To: All Plan Holders of Record

From: Verdantas LLC
For the Owner

Re: ***Addendum No. 2***
Lakeshore East Equalization Basin
City of Willoughby

Date: March 18, 2025

This Addendum forms a part of the contract documents and modifies the original bidding documents dated February 2025 and all previous addenda, if any. Acknowledge receipt of this addendum in the space provided in the bid forms. Failure to do so may subject the bidder to disqualification.

QUESTIONS AND ANSWERS

Q1. Are all tank manufacturers required to adhere to the quality control requirements?

A1. The Contractor selected pre-stressed concrete tank manufacturer shall meet the quality control requirements as described Specification 333633.01 – Circular Prestressed Concrete Tanks, Section 1.5 and 1.6. The Contractor selected pre-stressed concrete tank manufacturer shall meet the quality control requirements as described Specification 033800 – Circular Post-Tensioned Concrete Tanks, Section 1.5 and 1.6. Manufacturers that do not meet these requirements, even if noted as an acceptable manufacturer in the specification, are not acceptable.

Q2. Section 033800 1.1.A.2.a –Please confirm that the roof structure shall be site cast and no precast elements in the roof will be permitted.

A2. The concrete walls and roof can be precast units brought to the site. The tank manufacturer is responsible for the safe delivery of each unit. Each precast unit is subject to inspection upon delivery to the site. Each unit is subject to acceptance or rejection from the Engineer or Owner based on the inspection.

Q3. Section 033800 1.5.A – Please confirm that the design, construction, testing and quality control of the deep foundation system shall be the responsibility of the tank contractor whether it is pre-stressed or post-tensioned.

A3. The tank manufacturer shall be responsible for the design, construction, testing and quality control of the deep foundation system. The Tank Contractor may subcontract labor for the deep foundation installation under the Tank Contractor's direct supervision. The design of the deep foundation shall be stamped by a professional engineer in the State of Ohio.

Q4. Section 033800 1.6.B – Please confirm that the 10 similar facilities to be evaluated must include tanks that are fully-buried with no exposed walls or roofs above grade

A4. It is expected that the tank manufacture shall have completed on a minimum of ten (10) other tanks of similar depth and diameter. Each tank shall be completely buried, with flat roof designs similar to this project.

Q5. Section 033800 2.1.A – Please confirm that the named tank manufacturers are required to meet the qualifications listed in their respective specifications and these qualifications shall be submitted with the bid.

A5. The qualifications of the tank manufacturer shall be provided with the Contractor's bid.

Q6. Please confirm the filling, draw down and venting rates for the tank.

A6. The proposed pumps will operate at 1,000 gpm per contract documents. The 16-inch force main from Lakeshore Avenue will have a flow rate of 3.10 MGD.

Q7. Sheet 18 shows the finish floor elevation at the tank wall to be 579.00 with the bottom of trough varying from elevation 578.00 to 577.43 (1 to 1.57 feet deep). It does not appear these elevations will work to facilitate the 24" diameter pipe required at the low point of the trough as it will extend above the floor and into the wall (something that is now feasible with the AWWA D110 type tank). Please confirm the trough dimensions (i.e. is the trough deeper) or if the 24" outlet can exit trough the bottom of the trough with an elbow.

A7. The perimeter drain and wet well elevations shall be adjusted to allow for no conflict with the wall to floor seal. Refer to Drawings section of this addendum for changes.

Q8. Is the tank manufacturer responsible for the interior ladder and platform.

A8. The tank manufacturer is responsible for the interior ladder, platform, all wall penetrations, roof vent, and access hatches. The wall penetrations shall be incorporated into the design and construction of the tank. Coring the wall of the tank or roof is not acceptable. Details shall be provided with the tank submittal.

Q9. Please provide a design ground water elevation so that all potential tank builders are using the same criteria to design for hydrostatic uplift.

A9. Refer to Addendum 01.

Q10. Please confirm that floor-mounted tank Pressure Relief Valves (PRVs) will be acceptable. PRVs will be by far the most economical approach for mitigating hydrostatic uplift due to high groundwater during tank empty conditions.

A10. Pressure relief valves are not acceptable for mitigating uplift pressures for any structures.

Q11. Are other electric actuators acceptable?

A11. Limitorque and Rotork are acceptable manufacturers.

DRAWINGS

1. Sheet 8 of 46, **Add** a 36-inch man-gate on the north side of the fence line.

2. Sheet 9 of 46, **Add** a 36-inch man-gate near the corner located at N:734411.75 and E:2261343.78.

3. Sheet 14 of 46, **Replace** 24" INV. from 577.09 to 575.58. **Replace** bottom of wet well elevation from 574.59 to 573.08. Increasing the depth of the wet well 1.51 feet.

4. Sheet 18 of 46, **Replace** "Bottom of Channel @ HP – EL." from 578.00 to 577.15 in Section B. **Replace** "Bottom of Channel @ 24" INV. – EL." from 577.43 to 575.58.

5. Sheet 31 of 46, **Replace** 24" INV. from 577.09 to 575.58. **Replace** bottom of wet well elevation from 574.59 to 573.08. Increasing the depth of the wet well 1.51 feet.

TM/RS:mep

Enclosures

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