003-60X79

FAI-90/94/290, EB I290 RAMP TO I90/94 NB OF THE JANE BYRNE INTERCHANGE.

Question #16

Item 3 Ramp EN East Abutment calls out for permanently cased soldier piles with rock sockets, however that abutment is under the NW Flyover. The current design appears unconstructable, or at least, tedious and inefficient to the point where alternatives would be the better solution. Have alternative foundation elements been evaluated at this location, or will alternatives be entertained?

Answer to Question #16

Alternative foundation types were considered during design. Based upon an evaluation of the abandoned steel sheet piling and steel sheet piles located in the area of the proposed east abutment, drilled HP piles, including steel casing were proposed in order to provide the most flexibility during construction with regards to existing obstructions.

It is noted on Sheet 460, Note 7 that the Contractor shall expose all existing piles, drilled shafts and sheet piles to an elevation 1 foot below the top of these elements. Based on the existing plan information provided in the plans, the existing top of footing/piles are around elevation +/-576.7 providing additional vertical clearance for drilling.

It is also noted in the Suggested Stages of Construction Ramp EN Narrative, during Stage 1A to construct both the east abutment and proposed retaining wall no. 20. Proposed retaining wall no. 20 includes excavation to the MSE leveling pad elevation. Excavation to these elements provides additional clearance below the NW Flyover structure.

The Department will consider alternative foundation designs and proposals in accordance with the Standard Specifications For Road and Bridge Construction, Adopted April 1, 2016, Article 104.07 - Value Engineering Proposals.