Connecticut Department of Transportation

State Project No. 35-198 90% Federally Funded 10% State Funded Rehabilitation of Bridge No. 06821 carrying Interstate 95 over drainage Town of Darien

Wednesday, March 9, 2022 at 6:00 p.m. Virtual Meeting via MS Teams Live Event & YouTube Live

Minutes of Public Informational Meeting

In Attendance: There were 18 people in attendance. The meeting participants included residents and representatives of the Town of Darien, the Connecticut Department of Transportation, and BL Companies.

Presentation: A Public Information Meeting was held for this project on the night of March 9, 2022. This meeting was held virtually via MS Teams Live Event and YouTube Live. At 5:45 p.m. the meeting went live with an informative introductory slide for attendees to view prior to the event. The formal presentation began at 6:00 p.m.

Connecticut Department of Transportation (CTDOT) Project Engineer Susan Morneault began the presentation by introducing the representatives of the CTDOT and BL Companies (BLC), the Consultant Liaison Engineer, and noting the project Designer as Prime AE Group.

Susan Morneault, Jennifer Usher and Stephanie Maurer, both from BLC, then gave an eighteenminute PowerPoint presentation describing State Project No. 0035-0198, the Rehabilitation of Bridge No. 06821 carrying Interstate 95 over drainage in the Town of Darien. Matthew Geanacopoulos with the CTDOT office of Rights-of-Way also presented information regarding the rights-of-way acquisition process.

The presentation included the following items:

- The existing conditions of the bridge, which include deterioration of the asphalt coated corrugated metal pipe and section loss of the culvert floor.
- The purpose and need for the project, which is to address the structural deficiencies of the existing structure.
- A description of the proposed rehabilitation, which includes constructing a temporary construction access road, installing a glass reinforced pipe liner within the existing pipe, constructing a pre-formed scour hole and installing slope protection.
- All lanes on Interstate 95 will be maintained. Portions of the on-ramp and off-ramp lane will be shifted to allow for an adequate buffer between the work zone and the traveling public.
- No anticipated utility relocations except the highway luminaires
- Anticipated environmental permits include: USACE CT General Permit Self Verification (GPSV-19) and CT DEEP Inland Wetlands General Permit
- There are potential Construction Easements and Rights
- Construction is anticipated to begin in the Spring of 2025 and last one construction season.

• The current Opinion of Probable Construction Cost is approximately \$1,800,000. State Project No. 0035-0198 is expected to be 100% State Funded.

Public Comments and Questions: Following the formal presentation, a live Question and Answer session was opened to attendees. The questions and comments below were provided via voicemail, email, and MS Teams Live Event Chat:

• Chat Question: I attended the prior meeting on Feb.11. At that time, I requested that BL Co. share their detailed models & quantitative analysis that confirms that the future maximum flow throughput will be no less than the current throughput. I have not received this information, so I am again requesting that BLC Share their hydraulic modeling

A representative of BLC responded that BLC had sent the information to the Town as they stated they would on February 11, 2022; further noting that it is likely to be under their review.

• Email Question: How long will the noise barrier wall be down?

A representative of BLC responded that it is anticipated that the noise barrier wall will be down for the duration of the project. Construction is anticipated to take one construction season, most likely between four and six months. A slide depicting the Plan View was shown and BLC indicated that the wall would only be taken down in the direct vicinity of the culvert and the access road.

• Chat Question: Can you please describe the GRP insertion process? Does the glass liner rest on the floor of the old culvert or is it centered vertically?

A representative of BLC responded that the liner will be placed as close to the existing invert as possible. It was further noted that the pipe segments would be pushed through the existing pipe on rails and would not sit directly on the floor of the old culvert. Typically, a liner will raise the invert of a culvert three to four inches. Due to the thickness of this particular liner, the new invert is likely to be approximately two to three inches above the existing invert.

• Voicemail Question: Will the construction block the stream?

A representative of BLC responded that water handling during construction will likely be done via pumping through the existing pipe. It was also noted that the Contractor will be required to submit a detailed water handling plan prior to the start of construction. Additionally, BLC noted that in the event of a high intensity storm, the contractor will be responsible for clearing the area of any blockages and allowing the existing pipe and waterway to convey drainage during that storm.

• Chat Question: How big is the pipe under the Railroad tracks that feeds this culvert. Who owns it and who is responsible for maintaining its condition?

A representative of BLC responded that the culvert below the railroad tracks is 3 feet by 4.3 feet and believed to be owned by the Town; this was subsequently corrected by a representative of CTDOT, who noted that the upstream culvert is believed to be owned by the State, but would be confirmed.

• Email Question: What happens if the contractor damages my fence?

A representative of BLC responded that if the fence is on privately-owned property and not within a construction easement, the contractor will be responsible for repairing or replacing the damaged fencing as needed.

 Chat Question: On February 7th I emailed Alvaro Garcia asking about the Town of Darien proposal to mitigate upstream drainage. The response from DOTProject35-108 stated the proposal is under review and includes installing underground infiltration chambers on the north side of the State-owned commuter parking area near exit 10. My question is that this project has been pending for some time so when can we expect a disposition to this project?

A representative of CTDOT responded that they are unfamiliar with the referenced project and would inquire and respond with a status update.

• Chat Question: Back to Mr. Adelman's question about the hydraulic flow modeling - we would like to know that information during the public comment period so we can interrogate and question those results.

A representative of BLC reiterated that we have provided the information to the town Public Works Department for their review.

• Chat Question: Should the Preformed scour hole prove to be inadequate to diffuse water velocity, can the scour hole be enlarged and is there State property available to do so?

A representative of BLC responded that the pre-formed scour hole will be inspected by the State every two years. It was further noted that, if warranted, larger riprap could be installed and/or the volume of riprap may be increased, if it becomes necessary.

 Chat Question: The pipe under RR tracks is owned by CDOT which owns the tracks, I believe. Town PW Director Ed Gentile has NOT told us that RR pipe is the Town's. Can you check your facts so we're certain?

A representative of BLC responded that it is feasible and asked the resident to provide an email address and phone number, to provide the information once confirmed. Subsequent to this question being asked, a representative of CTDOT noted that the upstream culvert is owned by the State.

• Chat Question: Does Matt believe any property acquisition will be required for this project?

A representative of BLC responded that Matt Geanacopoulos is with the DOT Right-of-way division and will rely on the design team to identify the need for acquisitions or easements needed for construction. It was further stated that the project is in the early design phase and that there is potential for temporary construction easements.

• Chat Question: Can someone from CTDOT address this?

A CTDOT representative responded that after conferring it was concluded that this section of the railroad is Metro North and CTDOT does own that land and pipe underneath; this will be confirmed following the meeting.

• Chat Question: Once the enlarged Scour Hole is installed, will it be fenced in as a matter of neighborhood safety?

A representative of CTDOT responded that the State is currently considering the need to include permanent fencing at this location.

• Chat Question: NO... RR tracks are owned by the STATE, not Metro-North

A representative of BLC noted that this had been addressed (noted above).

• Chat Question: If you own that pipe under the RR tracks... what's its condition and when will it be improved?

A representative of BLC responded that the project team does not have this information readily available, as the purpose of this meeting is to discuss the subject project, which consists of addressing the deficiencies of Bridge No. 06821. Following a short discussion regarding the structural inspections of stormwater pipes, it was determined and noted that the State does not perform structural inspections of pipes less than six feet in diameter.

A BLC representative noted that the State understands that there are concerns regarding flooding in the area and reiterated that the subject project consists of installing a structural pipe liner with a very low Manning's coefficient, also known as a roughness coefficient, which will result in an improved hydraulic capacity of the structure. Once completed, the structure will be able to convey the 50-year design storm which it cannot do currently.

• Email Question: When is construction anticipated to start?

A representative of BLC stated that construction is anticipated to begin in the spring of 2025, last one construction season, and end in the fall of 2025

 Chat Question: I am reiterating a concern expressed at the Feb 11 meeting. This project will have a 75-year life, or in service to year 2100. Given the intensification of storms, and the expectation that such intensification will continue, wouldn't it be prudent to significantly over-design the capacity of this culvert to "future proof" against higher flow? ie., even if you are designing to meet the current CT requirements, that may not be enough for future actual max flows if storms continue to intensify. Thank you.

A representative of BLC stated that State projects undergo an environmental screening and environmental review. The environmental review determines if the project should consider sea level rise; during this review, the subject project was not identified as needing to consider this. Additionally, the representative noted that the flows used are the recommended flows that come from federal agencies and are consistent with CTDOT's drainage manual.

Another BLC representative added that the latest recommended flow rates were used to model the subject structure. The representative further stated that revising these requirements would need to be vetted through CTDOT's Hydraulics and Drainage unit. Additionally, it was noted that the design would be updated should the rainfall rates change, and that the analysis employs a conservative approach when calculating storm flows.

• Chat Question: Is the water flow analysis based on rainfall tables of 2019? Given the everincreasing rain fall in the Northeast will the pipe sleeve adequately convey water flow for the 75-year lifespan of the sleeve?

A representative of BLC responded that the latest rainfall precipitation data includes 2019 storms and noted that given the increasing rainfall and uncertainty of future conditions, a definitive answer cannot be provided. The representative elaborated on the unknown potential factors that could affect stormwater flow in the future.

• Chat Question: Where does one find those reports on structures?

Assuming that the question was in reference to the structural inspection reports, a representative of CTDOT responded that the bridge inspection reports are not readily available to the public, but could be provided if requested, asking further for the person inquiring to provide contact information.

A BLC representative stated that if the question was in reference to rainfall data, the data could be found through National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Cornell University Study information.

 Chat Question: To Mr. Cameron's point - the upstream structures impact the volume of flow downstream - i.e. this project. If the upstream flow increases, it could significantly impact the efficiency of this project. Thus our collective concern about the design of this project.

Assuming the question posed was referencing a concern regarding velocity and/or flow, a representative of BLC stated that a pre-formed scour hole would be constructed at the outlet to dissipate the energy expected from the increase flow. The representative further stated that the purpose of a pre-formed scour hole is also to prevent erosion.

A BLC representative added that the question may be referring to the volume of flow coming from the upstream developments, which add to the flow through the subject structure. It was noted that the upstream shopping center that was recently constructed is retaining upstream drainage as well as on site drainage. (An image of the infiltration system was displayed on screen.) Additionally, it was noted that the northern area of the watershed of the neighborhood north of West Avenue flows south into the large underground infiltration system; a significant portion of the watershed is being captured, retained, and slowly released downstream.

• Chat Question: The state-owned commuter parking lot is a large impervious area on Heights Road that is not captured by the Federal Realty cistern. This parking lot needs to be mitigated from flooding Heights Road and in turn the pipe under the railroad.

A representative of BLC responded that they are unfamiliar with the cistern and therefore will not proffer a response or opinion. The representative further iterated that the purpose of the meeting was to discuss the subject structure.

Adjournment: The email address, telephone number and project webpage address were provided for any additional questions or comments regarding the project following the meeting. Attendees were reminded that any additional comments will be received until March 24, 2022.

The meeting was adjourned around 7:15 p.m.