



February 13, 2014

Summary of Option 1 Work for T.Z. Osborne Upgrades and North Buffalo Decommission

Package One - will address current and future hydraulic capacity issues at North Buffalo. The specific improvements for Package One include conversion of an existing aeration basin at North Buffalo into a flow equalization basin and adding increased transfer pumping capacity. The improvements at T.Z. Osborne are necessary to receive the pumped flow from North Buffalo and include a new flow equalization basin, equalization diversion structure and flow control/metering vault. The North Buffalo Treatment Facilities downstream of the influent pump station will be demolished or abandoned.

\$8.4 million

Package Two - will hydraulically expand T.Z. Osborne for treating up to 56 million gallons per day under the current nutrient limits and will include improvements to pass the peak future flow with North Buffalo decommissioned. The improvements for Package two include new membrane-diffuser grids in the existing aeration basins, two new single stage blowers, three new 160-foot diameter clarifiers with associated distribution and return activated sludge pumping, new yard piping for increased flow and electrical improvements including a new generator.

\$31 million

Package Three - will increase final discharge and filtering capacity to complete expansion of T.Z. Osborne to 56 million gallons per day. The improvements for Package Three include new tertiary filters, two new chlorine contact tanks, modifications to the existing chemical feed facilities, and an additional outfall pipeline. The existing scum handling system works inconsistently so improvements will also include replacement of existing scum pumps, new scum pre-concentrator and refurbishment of the existing scum concentrator equipment and piping.

\$18.4 million

Package Four - will add biological nutrient removal capacity to the plant to meet nutrient removal requirements of the Jordan Lake Rules at the increased capacity of the plant. The improvements for Package Four include construction of four new aeration basins, modifications to the existing aeration basins including new baffle walls, post-anoxic zone mixing, nitrified recycle and associated electrical improvements.

\$29.4 million

Prior to bidding of Package One, a final construction engineering services contract associated with the first three packages will be presented at a value of approximately **\$4.9 million**. This service contract will include final engineering, bidding assistance, construction inspections, contract administration, equipment start-up and record documents. This services contract excludes Package Four so as to avoid encumbering funds for a package that is anticipated to change based on further Jordan Lake Study or additional permit requirements.