Use of the SLIDE Method forPreparing ConstructabilityReviews for ITS Projects

Presented October 14, 2014 atITSNJ’s Annual Meeting
A constructability review is a process to determine if a project can be constructed as designed with the information provided on the drawings and specifications and in accordance with established codes and practices.
DIFFERENCE:

Construction issues – conditions or circumstances that need to be addressed in order to achieve the design intent or functionality

Constructability issues – conditions or circumstances that prevent the original design intent or layout from being achieved
Construction vs Constructability Issues

**Construction**
- Soil properties for foundations needed
- Placement and installation of video detection
- Installation of cables in existing conduit
- New conduit runs into existing junction boxes

**Constructability**
- Unsuitable soil properties for foundations needed
- Placement of video detection is too close to overhead utilities
- Installation of cables exceeds maximum allowable
- New conduit runs to existing JB’s exceeds maximum allowable
SLIDE is an Acronym for:

• Survey
• Layout
• Inspect
• Decide
• Evaluate
Intended Use

• Projects re-using existing infrastructure
• Little or no geometric changes
• Majority of the existing signal layout retained
• Performed at the end or near final design completion
• To be a supplement to NJDOT’s Limited Scope Project Delivery Process Approach
• Help in identifying recurring themes that may arise during the design process
SURVEY

Examples:
1) Inventory of existing equipment/hardware
2) Location of equipment/hardware
3) Existing conduit layout and size
4) Overhead and underground utilities
5) Trees
6) Soil conditions
LAYOUT

Examples:
1) Placement of video and other detection
2) Placement of communication equipment
3) Line of sight
4) Existing or proposed conditions that could impact installation
5) Right-of-way or access issues
Examples:

1) Modifications to existing controller cabinets
2) Compliance with NEC, OSHA, NESC, and other standards
3) Underlying operational or maintenance issues that may impact the ability to construct the project
Examples:
1) Are modifications are needed to the original design?
2) What additional information is needed?
3) What needs to be augmented?
4) What needs to be supplemented?
**EVALUATE**

**Examples:**

1) Pay items – standard and special
2) Specifications
3) Construction schedule
4) Lead time for procurement of equipment
5) Determine if the project can be built or are modifications needed?
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