



**NAVAJO TRIBAL UTILITY NTUA**  
AN ENTERPRISE OF THE NAVAJO NATION

# NAVAJO TRIBAL UTILITY AUTHORITY

WASTEWATER DEPARTMENT



TOTAL RETENTION LAGOON EXPANSION PROJECT,  
PINON,  
NAVAJO COUNTY, ARIZONA

NTUA PROJECT NO. 431800002

January 2020



NAVAJO TRIBAL UTILITY NTUA  
AN ENTERPRISE OF THE NAVAJO NATION

## Pinon WWTP Total Retention Expansion

### SECTION I. SCOPE OF WORK

#### 1. Project Location

Pinon Wastewater Treatment Plant is located approximately 0.5 miles south of the intersection of Indian Route 4 and Indian Route 8030 in Pinon AZ. (See design cover sheet)

#### 2. Overview and Objective

Construct 2 sewer retention and evaporation ponds, 9.65 acres and 8.70 acres. Ponds will be located south of the existing Pinon WWTP. The northernmost pond is designated pond 5 and the southernmost pond is designated pond 6.

#### Tasks

- i. *Clearing and Grubbing* of approximately 22 acres. Existing vegetation and soil which cannot be stabilized on the site will have to be removed from the pond area. **(Disposal location to be discussed during pre-bid meeting)**.
- ii. *Lagoon Earthwork* will bring surface elevations to match the design. The total combined cut material for the two ponds will be approximately 116,000 yd<sup>3</sup>. The total combined fill material for the two ponds will be approximately 96,000 yd<sup>3</sup>. All extra cut material will be disposed of on-site per engineer's directions. **(To be discussed during pre-bid meeting)**.

Pond-Floor and Berm Elevations must be brought match those shown in the design drawings. Pond areas and berm slopes must also match those shown in the drawings. All grading and compaction must meet NTUA specifications.

Install all accompanying control plumbing and fencing to link the facilities.

#### Tasks

- i. Install one 6'x4' Standard precast manhole as shown on Drawing C-2.
- ii. Install 1,000 Linear feet of 8" PVC Sewer line per drawing C-2. Trenching, pipe laying, bedding and backfill must conform to the NTUA standards see Detail C-2 & C-4.
- iii. Install 500 linear feet of Ductile Iron Sewer Line per drawing C-2.



**NAVAJO TRIBAL UTILITY NTUA**  
AN ENTERPRISE OF THE NAVAJO NATION

- iv. Install one 8” Plural Siphon apparatus at location shown in drawing C-2. See IHS Standard Detail S-14.
- v. Install Three 8” Gate Valves w/Boxes at locations shown in drawing C-4.
- vi. Remove a portion of existing fence. Approximately 1200Lf of fence on the south side of existing perimeter will be removed. See Drawing C-2
- vii. Construct 4,200Lf of new perimeter fence with gates around new pond area as shown in drawing. See Drawing C-2 and HIS Standard Detail S-20
- viii. 40 Pipe supports will be utilized on suspended portions of DI discharge line. Locations in Drawing C-2. See typical discharge piping detail Drawing C-5
- ix. Install One 8” Transfer structure with gate valve at location shown in drawing C-2.
- x. Pour 4 concrete Splash Pads at discharge locations as shown in drawings.
- xi. Install one Lagoon Water Level Indicator shown in drawing C-2. See IHS Standard Detail S-12.

3. **Material Submittals**

All construction materials shall be approved by NTUA project manager prior to being ordered. Contractor shall submit material specification to NTUA for approval before obtaining any material for project.

4. **Permitting.**

Contractor is responsible for obtaining all necessary construction permits needed to perform construction work on the Navajo Nation.

5. **Site Cleanup**

Contractor will be responsible for all site cleanup following construction activities. At the completion of all construction work, the Contractor shall conduct clean-up activities of all project debris and transport the debris to an approved disposal site. **Such debris or removed material shall not be taken the local NTUA District Office yard for disposal.** As an addition to the Scope of Work, this will be the Contractor’s responsibility to discard all project trash and debris. This cost is incidental and is not a separate cost item.

6. **Project Monitoring, Field Inspections and Testing**

The Contractor shall maintain an adequate project monitoring and joint inspection system with NTUA and NTUAs Construction Monitoring Consultant for the duration of



**NAVAJO TRIBAL UTILITY NTUA**  
AN ENTERPRISE OF THE NAVAJO NATION

the project, until completion of construction. All testing will be done with a representative from NTUA present and will be carried out to NTUA's testing requirements. **(3<sup>rd</sup> party consultants for Geo-Tech testing and monitoring will be discussed at pre-bid meeting)**

**7. Construction Schedule Submittal**

The Contractor shall prepare and submit a construction schedule within ten (10) working days of receiving the Notice to Proceed letter. The submitted construction schedule shall become a part of the contract Agreement documents governing the project duration until completion.

If the Contractor amends or revises his work schedule for any phases of the project, he shall submit a revised and updated version of the construction schedule as soon as possible for proper adjustments on the monitoring and/or inspecting schedules of all parties involved.

**8. Warranty For Workmanship**

The Contractor shall warrant to NTUA for a period of One (1) Year for his construction workmanship on the project, following a successful Final Inspection and Utility Transfer to NTUA. The Contractor shall sign the Warranty Agreement included on the Final Inspection and Utility Transfer Agreement packet for the completed construction work on the project. The Contractor shall then provide a written Certification to the Warranty Agreement that warrants all materials and installation labor work for not less than One (1) Year, commencing on the signed and dated Warranty Agreement.

**9. Project Records To Be Furnished**

Upon completion of construction for the project and prior to the signing of the paperwork for Final Inspection, a complete set of construction as-built plans, showing the actual work constructed in the field along with any approved supplemental changes and shop drawings of significance, shall be submitted to NTUA for the Owner's Record and review. All costs incurred by the Contractor in the preparation and furnishing of the construction as-built plans shall be included in the contracted price. This cost is incidental and is included as part of the cost for construction and is not a separate cost item.



**NAVAJO TRIBAL UTILITY NTUA**  
AN ENTERPRISE OF THE NAVAJO NATION

**Construction AS-BUILT Plans (Record Drawings)**

The construction as-built plans shall be considered part the project Scope of Work. The submitted as-built will be inspected for accuracy and completeness by NTUA and the Contractor.

The construction as-built shall show the following information, but not limited thereto:

- A. The locations and description of any ex. utility lines and all new utility installations within the construction area. The construction as-built shall include dimensions and swing ties to permanent features.
- B. If applicable, the locations and description of any change orders or Addendums to the approved plans and Scope of Work shall be included. This includes changes in the details of design or additional information prepared or furnished by the Contractor, including modified or revised fabrication, construction, installation, and related details.
- C. Any revisions or modifications (punch list items) which result from the Final Inspection field meeting.
- D. All new project installation information, as required in NTUA Technical Specifications and Provisions.



**NAVAJO TRIBAL UTILITY NTUA**  
AN ENTERPRISE OF THE NAVAJO NATION

<b>Piñon Total Retention Expansion Cost of Plant Sheet</b>							
<i>Navajo Tribal Utility Authority</i>							
<i>Item #</i>	<i>Item Description</i>	<i>Quantity (Est)</i>	<i>Unit</i>	Costs			Sub-Total
				Materials	Labor	Equipment	
1	Clearing & Grubbing	22	Ac				
2	Lagoon Earthwork (Cut)	116,000	Cu Yd				
3	Lagoon Earthwork (Fill)	96,000	Cu Yd				
4	6'x4' Standard Precast Manhole	1	Ea				
5	8" PVC Sewer	1,000	LF				
6	8" DI Sewer	500	LF				
7	Plural Dosing Siphon	1	Ea				
8	8" Gate Valve w/ Box	3	Ea				
9	Demo Existing Fence Section	1	LS				
10	Fence w/ Vehicle Gate	4,200	LF				
11	Piping Supports	40	Ea				
12	8" Transfer Structure w/ Gate Valve	1	Ea				
13	Splash Pads	4	Ea				
14	Water Level Indicator	1	Ea				
	Total Material Cost						
	Total Labor Cost						
	Total Equipment Cost						
				<b>Total Cost of Plant</b>			

**NOTE:** The above listed quantities of material represents the material required (to the best of NTUA's knowledge and estimation), to perform the contracted SCOPE OF WORK as required. It is the responsibility of the contractor to verify material accuracy to ensure that the contracted SCOPE OF WORK will be completed. Notify the NTUA Project Manager of any errors and/or discrepancies with the material list and scope prior to the ordering and acquiring of any material.