you are relocating facilities during the highway construction phase, any delays to your relocation schedule will delay the highway contractor. Under these conditions, the highway contractor is subject to file a delay claim against the Department for time and idle equipment. These types of claims can be monetary in damage and significantly increase the construction cost to the department.
The Weeds of the 3 C’s

Communication

Coordination

Cooperation

2017 ROWUOAC Conference
What is the 4th C?
That’s All Folks!

2017 ROWUOAC Conference
CONTACT INFORMATION

Mark Pitchford – Maser Consulting, PA
Director, National GeoSpatial Services
(727) 348-3906
mpitchford@maserconsulting.com

Robert Memory – Amec Foster Wheeler
Utilities Coordination Manager
(919) 765-0078
robert.memory@amecfw.com

Guy Rezendes – Massachusetts DOT
State Utility Engineer
(857) 368-9489
guy.rezendes@state.ma.us