

## Status of H1 Screening and Wet Weather Pump Station

TO: Richard Wolff/Chairman/North Hudson Sewerage Authority  
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FROM: John Tobia, Project Manager, CH2M HILL  
DATE: September 10, 2010

Chairman Wolff:

As requested, we are providing the monthly update regarding progress of construction of the H1 Screening and Wet Weather Pump Station project.

The contractor's most recent progress schedule is dated August 15, 2010; an updated schedule is expected prior to September 15, 2010. The August 15 schedule continues to reflect delay in completion of the project. The following is a summary of the continued causes for the delay, other issues that need to be monitored, milestones achieved, and a revised estimate of the project schedule:

### A. Causes for Project Delay

The following three factors are the causes for the anticipated delay:

- 1. Delivery of a Critical Transformer:** The contractor has advised us that the new electric power transformer that will be designed and provided by PSE&G still has not been released for manufacturing at this time. The transformer has a 6- to 9-month delivery time and the contractor's latest schedule lists delivery by approximately April 1, 2011. However, assuming completion of design by the end of September 2010, and consideration of the range in anticipated delivery time, receipt of the transformer would be expected between April 1, 2011 and July 1, 2011. The pump station cannot be tested, or placed into service until the transformer is in place and energized.
- 2. Requirements of the American Recovery and Reinvestment Act:** ARRA Buy-America restrictions have resulted in only one model of pump being acceptable for this project. Two of these pumps are required, and they have been released for fabrication. The anticipated lead time for pump delivery is between 24-26 weeks. The Contractor received a verbal communication from the pump manufacturer identifying a delivery date of mid-November 2010.
- 3. Landmark Records Building - Structural Settlement:** Excavation within the Pump Station cofferdam remained suspended due to the settlement of the NJ Transit Records Building. However, the Contractor worked on construction of the specialty stabilization work recommended in their July 28, 2010 geotechnical report/plan. Completion of the specialty work is required in order to move forward with the pump station excavation. The Contractor

expects to complete the specialty work and resume excavation for the pump station by September 20, 2010. The resulting delay of the construction of the pump station due to settlement of the Records Building is forecasted to be approximately 12 weeks; June 25, 2010 to September 20, 2010.

## **B. Issues To Be Monitored**

The following issues, while not causes for the current anticipated delay, will be carefully monitored as they could negatively impact the schedule in the future. We are focused on these issues with the purpose of ensuring that they do not contribute to further delays.

- 1. Outfall Rehabilitation and Extension:** Due to the disruption that would be caused by construction and operation of a temporary outfall for the H1 Pump Station, installation of a temporary outfall is not included in the current schedule. Consequently, completion of the permanent rehabilitation and extension of the existing outfall is required for operation of the pump station, as it is the sole means of conveyance of pumped flow from the system to the river. This is the most complex portion of the project and has the most potential to impact the schedule for placing the pump station into operation. The contractor's August 15, 2010 schedule projects completion of the outfall rehabilitation and extension work to occur by early March 2011. This date is currently earlier than the potential dates of delivery of the transformer (discussed above) that is required for operation of the pump station.
- 2. Electrical Building Façade Modifications:** CH2M HILL continued coordinating with Nastasi Architects regarding revisions to the electrical building façade. The detailed drawings and specifications for the related interior building changes were completed and provided to the Contractor for immediate execution of the work to ensure uninterrupted construction of the pump station. The detailed exterior façade drawings were also completed, and will be provided to the Contractor for firm cost quotation. It is anticipated that the façade modifications will result in cost credits for deleted work, as well as additional costs for modified work. The costs and credits will be included in an anticipated change order. The revised construction drawings were submitted to the Hoboken Construction Code office for their review on September 10, 2010; code approval was granted on the same day.
- 3. Access Agreement:** On July 2, 2010, a draft of the NJT Construction Agreement Permit was submitted by NJT to the Authority for review and execution. The Agreement was executed by the Authority and returned to NJT on September 3, 2010; NJT reports they are routing the Agreement within their organization for execution. NJT also approved an extension of the Temporary Access Permit to September 14, 2010.

### **C. Milestones Achieved**

1. Moretrench (a specialty subcontractor to the prime contractor) completed the jet grouting operation around the lower elevation of the sheeting in the location of the Pump Station excavation. This work is being done in accordance with the Mueser-Rutledge geotechnical report/plan to move forward with the pump station excavation.
2. Moretrench began the installation of sheeting pin piles at the perimeter of the Pump Station excavation. By September 9, 2010 they installed 10 of 23 pin piles. This work is also being done in accordance with the Mueser-Rutledge geotechnical report, and must be complete in order to proceed with the pump station excavation.
3. At the Electrical Building, the contractor completed installation of the foundation frost wall, foundation slab, first floor columns and the grounding grid.
4. At the location of the proposed outfall extension on NJ Transit property, the contractor installed a temporary pedestrian canopy to route light rail pedestrian traffic flow away from the work area. The contractor began demolition work and underground utility locating and test pitting.
5. The contractor continued to perform survey monitoring of the NJ Transit Records Building. Minor settlement of the building was identified; however, the settlement was below the actionable threshold limits noted in the Mueser-Rutledge geotechnical report.

### **D. Estimated Project Schedule**

We reviewed the contractor's August 15, 2010 schedule. Based on currently available information, initial operation of the H1 Screening and Wet Weather Pump Station has been delayed by approximately seven to nine months. The contractor's August 15, 2010 revised schedule and the contract schedule are presented in Table 1 on the next page.

**Table 1**  
**Contract Project Schedule vs. Contractor's August 15, 2010 Schedule**

	<b>Notice to Proceed</b>	<b>Pump Station Ready for Startup</b>	<b>Temporary Outfall Ready for Startup</b>	<b>Electrical Building Ready for Startup</b>	<b>Rehabilitation of Twin Outfalls Complete and Extended to Long Slip Canal</b>	<b>Pump Startup and Testing</b>	<b>Completion of Construction</b>
<b>Per Contract</b>	January 11, 2010	November 7, 2010	November 7, 2010	November 7, 2010	June 5, 2011	November 7, 2010 – Jan. 7, 2011	September 3, 2011
<b>Contractor's Schedule August 15, 2010</b>	January 11, 2010	April 1, 2011	<b>(Note #1)</b>	April 1, 2011 <b>(Note #2)</b>	February 22, 2011	April 4, 2011 – April 29, 2011	July 26, 2011

Table Notes:

1. Installation of a Temporary Outfall is not included in the current schedule.
2. Date in the table is the Contractor's expected date for the PSE&G transformer delivery. CH2M HILL estimates that the PSE&G transformer will be delivered between April 1, 2011 to July 1, 2011, contingent upon PSE&G completing their engineering review by the end of September 2010.