Call 03 Roundabout on I-55 at the Brookway Boulevard Interchange, known as Federal Aid Project No. CRP-0055-01(125) / 109120301 in Lincoln County.

Q1. For items 603-CA038 and 603-CE007 (Concrete pipe jacked or Bored) can steel pipe be used in lieu of concrete pipe? The 22" X 13" Concrete Arch Pipe is a 18" equivalent. Can 20" steel pipe be used in lieu of since the wall thickness of the arch pipe makes the overall height 20.25"?

A1. **Revised Answer:** Bidders are advised to bid as per the Contract Documents. See Addendum 2.

Q2. As for the permanent signs can a list of signs be provided that will be removed and reset?

A2. No permanent signs are being removed and reset.

Q3. Will Smart Work Zone Traffic Advisory System's be required? See pages 87 & 88 of drawings but not on line item list.

A3. Any reference to smart work zone system is in error. Bidders are advised to bid per plans.

Q4. **1.)** There is not a pay item for 30" pole foundations. **2.)** There is a foundation detail on Sheet No. 4008 that shows the diameter of the pole foundation but does not show the depth. There is a note that reads "see plans" for the depth but it does not appear to be shown on the plans. **3.)** Will the poles require a round maintenance pad at the base? There is a detail on Sheet No. 4008 but the detail reads "when required". What is the detail referring to with 4' concrete riprap? **4.)** Sheet No. 4010 show (2) 3/8" templates. Are these required? I have only seen these used on High Mast pole foundations. Never in Low Mast pole foundations. **5.)** There are no details or enough information on the drawings that show the contractors what size wire is being installed in the conduit. Sheet No. 4007 show the wire size between the breakers and lighting contactor but only shows the wire size for the lights on circuits 2 and 3. It appears that the size was intended to be shown at the bottom left-hand corner of this page but it references Circuit 4 in all four notes. **6.)** Is the detail on Sheet 4007 for the SPC correct? MDOT always installs a contactor between the main breaker and panel bussing. So, in this SPC I would have expected to see a 200A/2P 600V rated contactor in lieu of a multipole contactor between the branch breakers and lighting assemblies. This contractor would need to be a minimum of 60A/12P but I am not sure if a 60A contactor can accept the 3/0 wire that is shown on Circuit 3. **7.)** Are the boring quantities correct? Sheet 4001 shows 390' based off the quantities shown on the plans but the chart in the bottom left-hand of the page has 475' of #2 bored and 295' of #4 bored. Also, this chart also has wording after the pay item description that appears to be a typo. **8.)** Sheet 4002 shows to provide a temporary generator. What size KW does the generator need to be? How long will it be needed? I have never seen MDOT require this before and could be very costly by the time you include the monthly rent, fuel and someone to turn it on every day just before sunset and off every morning after sunrise and fuel it up. This would be a trailer mounted generator so it would be difficult to secure on the side of a roadway at night if it will be left there for an extended period of time. **9.)** There is not a pay item for the conduit

and wire that will power the new secondary power controller. MDOT has always had a pay item for this unless the service pole is within 20' of the SPC and then it would be absorbed. This would be a minimum of AWG 3/0, 3 Conductor and would require directional boring and trenching pay items. **10.)** How can you tell the difference between the Underground Pull Boxes and Underground Junction Boxes on the sheets? They are all identified by PB and then followed by a number. **11.)** It appears that the main feed to the secondary power controller and power to lighting assemblies will pass through the same pull or junction box. This may be a problem for maintenance personnel in the future if they turn off a breaker to the lights to work on them and are not aware that feeder from the utility pole to the SPC passes through the same box as is still energized.

A4. **1.)** See Addendum **2.)** Foundation depth is 10'. See Addendum 2. **3.)** See Addendum 2. **4.)** Anchor bolt assembly is included to secure the pole to the concrete foundation, to provide additional stability against wind loads. Transformer base should be used for breakaway poles. **5.)** Using 2-#2,1#2(G) for circuit 4 and 2-#4,1#4(G) for all other circuits. See Addendum 2. **6.)** A single contactor was added. The wire size was reduced. The larger contactor was removed. See Addendum 2. **7.)** The 475' for # 2 in sheet 4001 is based on the four bore conduits within the sheet and a small slack. The 295' for # 4 in sheet 4001 is not needed. The extra '3 Conductor' text in the pay item is a typo. See Addendum 2. **8.)** 10,000-12,000 KVA unit, 120V system, existing panel board on the meter service. This would be needed during the construction phase where existing power is impacted due to roadway work on the off ramp. The contractor will be responsible for securing all the equipment including the generator during the construction, refueling, and operating the generator. **9.)** A separate conduit parallel to the existing conduit for just for providing conductor from power pole to SPC (3-#3/0 conductors) has been added. See Addendum 2. **10.)** Junction box pay item for intersections with 3 or more conduits (branches) and pull box label for intersections of 2 conduits (PB along a single conduit). **11.)** As noted in Answer 4.9, a separate conduit parallel to the lighting conduit and additional pull boxes to carry wiring from the service pole to SPC (beside the proposed pull boxes dedicated to carry wiring from SPC to lighting) has been added. During construction, the maintenance personnel would need to open the pull boxes which are dedicated for wiring from SPC to lighting.

Q5. **1.)** There is a pay item for a new secondary power controller but there is not a pay item 202-B176 Removal of Lighting Controllers. **2.)** The plans show to remove existing conductors but there is not a pay item 202-B251 Removal of Underground Electric Wire.

A5. **1.)** Pay item is included in Addendum 2. However, the existing lighting controller remains functional along with temporary power generator during construction and will be removed after the proposed controller is installed and functional. **2.)** Will include the pay item for the removal of existing conductor. See Addendum 2.

Q6. Sheet No. 4002 shows a temporary power generator that ties into new infrastructure and suggests that it will be used to maintain continuous lighting during construction. Will there be a line item provided for temporary power? What line item should this be placed under?

A6. It will be paid for under Pay Item No. 683-D001, Portable Electric Power Units. Temporary power generator shall be 10,000-12,000 KVA unit, 120V system, existing panel board on the meter service.

Q7. For items 603-CE007 (Concrete pipe jacked or Bored) arch pipe is not a typically jacked or bored pipe at this size. The tooling required would have to be manufactured for this project thus driving the cost up. A larger round steel casing to install the Arch pipe in would defeat the purpose for the ground clearance and any pressure grouting could damage the roadway being jacked under. Can this be a 20 in steel casing in lieu of the arch RCP?

A7. See Addendum 2.