

Questions for Contractors

Project: ODOT | K19786 I-205: I-5 to OR 213

Subject: Questions for 1:1 Contractor Sessions

Schedule: 60 minutes of discussion on ODOT questions/30 minutes open floor to contractor to ask questions/share observations.

In-Water Work & Access (10 min.)

1. The design team anticipates that a robust temporary work structure will be required to resist the forces generated from oscillating the drilled shaft permanent casing. What should the design team consider to allow for sufficient flexibility and to efficiently design and construct a temporary work structure capable of resisting the expected oscillation forces?
2. What do you see as the 3-4 biggest risks to completing in-water work within the in-water work period? How do you propose to mitigate those risks?

Drilled Shafts & Ground Improvements (15 min.)

1. There are several drilled shafts where geotechnical explorations were unable to sample the subsurface within the planned shaft footprint. ODOT is considering adding a bid item for contractor exploratory drilling prior to drilled shaft construction. The intent is to improve drilled shaft construction planning. Do you see value in adding this work to the contract?
2. Do you see conflicts in the Improved Soil Mass work, drilled shaft construction, and other project elements? What challenges do you foresee in overlapping work areas, access, construction sequencing, and laydown area?
3. What would be your preferred approach to dispose of spoils from the Improved Soil Mass work? Do you have suggestions for beneficial re-use on or off site?
4. Soil boring information and a draft geotechnical report was provided as a part of this constructability review. In reviewing the underlying soils and proposed construction work, what do you see as the 3-4 biggest risks to constructing sub-surface work on-time? How would you propose to mitigate these risks? What information can ODOT provide in the plans, specifications, and reference documents that will help the contractor reduce constructability risk for the Improved Soil Mass and drilled shaft work?

Crossbeam Construction (20 min.)

1. The new crossbeams for the Abernethy Bridge are large masses of reinforced concrete that encapsulate the existing crossbeams. There is significant reinforcing steel congestion in places. The contractor will be responsible for quality control. Describe your concerns regarding the following:
 - a. Reinforcing steel and post-tensioning tubes installation;
 - b. Proper concrete consolidation around existing caps;
 - c. Cooling/curing of the mass concrete pours; and
 - d. Removal of the existing columns.

Super-Structure Construction & Translation (15 min.)

1. Widening of the existing northbound and southbound superstructure is planned to be constructed adjacent to live traffic, with secured temporary barrier separating the work zone and traffic. Based on your experience, what is the minimum width needed for access to complete drilling and doweling into the existing structure and placing the new deck concrete immediately adjacent to the barrier separated live traffic?
2. The project is planning to perform two superstructure translations, one for the northbound superstructure and one for the southbound superstructure. The directional translation is planned to occur under a directional closure of I-205 and in a 3-day period of time. The northbound superstructure is planned to be translated first and the southbound superstructure second. After each translation, the bridge must be opened to traffic. From your perspective, what are the biggest risks to completing a directional translation in the planned timeframe? How do you propose to mitigate those risks?