

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	01/20/2022	
Media Program:	Water	
Regulatory Program(s)	CWA	
Company Name:	Village of Taos Ski Valley	
Facility Name:	Taos Ski Valley WWTP	
Facility Physical Location:	101 Ocean Boulevard	
(city, state, zip code)	Village of Taos Ski Valley, New Mexico 87525	
Mailing address:	Post Office Box 100	
(city, state, zip code)	Taos Ski Valley, New Mexico 87525	
County/Parish:	Taos	
Facility Phone Number	575-776-8220	
Facility Contact:	Anthony Martinez	Public Works Director
	amartrinez@vtsv.org	
FRS Number:	110002047197	
Identification/Permit Number:	NM0022101	
Media Identifier Number:	NA	
NAICS:	221320	
SIC:	4952	
Personnel participating in inspection:		
Anthony Martinez	Village of Taos Ski Valley	Public Works Director
David Esparza	EPA-R6/ECDWM	Environmental Engineer
EPA Lead Inspector Signature/Date		
	David Esparza	Date
Supervisor Signature/Date		
	Roberto Bernier	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

United States Environmental Protection Agency (EPA) Region 6 inspector David Esparza, PE, arrived at the Village of Taos Ski Valley (Taos Ski Valley) Wastewater Treatment Plant (WWTP) approximately 8:00 AM on January 20, 2022, for an unannounced inspection. I presented my credentials to Mr. Anthony Martinez, Public Works Director and informed him that this was an EPA inspection to determine the facility's compliance under the Clean Water Act (CWA) and the requirements of the National Pollutant Discharge Elimination System (NPDES) permit program, in accordance with the CWA. The generation of this report is based on information supplied by Taos Ski Valley representatives, observations made by the EPA inspector, NMED, and records and reports maintained by the permittee (Taos Ski Valley), and the EPA. Before leaving the facility on January 20, 2022, an exit briefing was held with Mr. Martinez, to explain areas of concern noted at the time of the inspection. It should be noted the WWTP also maintains a discharge permit (DP-1383) issued by the New Mexico Environment Department (NMED), Groundwater Quality Bureau (GWQB) in conjunction with the sludge disposal.

FACILITY DESCRIPTION

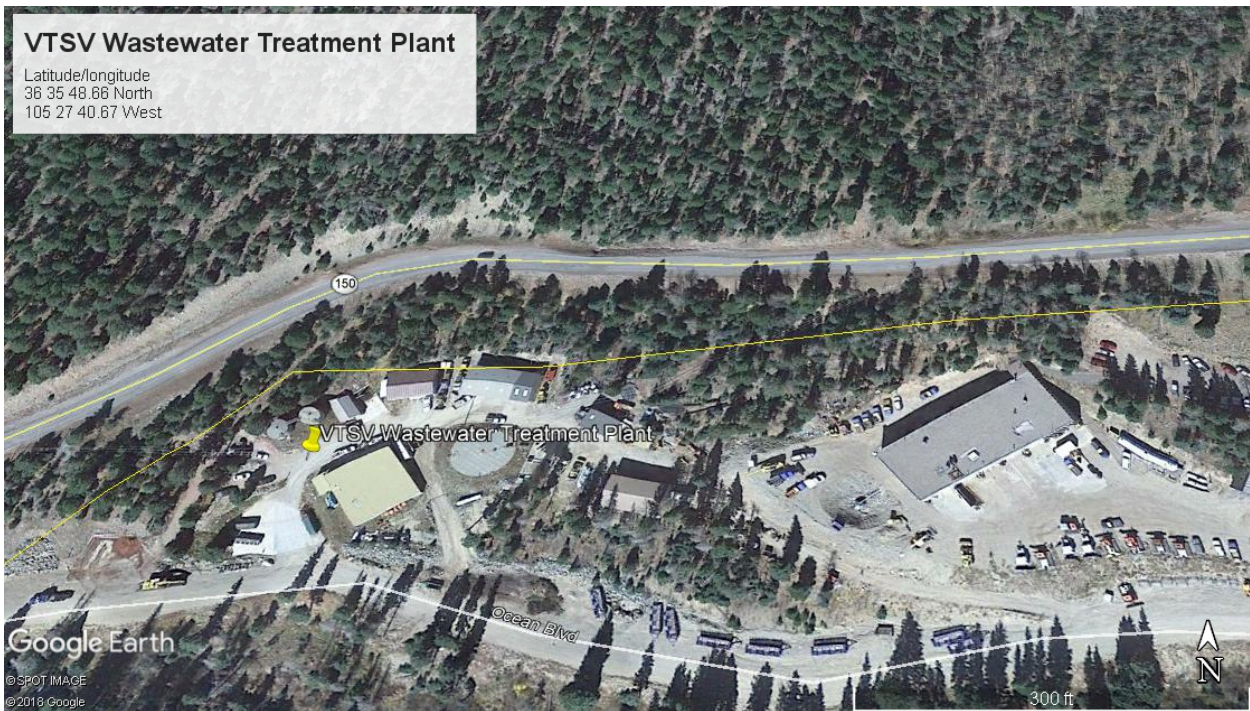
The Village of Taos Ski Valley (VTSV) WWTP facility is classified as a minor discharger with a design capacity of 0.9 MGD serving a year-round population of approximately 500 people and a peak tourist population of approximately 5,000. The facility is located at 38 Ocean Boulevard Taos Ski Valley, Taos County New Mexico or approximately 0.36-miles west of the Village Administration Office, between New Mexico State Road (SR) 150 and Ocean Boulevard in Taos Ski Valley, Taos County, New Mexico (denoted in Aerial Image #1 below). Approximate coordinates to the VTSV WWTP facility are Latitude 36°35'48.66" North, Longitude 105°27'40.67" West. Site hours will consist of Monday through Friday 7am to 5pm.

The existing WWTP is located inside a building to protect it from inclement weather during the winter months. The WWTP treatment process is comprised of a gravity collection system, two (2) lift stations (identified in Table #1), headworks comprised of a grit removal system with a screw pump and bagging system. Flow from the headworks then traverses through a flow control box; thence to two (2) in-ground equalization (EQ) basins, i.e., an anoxic EQ basin with mixers and a steel EQ basin (Appendix 2 VTSV Site Map).

The WWTP maintains four (4) 25K gallon aeration basins; thence the flow passes through a splitter box into secondary clarifiers, for settling of the activated sludge; thence the return activated sludge (RAS) is directed to the first aeration basin. A sweeping arm is used to push the floating materials/debris into a scum pit, thence to sludge storage tanks. Solids from the anoxic EQ basin and backwash from the filters and liquids from the sludge dewatering process are returned to the equalization basins where they are

processed through the WWTP for rescreening. Wastewater from the clarifiers is pumped to two (2) polishing filters; thence traverse through two (2) ultraviolet (UV) disinfection units prior to discharge to the Rio Hondo a tributary to the Rio Grande. Final disposal of the sludge is at the Taos County Land fill.

Part of the June 2019 improvement project included the placement of an Ovivo Membrane Bioreactor (MBR) system that provides primary treatment in the WWTP. This MBR system is comprised of multiple sub-systems (Appendix 3 Ovivo MBR Simplified Plant Layout and Flow Diagram), an upgraded UV disinfection system and a Supervisory Control and Data Acquisition (SCADA) instrumentation.



Aerial Image #1: Overall view of the Village of Taos Ski Valley's Wastewater Treatment Plant. Aerial from Google Earth maps.

Table 1: Village of Taos Ski Valley Lift Stations

	Lift Station	Address
1	Force Main	Kachina Lift Station to Kachina Road
2	Kachina	approximately 2.5-miles to WWTP

Taos Ski Valley does have written policies and procedures to address any potential sanitary sewer overflow events (SSOs), and standard operating procedures (SOPs) pertaining facility operations and

maintenance (O&M) and a current Fats, Oils and Grease (FOG) program policy with respect to existing and/or new FOG contributors. Additionally, their Asset Management Plan pertaining to the Sanitary Sewer and Water GIS Database-Methodology & Description was updated in calendar year 2021.

Currently, there is no Industrial User (IU) contributing to the WWTP.

Section II – OBSERVATIONS

I observed the following and/or the following information was provided or stated on January 20, 2022.

- The June 2019 improvements included upgrades to the WWTP UV disinfection system, a Supervisory Control and Data Acquisition (SCADA) instrumentation and placement of an Ovivo Membrane Bioreactor (MBR) system(Appendix 1 Photograph #3 and Photograph #4).
- The WWTP maintains an on-site generator for back up that is exercised every two (2) weeks.
- At the time of the inspection, I was informed that a Sanitary Sewer Overflow (SSO) had occurred in November 2021 and was duly reported.
- Overall maintenance and operation of the WWTP appeared to be satisfactory. All equipment looked to be running properly.

Section III – AREAS OF CONCERN

A review of the Integrated Compliance Information System (ICIS) database for the period from April 10, 2019, to January 20, 2022, indicates the following:

1. NPDES permit excursion - Nitrogen Total [as N] - November 2019, December 2019, January 2020, April 2020, January 2021, December 2021
2. NPDES permit excursion - Nitrogen Ammonia Total [as N] - November 2019, December 2019, January 2020, December 2021
3. NPDES permit excursion - Phosphorus Total [as P] - December 2019, January 2020, February 2020, April 2020, May 2020, October 2020, November 2020, March 2021, November 2021, December 2021
4. NPDES permit excursion - Biological Oxygen Demand-5 day (BOD₅) - February 2020

EPA Region 6 inspector David Esparza conducted a closing conference at the Village of Taos Ski Valley's WWTP at approximately 10:00 AM on January 20, 2022, for the inspection.

Section IV – FOLLOW UP

The following information was received by EPA on January 27, 2022, after exiting the Facility on January 20, 2022:

- A summary of the quantity and locations of the Village of Taos Ski Valley's lift station(s).
- A copy of the current protocols related to Fats, Oils and Grease (FOG) policy/ordinance - Grease Trap Cleaning Log and Policy
- Standard Operating Procedures (SOP) - Taos Ski Valley NM Control Strategy
- A summary of the quantity and locations of any lift station(s).
 - Forced main from Kachina Lift Station to Kachina Road
 - Kachina Lift Station to WWTP approximately 2.5 miles
- A summary of your sanitary sewer overflow (SSO) protocol or Best Management Practices (BMP), inclusive of a spreadsheet type document delineating any/all SSO events specifically with respect to the previous 2-year period (if available).
 - VTSV Spill Reporting Policy
 - Spill Spreadsheet
- A copy of the current/updated Site Map/Plan
 - VTSV Site and Building plan layout
- Additional Information requested at the facility
 - Average Flow data 2020-2021
 - The Village of Taos Ski Valley - Asset Management Plan

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 5 photos taken 1/20/2022

Appendix 2 – Village of Taos Ski Valley WWTP Site Map

Appendix 3 – Ovivo MBR Simplified Plant Layout and Flow Diagram

Appendix 4 – A Review of the Integrated Compliance Information System (ICIS) Database for the period from April 10, 2019, to January 20, 2022

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Taos Ski Valley Wastewater Treatment Plant		
City: Village of Taos Ski	County/Parish: Taos	State: New Mexico



View of one (1) of the two (2) in-ground equalization (EQ) basins, i.e., an anoxic EQ basin with mixers and a steel EQ basin after receipt of flow from the headworks. (DSCN2108). Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Taos Ski Valley Wastewater Treatment Plant		
City: Village of Taos Ski	County/Parish: Taos	State: New Mexico



Another view of the in-ground equalization (EQ) basins. (DSCN2109). Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Taos Ski Valley Wastewater Treatment Plant		
City: Village of Taos Ski	County/Parish: Taos	State: New Mexico



View of the upgraded UV disinfection system in conjunction with the Ovivo Membrane Bioreactor (MBR) system. (DSCN2113). Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Taos Ski Valley Wastewater Treatment Plant		
City: Village of Taos Ski	County/Parish: Taos	State: New Mexico



A view of a portion of the Ovivo Membrane Bioreactor (MBR) system. (DSCN2114). Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Taos Ski Valley Wastewater Treatment Plant		
City: Village of Taos Ski	County/Parish: Taos	State: New Mexico

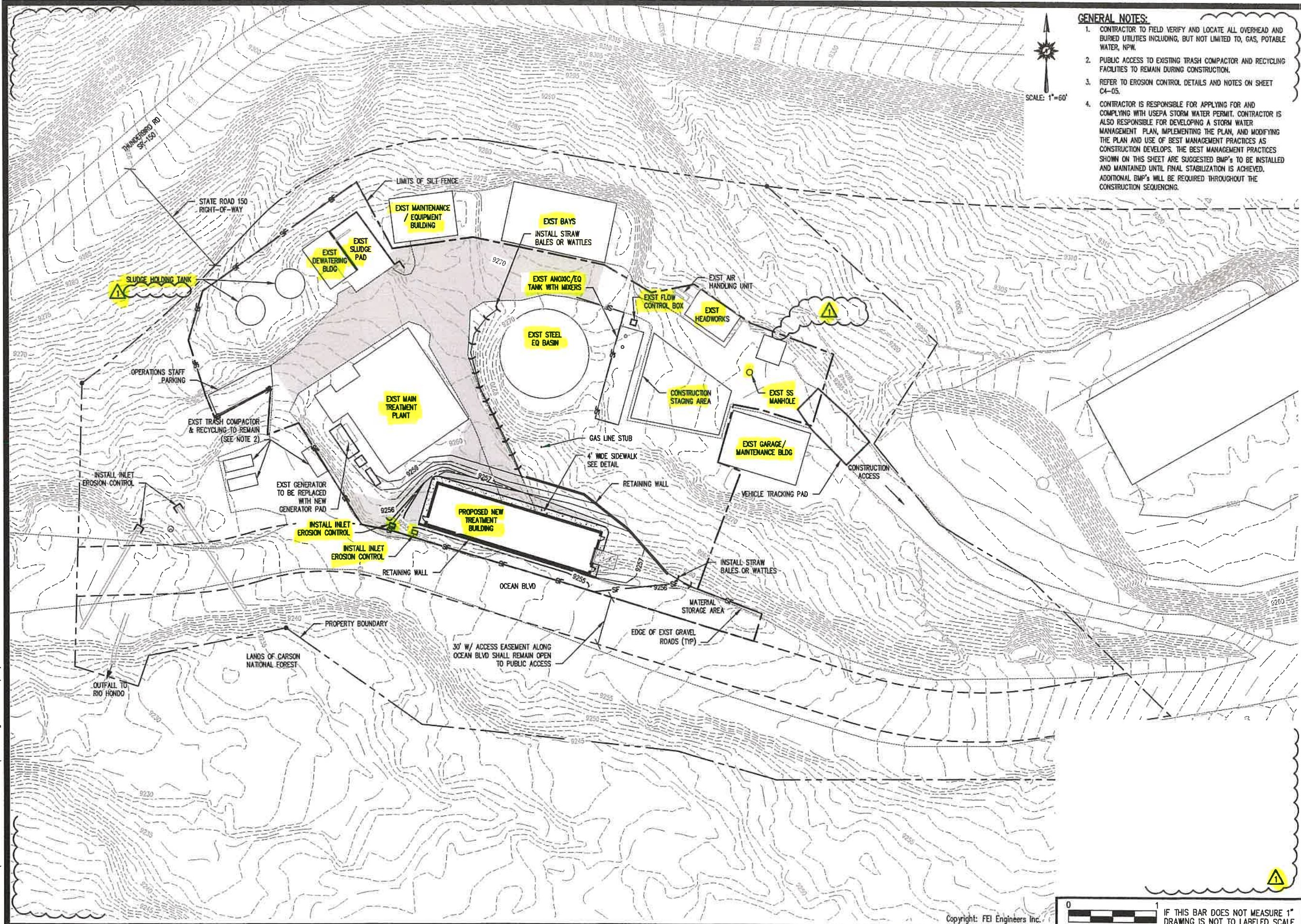


View of the WWTP's Outfall into the Rio Hondo a tributary to the Rio Grande. Note: no visible staining, aromatics or stressed vegetation was observed. (DSCN 2118). Photographed by D. Esparza

Appendix 2

Village of Taos Ski Valley WWTP Site Map

LOCATION: W: VTSV-0262 WWTP RE-DESIGN\CI-07.dwg PLOTTED: 3/29/2019 3:48 PM BY: Pemberton,Ron



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY AND LOCATE ALL OVERHEAD AND BURIED UTILITIES INCLUDING, BUT NOT LIMITED TO, GAS, POTABLE WATER, NPW.
2. PUBLIC ACCESS TO EXISTING TRASH COMPACTOR AND RECYCLING FACILITIES TO REMAIN DURING CONSTRUCTION.
3. REFER TO EROSION CONTROL DETAILS AND NOTES ON SHEET C4-05.
4. CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND COMPLYING WITH USEPA STORM WATER PERMIT. CONTRACTOR IS ALSO RESPONSIBLE FOR DEVELOPING A STORM WATER MANAGEMENT PLAN, IMPLEMENTING THE PLAN, AND MODIFYING THE PLAN AND USE OF BEST MANAGEMENT PRACTICES AS CONSTRUCTION DEVELOPS. THE BEST MANAGEMENT PRACTICES SHOWN ON THIS SHEET ARE SUGGESTED BMP'S TO BE INSTALLED AND MAINTAINED UNTIL FINAL STABILIZATION IS ACHIEVED. ADDITIONAL BMP'S WILL BE REQUIRED THROUGHOUT THE CONSTRUCTION SEQUENCING.



REV. No.	DATE	DESCRIPTION
1	03/2019	ADDENDUM No. 3

VILLAGE OF TAOS SKI VALLEY
WASTEWATER TREATMENT PLANT EXPANSION

EROSION CONTROL PLAN

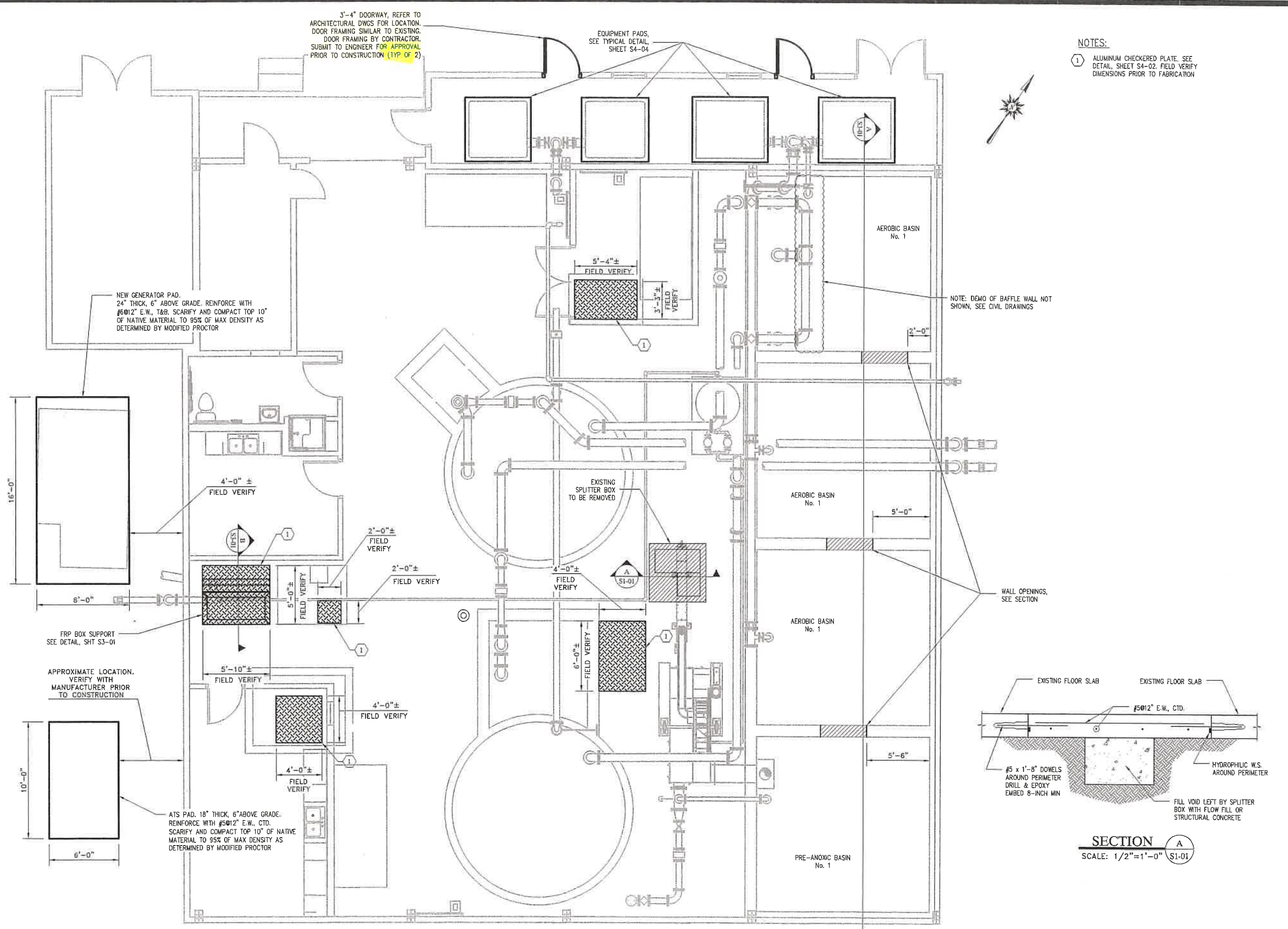
PROJECT No.: VTSV-0262
DATE: 3/27/2019
DESIGNED BY: MAD
DRAWN BY: BB
CHECKED BY: PJO

C1-07

Copyright: FEI Engineers Inc.



IF THIS BAR DOES NOT MEASURE 1"
DRAWING IS NOT TO LABELED SCALE



NOTES:
 1 ALUMINUM CHECKERED PLATE. SEE DETAIL, SHEET S4-02. FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION

REV. No.	DATE	DESCRIPTION
1	03/2019	BID SET

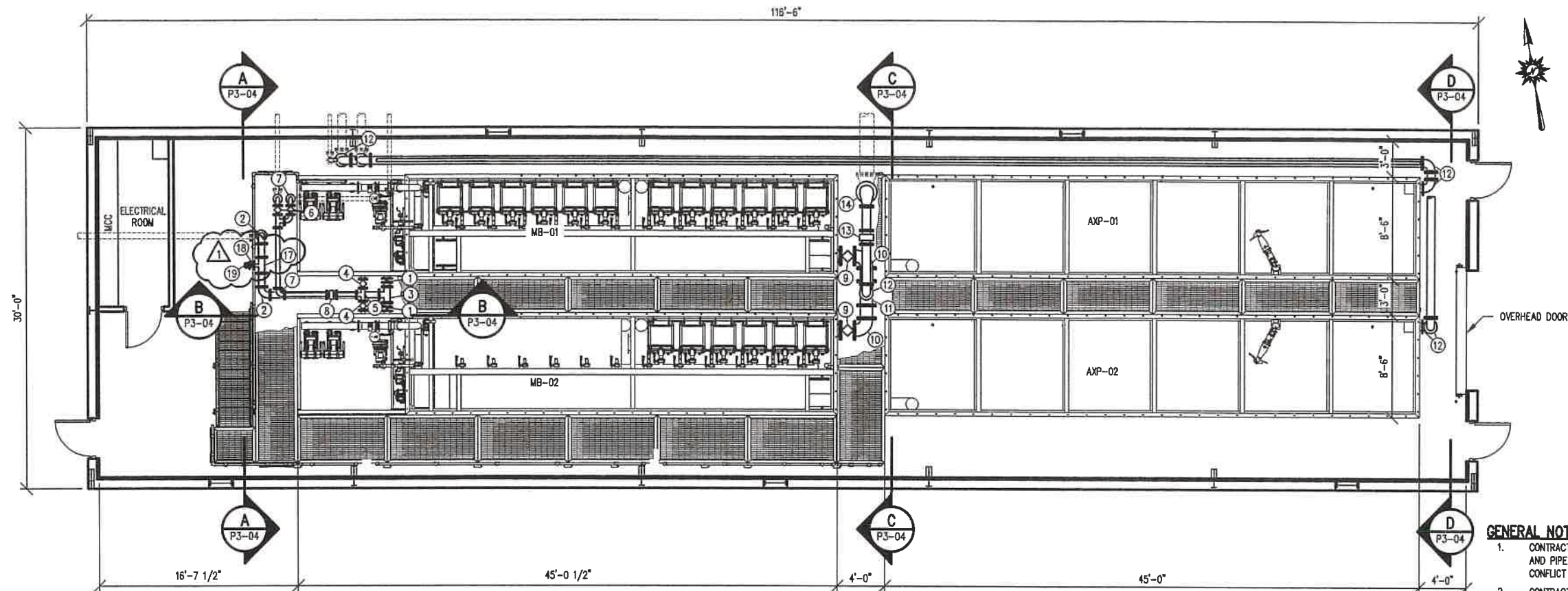
VILLAGE OF TAOS SKI VALLEY
 WASTEWATER TREATMENT PLANT EXPANSION
 EXISTING TREATMENT BUILDING
 UPPER LEVEL PLAN

PROJECT No.: VTSV-0262
 DATE: 2/19/2019
 DESIGNED BY: TSC
 DRAWN BY: TSC
 CHECKED BY: DWM

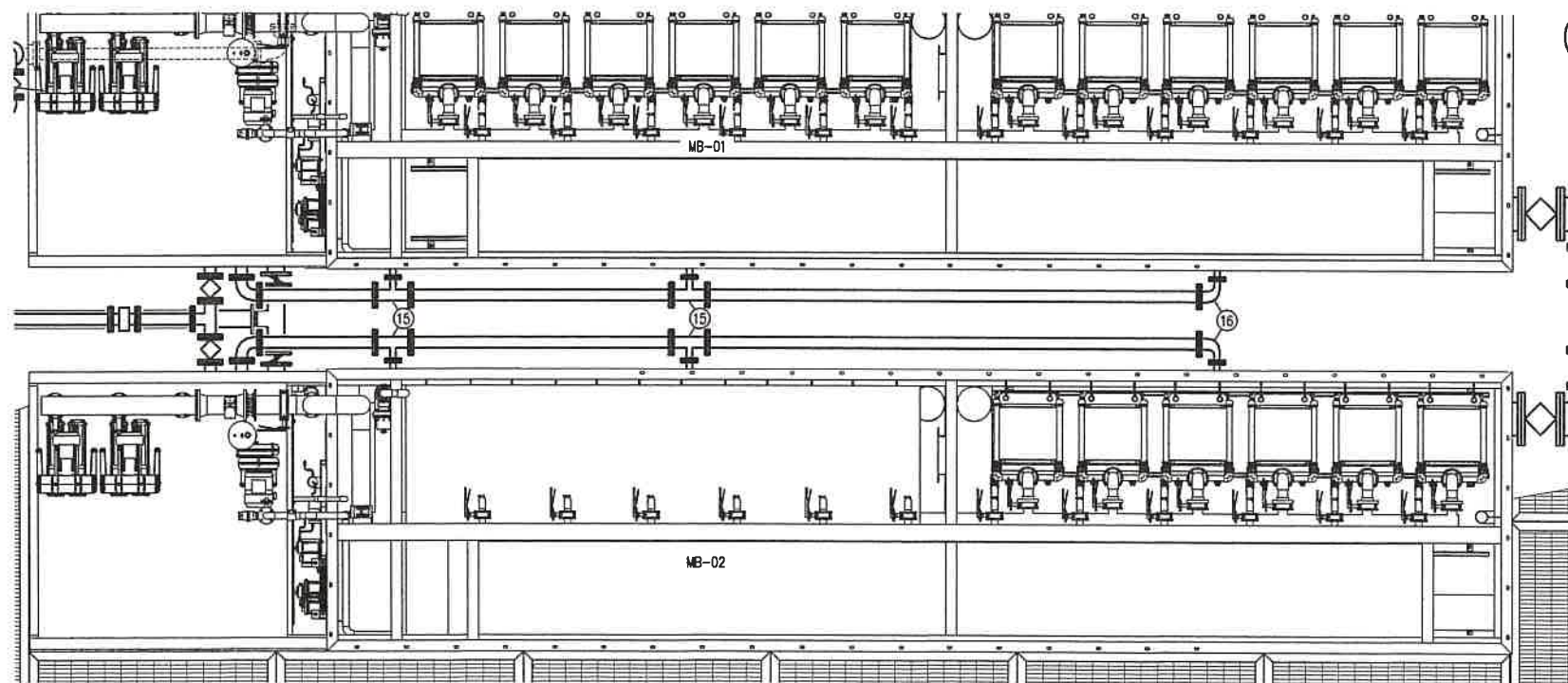
S1-01

TREATMENT PLANT PLAN
 SCALE: 1/8"=1'-0"

LOCATION: W:\VTSV-0262 WWP RE-DESIGN\PI-04.dwg PLOTTED: 3/26/2019 3:11 PM BY: Rindt, Keith



PROPOSED TREATMENT BUILDING PLAN
3/32"=1'-0"



ENLARGED PLAN
3/16"=1'-0"

GENERAL NOTES:

1. CONTRACTOR TO COORDINATE PLATFORM SUPPORT LOCATIONS AND PIPE ALIGNMENT. INFORM ENGINEER OF ANY NOTED CONFLICT BEFORE PROCEEDING.
2. CONTRACTOR TO FIELD ROUTE WAS PIPING FROM TANK TO WAS PUMP SUCTION FLANGE.

EQUIPMENT NOTES:

- 1 6" BUTTERFLY VALVE
- 2 6" 90° BEND
- 3 6" TEE
- 4 4" PLUG VALVE
- 5 4" TEE
- 6 4" ELECTRICAL ACTUATED PLUG VALVE
- 7 4" 90° BEND
- 8 4" FLOW METER
- 9 12" PLUG VALVE
- 10 12" 90° BEND
- 11 12"x12"x8" REDUCING TEE
- 12 8" 90° BEND
- 13 8" FLOW METER
- 14 14"x8" REDUCING 90° BEND
- 15 4"x2" TEE
- 16 4"x2" 90° BEND
- 17 6"x3" REDUCING TEE
- 18 3" BUTTERFLY VALVE
- 19 3" CAMLOCK



IF THIS BAR DOES NOT MEASURE 1"
DRAWING IS NOT TO LABELED SCALE.

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REV. No.	DATE	DESCRIPTION
1	03/2019	BID SET
2	03/2019	ADDENDUM No. 2

VILLAGE OF TAOS SKI VALLEY
WASTEWATER TREATMENT PLANT EXPANSION

PROPOSED TREATMENT BUILDING PLAN

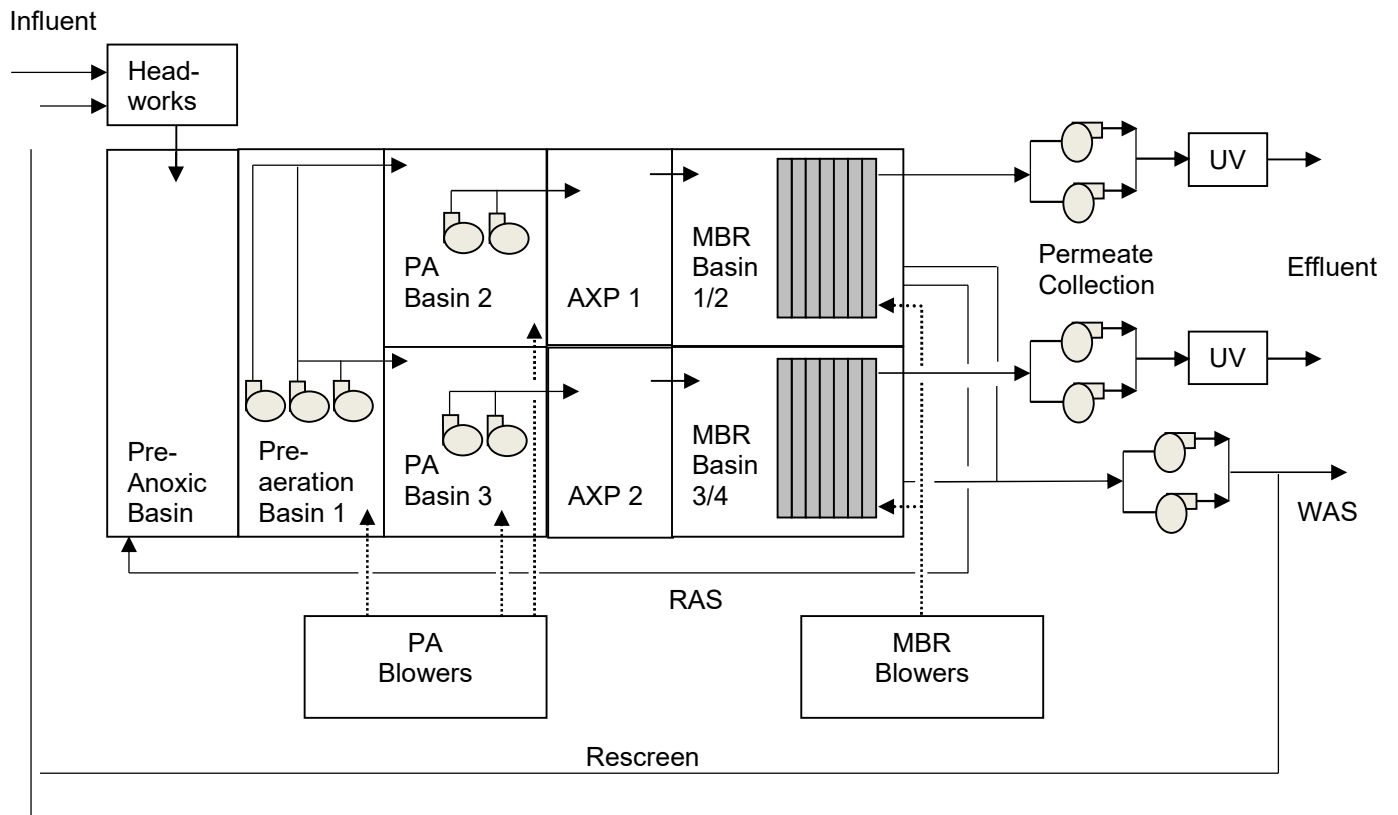
PROJECT No.: VTSV-0262
DATE: 3/26/2019
DESIGNED BY: MAD / KV
DRAWN BY: KPR
CHECKED BY: PJO

P1-04

Appendix 3

Ovivo MBR Simplified Plant Layout and Flow Diagram

Simplified Plant Layout and Flow Diagram



Appendix 4

A Review of the Integrated Compliance Information System (ICIS) Database for the period from April 10, 2019, to January 20, 2022

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Related NPDES Violations

ADD SINGLE EVENT VIOLATION

List of Violations Related to the Permit

						Record Numbers 1 to 49
Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	11/30/2019	T-12/31/2019	2-07/31/2020	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C3	E90	11/30/2019			
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	11/30/2019	T-12/31/2019	2-04/30/2020	
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	11/30/2019			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 Q1	E90	12/31/2019	T-12/31/2019	2-07/31/2020	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	12/31/2019	T-12/31/2019	2-07/31/2020	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C3	E90	12/31/2019			
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q1	E90	12/31/2019	T-12/31/2019	2-04/30/2020	
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q2	E90	12/31/2019			
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	12/31/2019	T-12/31/2019	2-04/30/2020	
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	12/31/2019			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q2	E90	12/31/2019			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	12/31/2019	V-02/29/2020	2-07/31/2020	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C3	E90	12/31/2019			

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	01/31/2020	T-01/31/2020	2-07/31/2020	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C3	E90	01/31/2020			
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q2	E90	01/31/2020			
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C2	E90	01/31/2020	T-01/31/2020	2-04/30/2020	
Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	01/31/2020			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	E90	01/31/2020	T-02/29/2020	2-07/31/2020	
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Effluent Violation	001 A 00310 BOD, 5-day, 20 deg. C Effluent Gross Season ID:0 Q2	E90	02/29/2020			
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DMR Non-Receipt Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q1	D90	02/29/2020	N-04/15/2020	2-10/15/2020	
DMR Non-Receipt Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 Q2	D90	02/29/2020	K-04/15/2020	2-10/15/2020	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	02/29/2020	V-02/29/2020	2-07/31/2020	
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C3	E90	02/29/2020			
Effluent Violation	001 A 81010 BOD, 5-day, percent removal Effluent Gross Season ID:0 C1	E90	02/29/2020			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	04/30/2020	T-04/30/2020	2-07/31/2020	
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C3	E90	04/30/2020			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C3	E90	04/30/2020			

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
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Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C2	E90	11/30/2020			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C3	E90	11/30/2020			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C2	E90	01/31/2021			
Effluent Violation	001 A 00600 Nitrogen, total [as N] Effluent Gross Season ID:0 C3	E90	01/31/2021			
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Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 Q2	E90	12/31/2021			
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Effluent Violation	001 A 00610 Nitrogen, ammonia total [as N] Effluent Gross Season ID:0 C3	E90	12/31/2021			
Effluent Violation	001 A 00665 Phosphorus, total [as P] Effluent Gross Season ID:0 C3	E90	12/31/2021			

Record Numbers 1 to 49

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