PUBLIC REVIEW DRAFT

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

BIG SANDY RANCHERIA WASTEWATER SYSTEM IMPROVEMENTS PROJECT

FRESNO COUNTY, CALIFORNIA

LSA

September 2021

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Big Sandy Rancheria, 37387 Auberry Mission Road, Auberry, CA 93602

Notice of Intent to Adopt an
Initial Study/Mitigated Negative Declaration

Date: October 29, 2021
To: Public Agencies, Organizations, and Interested Parties
From: Big Sandy Rancheria
Subject: **Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration**

Pursuant to the *State of California Public Resources Code and the Guidelines for Implementation of the California Environmental Quality Act*, as most recently amended, this is to advise that the Big Sandy Rancheria (BSR) has prepared an Initial Study to evaluate the environmental effects of the project identified below:

Project Title: Big Sandy Rancheria Wastewater System Improvements Project

Project Sponsor: Big Sandy Rancheria, 37387 Auberry Mission Road, Auberry, CA 93602.

Project Location: The project site is approximately 280 acres in size, and is located approximately one mile east of Auberry, a census-defined place in eastern Fresno County. The BSR is located approximately 20 miles northeast of the Fresno-Clovis metropolitan area. Regional access to the BSR is made through State Route (SR) 168 and Auberry Road.

Project Description: The project would include the construction and operation of a new wastewater treatment plant (WWTP) and associated wastewater collection system within the Big Sandy Rancheria (BSR). The project would provide wastewater service to all residences within the BSR boundary, as well as to all community buildings with water service, including the following:

- 54 Existing Residential Structures
- Mono Wind Casino
- Gas Station
- Gymnasium
- Tribal Administration Buildings
- Head Start Buildings

CEQA Project Status: An Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for this project pursuant to the provisions of CEQA. The IS/MND determined that the proposed project would result in less-than-significant impacts, and therefore a Mitigated Negative Declaration

is proposed. The Public Review Draft IS/MND and all related analysis are available on BSR's website at bigsandyrancheria.com.

Public Hearing: The BSR will consider the proposed project and IS/MND at a public meeting that has not been scheduled. When scheduled, the hearing will be held at 3:00 p.m. at Big Sandy Rancheria gym.

Public Review Period: A 30-day public review period will begin on October 29, 2021. Written comments must be mailed, faxed, submitted in person, or via email to the contact person identified below no later than 5:00 p.m. on November 29, 2021.

Tom Zizzo, Tribal Administrator
Big Sandy Rancheria
37387 Auberry Mission Road
Auberry, CA 93602
Fax: (559) 855-4640
Email: TZizzo@bsrnation.com

BSR staff encourages your agency or organization to review the IS/MND and offer comments during the public review period. BSR staff would greatly appreciate receiving written comments at the earliest possible time. This would greatly assist us in meeting the project schedule. You are also welcome to contact us at (559) 374-0069 with any questions you might have.

PUBLIC REVIEW DRAFT

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

BIG SANDY RANCHERIA WASTEWATER SYSTEM IMPROVEMENTS PROJECT

FRESNO COUNTY, CALIFORNIA

Submitted to:

Big Sandy Rancheria
37387 Auberry Mission Road
Auberry, California 93602

Prepared by:

LSA
2565 Alluvial Avenue, Suite 172
Clovis, California 93611
559.490.1210

Project No. MKN2001

LSA

September 2021

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LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ADF	average daily flow
APE	Area of Potential Effect
BMPs	Best Management Practices
BOD5	five-day biochemical demand
BSA	Biological Study Area
BSR	Big Sandy Rancheria
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CH_4	methane
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG	Council of Governments
CUPS	Certified Unified Program Agency
dB	decibel
dBA	A-weighted sound level
DBH	diameter at breast height

DOT	United States Department of Transportation
DTSC	California Department of Toxic Substances Control
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Monitoring and Mapping Program
GHGs	Greenhouse gas emissions
gpd	gallons per day
gpm	Gallons per minute
GWP	Global Warming Potential
HCP	Habitat Conservation Plan
HPIR	Historic Property Identification Report
IHS	Indian Health Service
IPaC	Information, Planning, and Consultation
LAMP	Local Agency Management Plan
L_{dn}	average level
L_e	sound level
L_{max}	noise levels
LS-	Lift Station
MBTA	Migratory Bird Treaty Act
mg/L	milligrams per liter
N_2O	Nitrous oxide
NAAQ	National Air Quality Standards
NAHC	Native American Heritage Commission
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O&M	Operation and Maintenance
O_3	Ozone
OPR	Office of Planning and Research
OWTS	Onsite Wastewater Treatment Systems

Pb	lead
PHF	peak hourly flow
PM_{10}	particulate matter
$PM_{2.5}$	fine particulate matter
ppb	parts per billion
PVC	polyvinyl chloride
RC	Resource Conservation
ROG	reactive organic gases
ROWD	Report of Waste Discharge
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SHPO	State Historic Preservation Officer
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SR	State Route
SSJVIC	Southern San Joaquin Valley Information Center
State	State of California
SWPPP	Storm Water Pollution Prevention Plan
TACs	toxic air contaminants
TDH	total dynamic head
TSS	total suspended solids
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
WDRs	Waste Discharge Requirements
WWTP	wastewater treatment plant

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1.0 PROJECT INFORMATION

1. **Project Title:**

   Big Sandy Rancheria Wastewater System Improvements Project

2. **Lead Agency Name and Address:**

   Big Sandy Rancheria
   37387 Auberry Mission Road
   Auberry, California 93602

3. **Contact Person and Phone Number:**

   Tom Zizzo, Big Sandy Rancheria Tribal Administrator
   (559) 374-0069

4. **Project Location:**

   Big Sandy Rancheria, approximately one mile east of Auberry in eastern Fresno County.

5. **Project Sponsor's Name and Address:**

   Big Sandy Rancheria
   37387 Auberry Mission Road
   Auberry, California 93602

6. **Zoning:**

   Resource Conservation (RC) 40 Zoning District of Fresno County

7. **Description of Project:**

   The following describes the proposed Big Sandy Rancheria Wastewater System Improvements Project (project). The project would include the construction and operation of a new wastewater treatment plant (WWTP) and associated wastewater collection system within the Big Sandy Rancheria (BSR). This section includes a summary description of the project's location, existing site characteristics, and required approvals.

   The Big Sandy Rancheria of Mono Indians of California is a rancheria and federally recognized tribe of Western Mono Indians (Monache). The United States Department of Health and Human Services, Indian Health Service (IHS) is the lead agency for review of the project under the California Environmental Quality Act (CEQA).

   For the purpose of describing the proposed project, the project site consists of the area in which the following components would be located: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Collectively, these components are referred to as the proposed project and are located within the BSR.

Project Site

This section describes the location and characteristics of the project site and provides a brief overview of the existing land uses within and in the vicinity of the project site. BSR plans to make wastewater service available to every residence within the BSR boundary, as well as to all community buildings with water service, including the following:

- 54 residential structures
- Mono Wind Casino
- Gas Station
- Gymnasium
- Tribal Administration Buildings
- Head Start Buildings

Location

The BSR, and project site, is approximately 280 acres in size, and is located approximately one mile east of Auberry, a census-defined place in eastern Fresno County. The BSR is located approximately 20 miles northeast of the Fresno-Clovis metropolitan area. Regional access to the BSR is made through State Route (SR) 168 and Auberry Road. Figure 1 shows the location of the BSR and the regional context. Figure 2 shows the project site location.

Site Characteristics and Current Site Conditions

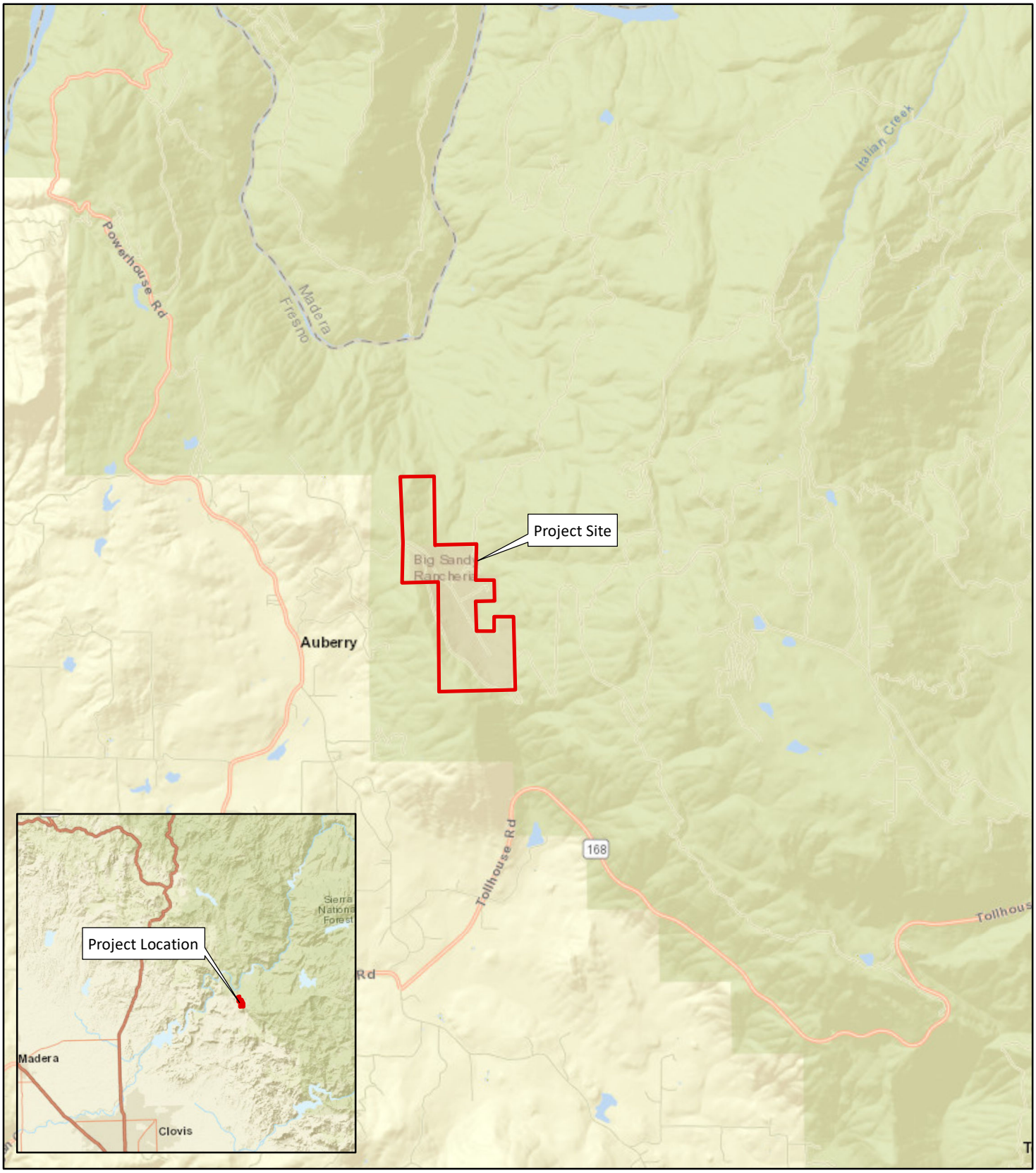
The project site is characterized by uneven topography, typical of the Sierra Nevada foothills. The project site is generally bisected by a dry creek bed with flow only during large rain events. The project site generally slopes from south to north and encompasses residential and commercial properties currently being served by septic systems.

Within the northern portion of the approximately 280-acre BSR, is an undeveloped 71-acre area referred to as the Comstock Property.

The project site includes 54 residences that are connected to individual septic tank systems. The locations of residences with septic tanks that would be connected to the wastewater collection system are shown in Figure 3. The existing septic systems have structural damage, are undersized, or are located in soils that are not suited for percolation. In addition, some homes do not have acceptable areas for replacement drain field systems, are susceptible to infiltration resulting in ground water or surface water contamination, and are in proximity to drinking water wells.

Proposed Project

This section provides a description of the proposed project as identified in the BSR Wastewater System Improvements Preliminary Engineering Report, dated August 28, 2020 (MKN & Associates 2020). BSR proposes to construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences.



LSA

FIGURE 1

0 2500 5000
FEET

SOURCE: ESRI World Street Map (03/20).

I:\MKN2001\Maps\Figure 1_Project Location and Vicinity.mxd (9/4/2020)

Big Sandy Rancheria Wastewater System Improvements Project
Fresno County, California
Project Location and Vicinity

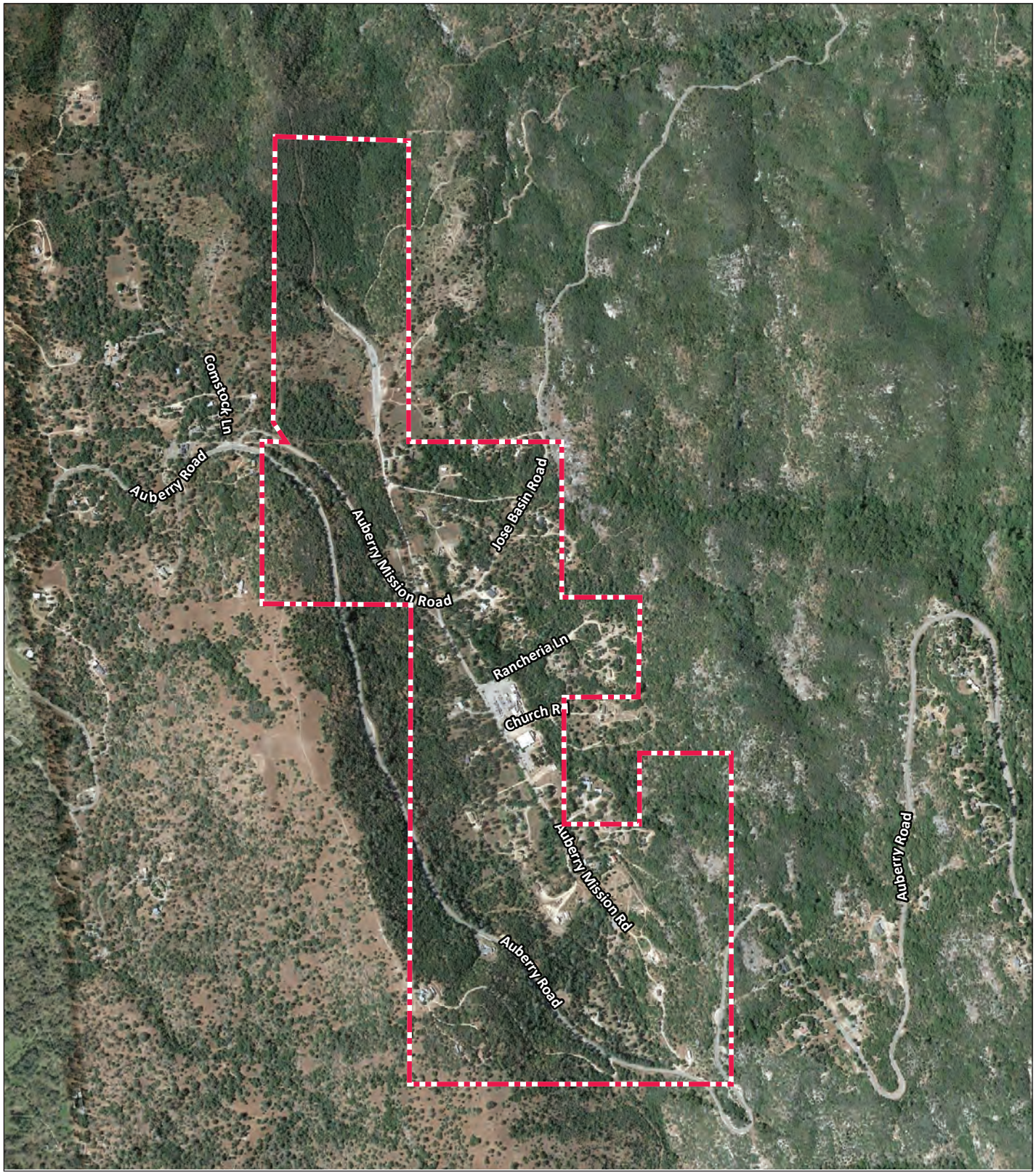


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FIGURE 2

N

0 500 1000
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Project Site

Big Sandy Rancheria
Wastewater System Improvements Project
Project Site Location

SOURCES: Google Earth, 8/23/18; LSA, 2020

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 2.ai (8/31/2020)

LSA

FIGURE 3

N

0 180 360
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Big Sandy Rancheria
Wastewater System Improvements Project
Existing Septic Tank Locations

SOURCE: MKN, 2020

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 3.ai (8/31/2020)

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Wastewater Treatment

Wastewater treatment would consist of two components: treatment of wastewater at a WWTP; and disposal of wastewater through subsurface disposal via drip fields. As shown in Figure 4, the proposed WWTP would be located along the entrance road at the southeast end of the Comstock Property.

Wastewater Treatment Plant

The project includes the construction and operation of a packed bed aerobic system that consists of a reactor with media and effluent recirculation chamber to keep the media wet. Similar to a biological filtration process, the packed bed consists of textile-covered plastic media which promotes growth of microorganisms on the surfaces. Such forms of the treatment provide a high tolerance for variances in flow while providing stable treatment. Figure 5 shows the Proposed WWTP Site Plan.

Generally, wastewater strength is defined by its five-day biochemical demand (BOD5), total suspended solids (TSS), and nitrogen content. The system consists of two phases. In the first phase, two 15,000-gallon flow equalization tanks sequentially provide primary treatment. The influent is then pumped into the second phase, where flow is directed to five treatment tanks that are controlled by pump station that adjusts the load accordingly to provide a treated effluent. Each of the five treatment tanks has a forced air venting system to minimize buildup of odorous gases. The top of all tanks would be 18 inches above final grade. Generally, wastewater strength is defined by its BOD5, TS, and nitrogen content. The treated effluent would be less than 10 milligrams per liter (mg/L) of BOD5 and TSS. Finally, the treated effluent pumped to the disposal fields that would cover approximately two acres of surface area and utilize approximately 43,200 linear feet of drip piping, as described below.

The proposed WWTP would be the Model AX-Max 300-42 AdvanTex Pod to treat the projected wastewater flow. Each AX-Max 300-42 pod is rated for an average wastewater flow of 15,000 gallons per day (gpd) in typical residential wastewater. The AdvanTex system would be supplied with its own control panel which would be installed inside a new fiberglass control building structure on site.

Three light posts would be located at the southern end of the WWTP, as shown on Figure 5, and would provide security lighting to be directed down to the proposed WWTP.

The exact number of trees to be removed as a result of construction of WWTP is not known, however, where required, trees would be removed to facilitate construction.

Treated Effluent Disposal

The proposed project would include a shallow drip distribution system to dispose of treated effluent. Figure 6 the proposed effluent disposal field site plan. Shallow drip distribution systems are used in places where conventional trench systems are not suitable or where steep slopes of heavily forested areas make it difficult to install trenches, mounds, or at-grade systems. Constraints and obstacles such as shallow bedrock, high-water table and low-permeability soils

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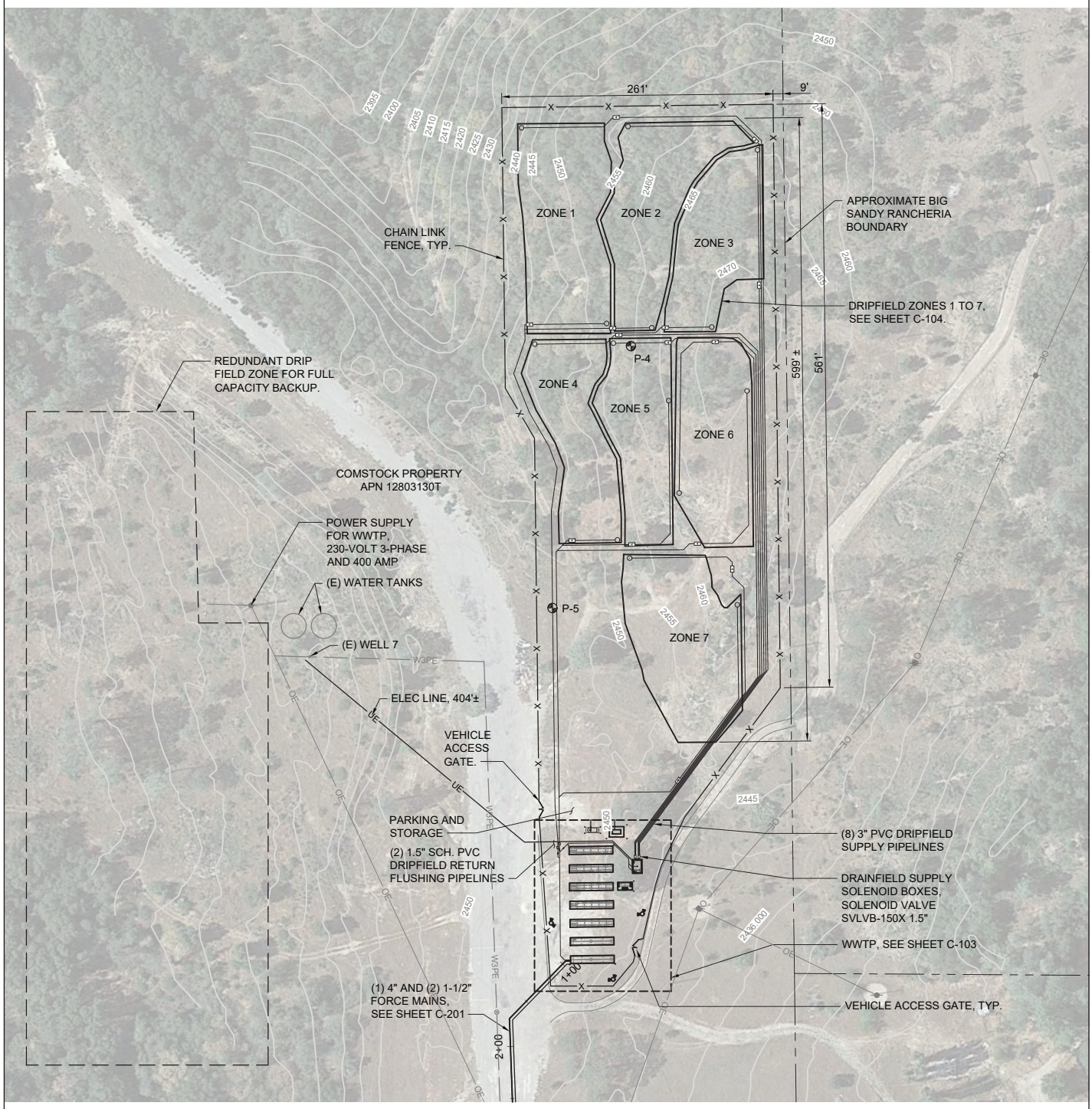

LEGEND

PERCOLATION TEST BORING

LSA

FIGURE 4

0 60 120
FEET

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed WWTP Site Plan and Effluent Disposal Area

SOURCES: Big Sandy Rancheria; MKN, June 2021

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 4.ai (8/23/2021)

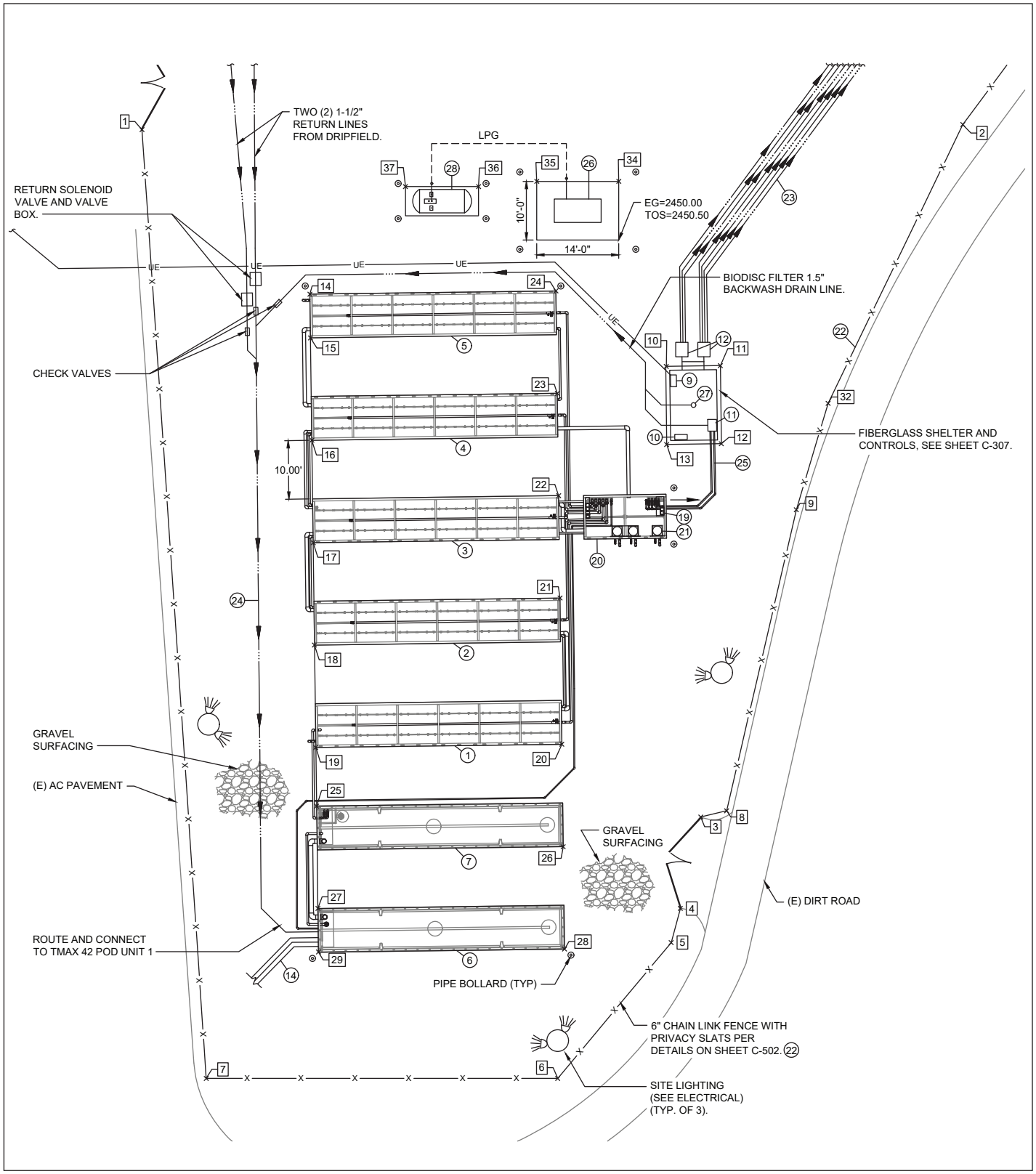

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FIGURE 5

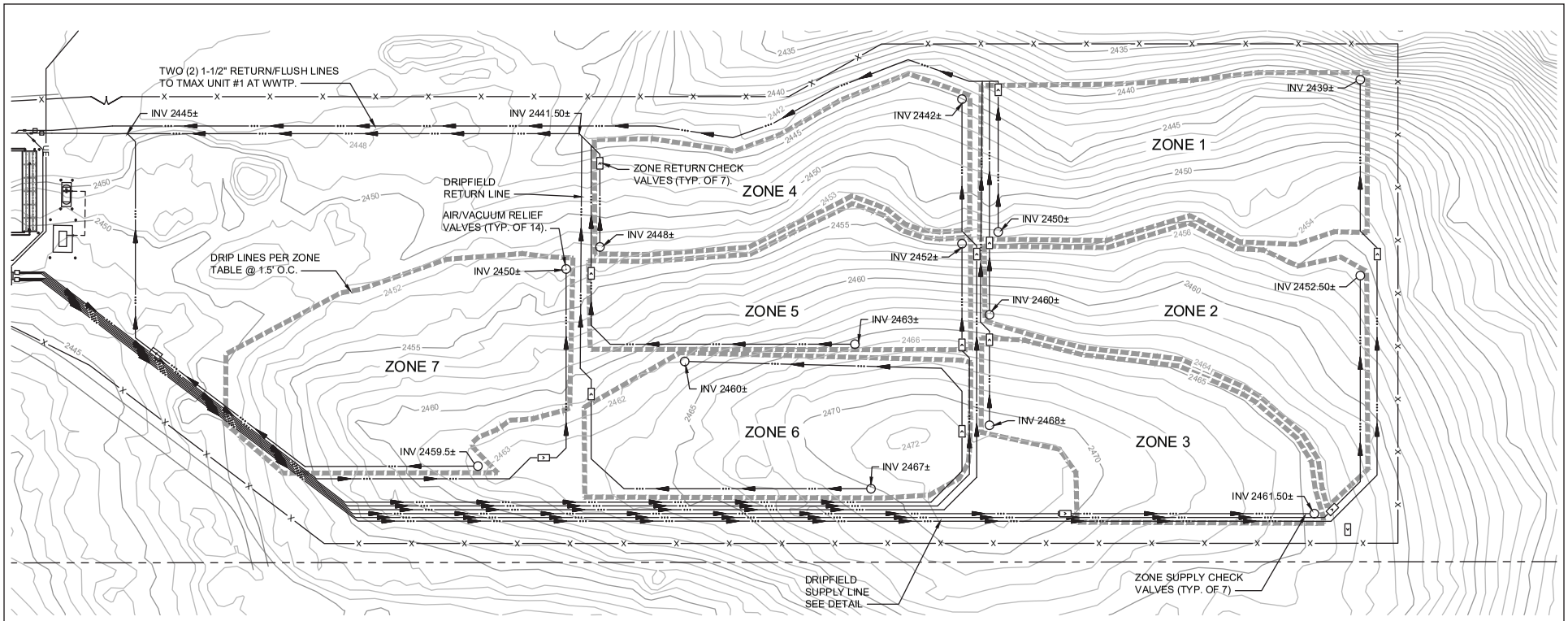
N

0 10 20
FEET

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed WWTP Site Plan

SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 5.ai (8/23/2021)



EFFLUENT DISPOSAL FIELD ZONE			
ZONE NO.	AREA (SQ.FT.)	ROWS OF DRIP LINES	MINIMUM LENGTH OF DRIP LINES (FT)
1	10,710	45	204
2	14,020	35	204
3	10,895	93	104
4	11,751	50	204
5	10,710	35	65
6	14,881	80	136
7	9,386	35	204

LEGEND

- 3" DISPOSAL FIELD SUPPLY LINE WITH FLOW DIRECTION ARROW
- 1-1/2" DISPOSAL FIELD RETURN LINE WITH FLOW DIRECTION ARROW
- 1/2" PVC DRIP TUBING
- CHECK VALVES PER SPECIFICATION SECTION 333610
- AIR VACUUM RELIEF VALVE PER SPECIFICATION SECTION 333610

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FIGURE 6

0 30 60
FEET

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Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Effluent Disposal Field Site Plan

SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 6.ai (8/23/2021)

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are less problematic for subsurface drip lines. This system would consist of pressurized small-diameter tubing buried below ground, as mandated by regulatory agencies, including integrated emitters with each trickling up to two gallons per hour. Critical factors that affect the design of drip distribution systems include soil texture and structure, depth to restrictive layer, and surface slope. Since effluent dispersal occurs near the ground surface, a minimum three feet separation distance between drip line and groundwater table is more achievable. However, the presence and location of bedrock, water table depth, and the down-gradient area through which the effluent flows would be considered when evaluating the feasibility of implementing a subsurface drip system.

Given the advantages associated with operating a shallow drip distribution system and low maintenance requirement, subsurface disposal via drip fields is recommended.

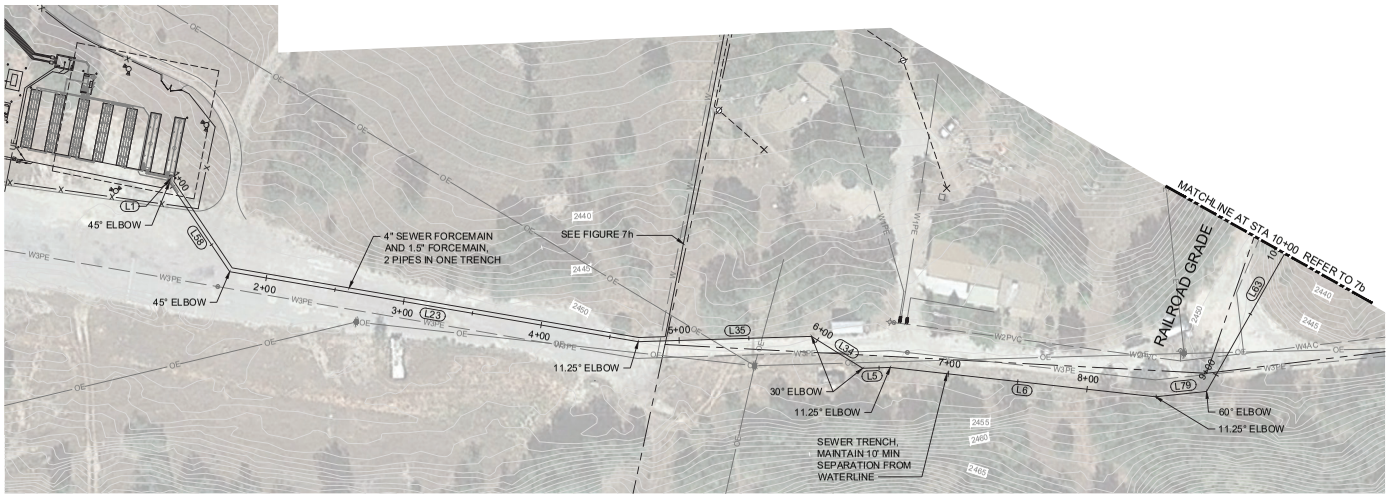
The geotechnical investigation (included as Appendix A of this Initial Study) identified areas on the Comstock property with adequate percolation to be used for drip fields. Subsurface disposal provides year-round disposal, reduces the potential for contact with wastewater by the public, utilizes percolation through the soil to further enhance treatment, is simple to operate and cost effective to construct and maintain. Furthermore, drip system operation and maintenance costs are lower than the leach field option because the drip field does not require maintenance and operation of solenoid valves and distribution valves within each zone. Drip field systems are also shallower and would take full advantage of the soil layers between the dispersal system and existing rock layers at the Comstock property. Furthermore, given the sloping terrain and presence of trees surrounding the Comstock property, a drip field system would provide a distinct advantage in minimizing distribution system clogging that could potentially occur with a leach field system in the similar surrounding environment.

Wastewater Collection System

A proposed wastewater collection system would connect the existing residences and structures to the proposed WWTP. The project site includes uneven terrain, wide spacing between potential connections, and a general lack of wastewater flows. In designing the preliminary layout of the proposed wastewater collection system, the following guidelines were considered:

- Avoid trees and vegetation at all costs
- Stay in public right-of-way when possible
- Utilize existing easements
- Minimize lift stations
- Avoid inverted siphons

The proposed wastewater collection system layout, property connection points and alignments can be found in Figure 7a through Figure 7s. The exact number of trees to be removed as a result of construction of wastewater collection system is not known, but where required, trees would be removed to facilitate construction.



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L1	4.78'	S89° 15' 12.03"W	0+91.31	0+96.10
L5	19.86'	S13° 31' 31.56"E	6+38.22	6+58.08
L6	191.39'	S05° 28' 31.39"E	6+58.08	8+49.47
L23	297.33'	S02° 04' 19.80"E	1+73.36	4+70.69
L34	43.20'	S20° 13' 28.44"W	5+95.02	6+38.22
L35	124.33'	S13° 31' 31.56"E	4+70.69	5+95.02
L58	77.26'	S44° 15' 12.03"W	0+96.10	1+73.36
L63	134.01'	S72° 13' 52.26"E	8+86.26	10+20.28
L79	36.80'	S17° 42' 58.92"E	8+49.47	8+86.26

STA 1+00 TO STA 10+00

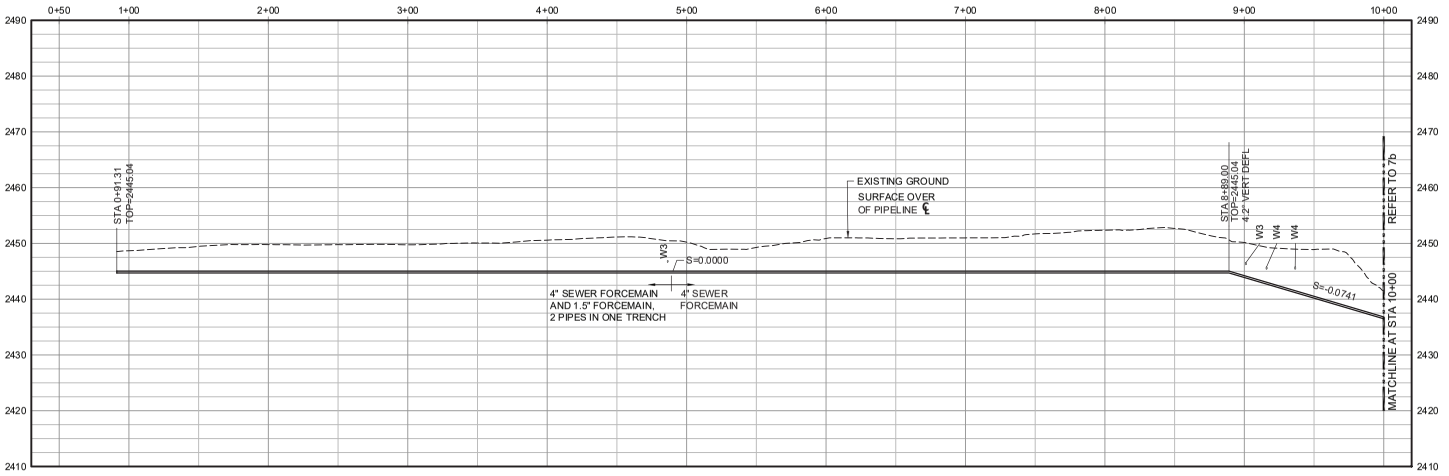


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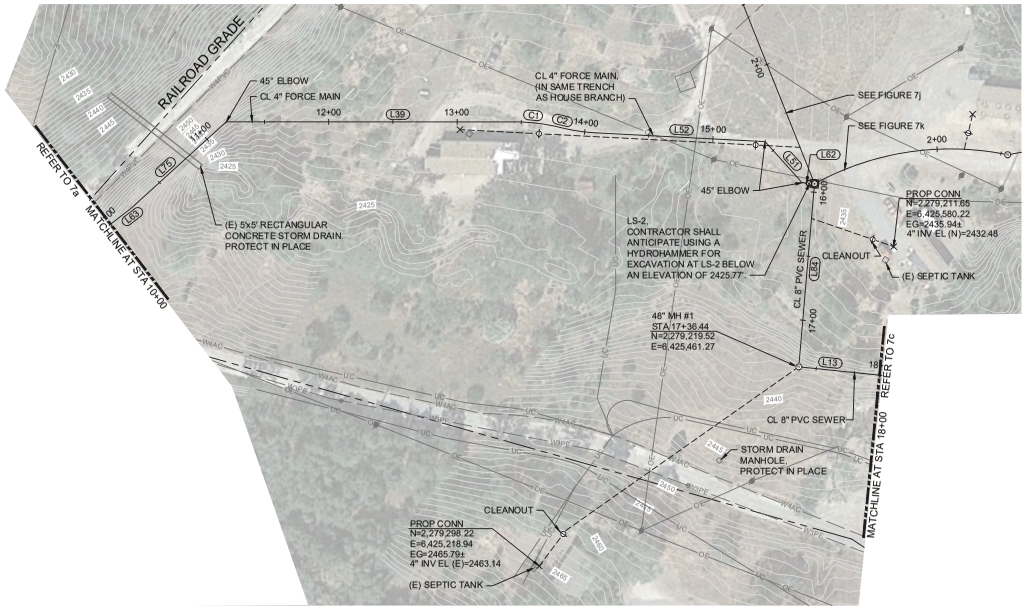
FIGURE 7a

0 40' 80'
0 10' 20'
H: 1" = 40'
V: 1" = 10'

SOURCES: Big Sandy Rancheria; MKN, June 2021.

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7a.ai (8/23/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L13	98.53'	S28° 35' 21.34"E	17+36.44	18+34.98
L39	224.12'	S34° 29' 03.52"E	11+20.28	13+44.40
L51	43.04'	S13° 29' 01.46"W	15+40.70	15+83.74
L52	131.56'	S31° 30' 58.54"E	14+09.15	15+40.70
L62	9.68'	S29° 34' 41.82"E	15+83.74	15+93.41
L63	134.01'	S72° 13' 52.26"E	8+86.26	10+20.28
L75	100.00'	S76° 44' 34.71"E	10+20.28	11+20.28
L84	143.03'	S60° 24' 17.56"W	15+93.41	17+36.44

CURVE TABLE				
CURVE #	LENGTH	RADIUS	BC STATION	EC STATION
C1	36.28'	150.00'	13+44.40	13+80.67
C2	28.47'	150.00'	13+80.67	14+09.15

STA 10+00 TO STA 18+00

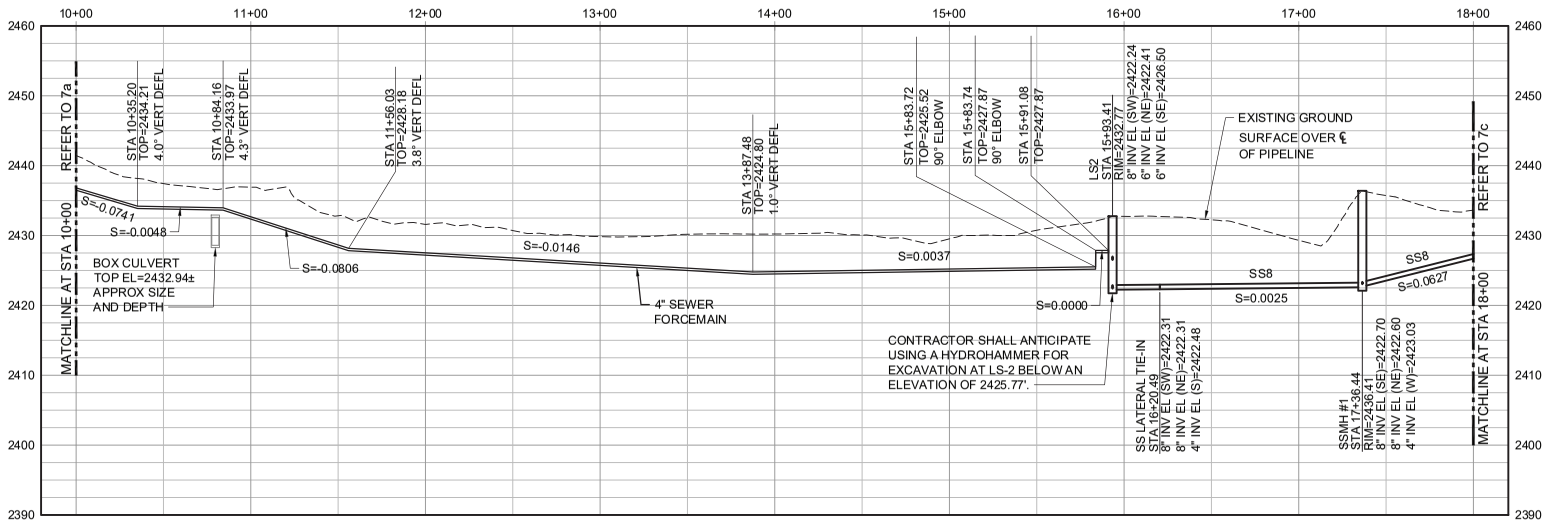


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FIGURE 7b

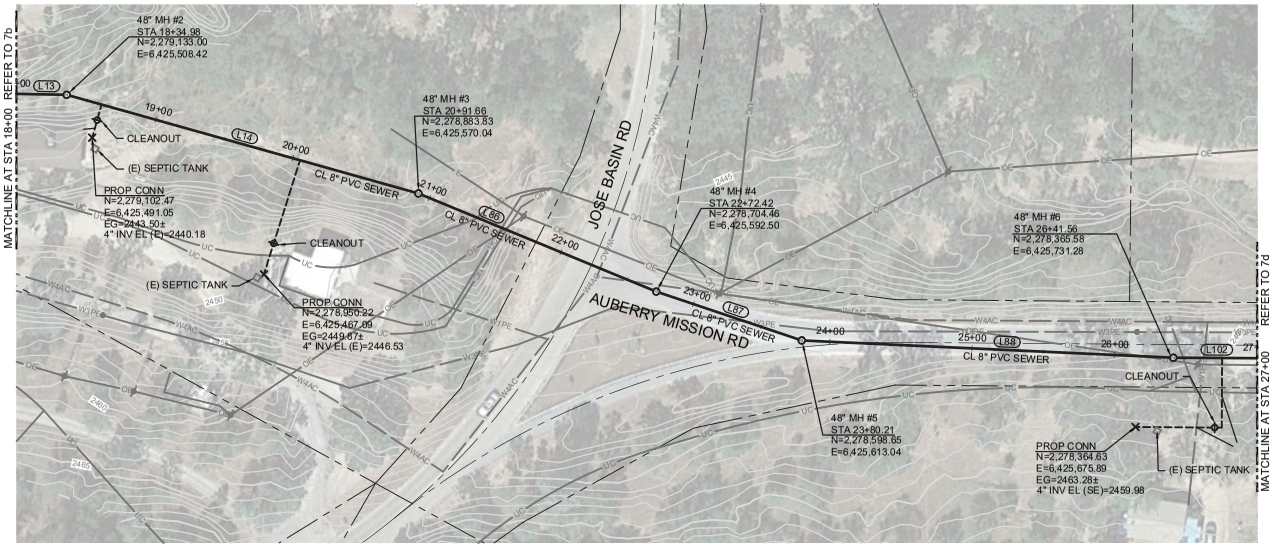
0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7b.ai (8/23/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L13	98.53'	S28° 35' 21.34"E	17+36.44	18+34.98
L14	256.68'	S13° 53' 27.15"E	18+34.98	20+91.66
L86	180.76'	S07° 08' 11.38"E	20+91.66	22+72.42
L87	107.79'	S10° 59' 12.22"E	22+72.42	23+80.21
L88	261.35'	S26° 53' 53.46"E	23+80.21	26+41.56
L102	1720.46'	S29° 17' 02.97"E	26+41.56	43+62.02

STA 18+00 TO STA 27+00

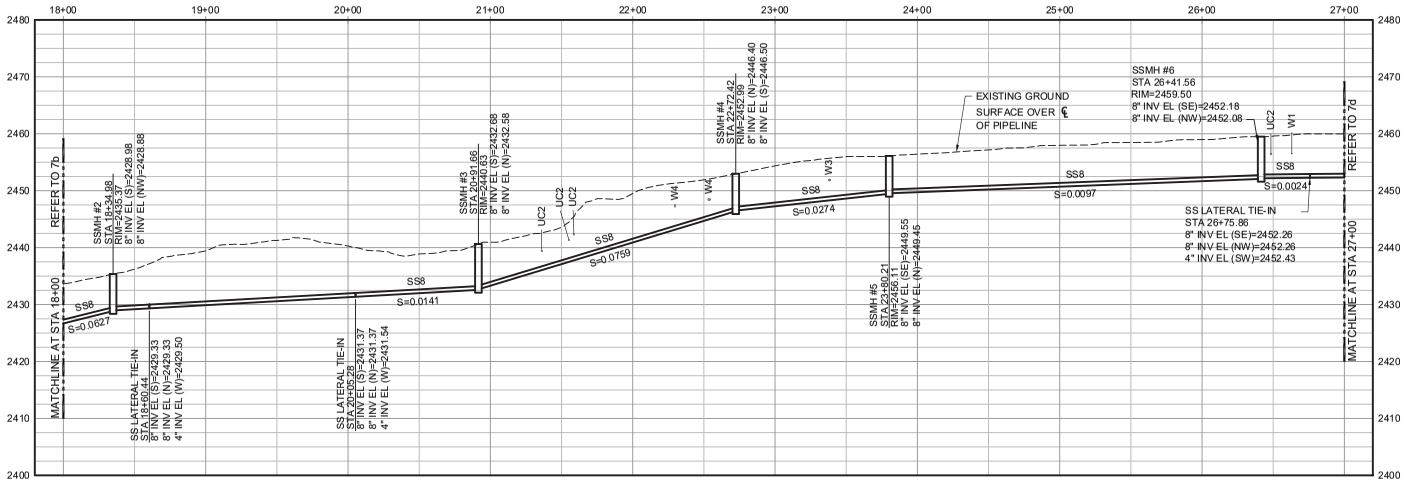


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FIGURE 7c

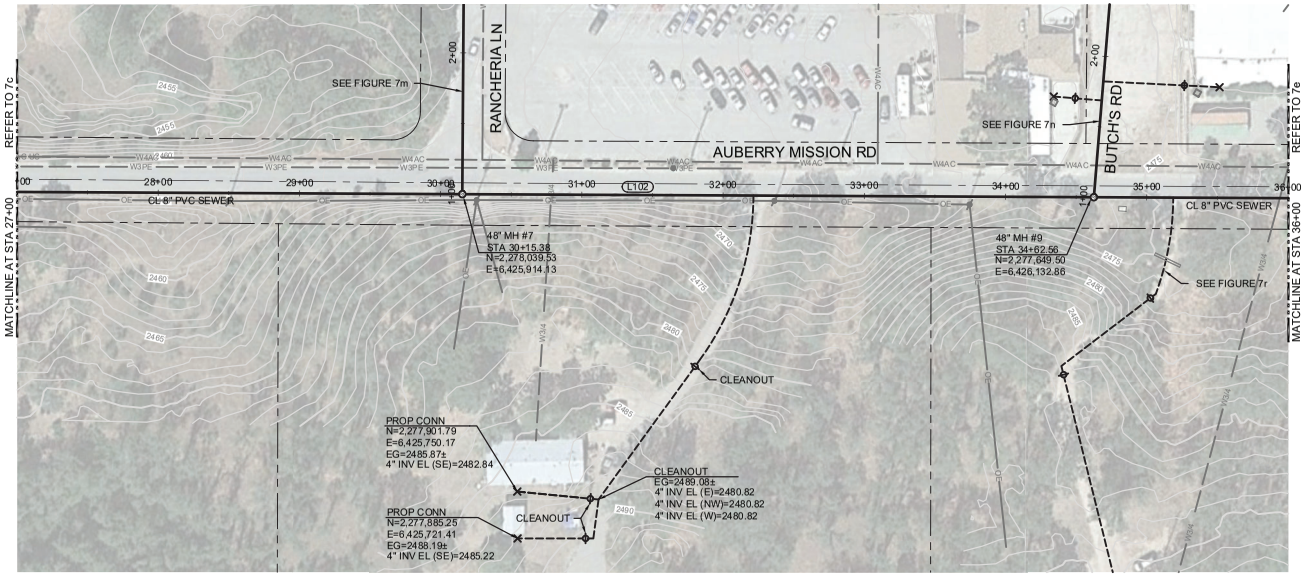
0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7c.ai (8/23/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L102	1720.46'	S29° 17' 02.97"E	26+41.56	43+62.02

STA 27+00 TO STA 36+00

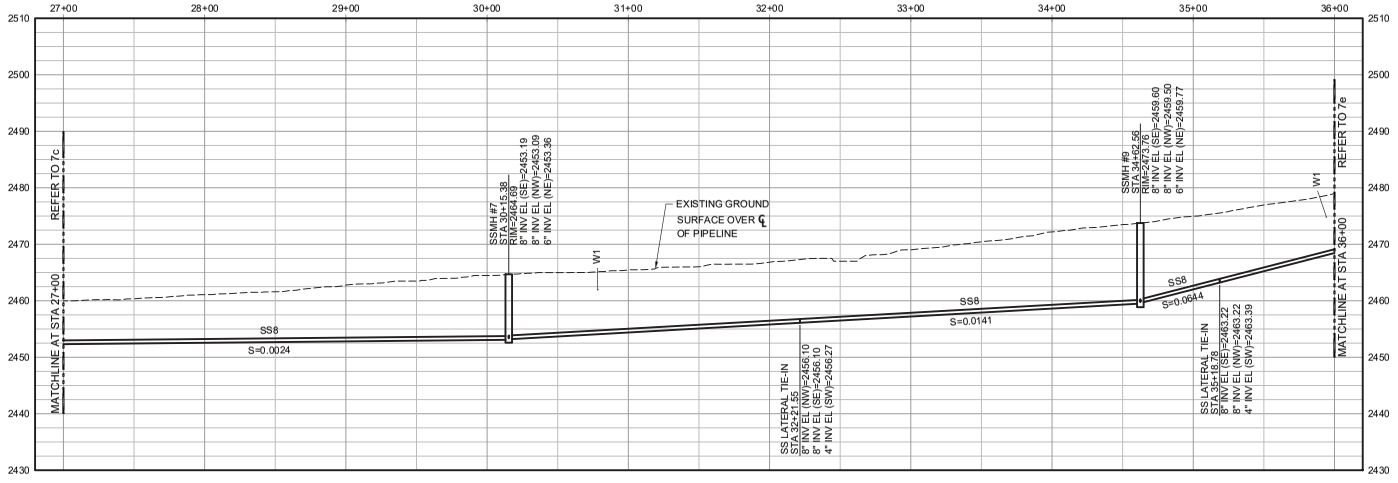


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FIGURE 7d

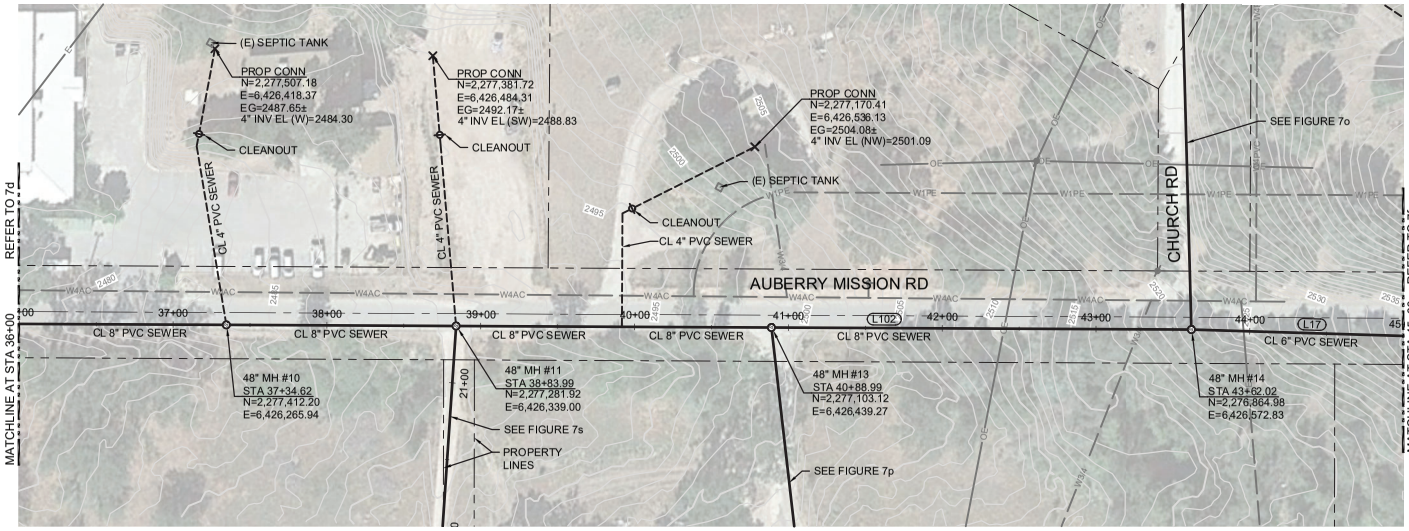
0 40' 80' H: 1" = 40'
0 10' 20' V: 1" = 10'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

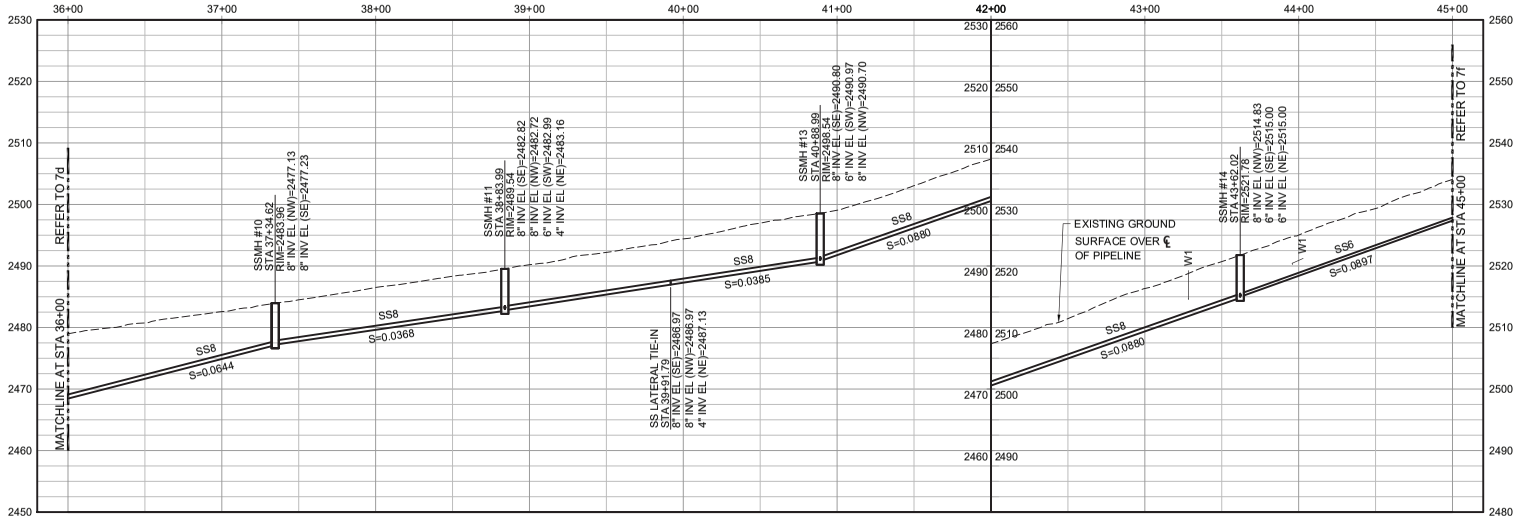
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7d.ai (8/23/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L17	249.72'	S27° 49' 19.48"E	43+62.02	46+11.74
L102	1720.46'	S29° 17' 02.97"E	26+41.56	43+62.02

STA 36+00 TO STA 45+00



LSA

FIGURE 7e

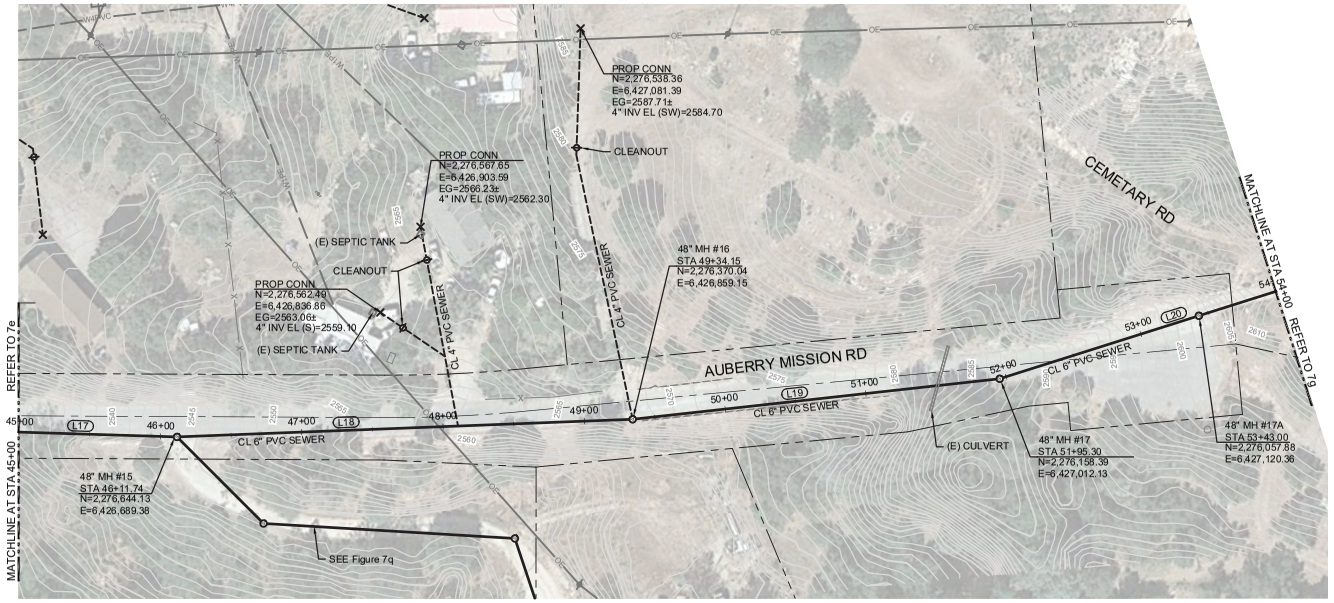
0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

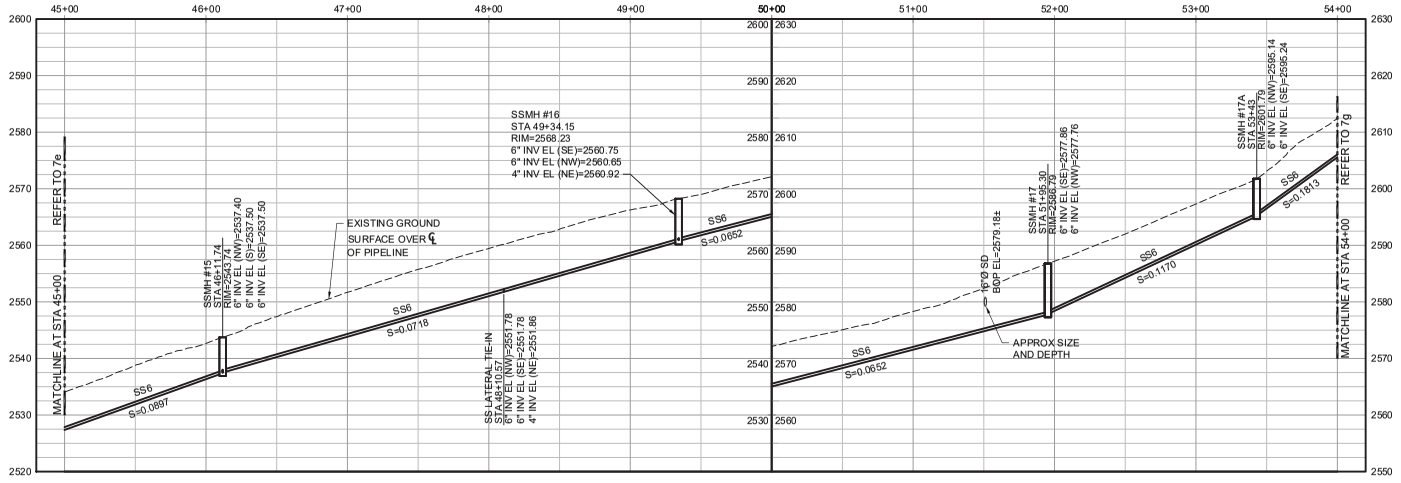
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7e.ai (8/23/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L17	249.72'	S27° 49' 19.48"E	43+62.02	46+11.74
L18	322.41'	S31° 46' 29.40"E	46+11.74	49+34.15
L19	261.16'	S35° 51' 27.59"E	49+34.15	51+95.30
L20	313.00'	S47° 07' 14.76"E	51+95.30	55+08.30

STA 45+00 TO STA 54+00



LSA

FIGURE 7f

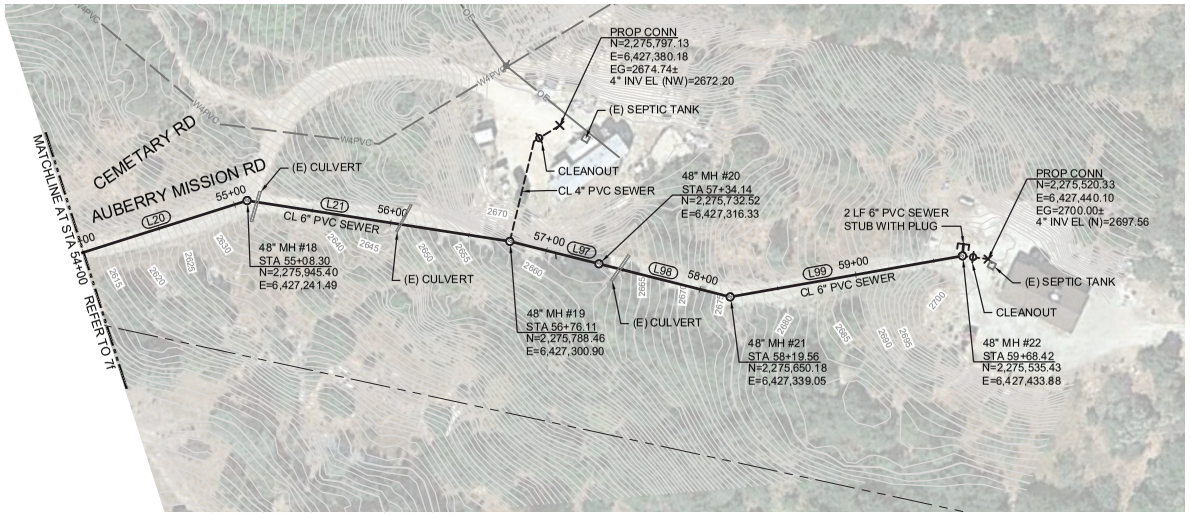
0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

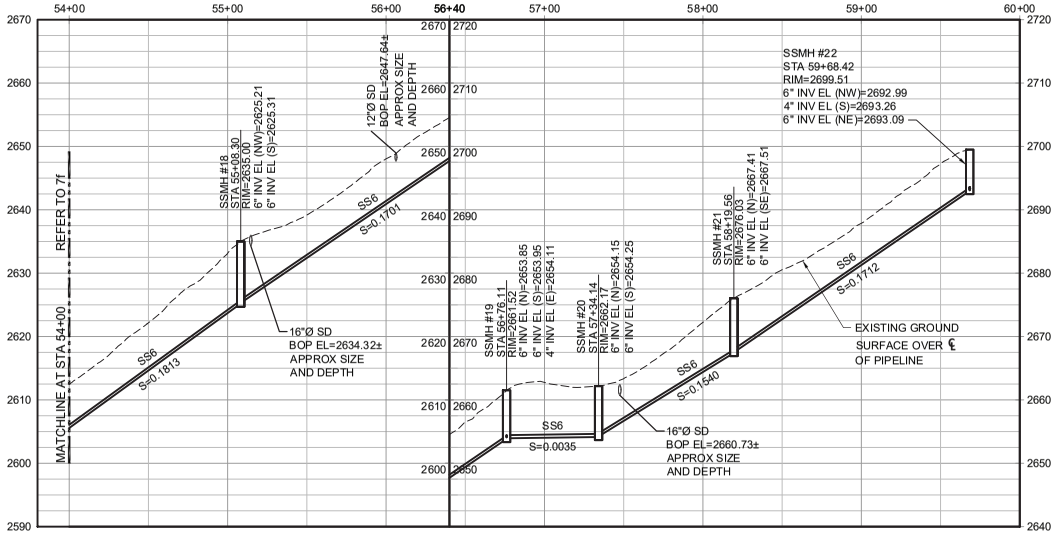
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7f.ai (8/23/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L20	313.00'	S47° 07' 14.76"E	51+95.30	55+08.30
L21	167.82'	S20° 43' 57.37"E	55+08.30	56+76.12
L97	143.44'	S15° 25' 28.38"E	56+76.12	58+19.56
L98	143.44'	S15° 25' 28.38"E	56+76.12	58+19.56
L99	148.87'	S39° 34' 13.53"E	58+19.56	59+68.42

STA 54+00 TO STA 59+68.42



LSA

FIGURE 7g

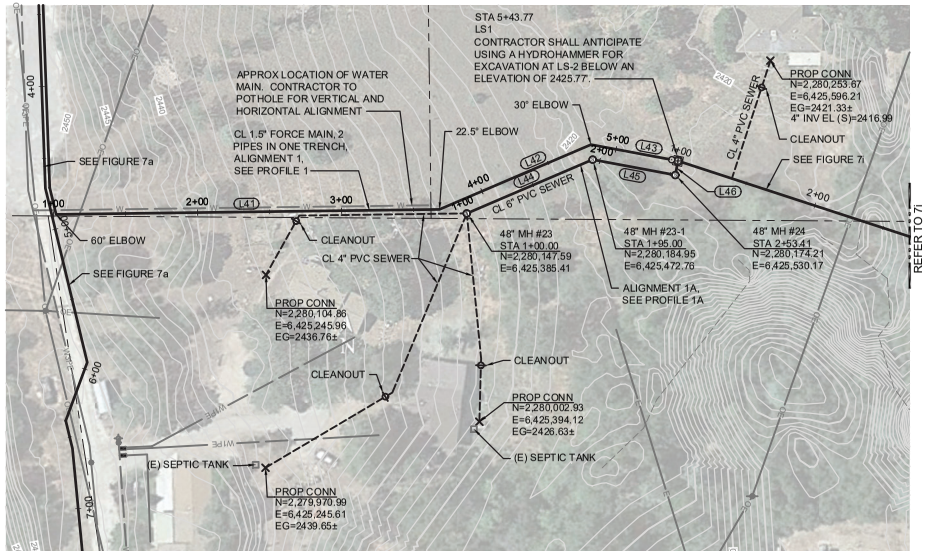
0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

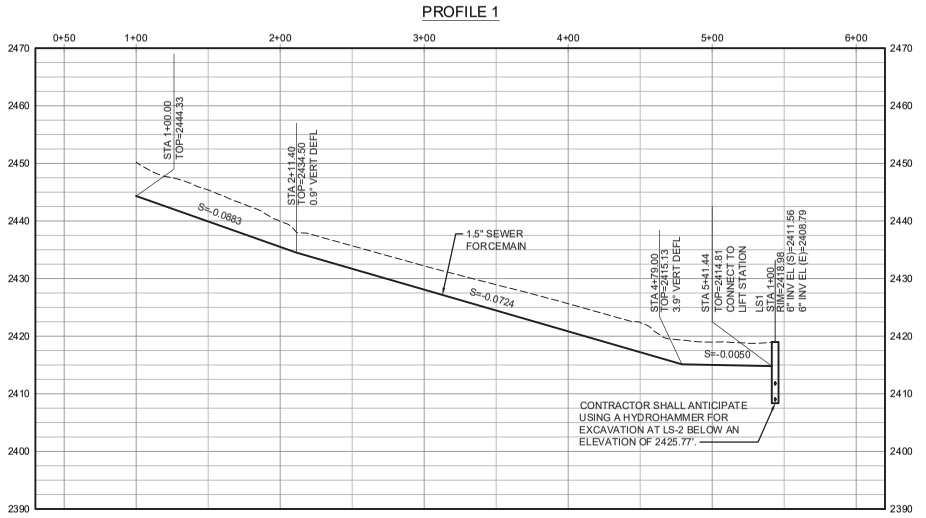
SOURCES: Big Sandy Rancheria; MKN, June 2021.

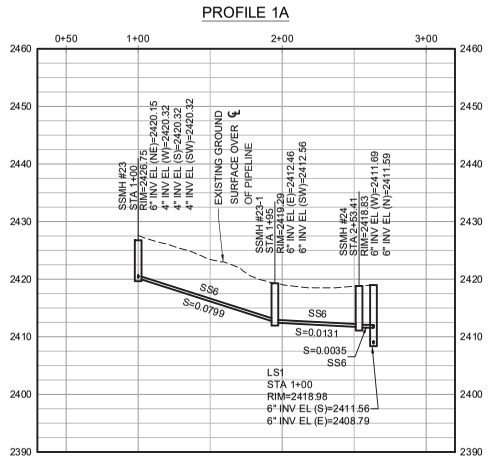
\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7g.ai (8/24/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L41	267.91'	N89° 15' 12.03"E	1+00.00	3+67.91
L42	114.41'	N66° 50' 35.45"E	3+67.91	4+82.33
L43	61.44'	S79° 24' 24.55"E	4+82.33	5+43.77
L44	95.00'	N66° 50' 41.43"E	1+00.00	1+95.00
L45	58.40'	S79° 24' 29.77"E	1+95.00	2+53.41
L46	10.00'	N10° 35' 49.33"E	2+53.41	2+63.41

ALIGNMENT 1 AND 1A





LSA

FIGURE 7h

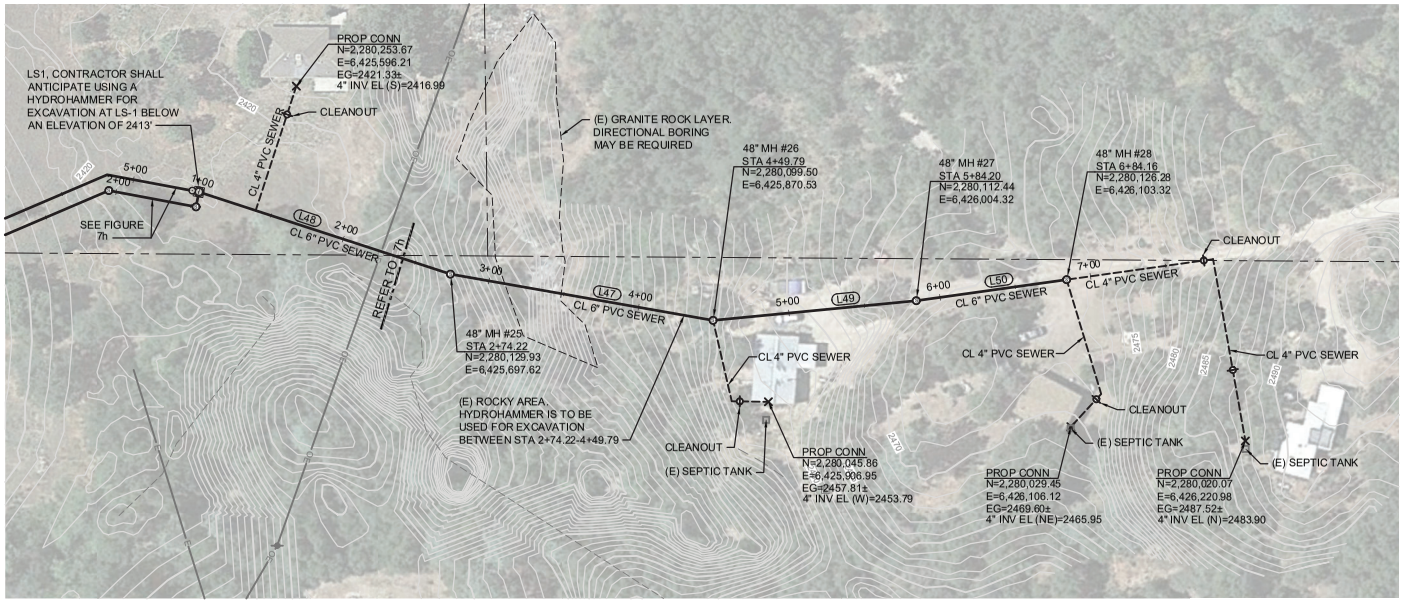
0 40' 80' H: 1" = 40'
0 10' 20' V: 1" = 10'

N

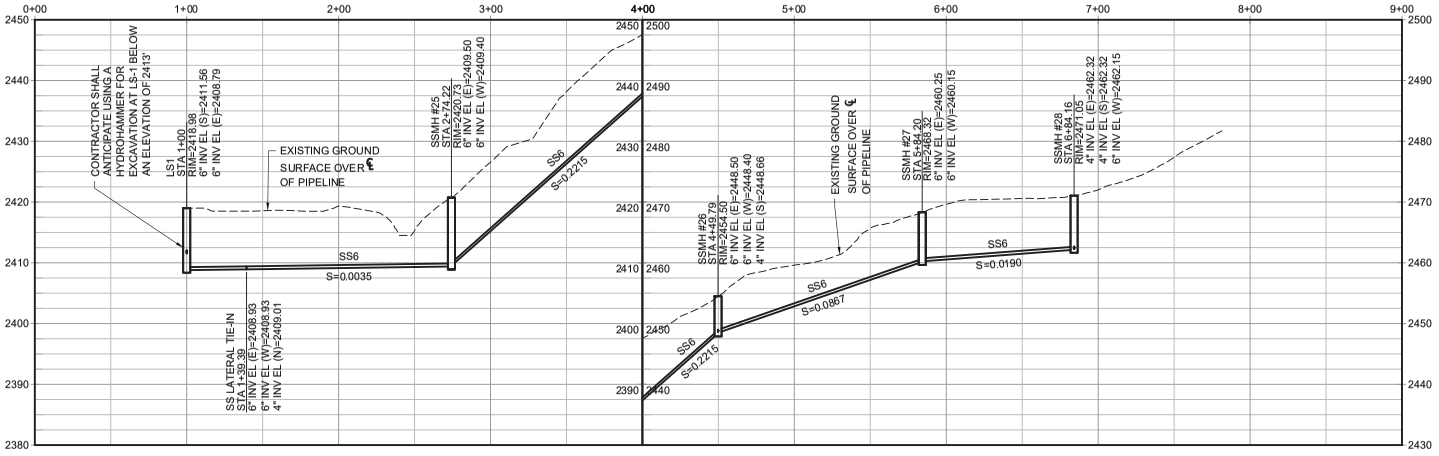
Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7h.ai (8/24/2021)



STA 1+00 TO STA 7+81.50



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L47	175.57'	S80° 01' 12.28"E	2+74.22	4+49.79
L48	174.22'	S71° 54' 18.75"E	1+00.00	2+74.22
L49	134.41'	N84° 28' 36.13"E	4+49.79	5+84.20
L50	197.30'	N82° 02' 33.73"E	5+84.20	7+81.50

LSA

FIGURE 7i

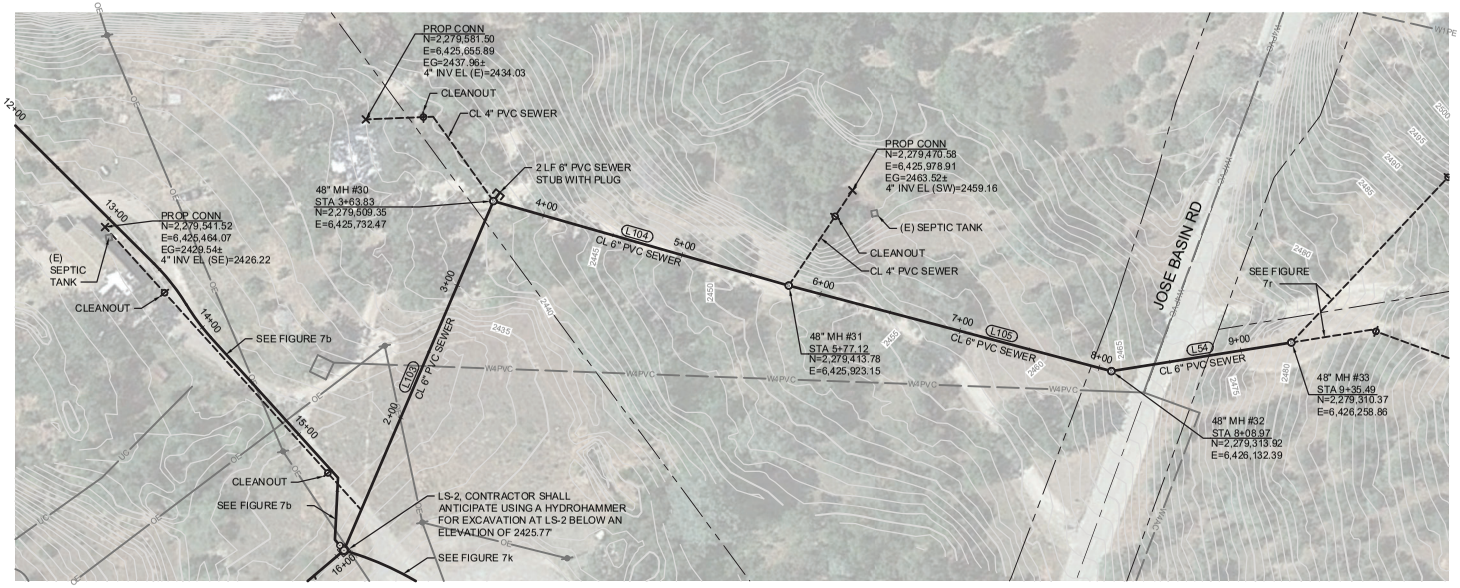
0 40' 80' H: 1" = 40'
0 10' 20' V: 1" = 10'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

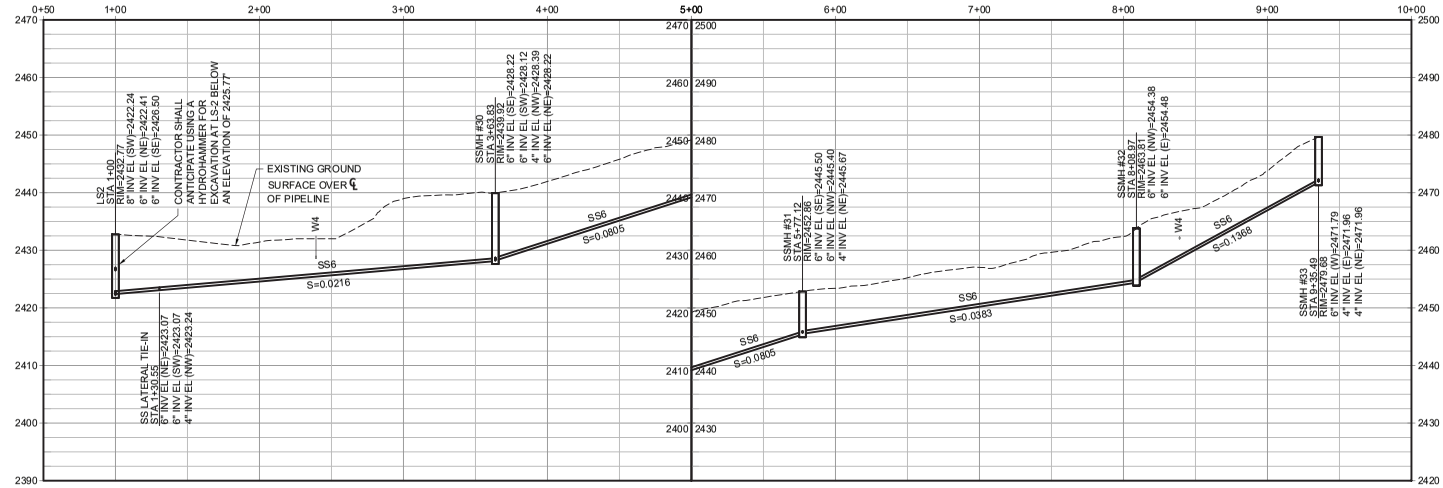
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7i.ai (8/24/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L54	126.52'	S88° 23' 39.69"E	8+08.97	9+35.49
L103	263.83'	N33° 48' 59.81"E	1+00.00	3+63.83
L104	213.29'	S63° 22' 50.64"E	3+63.83	5+77.12
L105	231.85'	S64° 29' 12.43"E	5+77.12	8+08.97

STA 1+00 TO STA 9+35.49



LSA

FIGURE 7j

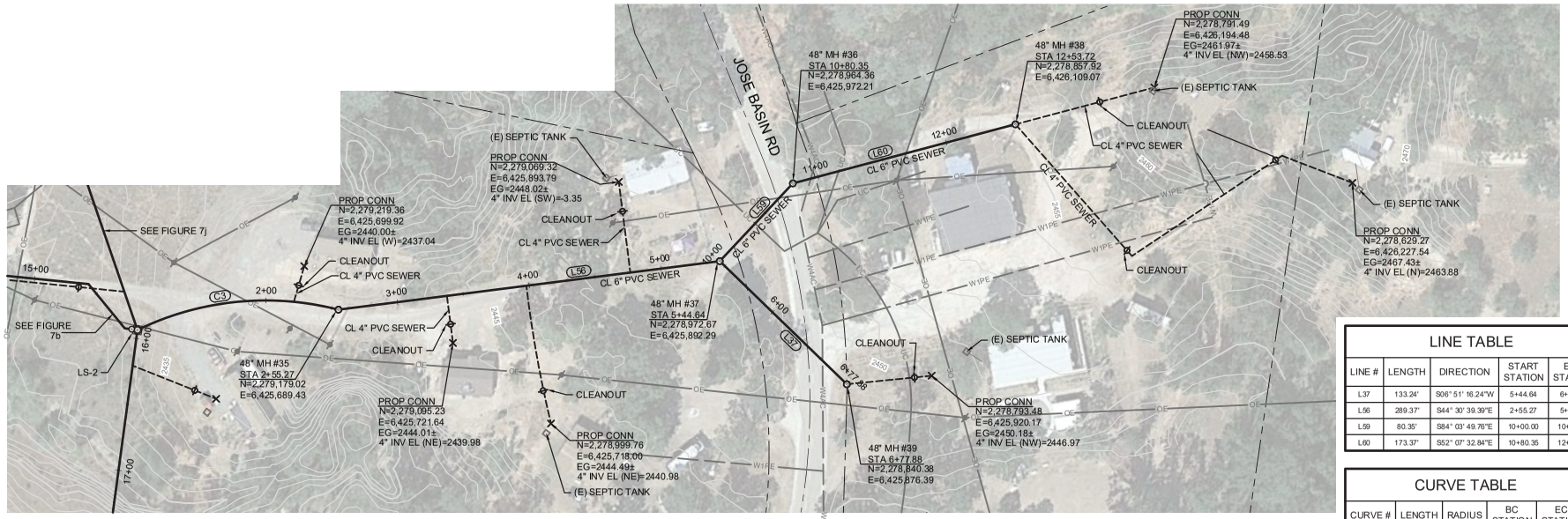
0 40' 80'
H: 1" = 40'
0 10' 20'
V: 1" = 10'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

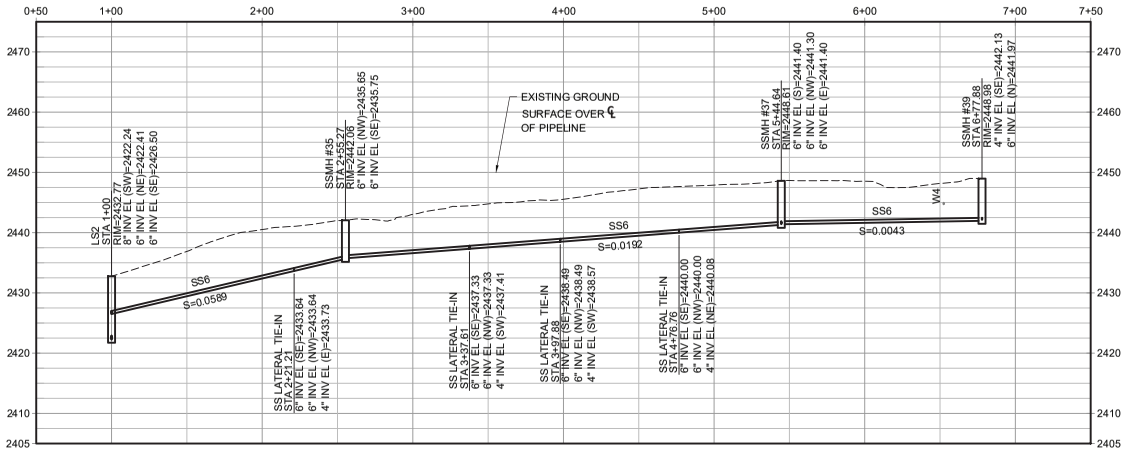
\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7j.ai (8/24/2021)

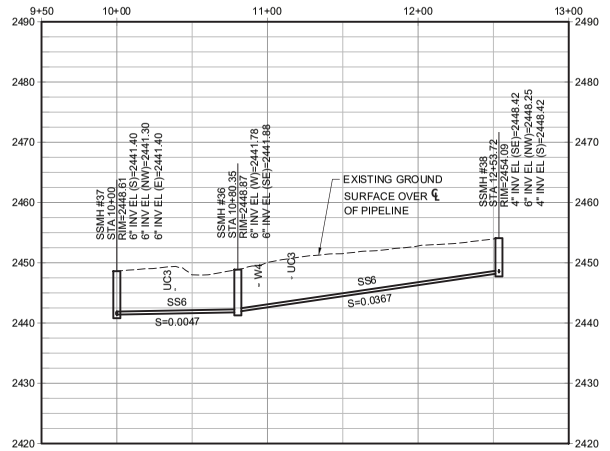


STA 1+00 TO STA 6+77.88

LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L37	133.24'	S06° 51' 16.24"W	5+44.64	6+77.88
L56	289.37'	S44° 30' 39.39"E	2+55.27	5+44.64
L59	80.35'	S84° 03' 49.76"E	10+00.00	10+80.35
L60	173.37'	S52° 07' 32.84"E	10+80.35	12+53.72

CURVE TABLE				
CURVE #	LENGTH	RADIUS	BC STATION	EC STATION
C3	155.27'	220.00'	1+00.00	2+55.27





LSA

FIGURE 7k

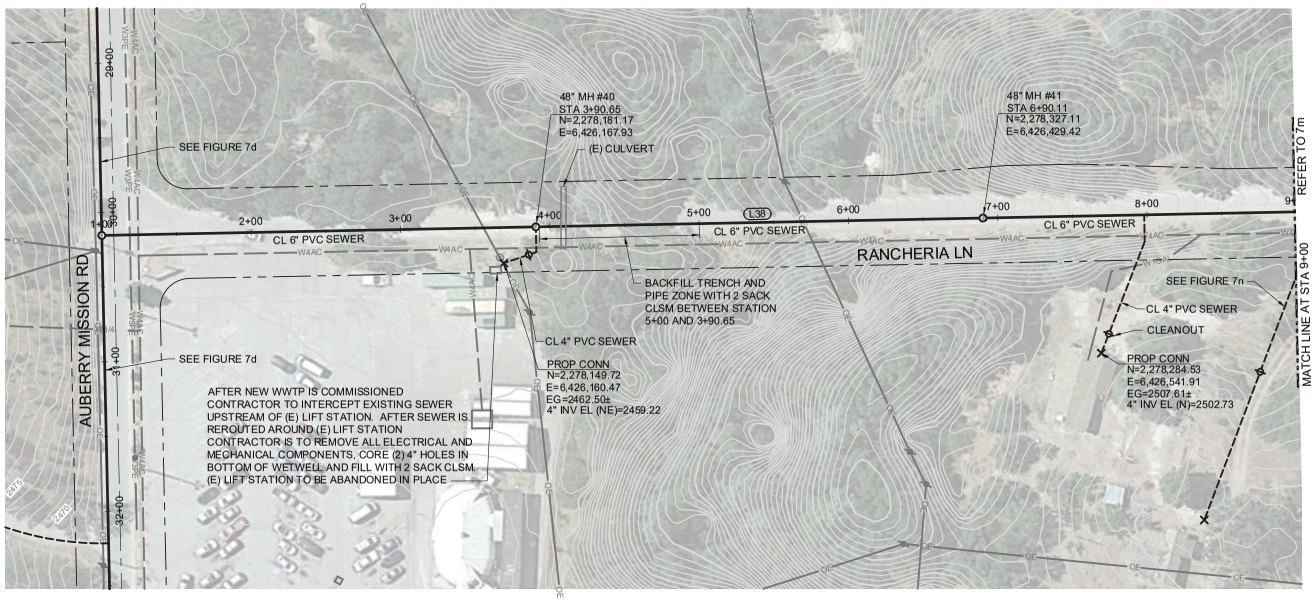
0 40' 80'
0 10' 20'
H: 1" = 40'
V: 1" = 10'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

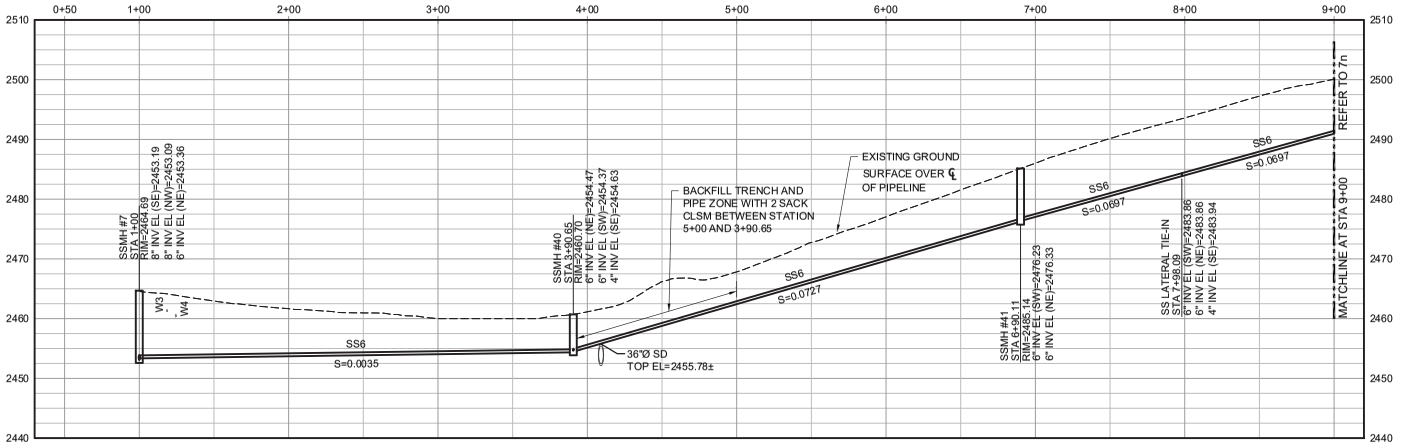
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7k.ai (8/24/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L38	866.61'	N60° 50' 04.78"E	1+00.00	9+66.61

STA 1+00 TO STA 9+00



LSA

FIGURE 7l

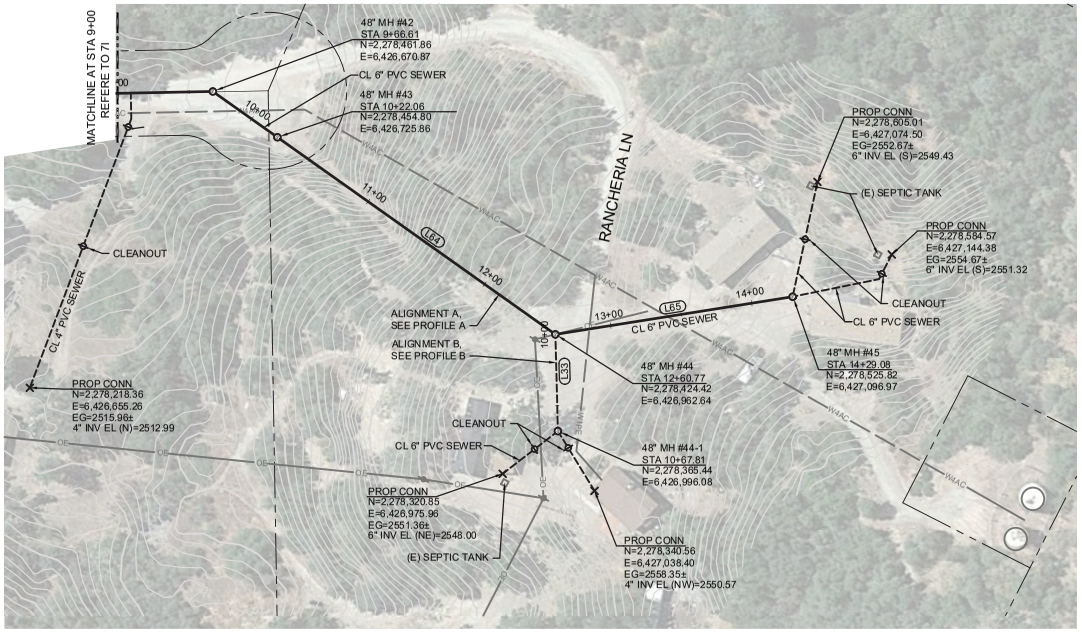
0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

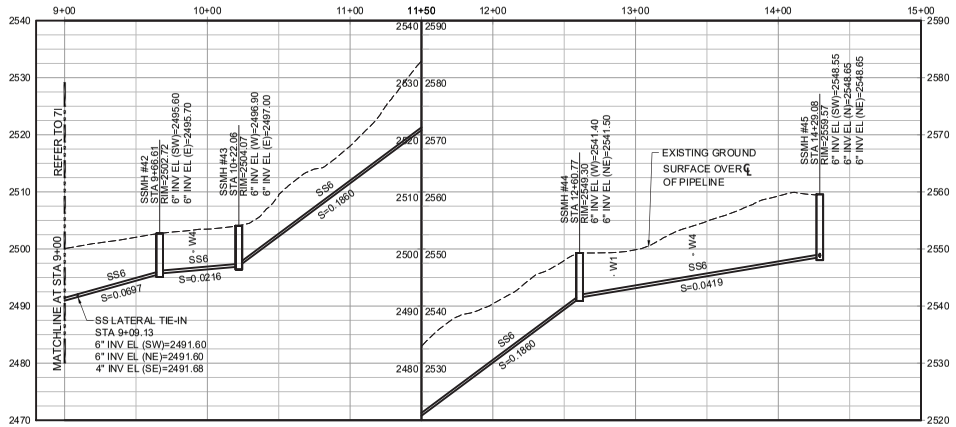
\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7l.ai (8/24/2021)



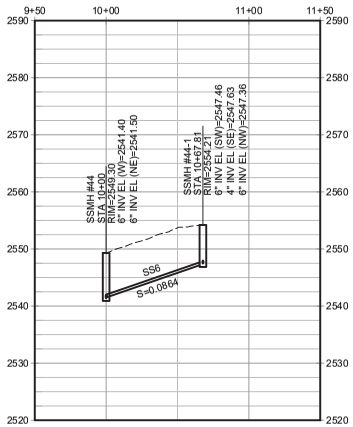
STA 9+00 TO STA 14+29.08

LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L33	67.81'	S29° 33' 01.48"E	10+00.00	10+67.81
L64	294.16'	S82° 41' 20.79"E	9+66.61	12+60.77
L65	168.30'	N52° 57' 13.87"E	12+60.77	14+29.08

PROFILE A



PROFILE B



LSA

FIGURE 7m

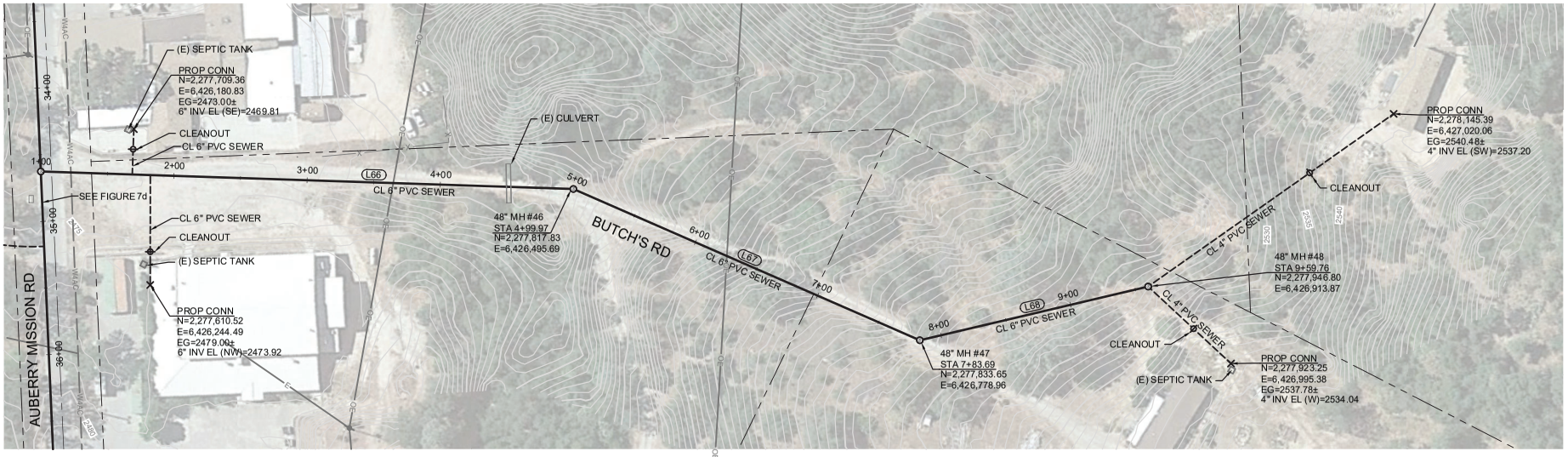
0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

N

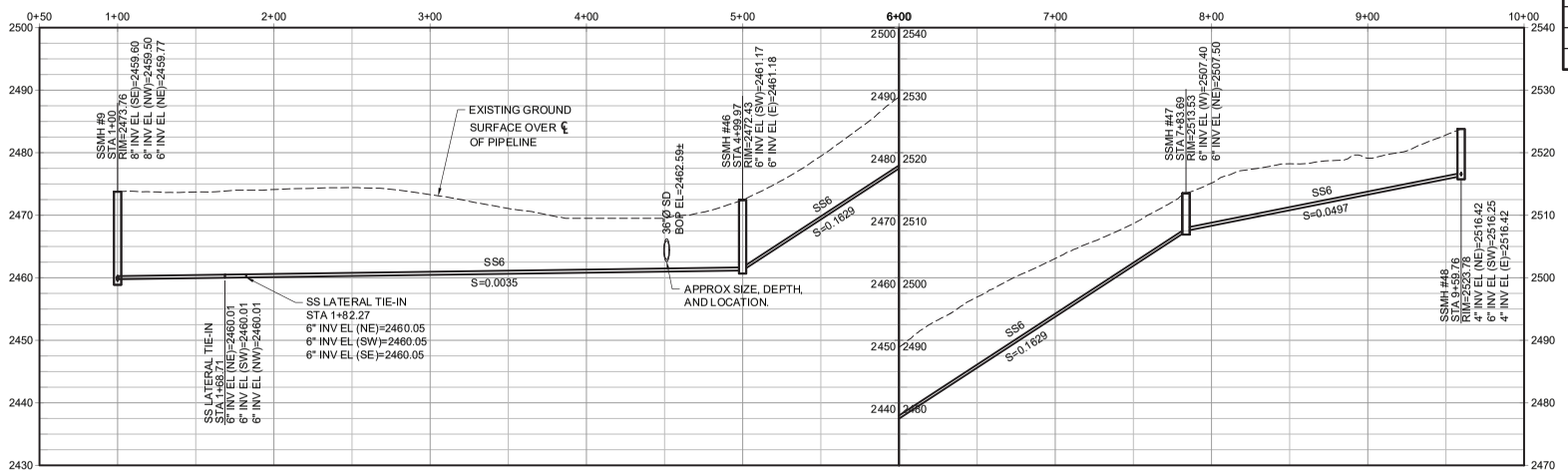
Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7m.ai (8/24/2021)



STA 1+00 TO STA 9+59.76



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L66	399.97'	N65° 06' 43.16"E	1+00.00	4+99.97
L67	283.72'	N86° 48' 10.65"E	4+99.97	7+83.69
L68	176.08'	N50° 00' 42.35"E	7+83.69	9+59.76

LSA

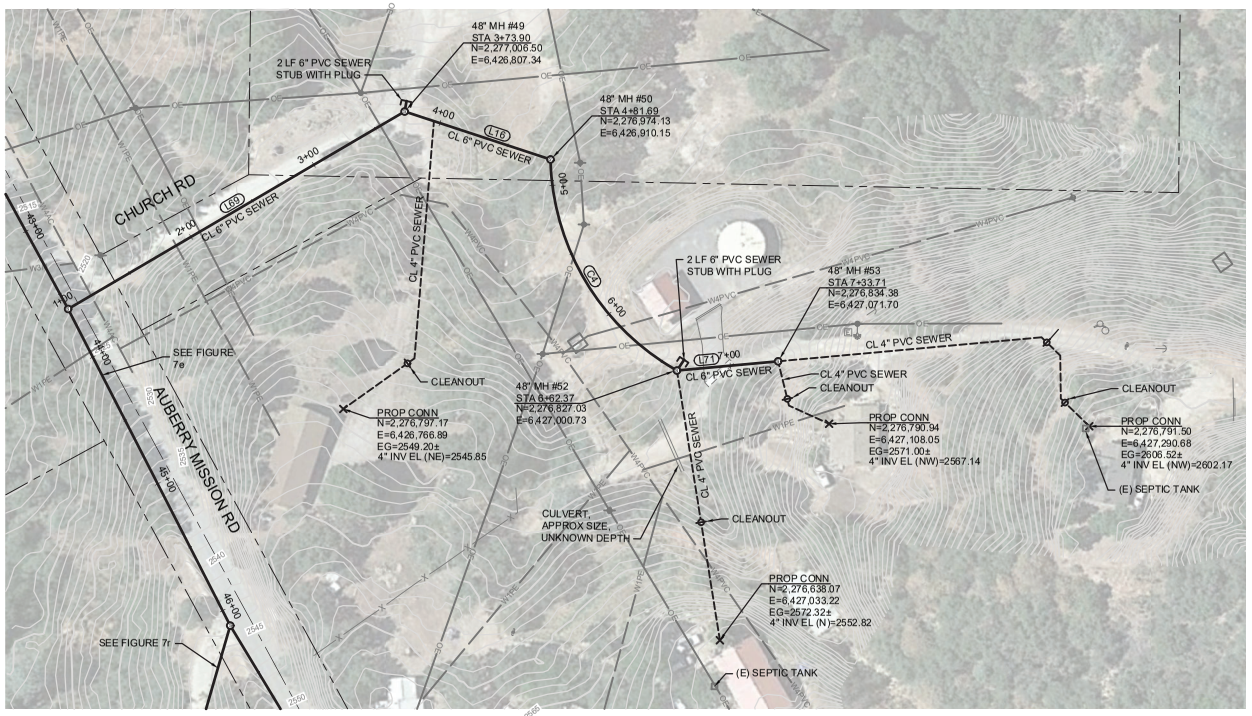
FIGURE 7n

0 40' 80'
H: 1" = 40'
V: 1" = 10'
0 10' 20'

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

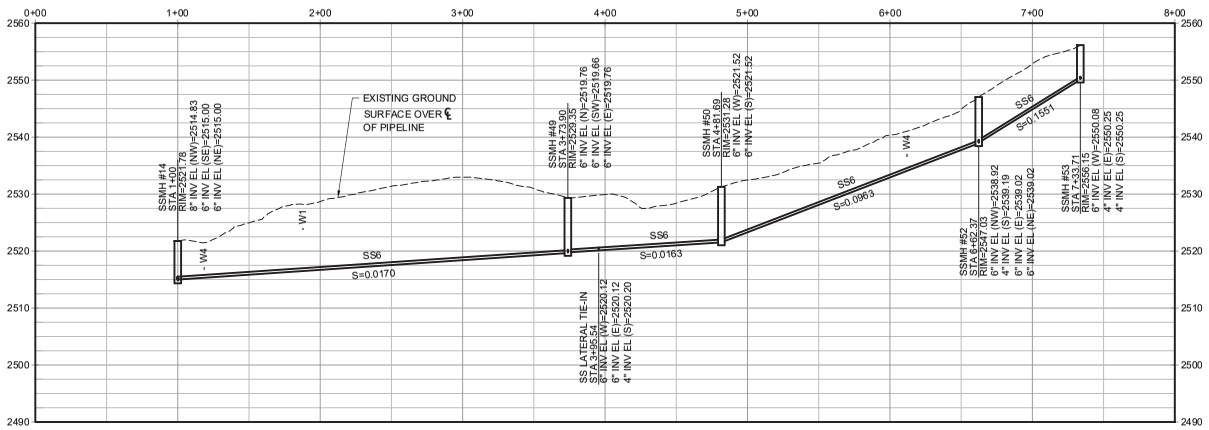
\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7n.ai (8/24/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L16	107.79'	S72° 31' 16.73"E	3+73.90	4+81.69
L69	273.90'	N58° 53' 22.86"E	1+00.00	3+73.90
L71	71.35'	N84° 05' 05.57"E	6+62.37	7+33.71

CURVE TABLE				
CURVE #	LENGTH	RADIUS	BC STATION	EC STATION
C4	180.67'	175.00'	4+81.69	6+62.37

STA 1+00 TO STA 7+33.71



LSA

0 40' 80'
H: 1" = 40'
0 10' 20'
V: 1" = 10'

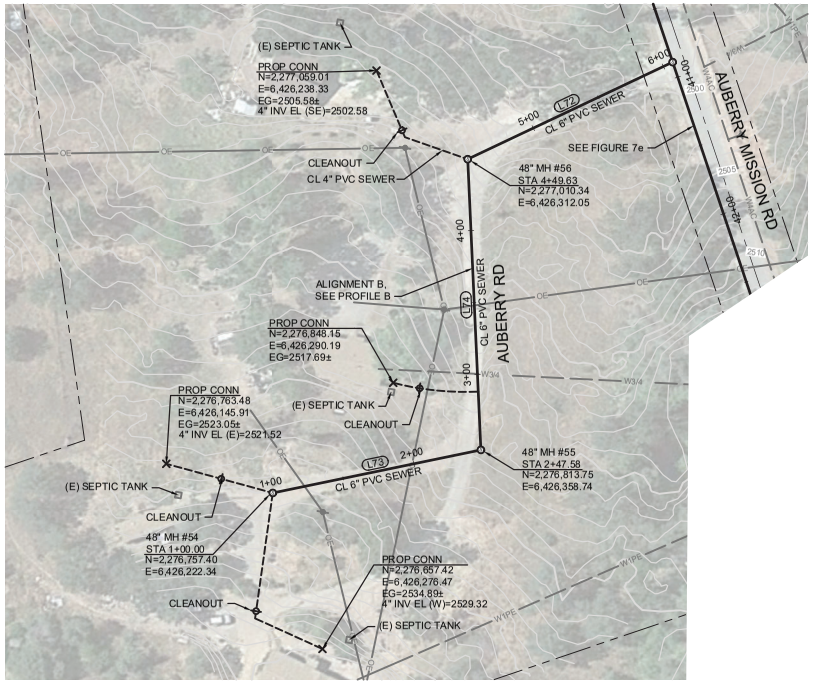
N

FIGURE 7o

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

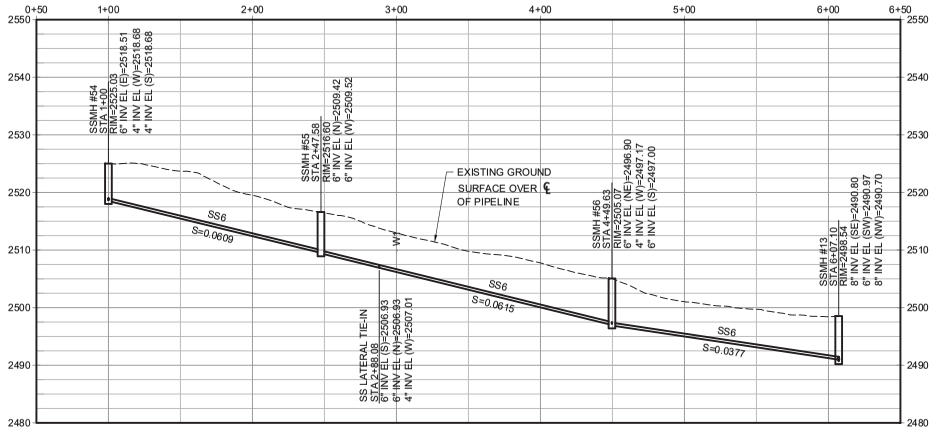
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7o.ai (8/24/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L72	157.47'	N53° 53' 48.57"E	4+49.63	6+07.10
L73	147.58'	N67° 33' 19.68"E	1+00.00	2+47.58
L74	202.06'	N13° 21' 38.79"W	2+47.58	4+49.63

STA 1+00 TO STA 6+07.10



LSA

FIGURE 7p

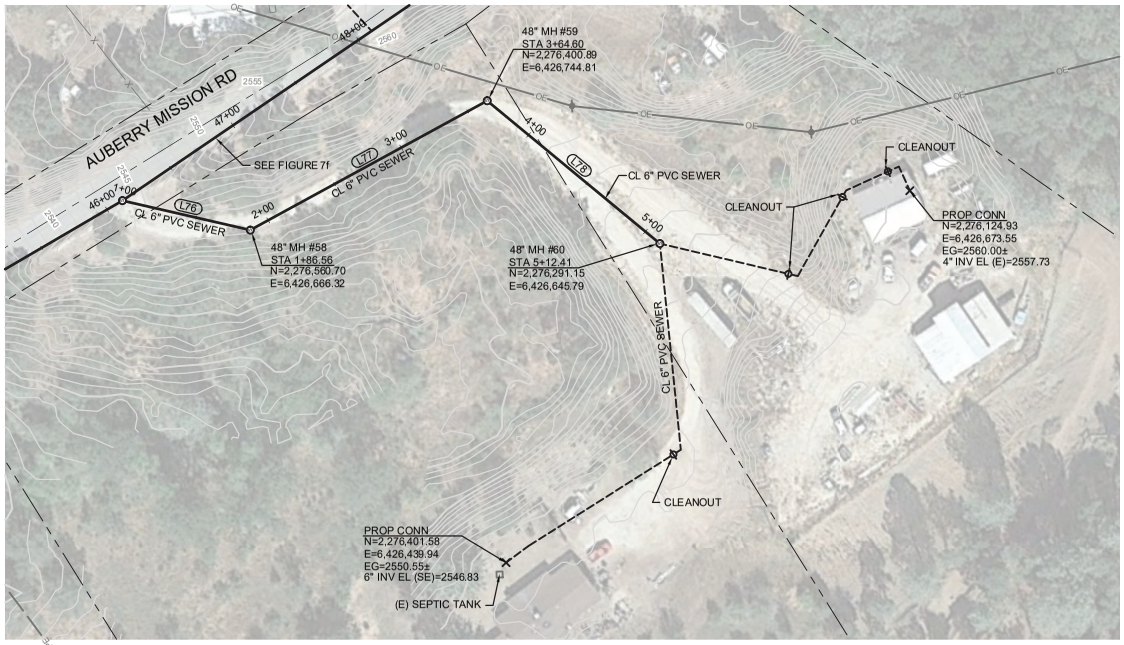
0 40' 80' H: 1" = 40'
0 10' 20' V: 1" = 10'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

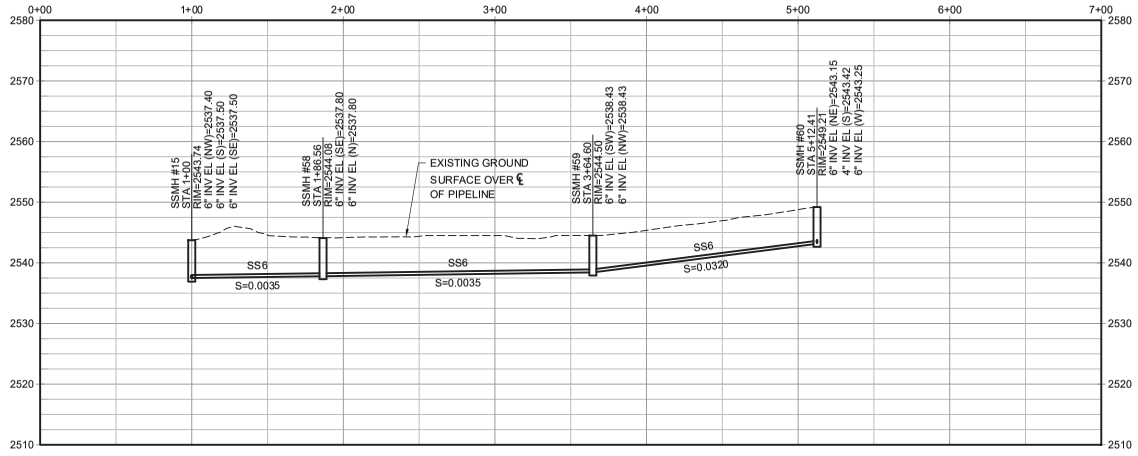
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7p.ai (8/24/2021)



LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L76	86.56'	S15° 26' 50.75"W	1+00.00	1+86.56
L77	178.04'	S26° 09' 33.15"E	1+86.56	3+64.60
L78	147.82'	S42° 03' 24.76"W	3+64.60	5+12.42

STA 1+00 TO STA 5+12.42



LSA

FIGURE 7q

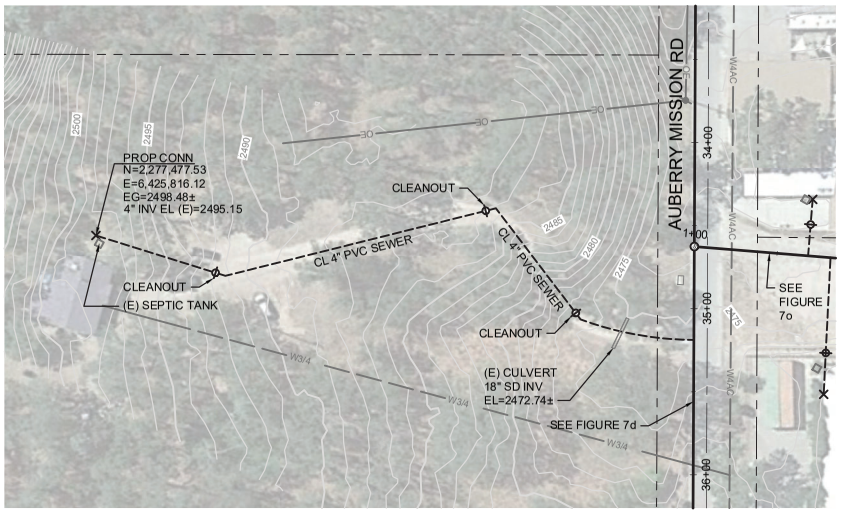
0 40' 80' H: 1" = 40'
0 10' 20' V: 1" = 10'

N

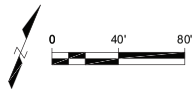
Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

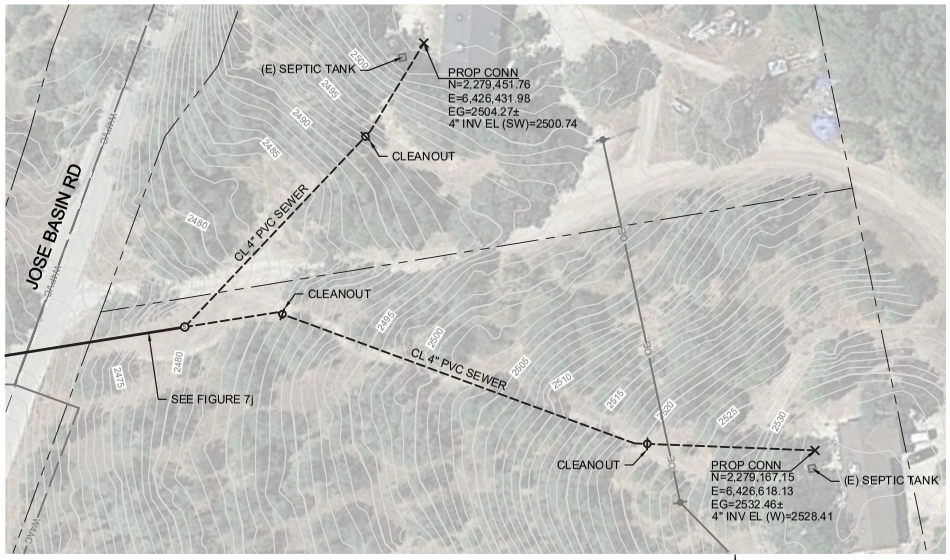
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7q.ai (8/24/2021)

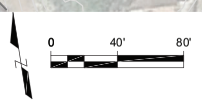


LATERAL B (SEE FIGURE 7d)





LATERAL C, C1 (SEE FIGURE 7j)



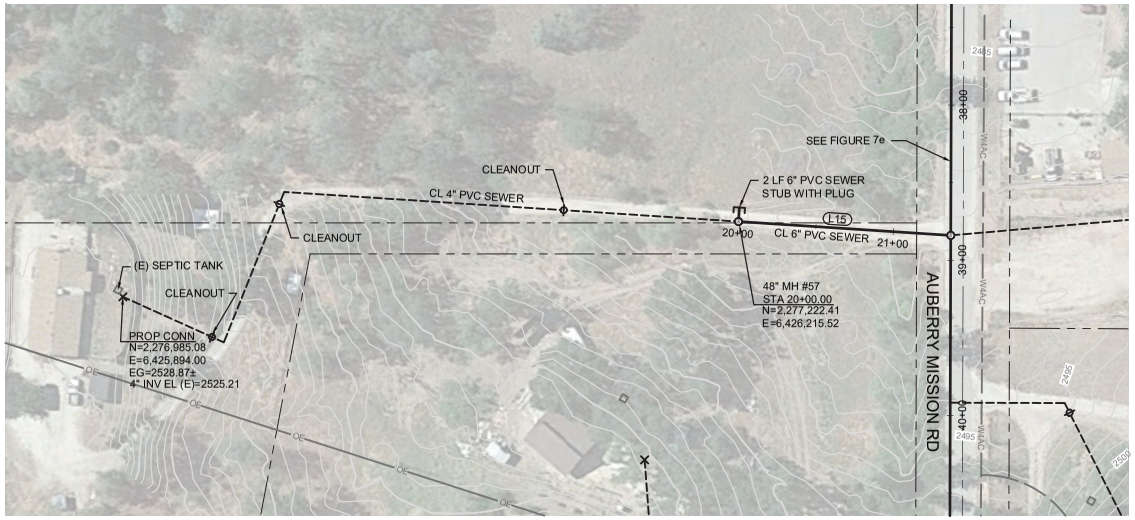
LSA

FIGURE 7r

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

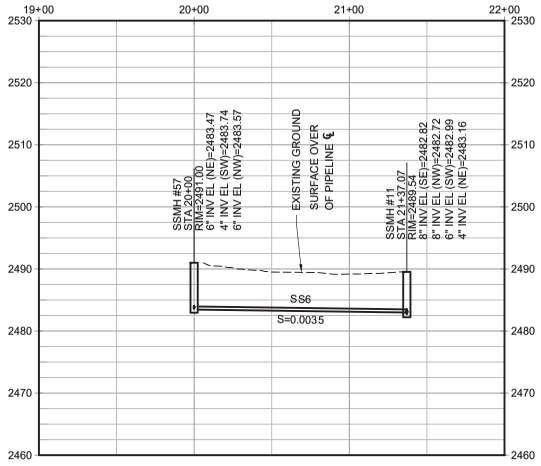
SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7r.ai (8/24/2021)



LATERAL E (SEE FIGURE 7e)

LINE TABLE				
LINE #	LENGTH	DIRECTION	START STATION	END STATION
L15	137.07'	N64° 15' 59.85"E	20+00.00	21+37.07



LSA

FIGURE 7s

0 40' 80'

N

Big Sandy Rancheria
Wastewater System Improvements Project
Proposed Alignment Layout

SOURCES: Big Sandy Rancheria; MKN, June 2021.

\\acorps04\projects\MKN2001 Big Sandy Rancheria\PRODUCTS\Graphics\Figure 7s.ai (8/24/2021)

Gravity Sewer Lines

The connections to residential structures would be made with 4-inch polyvinyl chloride (PVC) pipe between to the nearest sewer main. The wastewater collection system was designed to avoid as many trees as possible. Manholes or cleanouts would be located at all alignment changes, and would be 48 inches in diameter to allow maintenance access.

The design parameters for this wastewater collection system accounts for the steep terrain and low wastewater flow conditions. The gravity sewer design parameters are summarized in Table A.

Table A: Gravity Sewer Design Parameters

Design Parameter	Requirement
Minimum Gravity Sewer Pipe Diameter	6-inch (4-in laterals)
Gravity Sewer Pipe Material	SDR-35 PVC
Maximum Slope	15% (0.150)
Minimum Slope	0.35% (0.035)
Minimum Pipe Depth	4 feet
Maximum Pipe Depth	12 feet
Maximum Manhole Spacing	400 feet

Source: MKN (2020).
PVC = polyvinyl chloride

Lift Stations

The proposed project would include the construction of three lift stations. Lift Station 1 (LS-1) would be located at the northern region of the project site and would convey wastewater flows to the proposed WWTP. Lift Station 2 (LS-2) would be located the north-central region and would pump flows received by most of the gravity system to the WWTP. Each lift station would include a primary pump, backup pump, and force main to connect to the wastewater collection system. The buildout peak flows for each lift station is shown in Table B.

Each lift station would include duplex submersible pumps within a wetwell operating in a lead/lag configuration. In this arrangement, one pump would be fully capable of meeting the peak flows to provide 100 percent redundancy, which improves lift station reliability. To minimize excessive wear on the pumps, each lift station would be sized for a maximum of six pump starts per hour. In the event there is a pump failure, the remaining pump can convey the required flow while the failed pump is repaired or reset. The total dynamic head (TDH) required for each pump is based on the system curve which accounts for friction losses within the system plus the elevation differential between the low level of the wetwell and the discharge point required.

Table B: Lift Station Flows at Buildout

LS Number	ADF (gpm)	PHF (gpm)	Property Connections
LS-1 (North)	1.36	5.44	7 Residential Houses
LS-2 (South)	16.59	66.36	67 Residential Houses and all Non-Residential

Source: MKN (2020).
ADF = average daily flow
gpm = gallons per minute
LS = Lift Station
PHF = peak hourly flow

The pumps were selected in conjunction with the force main pipe sizes to maintain a cleaning velocity of at least 3.5 feet per second. Such velocities typically prevent sediment from accumulating at the bottom of the force main. Since the force main piping diameters are generally smaller (2.5 and 5-inches), the proposed lift station pumps would be grinder-type submersibles capable of grinding down larger particles to reduce the potential for clogging. Furthermore, each force main would be constructed without localized high points to eliminating the need for air relief valves.

Septic Tank Abandonment

Prior to abandoning an existing septic system, a permit is required to be submitted and approved by the Fresno County Department of Works and Planning, Development Services and Capital Projects Division. Following approval from Fresno County, demolition of each of the 54 existing septic systems would include the following:

- **Cap Existing Building Sewer Lines and Pump Remaining Waste from Septic Tank.** Prior to connecting to a public sewer, any abandoned septic tank must be capped within 5 feet of the property line. A certified septic hauler shall pump any remaining waste from each tank.

- **Fill Septic Tank with Approved Materials.** Each tank shall be completely filled with earth, gravel, concrete, or other approved materials. Per the County Local Agency Management Plan (LAMP), the filling shall not extend above the top of the vertical portions of the sidewalls or above the level of any outlet pipe until inspection has been called and the cesspool, septic tank, or seepage pit has been inspected. After such inspection, the cesspool, septic tank, or seepage pit shall be filled to the level of the top of the ground.

- **Owner and Permittee Guidelines.** Within 30 days of connecting the building sewer to a public sewer, the permittee making the connection shall fill all abandoned facilities in accordance with the County. The property owner shall act in accordance with the County LAMP and Onsite Wastewater Treatment Systems (OWTS) Guidelines.

The existing septic systems would be abandoned after the proposed WWTP and wastewater collection system have been constructed and each respective residence or structure is connected to the proposed wastewater collection system. To prevent accumulation of water, the abandonment of each existing septic tank would include coring a hole in the bottom of each

septic tank. Following abandonment, Big Sandy Rancheria or each respective owner would submit a report detailing the abandonment to Fresno County.

Electrical Improvements

The electrical improvements required for project construction would include four new electrical supplies. The new services would be at the wastewater treatment facility and at the three new lift stations.

- **Wastewater Treatment Facility (New supply existing meter location).** The supply for the WWTP would be the existing Pacific Gas and Electric (PG&E) utility pole and meter located at Well 7 on the west side of the Comstock Property, approximately 360 feet northwest of the of the proposed WWTP. The power available is 230-volt, three-phase, and 400 amp.

- **LS-1 (New supply existing meter location).** The supply for Lift Station 1 is located at the Brindle Well power pole located approximately 340 feet north of LS-1. The power available is 240-volts single-phase and 100 amp.

- **LS-2 (Existing building with existing meter).** The power for this lift station would be supplied from the existing Well 5 meters. Service is on the Well 5 building approximately 130 feet north of the lift station. This service is 240-volts single-phase.

Construction

Construction of the proposed project, including the WWTP and wastewater collection system, is expected to occur over a period of 9 months starting in the winter of 2021. Construction of the WWTP and the wastewater collection system would take place concurrently.

8. Surrounding Land Uses and Setting:

Unincorporated forest land, one mile east of the Town of Auberry.

9. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

While BSR is the CEQA Lead Agency for the project, other agencies also have discretionary authority related to the project and approvals, or serve as a responsible and/or trustee agency in connection to the proposed project. A list of these agencies and potential permits and approvals that may be required is provided below.

- Fresno County, encroachment permit
- PG&E, electricity service

10. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The project site is located within the BSR boundaries and the Tribe is functioning as the Lead Agency for the purposes of CEQA. The Tribe has not identified any significant impacts on tribal cultural resources.

2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

2.1 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

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3.0 CEQA ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Impact Analysis

a. Would the project have a substantial effect on a scenic vista?

The project site is characterized by uneven topography, typical of the Sierra Nevada foothills. The project site is generally bisected by a dry creek bed with flow only during large rain events. The project site generally slopes from south to north and encompasses residential and commercial properties currently being served by septic systems.

The proposed project includes the construction and operation of a new WWTP and associated wastewater collection system. None of the visual changes that would result from implementation of the proposed project would result in a substantial adverse effect on a scenic vista. Planned improvements would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. The most evident new feature within viewsheds would be the treatment tanks at the WWTP site; however, the treatment tanks would not be of such physical prominence that their presence would significantly affect a scenic vista.

During construction of planned improvements, additional vehicles, workers, and materials coming to and from the site, and site preparation activities would be visible from travelers along adjacent roadways and from adjacent uses. However, construction activities would occur within the BSR and would be intermittent and of relatively short duration.

Planned improvements would not include any tall structures or landscaping that would reduce, obstruct, or degrade scenic vistas. Therefore, the implementation of the proposed project would have a less-than-significant impact on scenic vistas.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The California Department of Transportation (Caltrans) Landscape Architecture Program administers the Scenic Highway Program, contained in the State Streets and Highways Code, Sections 260–263. State highways are classified as either Eligible for Scenic Designation, Officially Designated, or Connecting Federal Highway. The project site is located approximately 0.6 miles from State Route (SR) 168. The County's General Plan (County of Fresno 2000) designates portions of SR 168 as a County-designated scenic highway. The portions of SR 168 that are County-designated include the following segments: a proposed scenic highway from Friant-Kern Canal to Lodge Road; a designated scenic highway from Lodge Road to Pineridge; a proposed scenic highway from Pineridge to Huntington Lake Road; and a designated scenic highway from Huntington Lake Road to Huntington Lake. The segment of SR 168 highway from Lodge Road to Pineridge is located approximately 0.6 miles from the project site; however, implementation of the proposed project would include construction and operation of a new WWTP and associated wastewater collection system in an area not visible from SR 168 due to topography. The construction of the proposed project would result in grading activities and tree removal, where necessary, however, due to distance and topography, the proposed project would not result in a substantial adverse effect on a scenic highway. Therefore, the proposed project does not have the potential to damage scenic resources from designated scenic highways. This impact would be less than significant and no mitigation is required.

c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Implementation of the proposed project could result in the following visual changes: placement of treatment tanks; drip fields; and lift stations. Located within the BSR, the proposed improvements would increase the level of human-made elements on the project site; however, as described above, implementation and operation of the project would not substantially degrade the existing visual character or quality of public views of the project site. This would be a less-than-significant impact.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Glare is the result of improperly aimed or blocked lighting sources that are visible against a dark background such as the night sky. Glare may also refer to the sensation experienced looking into an excessively bright light source that causes a reduction in the ability to see or causes discomfort. Glare generally does not result in illumination of off-site locations but results in a visible source of light viewable from a distance.

The proposed project would not result in significant changes to lighting, shadows, or glare. The proposed project would include some exterior security lighting on light posts along the southern end of the WWTP. All exterior lighting would be light-emitting diode fixtures and would comply with Title 24 Part 6 of the California Energy Code. The security lighting would be directed towards to the WWTP avoid the creation of intrusive lighting and glare within the immediate project area. Therefore, light and glare impacts would be considered less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Impact Analysis

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

As the project site is located on Tribally-owned land held in trust by the Federal Government, the project site is not mapped by the Farmland Monitoring and Mapping Program (FMMP). Therefore, the project site is not land that is designated as Prime Farmland or Farmland of State Importance. Therefore, implementation of the proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the Fresno County Important Farmland Map, to a non-agricultural use. As such, implementation of the proposed project would result in no impact to agricultural resources.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project site is designated within the Resource Conservation (RC) 40 Zoning District of Fresno County. The project site is not zoned for agricultural uses and is not enrolled in a Williamson Act Contract. Therefore, the proposed project would have no impact on zoning designations for agricultural and farmland use or land currently under a Williamson Act contract.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

The project site is not zoned for, nor would it require the rezoning of, any existing parcels or land use designations, including forest land or timberland uses. In addition, there is no forest land or timberland subject to the Public Resources Code within the vicinity of the project site. Therefore, the proposed project would have no impact to forestland or timberland.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?

See Response 3.2.1.c. The proposed project would not convert forest land to non-forest use and would not result in the loss or conversion of forest land to a non-forest use.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

As stated previously, the proposed project would not convert farmland to a non-agricultural use. In addition, the proposed project would not contribute to environmental changes that would result in conversion of farmland to non-agricultural use. Therefore, no impacts to farmland or forest land would occur.

3.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The proposed project is located within Fresno County. Fresno County is part of the San Joaquin Valley Air Basin (SJVAB), which is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD is responsible for air quality regulation within the eight-county San Joaquin Valley region.

Both the State of California (State) and the federal government have established health-based Ambient Air Quality Standards (AAQS) for six criteria air pollutants: carbon monoxide (CO), Ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter ($PM_{2.5}$ and PM_{10}). The SJVAB is designated as non-attainment for O_3 and $PM_{2.5}$ for federal standards and non-attainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards.

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United States Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment, such as marginal, moderate, serious, severe, and extreme, are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. The SJVAB attainment statuses for each of the criteria pollutants are listed in Table C.

Table C: SJVAB Air Quality Attainment Status

Pollutant	State	Federal
Ozone (1-hour)	Severe/Nonattainment	Standard Revoked
Ozone (8-hour)	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	No Federal Regulation
Hydrogen Sulfide	Unclassified	No Federal Regulation

Source: SJVAPCD (2016).

An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD adopted the 2016 Plan for the 2008 8-Hour Ozone Standard in June 2016 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard (SJVAPCD 2016).

To assure the SJVAB's continued attainment of the USEPA PM_{10} standard, the SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007 (SJVAPCD 2007). The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards in November 2018 to address the USEPA 1997 annual $PM_{2.5}$ standard of 15 µg/m^3 and 24-hour $PM_{2.5}$ standard of 65 µg/m^3, the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m^3, and the 2012 annual $PM_{2.5}$ standard of 12 µg/m^3 (SJVAPCD 2018).

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Therefore, the proposed project would not conflict with or obstruct implementation of SJVAPCD air quality plans and impacts would be less than significant.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

As identified above, the SJVAB is designated as non-attainment for O_3 and $PM_{2.5}$ for federal standards and non-attainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. The SJVAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size

to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Short-Term (Construction) Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, reactive organic gases (ROG), directly-emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Site preparation and project construction would involve grading, paving, and other activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions) is designed to reduce PM_{10} emissions generated by human activity. The SJVAPCD has established Regulation VIII measures for reducing fugitive dust emissions PM_{10}. With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, ROGs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

The California Emissions Estimator Model (CalEEMod), Version 2020.4.0, was used to estimate construction emissions for the proposed project. Construction of the proposed project, including the

WWTP and wastewater collection system, is expected to occur over a period of 9 months starting in the spring of 2022. Construction of the WWTP and the wastewater collection system would take place concurrently. The total disturbance area would be approximately 5 acres. Construction would not require soil off-haul. Results, summarized in Table D, were compared to SJVAPCD thresholds of significance for construction impacts. CalEEMod output sheets are included in Appendix B.

Table D: Project Construction Emissions in Maximum Tons Per Year

Project Construction	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Project Construction Emissions	0.19	1.32	1.32	0.02	0.30	0.12
SJVAPCD Thresholds	10.0	10.0	100.0	27.0	15.0	15.0
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA (2021).

As shown in Table D, construction emissions associated with the project would be less than significant for ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions. The SJVAPCD requires the implementation of Regulation VIII measures for dust control during construction. Implementation of Mitigation Measure AIR-1 would ensure that the proposed project complies with Regulation VIII and further reduces the short-term construction period air quality impacts.

Mitigation Measure AIR-1: Consistent with SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/ suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of

each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of out-door storage piles, said piles shall be effectively stabilized of fugitive dust emission utilizing sufficient water or chemical stabilizer/suppressant.

Construction emissions associated with the project would be less than significant with implementation of Mitigation Measure AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Long-Term (Operational) Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity), and area sources (e.g., landscape maintenance equipment use) related to the proposed project. The proposed project includes: 1) the proposed WWTP; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Once operational, it is anticipated that inspection and maintenance of the WWTP would occur; however, given the minimal trip generation, mobile source emissions would be minimal and would be below SJVAPCD significance thresholds. In addition, the proposed project would result in energy source emissions associated with the electrical improvements; however, these emissions are also expected to be minimal and be below SJVAPCD significance thresholds. Therefore, the proposed project would not be a significant source of operational emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State AAQS and impacts would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors include the 54 residential structures that would abandon the septic tanks and be connected to the wastewater service.

Construction of the proposed project may expose these surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement Regulation VIII measures, as required by Mitigation Measure AIR-1 above. With implementation of Mitigation Measure AIR-1, project construction emissions would be below the SJVAPCD's significance thresholds. Additionally, due to the linear nature of the project, construction activities at any one receptor location would occur for a limited duration. Once the project is constructed, the project would not be a source of substantial emissions. Therefore, sensitive receptors are not

expected to be exposed to substantial pollutant concentrations during project construction or operation, and potential impacts would be considered less than significant.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

During construction, the various diesel powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. The potential for diesel odor impacts is therefore considered less than significant. The WWTP is located in a remote area, relative to the existing structures within the BSR, and it is not anticipated that significant odor issues would result from the conveyance and treatment facilities. In addition, each of the five treatment tanks includes a forced air venting system to minimize buildup of odorous gases. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and potential impacts would be considered less than significant.

3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 Impact Analysis

LSA prepared a Biological Resources Evaluation (LSA 2021) for the proposed project (Appendix C) that describes and documents potential impacts to biological resources, including special-status species, associated with the proposed project. In addition, the Biological Resources Evaluation contains measures to reduce potentially significant project-related impacts. The analysis in this Biological Resources section is based on the results of the Biological Resources Evaluation.

Prior to conducting the field survey, LSA compiled a list of sensitive plant and wildlife species potentially occurring within the Biological Study Area (BSA) to evaluate potential impacts resulting from project construction. Sources used to compile this list include the California Native Plant Society (CNPS) Online Inventory, the California Natural Diversity Database (CNDDB) referencing the Millerton Lake East, Shaver Lake, Trimmer, Humphreys Station, Cascadel Point, and Auberry U.S. Geological Survey 7.5 minute quadrangles, and the United States Fish and Wildlife Service (USFWS) Information, Planning, and Consultation (IPaC) Resource List. These databases contain records of special-status species that have been recorded in the general vicinity of the project and provide an indication of what species may occur within the BSA. While the National Marine Fisheries Service

(NMFS), Google Earth Species list (2016) was also consulted, there are no records of listed anadromous fish species, designated critical habitat, or Essential Fish Habitat within the United States Geological Survey 7.5-minute Auberry quadrangle. Thus, a NMFS species list was not generated for the project.

LSA biologist Zachary Carpenter conducted a general biological survey of the BSA on October 23, 2020. The survey focused on identifying any sensitive habitats or special-status plant or wildlife species present within the BSA and determining if project activities would potentially impact any sensitive biological resources. The biologist surveyed the BSA, noting plant communities, examining trees and shrubs closely for any nest structures, and identifying all birds and any other wildlife observed in order to determine if potential habitat to support special-status species was present.

Vegetation communities within the BSA were classified based on descriptions in *A Manual of California Vegetation – Second Edition* by Sawyer, Keeler-Wolf, and Evens, as appropriate. Names of plant species are consistent with *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) and the Jepson Online Interchange for California Floristics (n.d.).

Aquatic resources occurring in the BSA were examined and characterized but a formal delineation of aquatic resources to determine wetland and/or jurisdictional status was not conducted.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Compilation of the species lists described above resulted in a total of 35 special-status wildlife species and 37 special-status plants that could potentially occur in the BSA.

Special-Status Species. Wildlife observed in the BSA included 18 species of birds, California ground squirrel (*Otospermophilus beecheyi*), and evidence of dusky-footed woodrats (*Neotoma fuscipes*). No special-status species plants or animals were observed during the field survey, however the BSA provides suitable habitat for nesting birds and special-status plants, as described below. A list of all species observed during the biological survey is attached to the Biological Resource Evaluation (see Appendix C). Consistent with SWRCB environmental review requirements, a list of all federally listed species with the potential to occur within the BSA is also attached to the Biological Resource Evaluation.

The BSA provides suitable nesting habitat for a number of bird species protected under Section 3503 of the CFGC and the federal Migratory Bird Treaty Act (MBTA). No active bird nests or nest building activities were observed during the survey, which was not unexpected since the survey was conducted during the non-nesting season. However, several nest structures from previous nesting seasons were observed in the trees throughout the site, as well as in the cottonwoods (*Populus* sp.) and shrubs along the Backbone Creek riparian corridor adjacent to the BSA. Additionally, several cavities were observed in trees throughout the site that could be used by early season cavity-nesting bird species, several of which were observed during the survey, such as oak titmouse (*Baeolophus*

inornatus), white-breasted nuthatch (*Sitta carolinensis*), and acorn woodpecker (*Melanerpes formicivorus*).

Although the project was designed to minimize the removal of trees, since some trees would be removed as a result of project construction, migratory bird species may be impacted if any are nesting in the BSA when construction begins. Construction-related disturbance could also indirectly impact nesting birds by causing adults to abandon active nests, resulting in nest failure and reduced reproductive success. Therefore, the project has the potential to impact nesting bird species protected under Section 3503 of the CFGC and the MBTA. Mitigation Measure BIO-1, as summarized below, would effectively avoid, minimize, or mitigate any impacts on special-status species to less-than-significant levels.

The project would not adversely affect bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*) or otherwise conflict with the federal Bald and Golden Eagle Protection Act, as the BSA does not provide suitable nesting habitat for bald eagles or golden eagles, which typically nest in mature trees near bodies of water or in rugged, open habitats with canyons and escarpments, respectively.

Mitigation Measure BIO-1: The following measures shall be implemented to reduce potential impacts to nesting birds during construction:

- Tree removal activities should be conducted outside the nesting bird season (February 1 - August 31).
- Tree removal activities should be conducted outside the nesting bird season (February 1 - August 31).
- If work begins between February 1 and August 31, a qualified biologist should conduct a preconstruction survey for nesting birds in the BSA and within a 500-foot radius no more than 10 days prior to the start of construction.
- If no nesting activity is observed, work may proceed as planned. If any active bird nests are discovered within the BSA, a qualified biologist should evaluate the potential for the work activities to disturb typical nesting behavior of the birds and establish protective buffers, if necessary, based on this evaluation.
- If any active nests of special-status bird species are discovered within or less than 500 feet of the BSA, a minimum 500 foot buffer should be established. If any work is proposed within this buffer, CDFW should be notified, and should have the authority to reassess protective buffers and/or establish other avoidance and minimization measures.
- Disturbance of active nests should be avoided until it is determined by a qualified biologist that nesting is complete and

the young have fledged, or the nest has failed. If work is allowed to proceed, a qualified biologist should be on-site during the start of construction activities to monitor nesting activity. The biologist should have the authority to stop work if it is determined that the project is adversely affecting nesting activities.

Implementation of Mitigation Measure BIO-1 would effectively avoid, minimize, or mitigate any impacts on special-status species to less-than-significant levels.

Special-Status Plants. No special-status plant species were observed within the BSA; however, the interior live oak woodland provides potential habitat for the federally threatened Mariposa pussypaws; state threatened tree anemone (*Carpenteria californica*); and two California Rare Plant Rank List 1B.2 species, including orange lupine (*Lupinus citrinus var. citrinus*), and slender-stalked monkeyflower (*Erythranthe gracilipes*).

Mariposa pussypaws is an annual herb endemic to California that is known from only a handful of occurrences in Mariposa, Madera, and Fresno counties. Mariposa pussypaws are found in sandy soils, decomposed granite or metamorphic rocks in chaparral, gray pine, or oak woodlands from between 1,310 and 3,610 feet in elevation. The typical blooming period for this species is from April to May (Jepson Online Inventory for California Floristics 2020). There are two known CNDDB occurrence records within Fresno County, both from 2011, located 3.7 and 5.2 miles northeast of the BSA.

Tree anemone is a shrub that is known to occur in Madera and Fresno counties. This species occurs within granitic substrates in chaparral and oak woodland habitat between approximately 1,100 and 4,400 feet in elevation. The typical blooming period for tree anemone is from May to July (Jepson Online Inventory for California Floristics 2020). CNDDB lists 10 occurrence records for this species within Fresno County, and the nearest record, dated 2006, covers a large area bisecting the northeastern portion of the BSA (i.e., areas east of the intersections of Auberry Mission Road with Jose Basin Road and Rancheria Lane). This record references several extant populations from the Big Sandy Bluffs near SR 168 south of the BSA extending north to the San Joaquin River.

Orange lupine and slender-stalked monkeyflower are both annual herbs that are endemic to California and considered rare by CDFW. Both species are associated with granitic soils within chaparral or foothill/cismontane woodland habitat, although slender-stalked monkeyflower is known to occur in disturbed areas. Orange lupine typically blooms between April and May, and slender-stalked monkeyflower typically blooms between April and July (Jepson Online Inventory for California Floristics 2020). The closest CNDDB record for orange lupine overlaps the majority of the BSA and is associated with individuals observed in 1969. More recently, this species was observed in 2011 approximately 3.7 northeast of the BSA in conjunction with Mariposa pussypaws. The nearest CNDDB record for slender-stalked monkeyflower, which is associated with individuals last observed in 1963, is located adjacent to Auberry Road approximately 500 feet east of the southern end of the BSA.

No special-status plants were observed during the biological survey; however, the survey was conducted outside of the blooming period for these species and, based on the presence of suitable habitat, the potential for these species to occur in the BSA cannot be ruled out. Approximately 6.46 acres of interior live oak woodland would be impacted by the project consisting of 2.46 acres of permanent impacts associated with the proposed WWTP and drainfield, and 4.00 acres of temporary impacts associated with the installation of the sewer pipelines. Direct and indirect effects to these special-status plant species from removal and/or degradation of suitable habitat in the BSA could result in a decrease in the population due to the loss of habitat if these species are present in the BSA. As such, Mitigation Measure BIO-2 would be required to avoid and minimize impacts to special-status plants that could potentially occur in the BSA.

Mitigation Measure BIO-2: To avoid and minimize impacts to special-status plants that could potentially occur in the BSA, focused surveys should be conducted for special-status plants by a qualified botanist at least one season prior to the start of construction. Surveys should be scheduled during the blooming period or other time of year when the target species will be identifiable and should include all areas of potential impacts in suitable habitat. The surveys should be conducted in accordance with the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (March 20, 2018) or the current accepted guidance.

If a state or federally listed plant species (i.e., tree anemone or Mariposa pussypaws) is identified during the focused plant survey, the project proponent should coordinate with CDFW and/or USFWS prior to initiation of construction activities to determine if incidental take authorization is required under the California Endangered Species Act and/or Federal Endangered Species Act.

If a special-status plant species is identified in the BSA, if possible, the individuals should be protected in place using orange construction fencing (or equivalent) and avoided during construction. If it is determined that individuals cannot be avoided during construction, a salvage and relocation plan should be prepared to minimize impacts to non-listed species. The salvage and relocation plan should reflect the methods and timing for plant salvage and any implementation or follow-up monitoring requirements.

Implementation of Mitigation Measure BIO-2 would effectively avoid, minimize, or mitigate any impacts on special-status plants to less-than-significant levels.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Interior live oak woodland is classified as a natural community and surrounds the entire BSA. However, this community only encroaches into the BSA in areas adjacent to the ruderal road shoulders along the edges of the BSA and in an undeveloped area in the north section of the BSA, totaling 6.46 acres. Within the BSA, this community consists of an overstory dominated by interior live oak (*Quercus wislizeni*) and blue oak (*Quercus douglasii*), and also contains California buckeye (*Aesculus californica*), California bay (*Umbellularia californica),* gray pine (*Pinus sabiniana*), and hop tree (*Ptelea crenulata*). The understory is dominated by a variety of shrubs and herbaceous species including buckbrush (*Ceanothus cuneatus*), whiteleaf manzanita (*Arctostaphylos viscida*), poison oak (*Toxicodendron diversilobum*), California yerba santa (*Eriodictyon californicum*), silvery hairgrass (*Aira caryophyllea*), and *Bromus* sp.

Under PRC 21083.4, counties administering CEQA must consider mitigation for oak woodland impacted by the project. This state law requires a county to establish a method for requiring oak woodland mitigation. Oak woodland is defined as habitat where a majority of living trees are native oaks and with 10 percent or greater oak canopy cover.

The Fresno County General Plan contains several policies related to the protection of oak woodlands, including Policy OS-F.10, which specifies that new developments preserve natural woodlands to the maximum extent possible, and Policy OS-F.11, which requires that the County promote the preservation and management of oak woodlands by encouraging landowners to voluntarily follow the Fresno County Oak Management Guidelines (1998) and the County adopted Oak Woodlands Management Plan. The Fresno County Oak Woodland Management Guidelines provide guidance for building within oak woodlands. These voluntary guidelines direct land owners to include the following considerations when working within oak woodlands:

- Develop an Oak Woodland Management Plan to retain existing oaks, preserve agriculture, retain wildlife corridors, and enhance soil and water conservation practices.
- Avoid tree root compaction during construction by limiting heavy equipment in root zones.
- Carefully plan roads, cuts and fills, building foundations, and septic systems to avoid damage to tree roots.
- Design roads and consolidate utility services to minimize erosion and sedimentation to downstream sources. Also, consider reseeding any disturbed ground.
- Avoid landscaping which requires irrigation within ten (10) feet of the trunk of an existing oak tree to prevent root rot.
- Consider replacing trees whose removal during construction was avoidable.
- Use fire-inhibiting and drought-tolerant and oak-compatible landscaping wherever possible.

The interior live oak woodland community located within the northern portion of the BSA contains blue oak and interior live oak trees that would be removed to accommodate the proposed drainfield. It is anticipated that no oak trees located adjacent to ruderal road shoulders in other areas of the BSA would be removed to install the sewer laterals; however, trenching in the proximity of oak trees may damage the root systems. Approximately 6.46 acres of interior live oak woodland would be impacted by the project, consisting of 2.46 acres of permanent impacts associated with the proposed WWTP and drainfield, and 4.00 acres of temporary impacts associated with the installation of the sewer pipelines. Implementation of the Mitigation Measure BIO-3 would reduce impacts to interior live oak woodland community.

Mitigation Measure BIO-3: Disturbance within and around oak driplines should be minimized to the extent feasible. Prior to project implementation, a qualified arborist or biologist should identify all oak trees with a diameter at breast height (DBH) of 6 inches or greater within the BSA and a 50-foot radius that will be removed or potentially impacted by project construction activities. For any oak trees to remain, the qualified arborist or biologist should provide recommendations to avoid or minimize damage to the root systems during construction (e.g., restricting trenching to areas outside the root zone, flagging avoidance areas, avoiding tree root compaction, etc.). Oak trees within the BSA that are removed as a result of the project should be replaced on-site at a minimum ratio of one tree replaced to every one tree removed. The species composition should be similar to those removed. The qualified arborist or biologist should prepare an oak planting and monitoring plan specifying the number and type of plantings, installation guidelines, maintenance and monitoring requirements, and performance standards for determining planting success.

Implementation of Mitigation Measure BIO-3 would reduce impacts to the interior live oak woodland community to a less-than-significant level.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Backbone Creek flows north to south throughout and adjacent to the BSA (Figure 2 of the Biological Resources Evaluation), and is classified as a R4SBA (Riverine, Intermittent, Streambed, Temporary Flooded) riverine habitat by the National Wetlands Inventory. The reach of Backbone Creek within the BSA is a low-gradient stream with occasional small pools that crosses through existing culverts under roads within the BSA. The creek bed was dry during the biological survey. While flow is anticipated only during significant rain events, water may remain in isolated pools when the water is not flowing. A few sections of the creek, outside of and adjacent to the BSA, supported a narrow riparian corridor but riparian vegetation was largely absent. Trenching activities associated with the installation of the wastewater pipelines have the potential to impact this potentially jurisdictional

drainage feature regulated under Sections 404 and 401 of the Clean Water Act and Section 1602 of the California Fish and Game Code (CFGC).

As such, a formal jurisdictional waters delineation should be conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (January 1987), the USACE *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (September 2008), and the Regional Water Quality Control Board (RWQCB) *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (April 2019). The survey should include collection of data on soils, hydrology, and vegetation, where necessary, to determine the extent of potential waters of the U.S. and State in the BSA, including any potential wetlands. Aquatic features potentially subject to California Department of Fish and Wildlife (CDFW) jurisdiction should also be identified.

Prior to project implementation, the project proponent should obtain any required permits from the USACE; the U.S. Environmental Protection Agency, which administers the Section 401 Water Quality Certification program for projects on tribal lands in California; and/or CDFW, and comply with any conditions placed on the project by these agencies to reduce adverse impacts to jurisdictional areas.

In addition, Mitigation Measure BIO-4 would be required to reduce potential impacts to aquatic resources during construction.

Mitigation Measure BIO-4: To reduce potential impacts to aquatic resources during construction, the following measures shall be implemented:

- If any active nests of special-status bird species are discovered within or less than 500 feet of the BSA, a minimum 500-foot buffer should be established. If any work is proposed within this buffer, CDFW should be notified, and should have the authority to reassess protective buffers and/or establish other avoidance and minimization measures.
- Conduct open trenching through Backbone Creek when dry conditions are present in the stream channel, typically between June 15 and October 15.
- Stake the boundaries of designated work areas within the stream channel and ensure all vehicles and equipment stay within the designated boundaries.
- Designate vehicle and equipment staging areas at least 100 feet from the stream channel; any vehicle fueling or other maintenance should only occur within designated staging areas.
- Prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with typical provisions associated with a Regional General Permit for Construction Activities. The SWPPP should contain best management practices to minimize effects associated with erosion and siltation during construction, as

well as a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials.

Implementation of Mitigation Measure BIO-4 would effectively avoid, minimize, or mitigate any impacts to aquatic resources during construction.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As discussed above, since trees would be removed as a result of project construction, migratory bird species may be impacted if any are nesting in the BSA when construction begins. Construction-related disturbance could also indirectly impact nesting birds by causing adults to abandon active nests, resulting in nest failure and reduced reproductive success. Therefore, the project has the potential to impact nesting bird species protected under Section 3503 of the CFGC and the MBTA. Mitigation Measure BIO-1 would effectively avoid, minimize, or mitigate any impacts on special-status species to less-than-significant levels.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed project would not conflict with any local policies or ordinances protecting biological resources. As discussed above, the Fresno County General Plan contains several policies related to the protection of oak woodlands, including Policy OS-F.10, which specifies that new developments preserve natural woodlands to the maximum extent possible, and Policy OS-F.11, which requires that the County promote the preservation and management of oak woodlands by encouraging landowners to voluntarily follow the Fresno County Oak Management Guidelines (1998) and the County adopted Oak Woodlands Management Plan. The Fresno County Oak Woodland Management Guidelines also provide guidance for building within oak woodlands. As discussed above, the proposed project would not conflict with any of the existing ordinances. As a result, a less than significant impact would occur.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The PG&E San Joaquin Valley Operation and Maintenance (O&M) Habitat Conservation Plan (HCP) was approved in 2007 and covers portions of nine counties, including Fresno County. This HCP covers PG&E activities which occur as a result of ongoing O&M that would have an adverse impact on any of the 65 covered species and provides incidental take coverage from the USFWS and CDFW. Therefore, the proposed project would not conflict with the provisions of the PG&E HCP and the proposed project and would have no impact.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

3.5.1 Impact Analysis

LSA prepared a Historic Property Identification Report (HPIR) to identify cultural resources within the Area of Potential Effect (APE) that may meet the definition of a historic property or traditional cultural property. The HPIR is included as Appendix D of this Initial Study. The study consisted of background research that included a literature review, a records search at the Southern San Joaquin Valley Information Center (SSJVIC), and a review of historical maps and aerial images. The study also consisted of outreach to historical societies, the Native American Heritage Commission (NAHC), and geographically affiliated Native American tribes. A pedestrian field survey of the project site by an archaeologist was also conducted.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Southern San Joaquin Valley Information Center. On October 13, 2020, LSA submitted a request for a records search of the APE and a 0.25-mile radius by staff at the SSJVIC. The SSJVIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of cultural resource records and reports for Fresno County. The records search identified previously recorded resource records and studies, and included a review of federal and state historical resource and historic property inventories.

The SSJVIC provided LSA the records search results on October 19, 2020 (VIC #A11761). The record search identified one resource within the APE (San Joaquin and Eastern Railroad Grade, CA-FRE-1631H) and six resources within 0.25 miles of the APE. Table E, below, provides a summary of all resources identified within 0.25 miles of the APE.

Table E: Cultural Resources within 0.25 Mile of APE

Primary Number/Trinomial	Description	Distance from APE	National Register of Historic Places (NRHP) Eligibility Status
P-10-001631/CA-FRE-1631H	San Joaquin and Eastern Railroad Grade	Within APE: alignment of resource follows an unnamed N-S paved road, Jose Basin Road, and an unnamed E-W paved road that stretches from Jose Basin Road west to the unnamed N-S paved road (see Figure 2 of HPIR)	Recommended as non-contributor to NRHP-eligible Big Creek Hydroelectric System in 2006
P-10-002477	Bedrock milling feature	Approximately 90 feet east of the APE (see Figure 2 of HPIR)	Not evaluated
P-10-004727	Baty Parcel historic trash scatter	Approximately 45 feet north of the APE near Mono Wind Casino (see Figure 2 of HPIR)	Form states not eligible for the NRHP. Unknown if State Historic Preservation Officer concurred.
P-10-004962	Historic building at 30444 Auberry Road	Approximately 750 feet west of the APE	Unknown
P-10-005931	Bedrock milling feature	Approximately 50 feet from the APE (see Figure 2 of HPIR)	Not evaluated
P-10-005932	Bedrock milling feature	Approximately 90 feet north on the APE (see Figure 2 of HPIR)	Not evaluated
P-10-007110	Bedrock milling feature	Approximately 300 feet east of the drainfield zone, on the east side of backbone Creek (see Figure 2 of HPIR)	Not evaluated

Source: LSA (2021).

CA-FRE-1631H was evaluated in 2006 as a non-contributor to Big Creek Hydroelectric System Historic District. The historic district is eligible for listing in the National Register of Historic Places (NRHP); however, it was determined that CA-FRE-1631H does not contribute to or convey the historic property's significance. The Comstock Segment of CA-FRE-1631H was recorded in 2001 and the portion within the APE found unrecognizable as a railroad grade. The Comstock Segment was in the alignment of what is now an unnamed N-S paved road in the APE. The remaining segment of CA-FRE-1631H that is within the APE is also unrecognizable as a railroad grade. Jose Basin Road was upgraded in 1983 and the unnamed E-W paved road that leads from Jose Basin Road to the unnamed N-S paved road was improved after 1993. Although the roads follow the historic alignment of CA-FRE-1631H, they no longer contain ties, rails, ballast, or other tangible railroad features that would warrant consideration of this resource.

Map and Aerial Photograph Review. LSA reviewed historical maps and aerial photographs of the project site to understand the development of the rancheria over time and to identify the potential for historic-period cultural resources within the project site. The results of this review are presented in Table F.

Table F: Historic-Period Map and Aerial Photograph Review of the APE

Map	Results
1904 *Kaiser, Calif*. USGS 30-minute topographic quadrangle map	An unimproved road is depicted in the current alignment of a portion of Jose Basin Road and a portion of the current alignment of Auberry Mission Road.
1914 Official Map of the County of Fresno (McKay 1914)	This map depicts the "San Joaquin and Eastern R.R." in the current location of the unnamed N-S paved road, the unnamed E-W paved road, and the Jose Bains Road within the APE.
1904 (rev. 1923) *Kaiser, Calif*. USGS 30-minute topographic quadrangle map	Same as 1904 map except the San Joaquin and Eastern Railroad is depicted following the current alignments of a portion of Jose Basin Road, an unnamed E-W paved road, and an unnamed N-S paved road within the rancheria.
1904 (rev. 1939) *Kaiser, Calif*. USGS 30-minute topographic quadrangle map	Same as 1923 topo.
1940 aerial image (NETR 2020)	Unimproved roads throughout APE. Railroad grade in alignment of a portion of the current Jose Basin Road, the unnamed E-W paved road, and the unnamed N-S paved road.
1904 (rev. 1946) *Kaiser, Calif*. USGS 30-minute topographic quadrangle map	Same as 1923 topo.
1953 (1955 ed.) *Shaver Lake, Calif*. USGS 15-minute topographic quadrangle map	Twelve buildings scattered throughout rancheria, which is called out as Auberry Indian Mission. Improved roads are depicted in current alignment of Jose Basin Road, unnamed E-W paved road, and unmanned N-S paved road. Jose Basin Road is called out as Old Railroad Grade Road.
1957 aerial image from flight ABI_1957, Frames 54t-136 (UCSB 2020)	Same as 1940 image but the roads appear more improved. The north end of the unnamed N-S paved road appears flooded (directly west of the proposed drainfields).
1965 aerial image from flight CAS_FRE, Frames 13-136 and 13-137 (UCSB 2020)	Depicts the current alignment of Jose Basin Road extending west from unnamed N-S paved road to Auberry Road. Additional paved road depicted throughout rancheria.
1983 *Auberry, Calif*. USGS 7.5-minute topographic quadrangle map	Depicts improved roads in the current alignments of San Jose Basin Road, Auberry Mission Road, Auberry Road, Rancheria Road, and Church Road within the rancheria. Big Sandy Rancheria is called out in a boundary and contains 23 buildings and one outbuilding within the boundaries. The Auberry Indian Mission contains three buildings. Two water tanks are depicted just east of the boundary.

Source: LSA 2020

Field Survey. LSA Archaeologist Isaac Younglund conducted a pedestrian survey of the APE on October 23, 2020. No archaeological cultural resources were identified during the pedestrian survey. Special consideration was taken during the survey in the alignment of CA-FRE-1631H to record the current conditions of the resource. No evidence of the railroad was identified during the survey. The alignment has been regraded and paved into roads and no contributing features were identified

nearby. Appendix D of the HPIR Report contains an update to the DPR record for this resource. The majority of the APE comprises paved roadway where the ground surface was not visible. Where unpaved, visibility within the APE was approximately 80 percent due to modern leaf and branch piles created for ground clearing and controlled burns. Mr. Younglund observed several instances of modern dumping visible within the drainage that all appeared recently deposited. The field survey did not identify any archaeological cultural resources in the project site. The project site consists of flat, open areas that have been disturbed by vehicle traffic and construction of the existing well sites. Rodent burrowing holes and back-dirt piles, where present, were examined for archaeological cultural resources; none were observed.

Results. CA-FRE-1631H comprises the 55.9-mile-long San Joaquin and Eastern Railroad Grade that runs from El Prado to Big Creek as well as 50 associated features including, but not limited to, dry-laid rock walls, can scatters, pipe fragments, milled boards, and bridge piers. The railroad was constructed in 1912 to transport supplies and workers to Big Creek during the development of the Big Creek Hydroelectric System. It was dismantled in 1933 and a large part converted into a forest service road. CA-FRE-1631H was originally recorded as a cultural resource in 1979, followed by recordation of different segments throughout the 1980s and 1990s. Most recently, it was recorded in 2006 and found not to retain enough integrity to convey the significance of the Big Creek Hydroelectric System, a historic district eligible for listing in the NRHP and considered a historic property under Section 106 for purposes of the Southern California Edison Company Shaver Lake District Deteriorated Distribution Line Poles Replacement Project. LSA reached out to Pacific Legacy to request a copy of the State Historic Preservation Officer (SHPO) concurrence letter; however, Pacific Legacy no longer retained a copy of the concurrence letter in their files (Jackson and O'Neill 2020).

Although a feature of CA-FRE-1631H (the railroad grade) was previously recorded in the APE, the railroad grade is unrecognizable due to it being regraded and reconstructed into roadways since the railroad was dismantled in 1933. An update to this record has been prepared and is attached to this report as Appendix D. Because no tangible remains of CA-FRE-1631H are located within the APE, there is no potential for this project to affect this 55.9-mile-long resource. All 49 historic-period features of CA-FRE-1631H are located outside the APE and will not be affected by the project. In conclusion, no tangible evidence of the railroad remains within its former alignment in the APE; therefore, the resource was not evaluated for its eligibility for listing in the NRHP for purposes of this project because there is no potential to effect the resource in its entirety.

The HPIR, consisting of background research and a field survey, did not identify archaeological cultural resources in the project site. The ground visibility, the ability to examine samples of soils from below the surface, and the negative survey results indicate that there is a low likelihood of encountering buried archaeological cultural resources during construction activities. However, the potential for encountering intact archaeological deposits and/or human remains during construction of the proposed project cannot be ruled out. Any impacts to such resources would be significant under CEQA. Implementation of Mitigation Measure CUL-1 would reduce potential impacts to cultural resources or their accidental discovery during project construction to less than significant.

Mitigation Measure CUL-1: In the unlikely event that cultural resources are encountered during project activities, contractors should stop work in the immediate area of the find and contact a qualified professional archaeologist to assess the nature and significance of the find and determine if any additional study or treatment of the find is warranted. Additional studies could include, but would not be limited to, collection and documentation of artifacts, documentation of the cultural resources on State of California Department of Parks and Recreation Series 523 forms, or subsurface testing. If deemed appropriate, future monitoring should continue until grading and excavation are complete or until the monitoring archaeologist determines, based on field observations, that there is no likelihood of encountering intact archaeological cultural resources. Upon completion of any monitoring activities, the archaeologist should prepare a report to document the methods and results of monitoring activities. The final version of this report should be submitted to the SSJVIC.

Implementation of Mitigation Measure CUL-1 would reduce potential impacts related to the substantial adverse change in the significance of historical or archaeological resources to a less-than-significant level.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Mitigation Measure CUL-1, as presented in Section 3.5.1.a above, would ensure that potential impacts to archaeological resources would be reduced to a less-than-significant level. Therefore, the project would not cause a substantial adverse change in the significance of an archeological resource.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?

Although no such remains have been identified within the project site, there is a possibility of encountering such remains, either in isolation or with prehistoric archaeological deposits. Such remains could be uncovered during project ground-disturbing activities. Based on the significance criteria identified above, the project would have a significant effect on the environment if it would disturb human remains, including those interred outside of formal cemeteries.

Implementation of Mitigation Measure CUL-2 would reduce potential impacts to human remains to a less than significant level.

Mitigation Measure CUL-2: Any human remains encountered during project-related ground-disturbing activities shall be treated in accordance with California Health and Safety Code Section 7050.5. The Tribe shall inform all contractor(s) performing excavation of the sensitivity of the project

site for human remains and include the following directive in the appropriate contract documents:

If human remains are uncovered, all work within 50 feet of the discovery shall be halted and the Fresno County Coroner notified immediately. At the same time, the on-site monitoring archaeologist shall assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains or associated materials. If the human remains are of Native American origin, the Coroner must notify the California State NAHC within 24 hours of this identification. The NAHC will formally identify a Native American Most Likely Descendant—if one is not already on-site—to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Such recommendations shall be carried out to the satisfaction of the NAHC prior to work resuming within 50 feet of the discovered remains.

3.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Impact Analysis

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

The proposed project would include the construction and operation of a new WWTP and associated wastewater collection system within the BSR and would demand energy during construction and operation of the project.

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over 9 months. The proposed project would require grading, site preparation, and building activities during construction.

Construction of the proposed project would require energy for manufacturing and transporting building materials, preparation of the site for demolition and grading activities, and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

Operational Energy Use. Operation of the proposed project would demand electricity. The proposed project would have minimal to no effect on natural gas demand. The electrical improvements required for the selected project construction would require four new electrical supplies. The new services would be at the wastewater treatment facility and at the three new lift stations.

- **Wastewater Treatment Facility (New supply existing meter location).** The supply for the WWTP would be the existing PG&E utility pole and meter located at Well 7 on the west side of the Comstock Property, approximately 360 feet northwest of the of the proposed WWTP. The power available is 230-volt, three-phase, and 400 amp.

- **LS-1 (New supply existing meter location).** The supply for Lift Station 1 is located at the Brindle Well power pole located approximately 340 feet north of LS-1. The power available is 240-volts single-phase, and 100 amp.

- **LS-2 (Existing building with existing meter).** The power for this lift station would be supplied from the existing Well 5 meter. Service is on the Well 5 building approximately 130 feet north of the lift station. This service is 240-volts single-phase.

Electricity would be obtained from PG&E, which currently provides electricity to properties in the immediate vicinity of the project site. Due to the small electricity demand of the WWTP, it is not anticipated that operation of this facility would significantly impact PG&E's ability to provide electricity in the region. Due to the small electricity demand associated with the proposed project, the proposed project would not result in the wasteful, inefficient or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment use, and transportation. Impacts would be less than significant, and no mitigation would be required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

In 2002, the Legislature passed Senate Bill 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. The CEC recently adopted the 2019 Integrated Energy Policy Report (CEC 2020). The 2019 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

As indicated above, energy usage in the project area during construction would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Once operational, the proposed project would not substantially increase energy use. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the 2019 Integrated Energy Policy Report. Thus, as shown above, the project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and not result in any irreversible or irretrievable commitments of energy. Impacts would be less than significant.

3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

3.7.1 Impact Analysis

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The United States Geological Survey (USGS) defines a fault as "active" if it has moved one or more times in the last 10,000 years (USGS 2016). There are a number of active and potentially-active faults within and adjacent to Fresno County (County of Fresno 2000). Although most of Fresno County is situated within an area of relatively low seismic activity by comparison to other areas of the State, the faults and fault systems that lie along the eastern and western boundaries of the county, as well as other regional faults, have the potential to produce high-magnitude earthquakes throughout the County (County of Fresno 2000). No Alquist-Priolo earthquake zones are mapped in the vicinity of the project site (California Geological Survey 2015a). The nearest inactive fault to the project site is Mount Tom in Mono County, located approximately 47 miles northeast of the project

site. The site does not fall within an Alquist-Priolo Fault Zone, and is therefore not subject to any building restrictions. The proposed project would be constructed to standards consistent with California Building Code (CBC) guidelines, particularly those pertaining to earthquake design, in order to safeguard against major structural failures and loss of life. Therefore, no people or structures would be exposed to potential substantial adverse effects, including the risk of loss, injury, or death from the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. As a result, a less-than-significant impact would occur.

ii. Strong seismic ground shaking?

As discussed above, due to the distance to the known faults, hazards due to ground shaking would be minimal. Therefore, impacts related to strong seismic ground shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Soil liquefaction can occur in seismic conditions. Liquefaction is the temporary transformation of saturated, non-cohesive material from a relatively stable, solid condition to a liquefied state as a result of increased soil pore water pressure. Soil pore water pressure is the water pressure between soil particles. Liquefaction can occur if three factors are present: seismic activity, loose sand or silt, and shallow groundwater.

The County's General Plan does not identify specific areas prone to liquefaction; however, it notes that a soils engineering and geologic-seismic analysis be prepared by a California-registered engineer or engineering geologist prior to permitting development, including public infrastructure projects, in areas prone to geologic or seismic hazards (i.e., fault rupture, groundshaking, lateral spreading, lurchcracking, fault creep, liquefaction, subsidence, settlement, landslides, mudslides, unstable slopes, or avalanche). The project site does not contain many of these qualities that would make an area susceptible to liquefaction; this, combined with the lack of active faults in the area, indicates that the probability of liquefaction occurring on the site is low. As such, the proposed project would not expose people or structures to potential substantial effects associated with seismic-related ground failure, including liquefaction. Therefore, this impact is less than significant.

iv. Landslides?

The County's General Plan states that geologic hazards in Fresno County could include landslides. However, the project site is not mapped as a landslide hazard (California Geological Survey 2015b). In addition, the proposed project would include the construction and operation of a new WWTP and associated wastewater collection system. The proposed project would not expose people or structures to potential substantial adverse effects associated with landslides. Therefore, impacts related to landslides would be less than significant.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion is a process whereby soil materials are worn away and transported to another area, either by wind or water. Rates of erosion can vary depending on the soil material and structure,

placement, and human activity. Soil containing high amounts of silt can be easily eroded, while sandy soils are less susceptible. Excessive soil erosion can eventually damage building foundations and roadways. Erosion is most likely to occur on sloped areas with exposed soil, especially where unnatural slopes are created by cut-and-fill activities. Soil erosion rates can be higher during the construction phase. Typically, the soil erosion potential is reduced once the soil is graded and covered with concrete, structures, or asphalt.

Implementation of the proposed project would include grading activities that could result in short-term soil erosion during the construction period. Exposed soils are considered erodible when subjected to concentrated surface flow or wind. Mitigation Measure GEO-1, described below, would reduce the potential for soil erosion.

Mitigation Measure GEO-1: To reduce the potential for soil erosion during construction of the proposed project, an Erosion Control Plan shall be prepared for the project in conformance with the California Storm Water Best Management Practice Handbook for Construction Activity, prior to the start of grading.

Soil erosion and loss of topsoil would also be minimized through implementation of SJVAPCD Regulation VIII fugitive dust control measures and compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements. With incorporation of Mitigation Measure GEO-1 and compliance with NPDES permit requirements, construction of the proposed project would not result in substantial soil erosion or loss of topsoil.

The Geotechnical Engineering Investigation Proposed Underground Sewer Piping System (included as Appendix A of this Initial Study) identified areas on the Comstock property with adequate percolation to be used for drip fields. Subsurface disposal provides year-round disposal, reduces the potential for contact with wastewater by the public, utilizes percolation through the soil to further enhance treatment, is simple to operate and cost effective to construct and maintain. Furthermore, drip system operation and maintenance costs are lower than the leach field option because the drip field does not require maintenance and operation of solenoid valves and distribution valves within each zone. Drip field systems are also shallower and would take full advantage of the soil layers between the dispersal system and existing rock layers at the Comstock property. Furthermore, given the sloping terrain and presence of trees surrounding the Comstock property, a drip field system would provide a distinct advantage in minimizing distribution system clogging that could potentially occur with a leach field system in the similar surrounding environment.

In addition, the slopes where excavation and trenching is performed during project construction project and not paved are at risk for higher erosion. After construction, any nonpaved slopes steeper than 5 horizontal to 1 vertical would be planted with shallow rooted groundcover to reduce the risk of erosion. As such, this impact would be less than significant with incorporation of Mitigation Measure GEO-1.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

See Sections 3.7.1.a.iii and 3.7.1.a.iv above. The proposed project would not require a substantial grade change or change in topography. The project would not result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse. Therefore, this impact would be less than significant.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils can swell or shrink in response to changes in moisture, which can significantly damage infrastructure located on expansive soils. The project is not located in an area with high soil expansion potential. Therefore, the project would not create substantial risks to life or property due to expansive soils. Therefore, no impact would occur.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Planned improvements would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. As discussed in the Project Description, prior to abandoning an existing septic system, a permit is required to be submitted and approved by the Fresno County Department of Works and Planning, Development Services and Capital Projects Division. Following approval from Fresno County, demolition of each of the 54 existing septic systems would include the following:

- **Cap Existing Building Sewer Lines and Pump Remaining Waste from Septic Tank.** Prior to connecting to a public sewer, any abandoned septic tank must be capped within 5 feet of the property line. A certified septic hauler shall pump any remaining waste from each tank.

- **Fill Septic Tank with Approved Materials.** Each tank shall be completely filled with earth, gravel, concrete, or other approved materials. Per the County LAMP, the filling shall not extend above the top of the vertical portions of the sidewalls or above the level of any outlet pipe until inspection has been called and the cesspool, septic tank, or seepage pit has been inspected. After such inspection, the cesspool, septic tank, or seepage pit shall be filled to the level of the top of the ground.

- **Owner and Permittee Guidelines.** Within thirty days of connecting the building sewer to a public sewer, the permittee making the connection shall fill all abandoned facilities in accordance with the County. The property owner shall act in accordance with the County LAMP and OWTS Guidelines.

The existing septic systems would be abandoned after the proposed WWTP and wastewater collection system have been constructed and each respective residence or structure is connected to the proposed wastewater collection system. To prevent accumulation of water, the abandonment of each existing septic tank would include coring a hole in the bottom of each septic tank. Following abandonment, Big Sandy Rancheria or each respective owner would submit a report detailing the abandonment to Fresno County. Therefore, once complete, the proposed project would not require the use of septic tanks or other alternative wastewater disposal systems. As such, this impact would be less than significant.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources are the mineralized (fossilized) remains of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and leaves are found in geologic deposits (rock formations) where they were originally buried. Fossil remains are considered to be important as they provide indicators of the earth's chronology and history. These resources are afforded protection under CEQA and are considered to be limited and nonrenewable, and they provide invaluable scientific and educational data. Due to the sensitive nature of these paleontological resources, they are not mapped.

Implementation of the proposed project would require ground disturbing construction activities that may inadvertently encounter and damage paleontological resources. Should this occur, project construction may result in the destruction of a unique paleontological site, resulting in a potentially significant impact. Mitigation Measure GEO-2 would reduce this impact to less than significant.

Mitigation Measure GEO-2: The Tribe shall inform its contractor(s) of the sensitivity of the project area for paleontological resources. Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If found to be significant, and project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the Tribe for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology. The Tribe shall verify that the above directive has been included in the appropriate contract documents.

3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 Impact Analysis

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Greenhouse gas emissions (GHGs) are present in the atmosphere naturally, and are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur Hexafluoride

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime").

The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period.

The SJVAPCD *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (SJVAPCD 2009) suggests project GHG emissions would be considered less than significant if a project meets any of the following conditions: is exempt from CEQA requirements; complies with an approved GHG emission reduction plan or GHG mitigation program; or implements Best Performance Standards. Additionally, projects that demonstrate that GHG emissions would be reduced or mitigated by at least 29 percent compared to Business-as-Usual, including GHG emission reductions achieved since the 2002-2004 baseline period, would be considered less than significant.

Construction Greenhouse Gas Emissions. Construction activities associated with the WTPs, such as site preparation, site grading, on-site construction vehicles, equipment hauling materials to and from the project site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As discussed in the Project Description, construction of the proposed project, including the WWTP and wastewater collection system, is expected to occur over a period of nine 9 months starting in the winter of 2021. Construction of the WWTP and the wastewater collection system would take place concurrently.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction of the proposed project would generate a total of approximately 272 metric tons of CO_2 equivalents (CO_2e). When considered over the 30-year life of the project, the total amortized construction emissions for the proposed project would be 9 metric tons of CO_2e per year. As such, construction of the proposed project would not generate GHG emissions that would have a significant impact on the environment and construction-related impacts would be less than significant.

Operational Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile, area, waste, and water sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include maintenance worker trips to and from the site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions are typically generated at off-site utility providers as a result of increased electricity demand generated by a project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

The proposed project includes: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Once operational, it is anticipated that inspection and maintenance of the WWTP would occur; however, given the minimal trip generation, mobile source GHG emissions would be minimal. In addition, the proposed project would result in energy source GHG emissions associated with the electrical improvements; however, these emissions are also expected to be minimal. Therefore, the proposed project would not be a significant source of operational GHG emissions. As such, operation of the proposed project would not generate GHG emissions that would have a significant impact on the environment and construction-related impacts would be less than significant.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The SJVAPCD has adopted a CCAP, which includes suggested BPS for proposed development projects. Appendix J of the SJVAPCD Final Staff Report for the CCAP contains GHG reduction measures; however these measures are intended for commercial, residential, and mixed-use projects and wouldn't be applicable to the proposed project. Therefore, the following discussion evaluates the proposed project according to the goals of Assembly Bill (AB) 32, the AB 32 Scoping Plan, Executive Order B-30-15, SB 32, and AB 197.

AB 32 is aimed at reducing GHG emissions to 1990 levels by 2020. AB 32 requires the California Air Resource Board (CARB) to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The AB 32 Scoping Plan has a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

Executive Order Executive Order B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan (CARB 2017), to reflect the 2030 target set by Executive Order B-30-15 and codified by Senate Bill (SB) 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Executive Order B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

As identified above, the AB 32 Scoping Plan contains GHG reduction measures that work towards reducing GHG emissions, consistent with the targets set by AB 32, Executive Order B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and

implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed in Section 3.6.1.b, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Therefore, the proposed project would not conflict with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The purpose of the proposed project is to construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32, the AB 32 Scoping Plan, Executive Order B-30-15, SB 32, and AB 197 and would be consistent with applicable state plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

3.9.1 Impact Analysis

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Hazardous materials are chemicals that could potentially cause harm during an accidental release and are defined as being toxic, corrosive, flammable, reactive, an irritant, or strong sensitizer. Hazardous substances include all chemicals regulated under the United States Department of Transportation (DOT 2018) "hazardous materials" regulations and the USEPA "hazardous waste" (USEPA 2012) regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment.

Construction. Exposure to hazardous materials during the construction of the project could result from the improper handling or use of hazardous substances or an inadvertent release resulting from an unforeseen event (e.g., fire, flood, or earthquake). The severity of any such exposure is dependent upon the type, amount, and characteristic of the hazardous material involved; the timing, location, and nature of the event; and the sensitivity of the individual or environment affected.

Project construction would likely require the use of limited quantities of hazardous materials, such as fuels, oils, lubricants, and solvents. The small quantities of hazardous materials that would be transported, used, or disposed of would be well below reportable quantities. The improper use, storage handling, transport, or disposal of hazardous materials during construction could result in accidental release exposing construction workers, the public and the environment, including soil and/or ground or surface water to adverse effects. Construction activities would be conducted with standard construction practices and in accordance with all applicable California Division of Occupational Safety and Health Administration and other safety regulations to minimize the risk to the public. Compliance with federal, State, and local hazardous materials laws and regulations would minimize the risk to the public presented by these potential hazards during construction of the project. Transportation of any hazardous materials generated by excavation is regulated by the federal Department of Transportation and Caltrans. As such, transportation of hazardous materials off-site must be handled by licensed hazardous waste haulers.

Operation. Operation and maintenance of the wastewater collection and treatment systems would also involve the transport, use, storage, and disposal of small quantities of hazardous materials (e.g., cleaners, fuels, lubricants, hydraulic fluids). Any business with hazardous materials storage, use, handling or disposal is required to comply with federal, State, and local requirements for managing hazardous materials and wastes. Businesses that use hazardous materials are required to submit a Hazardous Materials Business Plan to the local Certified Unified Program Agency (CUPS), which performs inspections to ensure compliance with hazardous materials labeling, training and storage regulations. Operation of the sewer collection system would not emit or handle hazardous or acutely hazardous materials.

In summary, compliance with existing safety regulations and widely-accepted industry standards would minimize the hazard to the public and the environment. Construction and operation of the project would be required to comply with the Uniform Fire Code and local building codes for the storage of hazardous materials and construction of structures containing hazardous materials. Therefore, potential impacts associated with the transport, use, storage, handling and disposal of hazardous materials during operation of the project would be less than significant, and no mitigation is required.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

See Response 3.9.1.a, above. Compliance with existing safety regulations and industry standards would minimize the hazard to the public and the environment. As such, the proposed project would not result in a significant hazard to the public or the environment through a reasonably foreseeable upset or accident condition related to the release of hazardous materials. This impact would be less than significant.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is not located within 0.25 miles of an existing school. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur, and no mitigation is required.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

According to the California Department of Toxic Substances Control (DTSC) EnviroStor database (2007), the project site is not located on a federal superfund site, State response site, voluntary cleanup site, school cleanup site, evaluation site, school investigation site, military evaluation site, tiered permit site, or corrective action site. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CalEPA 2018). As a result, no impacts related to this issue are anticipated, and no mitigation is required. There would be no impact.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The proposed project is not located within 2 miles of a public or public use airport. The Kindsvater Ranch Airport is the closest private airport and is located approximately 3 miles south of the project site. In addition, the public use Fresno Yosemite International Airport is located approximately 13 miles southwest of the project site. The proposed project would construct and operate wastewater collection and treatment systems and would not result in a safety hazard or excessive noise for people residing or working in the project area. As a result, no impact would occur.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would not result in interference with any adopted emergency response plans or evacuation plans. The proposed project would be located within the northern portion of the approximately 280-acre BSR. Regional access to the BSR is made through SR 168 and Auberry Road. The proposed project would construct and operate wastewater collection and treatment systems. The proposed project would not result in the development of structures or alteration of existing roadways that would impede or obstruct emergency response plans or evacuation plans. Therefore, development and operation of the proposed project is not anticipated to interfere with any emergency evacuation plan, and no impact would occur. Therefore, no impacts would occur as a result of project implementation and no mitigation would be required.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

According to the California Department of Forestry and Fire Protection Very High Fire Hazard Severity Zone (VHFHSZ) Map for Fresno County, portions of the project site are located within the high and very high wildfire threat area. However, the proposed project would construct and operate wastewater collection and treatment systems. The proposed project would not result in the development of structures or alteration of existing roadways that would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, this impact would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	☐	☒	☐	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 Impact Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Construction. Pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. Any of these pollutants have the potential to be transported via storm water runoff into receiving waters.

Because the project would disturb greater than 1 acre of soil, the project is subject to the requirements of the State Water Resources Control Board NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWG and 2012-0006-DWQ, NPDES No. CAS000002) (Construction General Permit). The permit regulates stormwater discharges from construction sites which result in

a Disturbed Soil Area of 1 acre or greater, and/or are smaller sites that are part of a larger common plan of development.

On-site construction activities subject to the Construction General Permit include clearing, grading, excavation, and soil stockpiling. State Water Resources Control Board Construction General Permit also requires the development of a Stormwater Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer. A SWPPP identifies all potential pollutants and their sources, including erosion, sediments, and constructions materials and must include a list of Best Management Practices (BMPs) to reduce the discharge of construction-related stormwater pollutants. A SWPPP must include a detailed description of controls to reduce pollutants and outline maintenance and inspection procedures. Typical sediment and erosion BMPs include protecting storm drain inlets, establishing and maintaining construction exits and perimeter controls to avoid tracking sediment off-site onto adjacent roadways. A SWPPP also defines proper building material staging and storage areas, paint and concrete washout areas, describes proper equipment/vehicle fueling and maintenance practices, measures to control equipment/vehicle washing and allowable non-stormwater discharges, and includes a spill prevention and response plan.

Required compliance with State and local regulations regarding stormwater during construction would ensure that the proposed project would result in less-than-significant impacts to water quality during construction.

Operation. The proposed project would construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences. Wastewater treatment would consist of two components: treatment of wastewater at a WWTP and disposal of wastewater through subsurface disposal via drip fields.

The project includes the construction and operation of a packed bed aerobic system that consists of a reactor with media and effluent recirculation chamber to keep the media wet. Similar to a biological filtration process, the packed bed consists of textile-covered plastic media which promotes growth of microorganisms on the surfaces. Such forms of the treatment provide a high tolerance for variances in flow while providing stable treatment.

The system consists of two phases. In the first phase, two 15,000-gallon flow equalization tanks sequentially (series configuration) provide primary treatment. The influent is then pumped into the second phase, where flow is directed to five treatment tanks that are controlled by pump station that adjusts the load accordingly to provide a treated effluent of less than 10 mg/L of BOD and TSS. Finally, the treated effluent pumped to the disposal fields that would cover approximately two acres of surface area and utilize approximately 43,200 linear feet of drip piping, as described below.

The proposed WWTP would be the Model AX-Max 300-42 AdvanTex Pod to treat the projected wastewater flow. Each AX-Max 300-42 pod is rated for an average wastewater flow of 15,000 gpd in typical residential wastewater. The AdvanTex system would be supplied with its own control panel which would be installed inside a new fiberglass control building structure on site. Each of the five treatment tanks has a forced air venting system to minimize buildup of odorous gases.

The proposed project would include a shallow drip distribution system to dispose of treated effluent. Shallow drip distribution systems are used in places where conventional trench systems are not suitable or where steep slopes of heavily forested areas make it difficult to install trenches, mounds, or at-grade systems. Constraints and obstacles such as shallow bedrock, high-water table and low-permeability soils are less problematic for subsurface drip lines. This system would consist of pressurized small-diameter tubing buried below ground, as mandated by regulatory agencies, including integrated emitters with each trickling up to two gallons per hour. Critical factors that affect the design of drip distribution systems include soil texture and structure, depth to restrictive layer, and surface slope. Since effluent dispersal occurs near the ground surface, a minimum three feet separation distance between drip line and groundwater table is more achievable. However, the presence and location of bedrock, water table depth, and the down-gradient area through which the effluent flows would be considered when evaluating the feasibility of implementing a subsurface drip system.

A proposed wastewater collection system would connect the existing residences and structures to the proposed WWTP. The connections to residential structures would be made with 4-inch PVC pipe between to the nearest sewer main. The wastewater collection system was designed to avoid as many trees as possible. Manholes or cleanouts would be located at all alignment changes, and would be 48 inches in diameter to allow maintenance access.

The proposed project would include the construction of three lift stations. Lift Station 1 (LS-1) would be located at the northern region of the project site and would convey wastewater flows to the proposed WWTP. Lift Station 2 (LS-2) would be located the north-central region and would pump flows received by most of the gravity system to the WWTP. Each lift station would include a primary pump, backup pump, and force main to connect to the wastewater collection system.

The existing septic systems would be abandoned after the proposed WWTP and wastewater collection system have been constructed and each respective residence or structure is connected to the proposed wastewater collection system. To prevent accumulation of water, the abandonment of each existing septic tank would include coring a hole in the bottom of each septic tank. Following abandonment, Big Sandy Rancheria or each respective owner would submit a report detailing the abandonment to Fresno County.

The purpose of the proposed project is to provide treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences. Regulatory requirements for the WWTP would ultimately be determined by the selected effluent disposal method and will be influenced by the type of treatment processes implemented. Typical requirements in Waste Discharge Requirements (WDRs) include constituent effluent limits for pollutants, monitoring, and reporting; separation distances from groundwater; setback distances from surrounding wells (private, drinking, agricultural, etc.); and fence lines for each discharge method. As part of any land-based discharge, groundwater monitoring wells would be required both up gradient and down gradient of the discharge area(s). By monitoring the quality in wells, the impacts of the wastewater disposal can be observed. In addition, by providing wastewater service to the residences, groundwater quality would be improved. As such, implementation of the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality and impacts would be less than significant.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The geotechnical investigation encountered groundwater in two of the 15 borings drilled along the pipeline alignments. No free ground water was encountered in the proposed drain field area. Zones of wet, unstable soils and free groundwater may be encountered during the construction. If encountered during construction, dewatering and control of groundwater and stabilization of the wet, unstable soil conditions would be required. Soil stabilization may require aeration of the soils and/or the placement of rock and geotextile fabric. The in-ground structures would need to be designed to resist uplift created by a high ground water. With dewatering and control of groundwater and stabilization, the reduction in infiltration would not be substantial. Therefore, construction of the project would result in a less than significant impact associated with depleting groundwater supplies or substantially interfering with groundwater recharge, and no mitigation is required.

The sewer collection system portion of the project would consist of PVC sewer mains, manholes and prefabricated fiberglass lift stations. The wastewater treatment portion would include partially buried fiberglass tanks, fiberglass wetwells and an effluent disposal field.

The geotechnical investigation (included as Appendix A of this Initial Study) identified areas on the Comstock property with adequate percolation to be used for drip fields. Subsurface disposal provides year-round disposal, reduces the potential for contact with wastewater by the public, utilizes percolation through the soil to further enhance treatment, is simple to operate and cost effective to construct and maintain. Furthermore, drip system operation and maintenance costs are lower than the leach field option because the drip field does not require maintenance and operation of solenoid valves and distribution valves within each zone. Drip field systems are also shallower and would take full advantage of the soil layers between the dispersal system and existing rock layers at the Comstock property. Furthermore, given the sloping terrain and presence of trees surrounding the Comstock property, a drip field system would provide a distinct advantage in minimizing distribution system clogging that could potentially occur with a leach field system in the similar surrounding environment.

The proposed project would not prevent water from infiltrating into the groundwater nor would it result in direct additions or withdrawals to existing groundwater. As such, operation of the project would result in a less than significant impact associated with depleting groundwater supplies or substantially interfering with groundwater recharge.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

Implementation of the proposed project would include grading activities that could result in short-term soil erosion during the construction period. Exposed soils are considered erodible

when subjected to concentrated surface flow or wind. As discussed under Section 3.7.1.b above, Mitigation Measure GEO-1 would reduce the potential for soil erosion. In addition, soil erosion and loss of topsoil would be minimized through implementation of SJVAPCD Regulation VIII fugitive dust control measures and compliance with the NPDES permit requirements. With incorporation of Mitigation Measure GEO-1 and compliance with NPDES permit requirements, construction of the proposed project would not result in substantial soil erosion or loss of topsoil. This impact would be less than significant with mitigation incorporated.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

The Federal Emergency Management Agency (FEMA) flood maps do not identify the 100-year flood hazard area on the BSR; however, there are no flood hazard areas near the BSR boundary. As such, this analysis assumes that the project site is outside the 100-year flood zone. In addition, the proposed project would construct and operate wastewater collection and treatment systems. As such, the risk from flooding would be low. In addition, the proposed project would not prevent water from infiltrating into the groundwater. As such, implementation of the proposed project would not substantially increase the rate or amount of surface runoff that would result in flooding on or off site. This impact would be less than significant.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

See Response 3.10.1.c.ii above. Implementation of the proposed project would not substantially increase the rate or amount of surface runoff that would the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This impact would be less than significant.

iv. Impede or redirect flood flows?

See Response 3.10.1.c.ii above. FEMA flood maps do not identify the 100-year flood hazard area on the BSR; however, there are no flood hazard areas near the BSR boundary. As such, this analysis assumes that the project site is outside the 100-year flood zone. In addition, the proposed project would construct and operate wastewater collection and treatment systems. As such, the risk from flooding would be low. Therefore, implementation of the proposed project would not impede or redirect flood flows, and a less-than-significant impact would occur.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

As indicated above, the project site is not located within a FEMA designated 100-year floodplain. In addition, the project site are generally level and are not immediately adjacent to any hillsides. addition, the proposed project would construct and operate wastewater collection and treatment systems. Furthermore, no enclosed bodies of water are in close enough proximity that would create

a potential risk for seiche or a tsunami at the project site. Therefore, there would be no impact related to potential hazards from inundation from food, tsunami, or seiche.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed in Response 3.10.1.a, pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. These pollutants may percolate to shallow groundwater from construction activities. However, required compliance with State and local regulations regarding stormwater during construction would ensure that the proposed project would result in less-than-significant impacts to water quality during construction.

During operation of the proposed project, the proposed project would provide treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences. Regulatory requirements for the WWTP would ultimately be determined by the selected effluent disposal method and will be influenced by the type of treatment processes implemented. Typical requirements in WDRs include constituent effluent limits for pollutants, monitoring, and reporting; separation distances from groundwater; setback distances from surrounding wells (private, drinking, agricultural, etc.); and fence lines for each discharge method. As part of any land-based discharge, groundwater monitoring wells would be required both up gradient and down gradient of the discharge area(s). By monitoring the quality in wells, the impacts of the wastewater disposal can be observed. In addition, by providing wastewater service to the residences, groundwater quality would be improved. As such, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and impacts would be less than significant.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☒	☐
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

3.11.1 Impact Analysis

a. Would the project physically divide an established community?

The BSR, and project site, is approximately 280 acres in size, and is located approximately one mile east of Auberry, a census-defined place in eastern Fresno County. The proposed project would make wastewater service available to every residence within the BSR boundary, as well as to all community buildings with water service, including the following: 54 residential structures; Mono Wind Casino; gas station; gymnasium; tribal administration buildings; and head start buildings. The proposed project would involve infrastructure improvements and would not encroach upon or divide an established community. This impact would be less than significant.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is located on Tribally-owned land held in trust by the Federal Government, within Resource Conservation (RC) 40 Zoning District of Fresno County. The proposed project includes the construction and operation of a new WWTP and associated wastewater collection system. Planned improvements would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. The RC designation does not explicitly allow major utilities; however, the County would process any approvals and permits necessary to allow the WWTP through actions that may include either issuance of a special use permit or a zoning map amendment to allow major utilities. The proposed project would be generally compatible with the RC designation, and would not generate significant noise, odor, or other concerns that would interfere with adjacent land uses. Therefore, development of proposed infrastructure improvements would result in a less-than-significant impact on land use.

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

3.12.1 Impact Analysis

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The Surface Mining and Reclamation Act (SMARA) regulates surface mining in California. SMARA was adopted in 1975 to protect the State's need for a continuing supply of mineral resources and to protect the public and environmental health. There are no known or recorded mineral resources within the project site; therefore, construction and operation of the proposed project could not adversely affect known or recorded mineral resources. This impact would be less than significant.

b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project site is not located within an area known to contain locally-important mineral resources. No impacts related to the loss of availability of a locally-important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan would occur as a result of project implementation.

3.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.13.1 Impact Analysis

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly

L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, Fresno County.

Fresno County addresses noise in the General Plan and Ordinance Code, as described below.

Fresno County General Plan. The Health and Safety Element of the County's General Plan (County of Fresno 2000) works to protect residential and other noise-sensitive uses from exposure to harmful or annoying noise levels; to identify maximum acceptable noise levels compatible with various land use designations; and to develop a policy framework necessary to achieve and maintain a healthful noise environment. Applicable Health and Safety Element policies include the following:

- **Policy HS-G.1:** The County shall require that all proposed development incorporate design elements necessary to minimize adverse noise impacts on surrounding land uses.

- **Policy HS-G.4:** So that noise mitigation may be considered in the design of new projects, the County shall require an acoustical analysis as part of the environmental review process where:

    a. Noise sensitive land uses are proposed in areas exposed to existing or projected noise levels that are "generally unacceptable" or higher according to the Chart HS-1: "Land Use Compatibility for Community Noise Environments;"

    b. Proposed projects are likely to produce noise levels exceeding the levels shown in the County's Noise Control Ordinance at existing or planned noise-sensitive uses.

- **Policy HS-G.7:** Where existing noise-sensitive uses may be exposed to increased noise levels due to roadway improvement projects, the County shall apply the following criteria to determine the significance of the impact:

    a. Where existing noise levels are less than 60 dB L_{dn} at outdoor activity areas of noise-sensitive uses, a 5 dB L_{dn} increase in noise levels will be considered significant;

    b. Where existing noise levels are between 60 and 65 dB L_{dn} at outdoor activity areas of noise-sensitive uses, a 3 dB L_{dn} increase in noise levels will be considered significant; and

    c. Where existing noise levels are greater than 65 dB L_{dn} at outdoor activity areas of noise-sensitive uses, a 1.5 dB L_{dn} increase in noise levels will be considered significant.

- **Policy HS-G.8:** The County shall evaluate the compatibility of proposed projects with existing and future noise levels through a comparison to Chart HS-1, "Land Use Compatibility for Community Noise Environments."

Fresno County Code of Ordinances. The County further addresses noise in the Code of Ordinances in Chapter 8.40, Noise Control (County of Fresno 2020). Section 8.40.040 establishes the exterior daytime and nighttime noise standards and Section 8.40.050 establishes the interior daytime and nighttime noise standards. Table G below shows the exterior noise standards and Table H shows the interior noise standards.

Table G: Exterior Noise Standards

Category	Cumulative Number of minutes in any one-hour time period	Noise Level Standards, dBA	
		Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Source: County of Fresno (2020).

Table H: Interior Noise Standards

Category	Cumulative Number of minutes in any one-hour time period	Noise Level Standards, dBA	
		Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
1	5	45	35
2	1	50	40
3	0	55	45

Source: County of Fresno (2020).

In addition, as indicated in the Code of Ordinances, construction noise is permitted by Fresno County when activities occur between the hours of 6:00 a.m. and 9:00 p.m. Monday through Friday and between the hours of 7:00 a.m. and 5:00 p.m. on Saturday and Sunday.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The closest sensitive receptors include the 54 residential structures that would abandon the septic tanks and be connected to the wastewater service.

The following section describes how the short-term construction and long-term operational noise impacts of the proposed project would be less than significant with mitigation.

Short-Term (Construction) Noise Impacts. The implementation of the proposed project would result in a substantial adverse effect on a scenic vista. Planned improvements would include: 1) the

proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Table I lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed.

Table I: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
L_{max} = maximum instantaneous sound level

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table I, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on-site. Therefore, the noise levels vary as

construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table I lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical noise levels range up to 88 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders.

Project construction is expected to require the use of scrapers, bulldozers, and water trucks/pickup trucks. Noise associated with the use of construction equipment is estimated to be between 55 dBA L_{max} and 85 dBA L_{max} at a distance of 50 feet from the active construction area for the site preparation phase. As shown in Table I the maximum noise level generated by each scraper is assumed to be approximately 85 dBA L_{max} at 50 feet. Each dozer would generate approximately 85 dBA L_{max} at 50 feet. The maximum noise level generated by water trucks/pickup trucks is approximately 55 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 88 dBA L_{max} at a distance of 50 feet from the active construction area. Based on a usage factor of 40 percent, the worst-case combined noise level during this phase of construction would be 84 dBA L_{eq} at a distance of 50 feet from the active construction area.

As identified above, the closest sensitive receptors include the 54 residential structures that would abandon the septic tanks and be connected to the wastewater service. These residences could be exposed to noise levels exceeding 88 dBA L_{max} and 84 dBA L_{eq} when construction is occurring. However, construction equipment would operate at various locations within the project site and would only generate maximum noise levels when operations occur closest to the receptor.

Construction noise is permitted by Fresno County when activities occur between the hours of 6:00 a.m. and 9:00 p.m. Monday through Friday and between the hours of 7:00 a.m. and 5:00 p.m. on Saturday and Sunday. In addition, Mitigation Measure NOI-1 would be required to limit construction activities to the permitted hours and would reduce potential construction period noise impacts for the indicated sensitive receptors to less-than-significant levels.

Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the proposed project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.

- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities.
- Ensure that all general construction related activities are restricted to between the hours of 6:00 a.m. and 9:00 p.m. Monday through Friday and between the hours of 7:00 a.m. and 5:00 p.m. on Saturday and Sunday.
- Designate a "disturbance coordinator" at the County who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

Implementation of Mitigation Measure NOI-1 would limit construction hours and require the construction contractor to implement noise reducing measures during construction, which would reduce short-term construction noise impacts to a less-than-significant level.

Operational Noise. The proposed project includes: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Of the infrastructure improvements associated with the proposed project, only operation of the proposed WWTP has the potential to generate an increase in the ambient noise environment. The components of this facility that would generate the most noise would be the pumps. The proposed WWTP would utilize one pump, which is conservatively anticipated to generate 81 dBA L_{max} at 50 feet from the pump. Using a 6 dBA attenuation factor, the noise level at the nearest sensitive noise receptor would be 49.5 dBA L_{max}, which would not exceed the County's exterior noise level standards of 70 dBA L_{max} during the daytime (7:00 a.m. to 10:00 p.m.) or 65 dBA during the nighttime (10:00 p.m. to 7:00 a.m.). Therefore, noise from operation of proposed project would result in less than significant operational nose impacts.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction of the proposed project would involve ground clearing, excavation, foundations, erection, and finishing activities but would not involve the use of construction equipment that would result in substantial ground-borne vibration or ground-borne noise on properties adjacent to the project site. No pile driving, blasting, or significant grading activities are proposed. Furthermore, project operation associated with infrastructure improvements would not generate substantial

ground-borne noise and vibration. Therefore, the project would not result in the exposure of persons to or generation of excessive ground-borne noise and vibration impacts are considered less than significant, and no mitigation would be required.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not located within 2 miles of a public or public use airport. The Kindsvater Ranch Airport is the closest private airport and is located approximately 3 miles south of the project site. In addition, the public use Fresno Yosemite International Airport is located approximately 13 miles southwest of the project site. Aircraft noise is occasionally audible at the project site; however, no portion of the project site lies within the 60 dBA CNEL noise contours of any public airport nor does any portion of the project site lie within 2 miles of any private airfield or heliport. Therefore, the proposed project would not result in the exposure of people residing or working in the project area to excessive noise levels. As a result, a less-than-significant impact would occur.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 Impact Analysis

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project would include a WWTP and collection system. The proposed project would not result in direct population growth as the use proposed is not residential and would not increase permanent residency within the site. In addition, the proposed project would replace existing septic systems to improve groundwater recharge and protect residents, and would not induce substantial indirect population growth by increasing the availability of wastewater treatment. Therefore, the proposed project would not directly or indirectly induce population growth and there would be no impact.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed project would connect existing residential units to a new WWTP by constructing a new wastewater collection system with new pipes. No existing residential units would be demolished in order to construct new wastewater pipelines. Therefore, the proposed project would not displace existing housing or require the construction of replacement housing and would result in no impact.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

3.15.1 Impact Analysis

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection?
ii. Police protection?
iii. Schools?
iv. Parks?
v. Other public facilities?

The project site is located in an area that is already served by public service systems. Police protection services are provided to the County by the Fresno County Sherriff Department. Fire protection and emergency response services for the project site are provided by the Fresno County Fire Protection District. The project site is served by the Big Creek Elementary School District. In addition, the County provides several types of parks and other public facilities.

The proposed project includes: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. The proposed project would not result in an increase in population or facilities that would require the provision of new or additional fire or police services, schools, parks, or other public facilities, or result in the need for physically altered facilities. Therefore, the project would have no impacts associated with public services.

3.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.16.1 Impact Analysis

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed project would include infrastructure improvements and would not generate population growth that would result in an increase in the use of existing neighborhood and regional parks or other recreational facilities. Therefore, there would be no impact to parks or recreational facilities that would occur as a result of the proposed project.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project would not result in a substantial increase in the use of parks or other recreational facilities, and the proposed project would not require the construction or expansion of existing recreational facilities. Therefore, the project would result in a less-than-significant impact on recreational facilities.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

3.17.1 Impact Analysis

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed project would include a WWTP and collection system. Construction of the proposed project, including the WWTP and wastewater collection system, is expected to occur over a period of 9 months starting in the winter of 2021. Construction of the WWTP and the wastewater collection system would take place concurrently. Implementation of the proposed project would involve the transportation of construction equipment, materials, and workers commuting to the site, which would generate a small temporary increase in overall daily traffic volumes. However, the increase would not be substantial and would not increase congestion.

Once operational, the Tribe's utilities maintenance staff would conduct operation and maintenance of the water system. As such, minimal trips are anticipated due to the proposed project.

Due to the limited addition of project-related traffic, the proposed project is not anticipated to generate a significant number of trips that would result in the deficiency of existing intersections within the vicinity of the project site. As such, the addition of project traffic is not anticipated to generate a significant number of trips that would result in the deficiency of existing intersections within the project site vicinity. In addition, implementation of the proposed project would not disrupt or otherwise prevent roadway improvements, including the addition of bike paths or sidewalks in the vicinity of the project site. The project would also not disrupt existing transit services. Therefore, the proposed project would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or congestion management program. This impact would be less than significant.

b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

SB 743 created a path to revise the definition of transportation impacts according to CEQA. As the guidelines are proposed today, CEQA transportation impacts are determined using LOS of

intersections and roadways, which is a measure of congestion. The intent of SB 743 is to align CEQA transportation study methodology with and promote the statewide goals and policies for reducing vehicle miles traveled (VMT) and GHGs. Three objectives of SB 743 related to development are to reduce GHGs, diversify land uses, and focus on creating a multimodal environment.

VMT is defined as the product of a number of trips and those trips' lengths. The Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), circulated by the Governor's Office of Planning and Research (OPR), acknowledges that lead agencies should set criteria and thresholds for VMT and transportation impacts. The Technical Advisory also notes that land uses may have a less-than-significant impact if located within low VMT areas of a region, and suggests the use of screening maps to make a determination.

The first step in preparing a VMT analysis is to establish the baseline average VMT, which requires the definition of a region. The Technical Advisory states that existing VMT may be measured at the regional or city level, but also notes that VMT analyses should not be truncated due to "jurisdictional or other boundaries."

As the proposed project would only include a WWTP and collection system, operation of the proposed project is not anticipated to generate a significant number of trips. The Fresno Council of Governments (COG) provides a VMT analysis guide (COG 2020), which includes screening criteria for projects that satisfy certain criteria (e.g. project size, location, development type), may be eligible for screening. Projects that have been screened out are considered to have a less than significant impact on regional VMT without having to perform VMT analysis. Based on Fresno COG's screening criteria, projects that generate less than 500 average daily trips can be screened out. Due to the limited addition of project-related traffic, the project is expected to generate less than 500 average daily trips. As such, implementation of the proposed project would result in less than significant VMT impacts, and no mitigation would be required.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would not change the existing roadway design. As such, the proposed project would not include any sharp curves or other roadway design elements that would create dangerous conditions. Therefore, the project would not substantially increase hazards due to a design feature, and there would be no impact.

d. Would the project result in inadequate emergency access?

The proposed project would not result in the development of structures or alteration of existing roadways that would impede or obstruct emergency response plans or evacuation plans. Therefore, development and operation of the proposed project is not anticipated to interfere with emergency access, and no impact would occur.

3.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☐	☒	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

3.18.1 Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA environmental review process, and equates significant impacts to "tribal cultural resources" with significant environmental impacts. PRC Section 21074 defines "tribal cultural resources" as:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe and are one of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources;
- Included in a local register of historical resources as defined in subdivision (k) of PRC Section 5020.1; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A "historical resource" (PRC Section 21084.1), a "unique archaeological resource" (PRC Section 21083.2(g)), or a "nonunique archaeological resource" (PRC Section 21083.2 (h)) may also be a tribal cultural resource if it is included or determined to be eligible for inclusion in the California Register. The consultation provisions of the law require that a public agency consult with local Native American tribes that have requested placement on that agency's notification list for CEQA projects. Within 14 days of determining that a project application is complete, or a decision by a public agency to undertake a project, the lead agency must notify tribes of the opportunity to consult on the project, should a tribe have previously requested to be on the agency's notification list. California Native American tribes must be recognized by the NAHC as traditionally and culturally affiliated with the project site, and must have previously requested that the lead agency notify them of projects. Tribes have 30 days following notification of a project to request consultation with the lead agency.

The purpose of consultation is to inform the lead agency in its identification and determination of the significance of tribal cultural resources. If a project is determined to result in a significant impact on an identified tribal cultural resource, the consultation process must occur and conclude prior to adoption of a Negative Declaration or Mitigated Negative Declaration, or certification of an Environmental Impact Report (PRC Sections 21080.3.1, 21080.3.2, 21082.3).

The Big Sandy Rancheria of Mono Indians of California is a rancheria and federally recognized tribe of Western Mono Indians (Monache) and is proposing to construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences. The Big Sandy Rancheria has not identified any site, feature, place, or cultural landscape with cultural value to the Tribe. As a result, a less-than-significant impact would occur.

3.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The proposed project would include a WWTP and collection system. Construction and operation of the proposed WWTP and collection system would have minimal to no effect on water supply, natural gas, and telecommunications facilities. Therefore, no exceedance of the capacities of these services would occur that would result in a significant environmental effect. Development of the proposed project has the potential to impact solid waste services during construction, wastewater services, and electrical services.

As identified in the Project Description, BSR proposes to construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences. BSR plans to make wastewater service available to every residence within the BSR boundary, as well as to all community buildings with water service, including the following: 54 residential structures; Mono Wind Casino; gas station; gymnasium; Tribal administration buildings; and head start buildings. The proposed project would more reliably accommodate existing treatment demand and would not involve an expansion of capacity to accommodate new growth. Therefore, the project would not disrupt capacity to existing users or result in an increase in capacity to serve additional customers. The proposed project would

not result in construction of facilities that would result in significant environmental effects. Therefore, impacts would be less than significant, and no mitigation would be required.

As discussed in Section 3.6.1.a., operation of the proposed project would demand electricity. The electrical improvements required for the selected project construction would require four new electrical supplies. The new services would be at the wastewater treatment facility and at the three new lift stations. Electricity would be obtained from PG&E, which currently provides electricity to properties in the immediate vicinity of the project site. Due to the small electricity demand associated with the proposed project, the proposed project would not result in construction of facilities that would result in significant environmental effects. Therefore, impacts would be less than significant, and no mitigation would be required.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

See Section 3.19.1.a above. The proposed project would include a WWTP and collection system. The proposed project would construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences. Construction and operation of the proposed project would not result in direct additions or withdrawals to existing groundwater and as such would not result in impacts on water supply. Therefore, no exceedance of the capacities of these services would occur that would result in a significant impact. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years and impacts would be less than significant.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The proposed project includes the construction and operation of a WWTP that is specifically designed to provide treatment to the existing structures that would be connected to the WWTP. The capacity of the WWTP has been for the existing uses, however, should expansion of the WWTP be required to serve future, currently unplanned commitments the treatment capacity of the proposed WWTP could be expanded through modular design. As a result, the proposed project would have adequate capacity to serve the projected demand, and a less-than-significant impact would occur.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Project construction would generate wastes including construction materials, trenching spoils, and general refuse, and these wastes would need to be disposed of in local or regional facilities. Waste generated from construction could include: non-hazardous metal waste, non-hazardous non-metal waste (concrete rubble, organic waste [vegetation], boxes and crates, refuse from construction workers), trenching spoils (rubble and soils), and hazardous wastes. It is not anticipated that construction waste would exceed the capacity of local landfills or the transfer station.

The American Avenue Landfill (i.e. American Avenue Disposal Site 10-AA-0009) is the County's regional landfill located near the City of Kerman. The American Avenue Landfill has a maximum permitted capacity of 32,700,000 cubic yards and a remaining capacity of 29,358,535 cubic yards, with an estimated closure date of August 31, 2031. The maximum permitted throughput is 2,200 tons per day (CalRecycle 2019). This facility is able to accept all types of solid waste and recycling. In addition, the County of Fresno's Regional Household Hazardous Waste Facility is available for drop off of various chemicals and substances for safe disposal. The Shaver Lake Transfer Station is operated in partnership with the County of Fresno, Granite Solid Waste, and the United States Forest Service.

The quantity of solid waste materials associated with the project would be limited to the construction period, and would not pose a significant impact upon existing landfills. Typical wastewater treatment typically includes monitoring of solid waste and sludge buildup to determine appropriate dredging intervals (usually every 10 to 15 years). However, since the proposed project is intended to be paired with primary and secondary treatment using a packaged filter media system, regular dredging would not be required. Any solid waste generated by the operation of the WWTP would be disposed over via applicable waste regulations. Impacts related to solid waste disposal are considered less than significant.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation. The proposed project would comply with all federal, State and local statutes and regulations related to solid waste. As such, any impacts would be less than significant.

3.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

3.20.1 Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed camp fires, cigarettes, sparks from automobiles, and other ignition sources. As discussed in Section 3.9.1.g above, according to the California Department of Forestry and Fire Protection VHFHSZ Map for Fresno County, portions of the project site are located within the high and very high wildfire threat area. However, the proposed project would construct and operate wastewater collection and treatment systems. The proposed project would not result in the development of structures or alteration of existing roadways that would substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, this impact would be less than significant.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

As stated previously, the project site is located in a VHFHSZ; however proposed project would construct and operate wastewater collection and treatment systems. The proposed project would not exacerbate wildfire risks due to slope and prevailing winds, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. As a result, a less-than-significant impact would occur, and no mitigation would be required.

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The proposed project would construct and operate wastewater collection and treatment systems. Planned improvements would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. The electrical improvements required for the selected project construction would require four new electrical supplies. The new services would be at the wastewater treatment facility and at the three new lift stations. The proposed project would not include new distribution lines, but would require new service lines. The new service lines would be built to current California standards and would require PG&E electricity and gas connection approvals. Implementation of the proposed project, including new power lines, is not expected to exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. As such, a less-than-significant impact would occur, and no mitigation would be required.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking but can also occur as a result of erosion and downslope runoff caused by rain following a fire. As previously discussed in Section 3.7.1.a.iv, the County's General Plan states that geologic hazards in Fresno County could include landslides. However, the project site is not mapped as a landslide hazard (California Geological Survey 2015a). In addition, the proposed project would include the construction and operation of a new WWTP and associated wastewater collection system. Therefore, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. As a result, a less-than-significant impact would occur, and no mitigation would be required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.21.1 Impact Analysis

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Implementation of the mitigation measures recommended in this Initial Study would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The potential impacts of the project are individually limited and are not cumulatively considerable. Implementation of mitigation measures recommended in this report would reduce potentially significant impacts that could become cumulatively considerable.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed project would be constructed and operated in accordance with all applicable regulations governing hazardous materials, noise, and geotechnical considerations. Because all potentially significant impacts of the proposed project are expected to be mitigated to less-than-significant levels, it is unlikely that implementation of the proposed project would cause substantial adverse effects on human beings. Therefore, implementation of the proposed project would not result in significant human health risks.

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