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MEMORANDUM # 1

TO: Florida Greenbook, Chapter 11 Update Subcommittee members

FROM: Allen Schrumpf, Chairman

SUBJECT: Assessment of AWS proposed issues of concern

I have reviewed the MUTCD in greater detail, and have evaluated the extent of the MUTCD coverage on these issues previously identified by me, to determine if any language changes in the Florida Greenbook are still warranted.

OBJECTIVES (this is the heading in the current Greenbook)

 Should an additional objective to limit serious congestion on the facility be added?
 THIS IS INTENDED TO ACHIEVE CONSISTENCY WITH THE LATEST FHWA
 DIRECTION (Transportation Management Plan now includes three (3) components Temporary Traffic Control Plan + Traffic Operations Plan + Community Awareness
 Plan)

Assessment: YES - Text to be added as needed. Chapter 11 must conform to current MUTCD.

- 2. Should an additional objective to limit impacts to transit, commercial deliveries to adjacent property and emergency vehicle operation be added?

 **Assessment: NO Provisions are already covered in MUTCD. See 6C.01.
- 3. Should the objective to maintain safe passageways for pedestrians in the work zone be modified to require ADA compliance?

 Assessment: NO This is already covered in Section 6B.01 and also in several other areas in Part 6.

PLANNING OF OPERATIONS (specifically the section on Traffic Control and Protection)

- 1. Should the plan include consideration to include buffer spaces in front of the work zone and in front of barriers? What about attenuators on barrier ends?

 Assessment: NO The MUTCD discussion on 6C.06 Activity Area defined the issue as Support, hence no indication of requirement. Attenuators on barrier wall ends is already covered in 6F.01 (Support).
- 2. Should the plan include consideration of protecting dropoffs within the clear zone?

 Assessment: NO The MUTCD discussion on 6C.06 Activity Area defined the issue as Support, hence no indication of requirement.
- 3. Should the plan include Access to the WORK ZONE (by construction vehicles)?

 Assessment: YES The MUTCD seems to be concerned about both of these issues, but offers no firm guidance. This is probably a good idea to better define what is intended by the word "Access". Add more language to establish the intent of this item to be for BOTH issues of Work Zone Access (by construction vehicles) and to ADJACENT PROPERTIES.

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4. Should the plan include Access to ADJACENT PROPERTIES? The current reference seems too vague as to what "Access" refers to.

Assessment: YES - The MUTCD seems to be concerned about both of these issues, but offers no firm guidance. This is probably a good idea to better define what is intended by the word "Access". Add more language to establish the intent of this item to be for BOTH issues of Work Zone Access (by construction vehicles) and to ADJACENT PROPERTIES.

WORK ZONE OPERATIONS (specifically the section on Contracts and Permits)

1. Should the second paragraph be amended to require that ANY work effort be PRECEDED by the development/selection of a plan? Assessment: NO – The Greenbook Chapter 11.D. PLANNING OF OPERATIONS already covers this issue.

EVALUATION

1. Should the text refer to "Utility" as well as Construction and Maintenance operations? I know some Utilities (Progress Energy and FPL are the best examples) are under the UAM, but there are so many utilities that may not be under it, because they subcontract so much of their field work.

Assessment: YES - The current UAM only applies to FDOT right of way. See second paragraph of current UAM's Preface.

- 1. Should accordance with FDOT Policy? MUTCD now requires training, but does not specify methods. Perhaps FDOT's training is best here. Should we add a requirement that all TCP planning and TCP field personnel be trained in WZTC?

 Assessment: NO The MUTCD Section 6B.01 (near bottom of page 6B-2) already covers the need for training, and it is described verbally as being essentially the same as FDOT's criteria.
- 2. Do we need to require (or suggest) all individual pay items for all projects?

 **Assessment: NO The MUTCD is silent on this issue.
- 3. Do we need to require all roadsides to be "crashworthy". By this I mean adding language to require NCHRP Category 4 Devices (Advance Warning Arrow Panels, etc.) to be moved behind barrier or beyond the Clear Zone).

 Assessment: NO The MUTCD already covers this issue. See 6F.01, "Support" section.
- 4. Do we need to require ANSI Class II apparel (or Class III for Flaggers at night). Also, do we need to require materials, equipment and clothing to be reflectorized if used at night?
 - Assessment: NO The MUTCD already covers this issue. See Section 6D.03, and 6E.02 (for Flaggers at night).

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- 5. Do we need to require permanent warning signs installed at 7' height in areas where pedestrian traffic occurs, 5' where pedestrians are not likely.

 Assessment: NO The MUTCD already covers this issue. See 6F.03.
- 6. What about requiring warning lights on the traffic side of the sign?

 Assessment: NO The MUTCD does not address this issue. Most equipment manufactured is already appropriate. Probably not enough of an issue.
- 7. Do we need to add a requirement to have warning signs sizes and advance distance a function of speeds on high speed facilities? MUTCD allows 24" x 24"& 100' on very low speed roads, 36" x 36" on moderate facilities, and 48" x 48" & 1000' on high speed facilities.

Assessment: NO – The MUTCD already covers this issue. Sizes are in Table 6F-1.

- 8. Do we need to address the concern that posts be able to endure the severe weather that can be expected (FDOT standards require stronger post installations, and due to deeper embedment, more utility conflicts are anticipated).
 - Assessment: NO The MUTCD does not address this issue, and it is too new and still evolving or undergoing more discussion through FDOT now.
- 9. Do we need to add a requirement for dimming certain devices at night?

 Assessment: NO The MUTCD already covers this issue. See 6F.55 (for PCMS units
- 10. Do we need to add a requirement that Portable Changeable Message Sign messages be stated in the plans?

Assessment: YES – Simply adding the requirements to have the messages included in the plans seems like a "No Extra Cost" issue, and would lead to more consistent messages in all TTCZ.

- 11. Do we need to add a requirement that Arrow Panels in the Arrow are ONLY to be used for Lane Closures on a multilane facility, with a separate panel for each lane closed?
 - Assessment: YES Although implied in MUTCD (6F.56), some use of Arrow Panels in Arrow Mode for lane shifts is still apparent. For the consistency of all TTCZ, Adding the requirement seems like a "No Extra Cost" issue, and would lead to more consistent TTCZ.
- 12. NEW ITEM Should language be added to the Greenbook, "Introduction" section of Chapter 11 to reflect the intent of the MUTCD categories of uses of the terms "Standards" = Requirements and "Guidance" = Recommended unless engineering judgement overrides it?

Assessment: YES – The language in the MUTCD is clear, but it is needed to define how closely we intend the FDOT Greenbook to follow the MUTCD. In particular, how much is needed in the form of documentation when a TTCP varies from the "Guidance" criteria in the MUTCD?

END OF MEMORANDUM