

ACNH-9204-00(001)/100486
I-55 Split Diamond Questions and Answers

Question 1. Are as-built plans of the Madison Ave and Steed Road Bridges that are scheduled for demolition available through MDOT?

Answer 1. As-built plans for these bridges are located at the following FTP site:
<http://ftp.mdot.state.ms.us>
Download a File
Roadway_Design
Public
Asbuilts-for-100486-301

Note:

5448_I-091-2(16)OLD-Asbuilts – Original Asbuilt plans.
NH-SP-0055-02(190)N-FinalPlans – Final Construction Plans of the recent “Add 2 Lanes” project. We have not received Asbuilts yet of the project.

Question 2. Is the above referenced project currently on schedule to be bid in the March 27, 2012 letting, or will it be postponed to the April 2012 letting?

Answer 2. The project will be officially withdrawn from the February advertisement, but will be re-advertised in the March letting. Bids will be received on March 27, 2012. Proposal holders prior to the withdrawal of the project will be sent a new proposal (of like kind) at no cost when the proposals are ready for the March letting.

Question 3. Entergy will not give estimate for the monthly electricity bill to the contractor on the Madison County MDOT Project stating the prices could change due to the length of the project.

Answer 3. Contact Mr. Steve Lee, Manager, Customer Operations Support with Entergy Mississippi, Inc. at (601) 969-4810 or SLEE@entergy.com for questions related to power service information. It is the Contractor’s responsibility to make these arrangements and MDOT is not responsible for information provided by Entergy.

Question 4. Can MDOT define the allowable haul routes? I request MDOT to take the lead with the city and county on this issue and assign those routes or give some guidance. It’s a very important variable to costs and timeliness.

Answer 4. No, MDOT only provides access via the State maintained system. Local Officials will need to be contacted for access through their system.

Question 5. Due to timeliness, will MDOT allow the Erosion Control Plan be submitted in phases and outline the phases expected, so as to allow a timely NTP with work.

Answer 5. The erosion control plan can be submitted in phases in accordance with Notice to Bidders No. 3741.

Question 6. If there is no way to provide a network of street haul for the job access, then can temporary ramps of ingress and egress of I-55 be allowed by using shoulder closures, with acceleration type setup.

Answer 6. Notice to Bidders No. 3743 addresses lane closure restrictions. Ingress and egress of construction traffic with Interstate traffic would require a lane closure that would have to comply with NTB 3743. Permits for access directly to the Interstate Right-of-Way may be requested in writing and would require approval from MDOT and FHWA.

Question 7. Is there a possibility this project will be pulled from March letting due to lack of funding? Contractors are spending time and effort on preparing this bid and would like a heads up if the project is definitely going to bid.

Answer 7. See the answer to question no. 2

Question 8. Sheet 500, 501, 502, 503, 550, 551, 552, 553, 592, 593, 594, 595, 596, and 597 all state:

The Deck Pouring Schedule Shall Be As Shown On These Plans. Alternate Sequence Will Not Be Approved.

Sheets 500 and 501 (I-55 over Steed Road Right Lane) show Pour 1, Pour 2, Pour 3, Pour 4, and Pour 5 to be performed on each side of the CL of the Bridge with a Closure Pour to follow.

Sheets 502 and 503 (I-55 over Steed Road Left Lane) show two (2) Pour 1's, Pour 2, Pour 3, and Pour 4 to be performed on each side of the CL of the Bridge with a Closure Pour to follow.

Sheets 550, 551, 552, and 553 (I-55 over Colony Park Blvd Right and Left Lanes) show Pour 1, Pour 2, Pour 3, Pour 4, Pour 5, Pour 6, and Pour 7 to be performed full width of the bridge.

Sheets 592, 593, 594, 595, 596, and 597 (I-55 over Madison Avenue Right and Left Lanes) show two (2) Pour 1's, Pour 2, Pour 3, Pour 4, Pour 5, and Pour 6 to be performed on each side of the CL of the Bridge with a Closure Pour to follow.

Would not consistent pour sequences for all of the bridges help eliminate potential errors (such as, all with closure pours or all full width and/or all with multiple pour 1's or all single pours)?

Answer 8. The project should be bid based upon the pour schedule and phasing of the bridges as per the plans. After the execution of the contract, alternate pour schedules and phasing may be submitted for approval by MDOT. It shall be MDOT's sole discretion on the approval of alternate plans to construct the bridges.

Question 9. Concerning the Traffic Signal Plans it shows a Type 3 Pull Box (according to bid items) at each controller. On the ITS plans it shows a Type 5 Pull Box for fiber. If you are using a Type 5 Pull Box you should be able to do away with the Type 3 Pull Box. A Type I Pull Box is not needed at all on this project.

Answer 9. Pull box types, quantities, and locations should be bid as per plan sheets.

Question 10. Concerning the prints there is nothing stated about the power to the Traffic Signal Controllers. Entergy will not give a price for hook up due to these being new sites. The Contractor should not be responsible for meeting Power Company and inquiring to see how to get power to each site. Baker Engineering should be the responsible party for this task.

Answer 10. See answer to Question No. 3 previously posted.

Question 11. Concerning the Street Name Signs to be installed on the Signal Arms are they to be designed to meet Ridgeland/Madison Specifications or MDOT Standard Specifications?

Answer 11. The street name signs shall be in accordance with MDOT Specifications. Any reference in the contract documents referring to City of Madison or Ridgeland Specifications shall be disregarded.

Question 12. What are the over-all dimensions on the OTN Node Communication Huts?

Answer 12. A Notice to Bidders will be included in the reprint of the contract documents defining the dimensions and other specifics regarding the huts.

Question 13. Looking through the plans for this project the General Notes, page 2 Sheet 10.1 (17) there is mention of a soil profile available. Is this profile in an electronic version so that I may forward it on to our structure design folks?

Answer 13. The soil profiles are available at the following ftp site under soil profiles:
[\\ftp\ftp\Download\Roadway_Design\Public\Asbuilts-for-100486-301](ftp://ftp.Download.Roadway_Design/Public/Asbuilts-for-100486-301)

Question 14. Where might one find the spec 907-630-4 referenced on sheet 100.291A note #6?

Answer 14. The reference to 907-630-4 is incorrect. The correct reference should be to 907-630-9 which is included in the contract. Also, a Supplement to 907-630-9 will be included in the new proposal.

Question 15. Is it safe to assume that there will be a revised note #1 from sheet 100.263 as it is referencing the signal interconnect cable as copper and the plans show a fiber interconnect cable?

Answer 15. A revised note will be forthcoming. The signal interconnect cable shall be fiber.

Question 16. Concerning drilled shaft excavations for overhead sign structures. Will geo investigation be required for each sign foundation location or will the foundation designers be permitted to use the project soil profile being supplied to design the foundations?

Answer 16. The contractor will be responsible for performing soil borings at each location to be used in the design of the foundations and supports in accordance with the Supplement to 907-630-9. The Supplement to 907-630-9 will be included in the new proposal which addresses this issue.

Question 17. Where is Assembly 30 Cross Section Drawing located in the contract drawings? Assembly 28 & 29 are DMS-1 & DMS-2. Is Assembly 30 actually required or should this item be deleted?

Answer 17. It is located on Sheet TC-11. Assembly No. 30 is the temporary sign assembly required on the temporary crossover.

Question 18. For the Smart Work Zone (item 907-619-M2002), what are the required quantities of both Portable Changeable Message Signs and Portable Traffic Sensors? These quantities are not listed on the proposal- only as a lump-sum.

Answer 18. These quantities are not listed in either the proposal or plan sheets as this lump sum item is contractor-designed base on the general, technical, and performance requirements provided in the special provision. The provision states, "The quantity for each device will vary to meet project objectives." This specification further states that, "the SWZS supplier will prepare a preliminary plan showing the location and number of various components of the SWZS to provide adequate queue detection and warning to the traveling public for approval prior to any installation of the system or any components."

Question 19. Page 195 of the proposal document states that the system will be in operation only during phases 2 and 3. Will the system need to be re-deployed between Phases 2 and 3?

Answer 19. No, the system will be removed either partially or wholly once traffic is reopened to the public on both northbound and southbound routes after phase 2 and reinstalled once phase 3 is implemented.

Question 20. Call Number 2, Line number 2520 Pay Item Number 907-619-M3001 Portable Smart work Zone Monitoring: is indicating 500. Is 500 the number of days or hours? Special Provision is indicating each for quantity on item number 97-619-M3. ? If number of days or hours should lump sum on line item no. 2510 utilize 500 as basis for bid? If 500 days or hours for 97-619-M3001 and project runs over 500 how will additional pay be calculated? Is four hours correct on control software portion of special provision 907-619-7 General Requirements 907-619.03.10.1 is indicating "control software issues shall be corrected within (4) hours of notification" - is 4 hours correct or is this to be 24 hours?

Answer 20. As stated in Special Provision 907-619-7 Section 907-619.04, the measurement for portable smart work zone, system monitoring, will be per each calendar day,

determined by the number of calendar days the system is monitoring. There will be a revised Special Provision going out by addendum to correct the 4 hours. The spec will state in section 907-619.03.10.1 that, "Control software issues shall be corrected within 24 hours of notification by MDOT."

Question 21. Looking through the plan sheets (Sheet 100.289) we noticed that the communications pullbox depth is marked as 18", will this allow enough room for a splice can and slack fiber if necessary

Answer 21. Yes

Question 22. Plan Sheet WK 3 through WK 8 are referenced on the Cover Sheet of the Plans. Are these sheets available? If not, are there plan sheets available showing the project Geometry?

Answer 22. There are no plan sheets WK 3 through WK 8. The WK 5, for instance, is showing that the area between Station 180 and Station 210 can be found on the plan profile sheets that start with the number 5. In this case, there are 4 sheets: 5 LT, 5 RT, 5A and 5B. Sheet Numbers 100.088 through 100.093 provide a geometric layout of the project.

Question 23. Looking at the ITS Plan sheets other than a note about services being paid for by the contractor, we haven't seen many notes concerning electrical work. Was it the intention of the designer to leave power service location, cable sizing, number of services, etc. up to the contractor? We are not seeing any cable quantities on the ITS summary sheets, should this be absorbed into another pay item, and can we use one of the new conduits being installed or does the wire need a separate conduit, if so should also be absorbed?

Answer 23. For the power service location, see the Answer to No. 3. The cable quantities and conduit questions have been addressed in the addendum that was sent out March 8th.

Question 24. Cannot find specifications for item 907-605-CC001 prefabricated sheet drain utilized in project ACNH-9204-00(007)/100486391 Madison County, MS.

Answer 24. The specification was inadvertently left out of the contract. The specification will be added in Addendum No. 2

Question 25. There appears to be a unit discrepancy for Bid Item 3820, Precast Panels, 671 Square Feet. Is this supposed to be 671 Square Yards?

Answer 25. Yes, the correct unit is square yards. This will be corrected in Addendum No. 2

Question 26. Will full road closures of Steed Road and Madison Avenue be allowed for the demolition of the existing overpass bridges?

Answer 26. Temporary road closures will be allowed between the hours of 10:00 PM and 6:00 AM for bridge demolition work. The contractor shall notify the Project Engineer 10 days in advance of such closure.

Question 27. The specifications indicate that pile restrikes are required. However, there is no pay item for this activity. Please indicate which bid item Pile Restrikes (803-J) will be paid under.

Answer 27. A Pay Item for Pile Restrikes will be added in Addendum No. 2

Question 28. The Interconnect Plan (TRS-13 to TRS-20, 100.255 to 100.262) shows 2" Roll Pipe (Bored) in areas of new construction. Could this 2" Roll Pipe be installed during construction in these areas or is boring after construction required?

Answer 28. Bid as per plans. The Contractor may submit site-specific request after execution of the contract and prior to performance of the work.

Question 29. Sheet 24, Working Number TS-12 (Typical Sections) shows 42" Barrier required from Sta 20+50 to 25+00. Sheet 75, Worksheet 3A (SE Ramp at Old Agency) shows 42" Concrete Barrier required from Sta 20+50 to 25+00. Sheet 100.102, Working Number TC-1 (Traffic Control) Section A-A shows Permanent 32" Barrier for this ramp. Is the Barrier on the Southeast Ramp at Old Agency to be 42" or 32"?

Answer 29. 42" modified is required. Sheet No. 100.102 is in error. See Sheet No. 49.1

Question 30. Sheets 100.100 and 100.101, Working Number TC-TP1 and TC-TP2 (Typical Section, Temporary Pavement) require 6" Chemically Treated Subgrade and 6" Chemically Treated Granular Material under the asphalt pavement. As these are temporary crossovers to be removed, can the subgrade and granular material be replaced with crushed stone to reduce the cost to the State and reduce the duration of the construction of the crossovers?

Answer 30. Treatment of the subgrade will be required. Crushed stone may be used in lieu of the treated granular material.

Question 31. Sheets 12 and 13, Working Number TS-2 and TS-3 (Typical Sections) show different barrier details for the North Bound lanes and South Bound lanes of I-55. Could one detail be used to allow for more efficient construction?

Answer 31. No, build as per plans

Question 32. Sheet 701, Working Number WA2 (Retaining Wall) Typical Section shows a 4" Concrete Pavement at the base of the retaining wall. Sheet 17, Working Number TS-5 and Sheet 20, Working Sheet TS-8 (Typical Sections) do not show a concrete pavement for this retaining wall. What is the required width of this concrete pavement at the base of the retaining wall?

Answer 32. The required width is 3 feet. Sheet 17 & 20 will be revised by Addendum No. 2 to show that dimension.

Question 33. In areas where the plans called for jacked or bored concrete pipe, can steel pipe be used in place of concrete pipe?

Answer 33. Steel pipe may be used, but the Contractor will be required to submit, for approval, design calculations stamped by a registered Engineer with the following criteria considered as a minimum: PH, Resistivity, Corrosion, Wall Thickness, Dead Load & Live Loads. A Notice to Bidders will be added in Addendum No. 2 to address this issue.

Question 34. I am still not clear on the details for pay regarding the monitoring. If five hundred days is utilized for bidding purposes as line number 2520 indicates for item code 907-619-M3001 "Portable Smart Work Zone, System Monitoring":

1. If system is utilized and actual monitoring occurs for four hundred days is actual pay adjusted down?
2. If system is utilized and actual monitoring occurs for six hundred days is actual pay adjusted up?
3. A unit price is indicated on line 2520:
 - a. Is unit price to be daily rate for system monitoring and bid amount to be daily rate times five hundred?
 - b. Is unit price to be daily rate for each component of system being monitored and bid amount to be daily rate times each component times each component times five hundred?

Answer 34.

1. Yes, pay will be based on the actual number of days the system is monitored
2. Yes, pay will be based on the actual number of days the system is monitored
- 3a. Yes
- 3b. No, monitoring is not for individual components, but for the entire system

Question 35. There appears to be a Bid Item Quantity discrepancy for Bid Item 90, Removal of Concrete Median & Island Pavement. Quantity Sheet EQ-7 (Sheet 50) shows median and island pavement removals to be approximately 314 SY. The bid item quantity is 5,571 SY. Please confirm which is correct.

Answer 35. Neither is correct. The correct quantity is 739 square yards. This will be corrected in Addendum No. 2

Question 36. Special Provisions 907-307-3, 907-308-3, and 907-311-2 include a pay item for Bituminous Curing Seal; however, this item has not been included in the schedule of items. Please clarify.

Answer 36. The bituminous curing seal pay item will be added in Addendum No. 2

Question 37. If maintenance of the existing roadway is required during restricted lane closure periods, through no fault of the contractor, will the Contractor be charged the penalties associated with these lane closures?

Answer 37. If normal routine maintenance is required, it should be done under normal lane closure periods. The lane rental fee will not be assessed if the Engineer determines immediate maintenance is required and directs the Contractor to perform this work during a restricted lane closure period.

Question 38. There are twelve requirements for pay item 642-A008. However, on sheet number TRS-1, 100.242 it only requires for a modification of the existing cabinet. Since there is no pay item for a solid state traffic actuated controller modification, are we supposed to average this in with the eleven new complete traffic controller cabinet assemblies?

Answer 38. No, a new pay item will be added for a Solid State Actuated Controller Modification in Addendum No. 2

Question 39. In Special Provision 907-103-10, The "Value of the Contact Time" shall not exceed 928 Calendar Days. How is the number of Calendar days determined, is the Calendar to be 365 days per year without Weather days and State Holidays or is the Calendar modified to include Weather days and State Holidays? Please provide the number of Calendars days per Calendar Year.

Answer 39. The calendar year is 365 days per year without weather days and state holidays. See NTB No. 3781 and SP 907-108-26 for additional details.

Question 40. I have searched to spec for spare equipment requirements for signalization/ITS/lighting and see no mention of spare parts on the project specification other than a handful of fiber optic jumpers for the OTN Nodes. Is there some other mention of spare equipment in another document?

Answer 40. No

Question 41. Will Changeable Message Signs included in the Smart Work Zone System be paid under item 907-619-E3001 (Changeable Message Sign), or are they absorbed as part of the Smart Work Zone System.

Answer 41. No, they are absorbed under the pay item for Smart Work Zone System.

Question 42. Regarding the lighting plan details 100.307.1 the pull boxes are shown to be cast iron, can quazite pull boxes be used instead? Size of pull box is not shown on prints either, please clarify sizes.

Answer 42. Pull boxes shall be cast iron with an H-20 rated top. The boxes should be sized in accordance with the National Electrical Code with a minimum size of 12"x12"x6".

Question 43. Regarding Type I Pull Boxes-Sixty one Type I pull boxes are listed in bid quantities and bid item sheets but are not reflected on plan sheets, will this item be installed?

Answer 43. No, there are not any Type I Pull Boxes required. This pay item will be deleted in Addendum No. 2.

Question 44. Regarding Camera Poles and Radar Poles- Camera Poles 70' and Radar Poles 50' show to have no foundation details, please clarify width and depth for these items.

Answer 44. The foundations for the 70 foot Camera Poles and the 50 foot Radar Poles are Contractor designed in accordance with Special Provision No. 907-639-6 that will be included in Addendum No. 2. The poles and foundations shall be designed in accordance with the current addition of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals with a design life of 50 years and a minimum wind speed of 90 mph. The Camera Pole detail shown on plan sheet no. 100.290 shows the foundation concrete to be Class A, this is in error and the correct class of concrete is Class B.

Question 45. How does MDOT require that the controllers be communicate to the traffic system (ACTRA) – via Ethernet or via serial fiber?

Answer 45. The controllers shall communicate to the ACTRA via Ethernet.

Question 46. Managed Gigabit Traffic Ethernet Switches – are normally employed to provide the Ethernet switch in traffic cabinets, are these to be provided under Item No 642-A for each intersection? If serial fiber, where shall the initiating fiber modem(s) be located?

Answer 46. Yes, ethernet switches are to be provided under pay item no. 642-A for each intersection.

Question 47. It appears that the 907-658-A Network Switch Type A quantity is short by one for the switch required to connect the Type A detector cabinet on the west side of I-55 to the Type B camera cabinet on the East side of I-55. Should this quantity be increased by 1 switch?

Answer 47. Yes

Question 48. Does MDOT want the RDS cable terminated at the Type A detector cabinet instead of pulled under the interstate as indicated on the revised plans?

Answer 48. The RDS cable should be pulled in accordance with the revised plan sheets.

Question 49. In the Proposal NTB# 3810 indicates 2 OTN nodes while the Summary of Quantities (ITS-SQ-1) indicates only a single node. How many nodes are to be provided?

Answer 49. One OTN node.

Question 50. Whom is the current MDOT wireless provider for compliance with SP's 907-619-7 & 907-619-5 on above referenced project?

Answer 50. MDOT's current wireless provider is CSpire.

Question 51. Regarding the ITS Systems can they be fed from the traffic signal meters or would they be fed to a different meter? If fed to a different meter when contractor bores or trenches conduit to ITS System for power will that be paid from the bid item or will it be absorbed?

Answer 51. The ITS system shall be on a separate meter from the lighting and traffic signal meters. See note on plan sheet no. 100.291 for payment of conduit.

Question 52. Regarding the ITS Drawings it shows 2" roll pipe and 3" roll pipe at same location, if contractor does not use sleeve on bores for 2" or 3" conduit at the same time will contractor get paid for each linear feet per pipe?

Answer 52. The Contractor shall be paid separately for each linear foot of 2" roll pipe installed and the 3" roll pipe installed.

Question 53. Regarding Traffic Plans it shows 2" roll pipe and 3" roll pipe at same location, if contractor does not use sleeve on bores for 2" or 3" conduit at the same time will contractor get paid for each linear feet per pipe?

Answer 53. The Contractor shall be paid separately for each linear foot of 2" roll pipe installed and the 3" roll pipe installed.

Question 54. The drawings call for what looks to be a cast Aluminum Post - I have been unable to locate this post in any of the foundries I called, does MDOT have any source information.

One concern I have is that the drawings call for the posts to be installed level, with the horizontal rails following the slope. This will cause the rails to bind in the posts, and I believe it will be impossible to install them in this fashion.

Answer 54. There is at least one supplier that can furnish the posts that are shown in the plans. Contractors may submit an alternate railing system, similar to the system that is shown in the plans, in accordance with the General Notes on plan sheet no. 817.

Question 55. The rails should not bind in the posts if the posts are cast correctly as detailed. Is there any way that we might get an extension on the Q & A for this project?

Answer 55. The deadline to submit questions will be extended to 5:00 PM (Central Time) on Friday, March 16.

- Question 56. Removal of Concrete overlaid w/ asphalt - What are the limits of removal (Stations, lengths, widths) ? Any idea as to the thickness(es) of the concrete and the asphalt overlaying? 2.) Removal of Soil Cement w/ asphalt overlay - What are the limits of removal (Stations, lengths, widths)? Any idea as to the thickness (es) of the asphalt overlaying?
- Answer 56. The removal limits are shown on plan sheet 51 (EQ-8) and the existing pavement thicknesses are shown on plan sheet 11 (TS-1).
- Question 57. Sheet 80 (Worksheet 4RT) shows Jack & Bore 24" RCP in three places, Sta. 160+00, Sta. 163+55, and Sta. 165+50. Sheet 100.105 (Working Number TC-2) shows Jack & Bore 18" RCP in these locations. Are the Jack & Bore RCP 24" or 18"?
- Answer 57. The pipe shall be 24" as shown on Sheet 80 (WK #4RT); disregard the 18" designation on Sheet 100.105 (WK #TC-2).
- Question 58. Sheet 22 (Working Number TS-10) shows Steed Road to be widened on both the north side and south side of the existing roadway from Sta. 110+44 to Sta. 121+00. Sheet 82 (Worksheet 4B) only shows work on the south side of the existing roadway from approximately Sta. 114+50 to Sta. 121+00. Sheet 82 (Worksheet 4B) also shows Phase 1 work to be performed from Sta. 116+00 to Sta. 125+00 and Phase 3 work to be performed from Sta. 110+00 to 116+00. Sheet 100.105 (Working Number TC-2) shows the Phase 1 work at Steed Road to be from approximately Sta. 116+65 to Sta. 121+00 (East of I-55). Sheet 100.117 (Working Number TC-14) shows the Phase 3 work at Steed Road to be on the north side of the existing roadway from approximately Sta. 110+44 to Sta. 114+30 (West of I-55). The Traffic Control sheets do not show the work at Steed Road from Sta. 114+30 to Sta. 116+65 (Under I-55) in any phase. Will Steed Road be widened on both sides from Sta. 110+44 to Sta. 121+00? And if so, during which phase?
- Answer 58. Yes, Steed Road will be widened on both the north and south sides. The south side of Steed Road shall be widened from the East Frontage Road eastward within the milestone phase. The Contractor has the option to perform the remaining widening in any phase in accordance with NTB 3809, Additional Construction Requirements.
- Question 59. Can you help me find any description/scope/work required/notes regarding for pay item 619-H1001?
- Answer 59. The temporary traffic signal is located at the intersection of Jackson Avenue and Sunnybrook Road. The reconstruction of this intersection is within the milestone portion of the project and the temporary traffic signal may be required if the new traffic signal cannot be installed prior to the specified milestone completion date. The temporary traffic signal shall meet the requirements of Subsection 619.02.8--Traffic Signals and Flashers of the Mississippi Standard Specifications for Road and Bridge Construction, 2004 edition which states, " Traffic signals and flashers shall meet the requirements of the plans and Section 6F.71 & 6F.74 of the MUTCD."

- Question 60. I did not see the following pay items in the bid proposal:
- Traffic Signal Conduit Bank, Underground, Rolled Pipe, 2 @ 2"
- Traffic Signal Conduit Bank, Underground, Drilled or Jacked, Rolled Pipe, 2 @ 2"
- Answer 60. These items are included in addendum #1 bid sheets as Line No. 1900 and 1910, respectively.
- Question 61. The following Items appear to be an error. I have not found any of Item 1865 Electric Cable, Underground in Conduit, THHN, AWG #2, 4 Conductor or any of Item 1866 Electric Cable, Underground in Conduit, THHN, AWG #6, 4 Conductor. However there is AWG #2, 3 Conductor, AWG #2, 6 Conductor, & AWG #6, 3 Conductor shown on the drawings but not any pay items.
- Answer 61. Line No items 1865 Electric Cable, Underground in Conduit, THHN, AWG #2, 4 Conductor and Line No. 1866 Electric Cable, Underground in Conduit, THHN, AWG #6, 4 Conductor are in error and will be deleted in Addendum # 2.
- The pay items for AWG #2, 3 Conductor (5640 LF), AWG #2, 6 Conductor (4155 LF), & AWG #6, 3 Conductor (2750 LF) will be added in Addendum # 2.
- Question 62. On sheet 100.242 it shows installing new loops for this intersection. There are no conduit or pullbox quantities listed for this, will these materials be incidental to the loops?
- Answer 62. No, there are existing conduit and pull boxes that will be used for the new loops.
- Question 63. Existing Bike Paths have bollards to block motor vehicles from entering. Are bollards required at the locations where the 12' wide bike paths intersect streets? If so, will you please provide the requirements.
- Answer 63. Bollards are not required.
- Question 64. Will electronic drawings (Microstation) be provided to the awarded contractor?
- Answer 64. Yes, the Contractor that is awarded the project can request the electronic files from Keith Boteler in Roadway Design Division.
- Question 65. Please provide a typical section for the temporary detours and indicate which bid item the detours should be paid under.
- Answer 65. The typical section for the detour road is on plan sheet no. 27 (TS-15). Payment will be made under the pay items necessary to construct the detour road.
- Question 66. Sheet 100.111 and 100.113 refers to Sheet # TRW-1 for details of the temporary retaining wall. Please provide the sheet TRW-1.
- Answer 66. Sheet TRW-1 is on plan sheet no. 100.372, this sheet can be obtained from the MDOT Plans Print Shop.

Question 67. Is it safe to assume that the note on the ITS pages referencing transformers/concrete poles/disconnects will make these items incidental to the site work?

Answer 67. Yes, see Sheet No. 100.291

Question 68. Does the department provide any concrete cylinder testing or is this incidental to the work?

Answer 68. The Department breaks cylinders for acceptance. All other cylinder testing is incidental to the work.

Question 69. Is it safe to assume that since the CCTV and RDS pole foundations are contractor designed that each will have to have a geo investigation?

Answer 69. Yes

Question 70. Regarding the 907-637.02.1—Type A Network Switch #2 Long Reach optical ports (SFP), #1.a (p.295) requires “ the minimum optical budget between transmit and receive ports be 19dB.” Will MDOT consider an 18 dB optical budget acceptable for single mode SFP transceivers (Long Reach Optical Ports)?

The 19 dB optical budget (@ 1310nm wavelengths) requires a 25km SFP transceiver, a 40 km SFP transceiver, or other stronger SFP transceivers. 25km SFP transceivers are only available a very few manufacturers; hence, increased cost. Using stronger transceivers requires attenuators (#2.d) be used to protect the switches from burnout, and this would likely cause confusion during long term system operation and maintenance.

An 18 dB optical budget (@1310 nm wavelengths) requirement is readily met by industry standard 20km SFP transceivers. To the best of my knowledge all SFP transceiver manufactures and network switch providers have 20 km SFP transceivers available. A 20 km transceiver has approximate range of 12.4 miles which is roughly comparable to a 25 km transceiver’s range of 15.5 miles. 20 km transceivers are substantially more cost effective than 25 km transceivers due to their ready availability from a wide variety of manufacturers.

Additionally, using 20 km transceivers removes the possibility that attenuators will be required to protect the transceivers in each switch. This reduces system cost, reduces system complexity, and increases ease of maintenance – particularly over the long term.

To date, every MDOT project that I have seen would have been adequately served with a 20 km SFP transceiver with its approximate 12.4 mile range.

Answer 70. It must be 19 dB

Question 71. Concerning traffic signalization, does the department have any sort of per intersection summary sheet covering all of the items needed? The reason I am asking is that I see "lum" listed on several of the plan sheets indicating luminaire power, but I am not seeing any luminaire symbols on the drawings.

Answer 71. There is no recap. Intersections that show luminaire power shall have luminaires and the cost shall be absorbed.

Question 72. Addendum #1 addresses Special Provision 907-619-7 Portable Smart Work Zone Systems (SWZS). Under the basis of payment, it lists the following pay items:

907-619-M1 Portable Smart Work Zone, Single Device -per Each

907-619-M2 Portable Smart Work Zone, System -lump sum

907-619-M3 Portable Smart Work Zone, System Monitoring -per each

The bid items only show items 907-619-M2002 & 907-619-M3001. Will there not be a bid item regarding the Single Device? Or was there an omission?

Answer 72. A revised Special Provision for Portable Smart Work Zone Systems is included in Addendum No. 2. The revised specification provides a minimum number of components for the system and also includes individual pay items for traffic sensors and portable changeable message signs in the event it is necessary to expand the smart work zone system.