FREQUENTLY ASKED WORK ZONE QUESTIONS

MAINTENANCE OF TRAFFIC (MOT)

1. Where do I get a copy of the Work Zone accident forms?
2. How are copies of the temporary traffic control typical applications obtained?
3. Is there a standard for installing Category I, II, and III devices in accordance with NCHRP Report 350?
4. What are the NCHRP Report 350 requirements on construction projects? Where do I get information on NCHRP Report 350?
5. Are water-filled barriers approved for use?
6. What products are approved for use on state maintained highways?
7. How are general construction and materials specifications determined for projects?
8. How does a contractor determine what traffic control plan to use for a specific project?
9. How are requests made to deploy Maryland State Highway Patrol (MSP) personnel for work zone enforcement?
10. What is the clear zone? How far off the roadway is an object or material no longer considered a hazard for work zone and permanent conditions?
11. For the 4:1 slope related to protecting travel ways, is there a level lateral distance from the travel edge to the drop-off or does the slope begin at the travel edge?
12. What happens when traffic control devices are damaged within the work zone?
13. Do tow truck workers operate on highways in conjunction with work zones? Are there any references in the MUTCD to “towers” along the highway?
14. What is the Maryland SHA policy on work zone speed limit reductions?
15. What is the difference between “posted speed” and “prevailing speed”?
16. What can I do if I am involved in a crash within a work zone along a State Highway?
17. When is it necessary to file a traffic control plan? Is it based on time involved, type of roadway, degree of traffic or a combination?
18. Where is the need for a traffic control plan stated in the specifications and standards?
19. When (in what cases) must the traffic control plan be submitted? What about emergencies, (i.e., to restore service to a hospital or other public service facility)?
20. Are there occasions when commercial vehicle traffic is restricted in/for certain travel lanes within work zones on interstates roadways? Does Maryland have any laws in effect to regulate the flow of traffic on interstate roads?

21. Does the standard for the placement of truck mounted or trailer-truck mounted attenuators (TMA/TTMAs) on expressways/freeways need to be changed if the posted speed is reduced because of a work zone?

22. Where TMAs/TTMAs are required for the installation/removal of traffic control devices (on facilities where the posted speed is ≥ 55) and the posted speed is reduced to reflect work zone conditions, are TMAs/TTMAs still required during installation/removal?

23. Can SHA enforce Contractor's personnel to comply with the CID Directive on Personal Protective Equipment (PPE)?

24. What kind of vest must highway workers wear?

25. Do the higher fines for speeding infractions within work zones apply if no work is underway?

TEMPORARY CONCRETE TRAFFIC BARRIER FOR MOT

26. Is it permissible to install concrete barrier along the roadway and protect the blunt end of the tangent section with crash barrels?

27. What concrete barrier is acceptable for use?

28. What barrier clamps are approved for use when mounting signs on concrete barriers?

29. What barrier joints/connection devices are permitted for use in connecting concrete barriers in the State of Maryland?

30. Does the SHA permit the installation of object markers on the tapered section of temporary concrete barrier?

31. Can excavations of greater than five inches be conducted along two-lane, two-way roadways (flagging operation) without the installation of temporary concrete barrier?

ARROW PANEL

32. Can an arrow panel be mounted on the top of a truck or other vehicle?

33. Is it acceptable to display the sequential arrow on arrow panels installed along state-maintained highways? What about the sequential chevron?

TEMPORARY TRAFFIC SIGNS

34. Which portable signs (composite aluminum or roll up) and sign stands may be used on a construction project?

35. What types of signs are acceptable to use for permanent work zones along Maryland State highways?

36. At what height should permanent signs be mounted?

37. At what height should portable signs be mounted?

38. Is it permissible to use sandbags to secure portable signs? How many sandbags may be used?

39. Can aluminum signs be used on portable sign stands? Is there a requirement on the type of reflectivity required for permanent-mounted aluminum signs?

40. Can signs be erected on concrete barriers in medians? Is there another method of installing permanent or temporary signs in areas where no median or shoulder exists?

41. How long can a work zone be in place before permanent signs are used?

42. Can signs remain exposed when no work is in progress?

43. What is the appropriate material used for covering signs when they are not in use?

44. What portable signs stands are permitted for use in Maryland work zones?

TEMPORARY CRASH CUSHION SAND FILLED PLASTIC BARRELS

45. What should the end barrier marker look like when installed on the lead crash cushion?

TEMPORARY PAVEMENT MARKINGS

46. Is there a time limit between when temporary markings are installed and when permanent markings must be installed?

47. Are “UNMARKED PAVEMENT” signs necessary for nighttime operations, where the center and lane lines are in place?

48. Are reduced dimension, lane markings permitted on state highways?

DRUMS FOR MOT

49. Can any type of drums be used for Maryland traffic control set-ups?
50. What is the correct lateral spacing of drums with regard to the edgeline for typical snow operations?

BARRICADES FOR MOT

51. Should warning lights and devices be provided on barricades for temporary closures associated with work zones?

CONES FOR MOT

52. Must cones with reflective striping be used at all times in work zones?
53. What are the dimensions of cones used in the State of Maryland?
54. What spacing would be used for the deployment of cones and/or drums in work areas?

FLAGGER

55. How do I become a trainer of flaggers?
56. What should be done for flaggers who have been properly trained, yet continue to use improper flagging technique?
57. What is the required handle height for the stop/slow paddle from the bottom of the sign to the ground?
58. Can a flagger be deployed in the work zone without a flagger's card?
59. Must a flagger deployed in Maryland work zones speak English?
60. Can flaggers with handicaps be deployed in Maryland work zones?
61. Can a flagger use a red or orange flag instead of a stop-slow paddle during work zone operations?

TRAFFIC MANAGER

62. How do I become a properly trained flagger or traffic manager?
63. How often are the Temporary Traffic Control Traffic Manager's courses offered?
64. How are copies of the Traffic Manager's Training Course Manual obtained?
65. Why must all highway construction crew leaders receive proper Traffic Manager training?
66. How is information on the Traffic Manager's Course obtained?
67. What happens if I do not pass the test for Traffic Manager's or Flagger Training Course?
68. Is the Traffic Manager's Training Course currently offered in Spanish?
69. Can individuals who cannot read or who have difficulty understanding/reading English be given the Traffic Manager's test orally (have someone read the questions aloud)?
70. What can I expect to receive upon successfully completing the Traffic Manager's or Flagger Training Course?
71. How do I find out if I passed the Flagger Training or Traffic Manager's Test?

PORTABLE CHANGEABLE MESSAGE SIGNS

72. Can the portable changeable message sign (PCMS) be used to provide speed limit postings?

Q18. Where is the need for a traffic control plan stated in the specifications and standards?
A18. The need for a TCP is addressed in the master permit issued to all utility companies by the SHA that allows them to do work within its ROW. It is also mentioned in SHA's Standard Specifications for Construction and Materials (Pages 42 and 148-150).

Q19. When (in what cases) must the traffic control plan be submitted? What about emergencies, (i.e., to restore service to a hospital or other public service facility)?
A19. A plan must be submitted for all highway construction projects and for normal utility operations. In the case of emergencies, utility companies aren't required to submit a TCP, however, they must contact the appropriate District Utility Section and use appropriate traffic control standards.

Q20. Are there occasions when commercial vehicle traffic is restricted in/for certain travel lanes within work zones on interstate roadways? Does Maryland have any laws in effect to regulate the flow of traffic on interstate roads?
A20. Currently, the State of Maryland does not have any laws in effect to regulate the flow of traffic on interstate roads. There are some occasions where commercial vehicles are directed to travel in a particular lane(s) through work zones. Normally, commercial vehicles will be restricted from traveling in lanes nearest the work area on certain projects, such as bridge repair/construction.

Q21. Does the standard for the placement of truck or trailer-truck mounted attenuators (TMAs/TTMAs) on expressways/freeways need to be changed if the posted speed is reduced because of a work zone?
A21. The truck mounted attenuator standard pertains to the "normal" (non-road work) speed of the facility, as well as the fact that the route is remains classified as "Expressway/Freeway".

Q22. Where TMAs/TTMAs are required for the installation/removal of traffic control devices (on facilities where the posted speed is ≥ 55) and the posted speed is reduced to reflect work zone conditions, are TMAs/TTMAs still required during installation/removal?
A22. Yes. The use of the TMAs/TTMAs is required on a facility based on its posted speed prior to reduction as a result of the proposed/active work zone.

Q23. Can SHA enforce Contractor's personnel to comply with the CID Directive on Personal Protective Equipment (PPE)?
A23. Yes. The current policy requires contractors working under contracts and authority with the SHA to comply with its criteria.

Q24. What kind of vest must highway workers wear?
A24. According to the High Visibility Apparel Policy approved by the SHA, the minimum Class 2 ANSI/ISEA 107-2004 Standard is required by SHA for all employees who work on SHA highways and rights-of-way. The apparel will be fluorescent yellow-green or orange background and will be the outermost garment worn.

Q25. Do the higher fines for speeding infractions within work zones apply if no work is underway?
A25. For the higher fines authorized for speeding violations in work zones to apply, work need not be taking place at a site (as long as the work zone signing remains in place). However, the speed limit has to have been reduced from the limit prior to the work zone being established. In other words, "No speed limit reduction, no higher fines!" (Dec 1, 2005)

TEMPORARY CONCRETE TRAFFIC BARRIER FOR MOT

Q26. Is it permissible to install concrete barrier along the roadway and protect the blunt end of the tangent section with crash barrels?
A26. No. The blunt end of the installed barrier must be tapered away from the roadway in accordance with the Maryland Book of Standards, Standard Nos. 104.01.23 and/or 104.01.24. The use of these standards should be applied based on the type of roadway on which the barrier is installed.

Q27. What concrete barrier is acceptable for use?

A52. Cones shall be reflectorized by a 6 in. wide white stripe and an additional 4 in. wide white stripe at all times. Cones that are more than 36 in. in height shall be reflectorized by approved horizontal, circumferential, alternating orange and white stripes.

Q53. What are the dimensions of cones used in the State of Maryland?
A53. Standard dimensioned cones used in Maryland must beat least 28 inches high and have a minimum inside base diameter of 10 inches. Tall weighted cones shall be at least 42 inches in height and shall have a minimum inside base diameter of seven inches.

Q54. What spacing would be used for the deployment of cones and/or drums in work areas?
A54. Maximum spacing between cones and drums is designated as equal to or less than the posted speed limit (in feet), not to exceed 40 feet, in the area where the lane closure taper occurs. In the area adjacent to the closed lane (tangent), drums are spaced a maximum (in feet), of twice the posted speed limit not to exceed 80 feet. Refer to Standards MD 104.01-30 B and MD 104.01-30 C.

FLAGGER

Q55. How do I become a trainer of flaggers?
A55. To be eligible to properly train flaggers, individuals must register for and successfully complete three course requirements: American Traffic Safety Services Association's (ATSSA) Flagger Instructor Training Course (www.atssa.com), SHA's Traffic Manager's (TM) Training Course (www.mdhighways.org), and ATSSA's Advanced Traffic Manager's Training (www.atssa.com). Upon successful completion of these courses, ATSSA certifies an individual's eligibility to properly train personnel. Information on the "Train the Trainer" program can be obtained on the ATSSA website, www.atssa.com.

Q56. What should be done for flaggers who have been properly trained, yet continue to use improper flagging technique?
A56. Properly trained flaggers, who continue to use improper flagging techniques, shall receive two warnings (with a copy of the documentation given to the flagger). If behavior continues, both the American Traffic Safety Services Association and the SHA's Office of Traffic and Safety should be notified, along with a copy of the two documented warnings.

Q57. What is the required handle height for the stop/slow paddle from the bottom of the sign to the ground*?*
A57. The stop/slow paddle should be mounted on the handle at a height of five feet from the bottom of the sign to the ground.

Q58. Can a flagger be deployed in the work zone without a flagger's card?
A58. A flagger receives a flagger card on the successful completion of the SHA- or ATSSA-provided flagger's course. A flagger must successfully complete the SHA- or ATSSA-provided flagger's course in order to be deployed in Maryland work zones. Exceptions for approved flaggers can be made during emergency situations, where a non-approved flagger may be deployed for up to 15 minutes.

Q59. Must a flagger deployed in Maryland work zones speak English?
A59. Since a flagger may complete approved training that has been offered in Spanish, flaggers are not required to speak English when being deployed in Maryland work zones.

Q60. Can flaggers with handicaps be deployed in Maryland work zones?
A60. Of the various qualifications that a flagger must meet to be considered for deployment in Maryland work zones, two qualifications include the "Ability to move and maneuver quickly in order to avoid danger from

errant vehicles" and the "Ability to work in stressful or emergency situations" Any flagger with a disability, who is able to meet the required qualifications is eligible to be approved as a flagger in Maryland.

Q61. Can a flagger use a red or orange flag instead of a stop-slow paddle during work zone operations?
A61. A flagger is permitted to use a reflectorized red flag, with a dimension of 24"x 24", during emergency operations for up to 15 minutes.

TRAFFIC MANAGER

Q62. How do I become a properly trained flagger or traffic manager?
A62. For representatives of state or local governments, contact the Traffic Development and Support Division at 410-787-5860. A minimum score of 70% is required for the satisfactory completion of the course and the flagger test. For contractors or private companies, contact the American Traffic Safety Services Association (ATSSA) at 1-800-272-8772 or www.flagger.com.
To be properly trained as a Traffic Manager, one must register with the Maryland Highway Contractor's Association (MHCA) and successfully complete the course, which includes achieving a minimum score of 70% on the Traffic Manager's test. More information can be found at www.mdhighways.org or by contacting a representative of MHCA at 410-760-9505.

Q63. How often are the Temporary Traffic Control Traffic Manager's courses offered?
A63. Often, courses are offered two or three times per month. In some cases, additional courses may be added to accommodate significant numbers of course applicants. A listing of available courses can be found at www.mdhighways.org or by contacting a representative of MHCA at 410-760-9505.

Q64. How are copies of the Traffic Manager's Training Course Manual obtained?
A64. To obtain copies of the Training Course Manual, individuals must register for and participate in the Temporary Traffic Control Traffic Manager's Course.

Q65. Why must all highway construction crew leaders receive proper Traffic Manager training?
A65. The Federal Highway Administration (FHWA) has mandated that all construction projects should be conducted under the authority of a Traffic Manager. The Traffic Manager may not be restricted to being on-site at all times, but may manage multiple projects as long as he can arrive on site in a timely manner and address any problems or concerns that may arise within 30 minutes of receiving notification. The Traffic Manager has been identified as properly trained upon successful completion of SHA's Temporary Traffic Control Traffic Manager's Training Course, which includes passing the training test.

Q66. How is information on the Traffic Manager's Course obtained?
A66. Contact the MHCA at 410-760-9505 or www.mdhighways.org for information on the Traffic Manager's course.

Q67. What happens if I do not pass the test for Traffic Manager's or Flagger Training or course?
A67. If a minimum score of 70% is not achieved after completing the first exam, an opportunity is given for a retest free of charge. Retests are usually scheduled for the afternoon on the date of the next scheduled course. In these instances, please contact the course instructor at the number provided in the course materials. If this is not available, contact TDSD at 410-787-5860 for additional information. If an individual does not successfully pass the test after the second attempt, the individual must register to take the course again and attempt to obtain the minimum score on the test.

Q68. Is the Traffic Manager Course currently offered in Spanish?

A68. Currently, for both the ATSSA training and the SHA sponsored training, the Traffic Manager's Course is offered in English only. In some cases, a course conducted by a bilingual instructor may be available. The course will still be conducted in English, but the instructor will be available to explain words or concepts in Spanish, during class breaks and as needed.

Q69. Can individuals who cannot read or who have difficulty understanding/reading English be given the Traffic Manager's test orally (have someone read the questions aloud)?
A69. No provision has been made to allow an oral Traffic Manager's Course test.

Q70. What can I expect to receive upon successfully completing the Traffic Manager's or Flagger Training Course?
A70. Participants successfully completing the Flagger or Traffic Manager's Training course will receive a letter stating participation in and successful completion of the course, and a card identifying the carrier as a properly trained Flagger or Traffic Manager. The card will also list an expiration date of the training, four (4) years from the date of issue by the Maryland Highway Contractors Association. In some cases, a certificate of completion may be provided, at the approval of the Traffic Manager's course instructor.

Q71. How do I find out if I passed the Flagger Training or Traffic Manager's Test?
A71. Normally, test results are distributed to respective agencies or companies within two weeks of the exam. Prior to the distribution, test results are posted at www.mdhighways.org. In exceptional cases (evaluated independently by the Maryland Highway Contractors Association and the SHA Flagger's or Traffic Manager's Course Instructor), test results can be provided during the next several days following the exam. Justification for these instances should be provided to the MHCA prior to the course date at 410-760-9505. Verification of test scores can be obtained by contacting TDSD at 410-787-5860.

PORTABLE CHANGEABLE MESSAGE SIGNS

Q72. Can the portable changeable message sign (PCMS) be used to provide speed limit postings?
A72. The PCMS can be used to provide speed limit postings; however, speed limits displayed on the PCMS are not considered statutory, and thus cannot be enforced.