



Council Presentation October 10, 2017

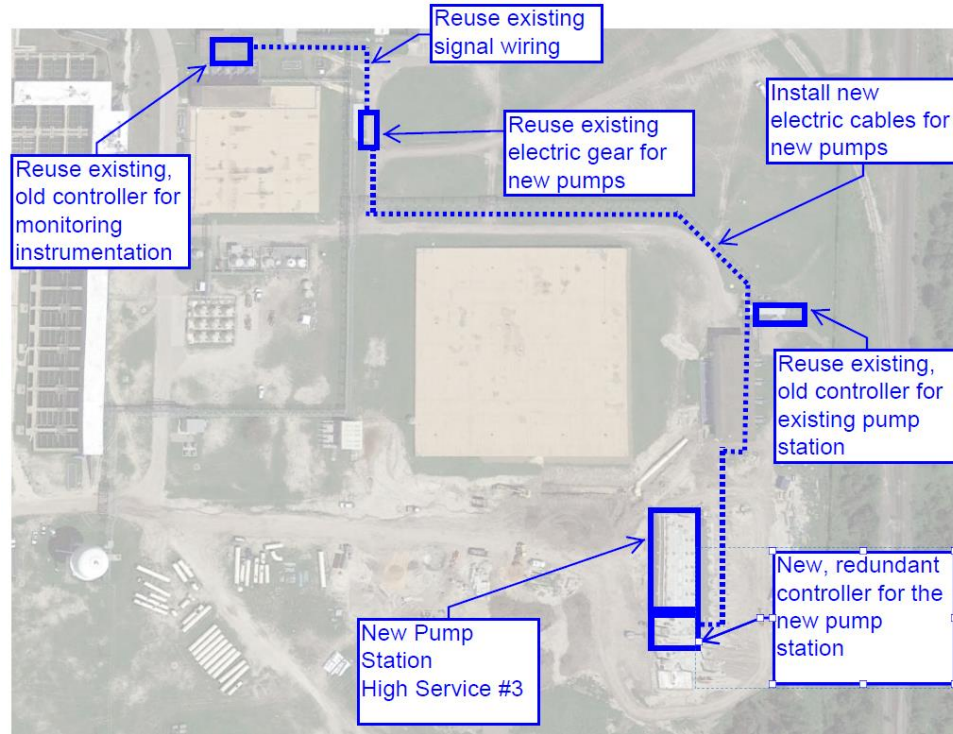


Background

- Project E11066 – O.N. Stevens Water Treatment Plant High Service Pump Building No.3 under construction
- City's competitive sealed bidding process for construction made the construction contract value \$1.85 Million lower than expected.
- During the Design Phase, to remain within budget, it was decided to re-use existing control system and equipment.
- Current design meets the requirements of codes and specifications, and provides operational and reliable control system for HS#3. However, reliability of the control system can be easily improved.

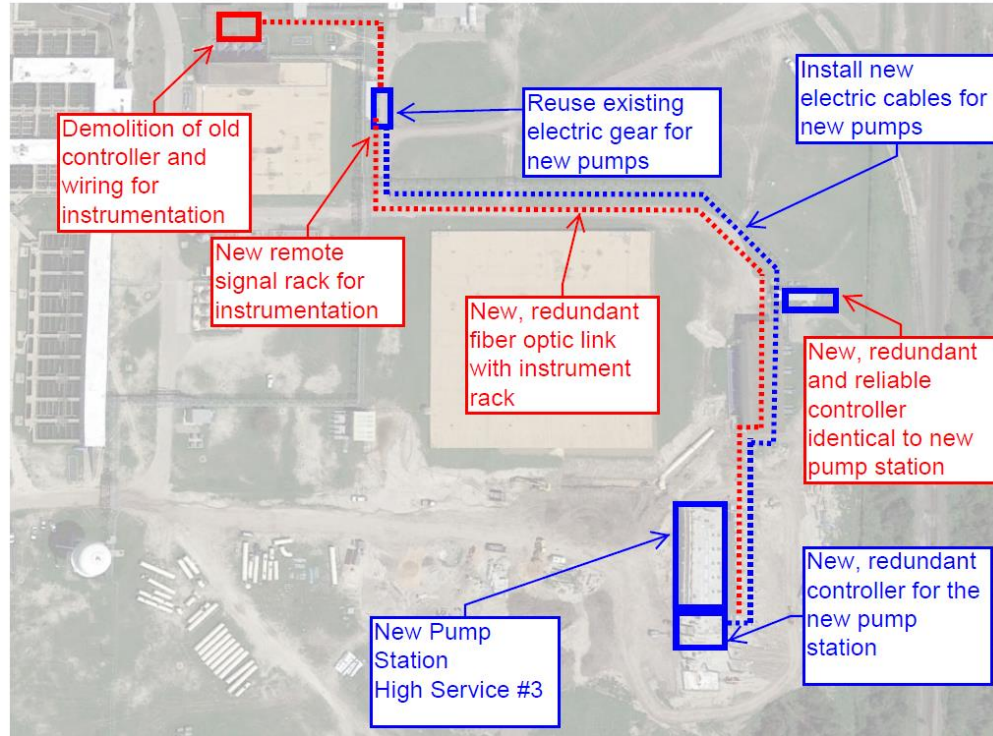


Current Controls Design





Proposed Controls Design





Recommendation

- Final construction contract price for project (\$21,650,000)
 - Engineer's Opinion of Probable Construction Cost (\$23,500,000)
 - Since the project bid nearly \$2 million under budget, the Utilities Department would like to propose an upgrade to the current control network through AE amendment contract and construction change order.
 - The proposed upgrades include (a) new, redundant controller for existing pump station, identical to the new one and (b) replacement of existing, old instrumentation controller with new signal rack and fiber optic cable
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Benefits from Upgrades

Overall, the entire Plant's pumping system will be:

- More reliable due to redundancy
- More easily maintainable
- Less complex due to standardization



Schedule Impact

- Current Completion Date: September 3rd, 2019
- The requested improvements will not impact construction schedule if design is completed by end of 2017



Actions Forward

City staff will take the following actions to upgrade the Control System for ONSWTP High Service Pump Building No.3:

- An AE Contract Amendment for design revisions
- A Construction Change Order for construction modifications