BIG SANDY
RANCHERIA

Big Sandy Rancheria
Extreme Weather and Natural Disaster Evacuation Plan (BSREVAC)

April 14, 2021

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I. OVERVIEW

a. Background

The historic 2018 and 2020 wildfire seasons throughout California underscored the importance of evacuation planning as a key element of emergency management. Locally, the Creek Fire in Fresno County highlighted the need to have community-based evacuation plans in place and ready to implement in advance of fast-moving fires.

Evacuations in a rural and heavily wooded community such as the Big Sandy Rancheria Band of Western Mono Indians (BSR) are complex efforts that require coordination between many disciplines, agencies, and organizations. Evacuations are only one element of the incident response effort; however, in certain circumstances, they carry the highest priority for life safety. Ensuring that an evacuation is effective, efficient, and safe will require multiple organizations to come together in filling key roles in the management of the event.

To establish a framework for implementing a well-coordinated evacuation, Big Sandy Rancheria, in partnership with the Fresno Council of Governments (FCOG), applied in 2020 for and was awarded a grant from the California Department of Transportation for the development of an Extreme Weather and Natural Disaster Evacuation Plan (BSREVAC) (the Plan).

b. Purpose

The Plan describes the strategies for managing evacuations that exceed the day-to-day capabilities of the various public safety agencies that protect Big Sandy Rancheria. As dictated by the Fresno County Master Emergency Services Plan, the Fresno County Sheriff-Coroner's Office (FCSO) is charged with evacuation in response to a major event threatening the life safety of residents and visitors of the county (Section 2.3.5) Alerts, Notifications, Warnings, and Evacuations. However, as a sovereign tribal authority, Big Sandy Rancheria can declare tribal emergencies and order evacuations. With a special emphasis placed on the wildland fire threat, the strategies outlined in this Plan use an all-hazards approach to prepare for and manage evacuations. Most evacuations in the area result from a quickly spreading wildfire, and life safety will carry the highest priority in evacuation decision-making. However, this Plan can be applied in any event regardless of the threat or hazard that precipitates the need to evacuate an area.

c. Scope

The BSREVAC addresses the movement of community members and visitors away from disasters and emergency threats, and situations affecting Big Sandy Rancheria.

The Plan addresses any or all of the following situations where protective actions are

needed:

- Resources to carry out these protective measures exceed the day-to-day capabilities of the local authority.
- The Tribe requests mutual aid for evacuation purposes.
- The emergency event crosses jurisdictional boundaries. At such time, the event will be managed under Unified Command so that the authorities and responsibilities of involved jurisdictions are honored.

This Plan is a key component of the Big Sandy Rancheria Emergency Management Program (EMP). The EMP serves as the framework for coordinating and responding to all emergencies and disasters within the Tribe's jurisdiction. This Plan complies with state law and state and federal emergency planning guidance, including the Standardized Emergency Management System (SEMS), National Incident Management System (NIMS), and the Incident Command System (ICS).

In disaster situations, emergency management starts at the tribal/local level and expands to include regional, state, federal, private, and nonprofit sector assets as the impacted jurisdictions require additional resources and capabilities. The purpose of both the EMP and this Plan, in turn, is to facilitate multi-agency and multi-jurisdictional coordination during emergency operations, particularly between Big Sandy Rancheria, the County, adjoining jurisdictions, and special districts as well as state and federal agencies.

d. Plan Limitations

For generally isolated emergencies such as gas line breaks, structural fires, small wildfires, and minor flooding affecting a few homes in a single area, the Big Sandy Rancheria Tribal Council Chair, FCSO, and local fire departments may advise individual persons or households to relocate or evacuate to a safe area temporarily. Procedures for accomplishing and implementing these limited actions are not part of this document.

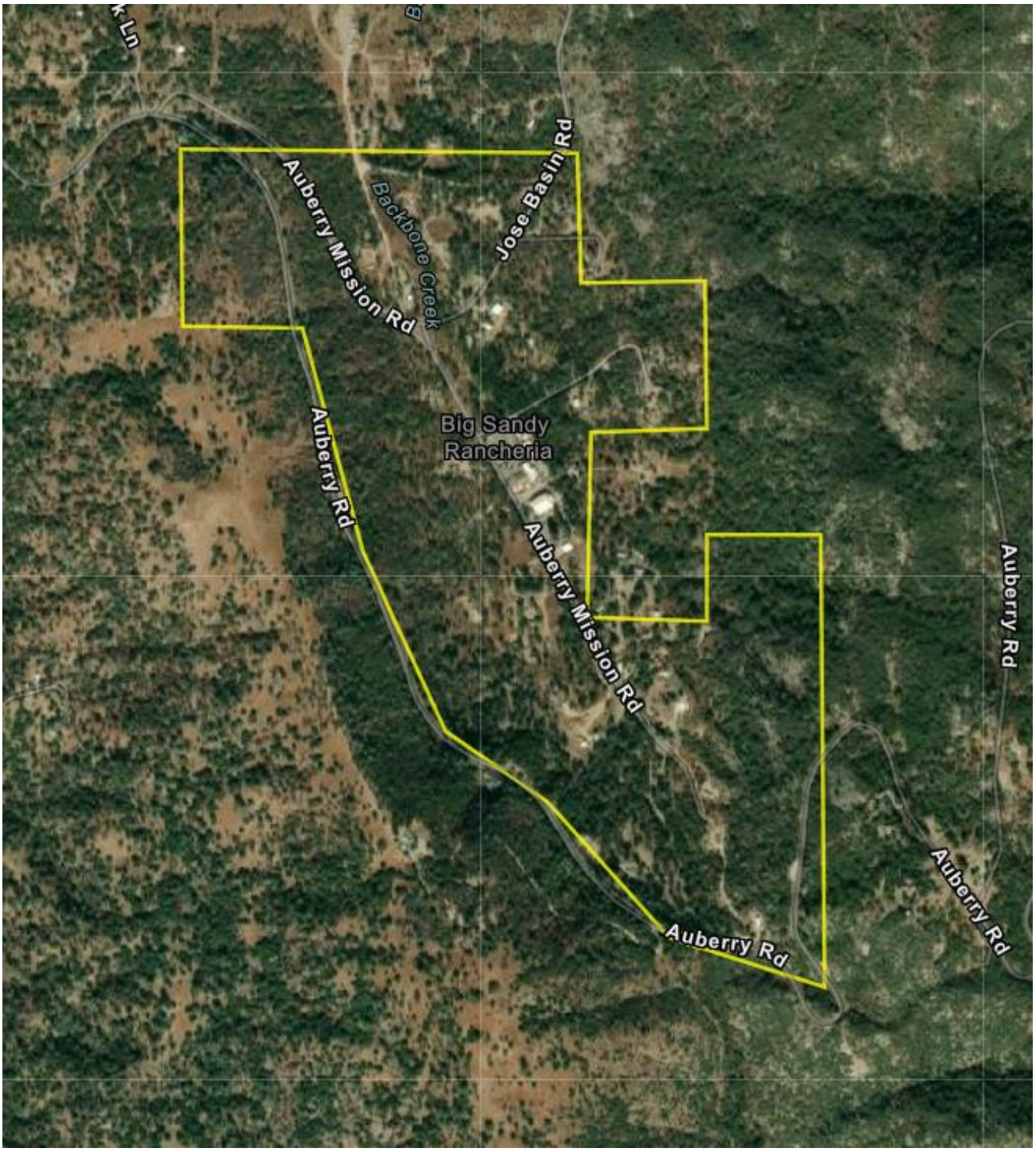
II. SITUATION OVERVIEW

a. Evacuation Planning Area

The Evacuation Planning Area covered by this Plan and outlined in yellow in Figure A below is consistent with the 2018 Highway 168 Fire Safe Council Community Wildfire Protection Plan (CWPP) and utilizes the same boundaries as the Big Sandy Rancheria Fire Hazard Zone outlined within the CWPP (Section 5.A.6). This area is based on several factors, including:

- Jurisdictional boundaries
- Types of values at risk
- Amount of fuel available (fuel loading)
- Topography
- Access population density
- Fire History

FIGURE A: Evacuation Planning Area



b. Climate

The Big Sandy Rancheria enjoys a Mediterranean climate, with cool winters and a hot day/cool night summer with cool, rainy winters and hot, dry summers.

TABLE A: BSR Climate Averages

Temperatures		
Season	**Low**	**High**
Avg. Summer Temp. (F)	**60**	**95**
Avg. Winter Temp. (F)	**37**	**60**
Precipitation		
Annual Precipitation	**30”** *(with 0” May-Sept.)*	
Annual Snowfall*	**2”** *(generally experienced in January)*	

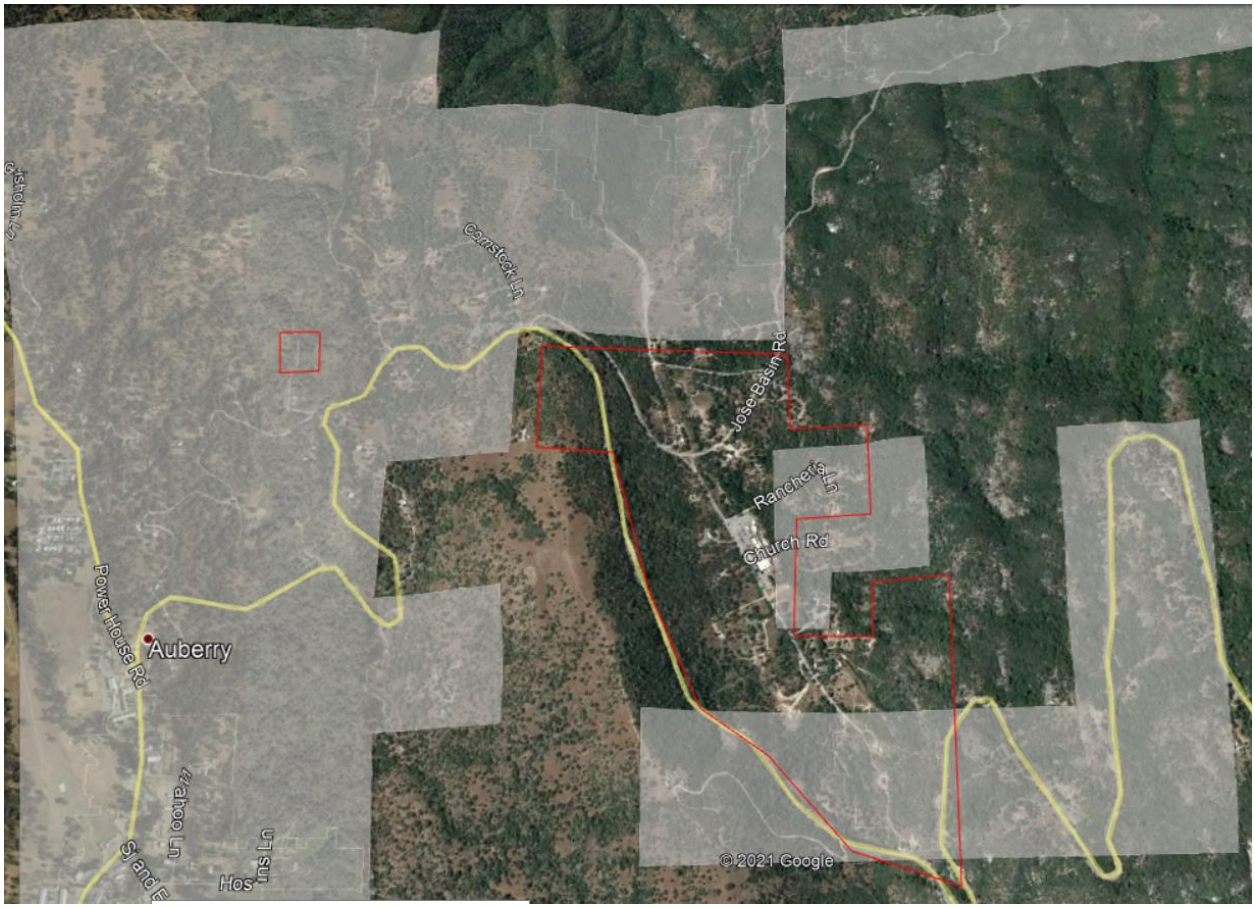
Note: Snow accumulates in the higher elevations in the surrounding foothills and mountains encircling the Rancheria.

c. Wildland-Urban Interface

The mountains and foothills surrounding Big Sandy Rancheria present a considerable wildfire risk. Big Sandy Rancheria (Jose Basin) is located within the Sierra National Forest, northeast of Powerhouse Road on Auberry Road. The continuous vegetation consists primarily of grasses, manzanita, and oak woodlands. The fuel type then changes to a mixed conifer forest as the elevation increases. The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program designates Big Sandy Rancheria as located within a Very High Fire Hazard Severity Zone (California Fire Hazard Severity Zone Viewer). Portions of the Rancheria lie within the California State Responsibility Area (shaded in Figure B below), with the remainder designated as a Federal Responsibility Area.

Fire evacuation concerns in the area include the San Joaquin River drainage basin adjacent to Jose Basin Road. This is the only means of vehicular travel into and out of the Rancheria. If a fire approaches from the north, it could cut off the escape route for the residents living east of Big Sandy and endanger the settlement, the residents, and a large casino within the Rancheria.

FIGURE B: Fire Hazard Responsibility Areas



d. Evacuation Hazard Ranking

As a key component of the Plan development process, a comprehensive Community Engagement Plan ensured the voices of all BSR residents and employees would be heard. A major component of that effort was the assured inclusion of two key stakeholder groups: Tribal Administration and Community Partners. Over a series of four stakeholder engagement meetings, these groups worked to identify and rank the natural and human-caused hazards which may necessitate an evacuation. Additionally, a digital survey was distributed, allowing the Evacuation Planning Team to rank the hazards that may pose a threat to the community. The tables on the following pages portray the data and analysis arising as a result of these meetings and surveys.

TABLE B: Hazard Risk Ranking

Ranking	Hazard	Human Impact	Property Impact	Economic Impact	Total Impact	Likelihood	Total Risk Score	Total Risk Rating
1	Wildfire	2.49	2.49	2.49	7.47	3.00	22.41	Extreme
2	Severe Winter Storm	2.49	2.01	2.01	6.51	3.00	19.53	High
3	Extreme Cold	2.49	1.34	2.01	5.84	2.83	16.52	High
4	Structural Fire	2.01	2.01	2.16	6.18	2.64	16.31	High
5	Landslide/Mudslide	2.01	1.99	2.01	6.01	2.66	15.98	High
6	HazMat Event	1.66	1.82	2.01	5.49	2.33	12.79	High
7	Earthquake	1.83	1.49	1.68	5.00	2.17	10.85	Medium
8	Riverine Flooding	1.65	1.51	1.84	5.00	2.01	10.05	Medium
9	Flash Flood	1.50	1.65	1.84	4.99	1.82	9.08	Medium
10	Dam Failure	1.33	1.33	1.17	3.83	1.18	4.51	Medium
11	Terrorism	0.83	0.68	1.02	2.53	1.34	3.39	Low
12	Volcanic Eruption	1.50	1.18	0.85	3.53	0.84	2.96	Low
13	PSPS	0.99	0.99	0.99	2.97	0.99	2.94	Low
14	Riot/Civil Disorder	1.00	0.84	1.02	2.86	1.01	2.88	Low
15	High Winds	0.99	0.99	0.85	2.83	0.99	2.80	Low
16	Extreme Heat	0.99	0.51	0.66	2.16	0.99	2.13	Low
17	Drought	0.51	0.51	0.51	1.53	0.51	0.78	Low
	Pandemic	0.51	0.51	0.51	1.53	0.51	0.78	Low
19	Nuclear Event	0.51	0.68	0.84	2.03	0.33	0.66	Low
20	Active Shooter	0.51	0.00	0.34	0.85	0.51	0.43	Low

TABLE: Hazard Risk Ranking Legend

Total Impact Score	Impact Rating	Likelihood Score	Likelihood Rating	Risk Score	Risk Rating
6.25+	Extreme	2.25+	Likely	20.25+	Extreme
5.25-6.64	Major	1.75-2.24	Possible	12.0-19.99	High
3.0-5.24	Moderate	1.0-1.74	Unlikely	4.0-11.99	Medium
0-2.99	Minor	0-0.99	Remote	0-3.99	Low

TABLE C: Likelihood Score and Rating

Ranking	Hazard	No Probability	Not Within 100 Years	Within 100 Years	Within 25 Years	Likelihood Score	Likelihood Rating
		0	1	2	3		
1	Severe Winter Storm	0%	0%	0%	100%	3.00	Likely
	Wildfire	0%	0%	0%	100%	3.00	Likely
3	Extreme Cold	0%	0%	17%	83%	2.83	Likely
4	Landslide/Mudslide	0%	17%	0%	83%	2.66	Likely
5	Structural Fire	0%	0%	33%	66%	2.64	Likely
6	HazMat Event	0%	17%	33%	50%	2.33	Likely
7	Earthquake	0%	33%	17%	50%	2.17	Possible
8	Riverine Flooding	17%	17%	17%	50%	2.01	Possible
9	Flash Flood	17%	17%	33%	33%	1.82	Possible
10	Terrorism	33%	17%	33%	17%	1.34	Unlikely
11	Dam Failure	33%	33%	17%	17%	1.18	Unlikely
12	Riot/Civil Disorder	33%	50%	0%	17%	1.01	Unlikely
13	Extreme Heat	0%	0%	0%	33%	0.99	Remote
	High Winds	0%	0%	0%	33%	0.99	Remote
	PSPS	0%	0%	0%	33%	0.99	Remote
16	Volcanic Eruption	33%	50%	17%	0%	0.84	Remote
17	Nuclear Event	66%	33%	0%	0%	0.33	Remote
18	Active Shooter	0%	0%	0%	17%	0.51	Remote
	Drought	0%	0%	0%	17%	0.51	Remote
	Pandemic	0%	0%	0%	17%	0.51	Remote

LEGEND	
Likelihood Score	Likelihood Rating
2.25+	Likely
1.75-2.24	Possible
1.0-1.74	Unlikely
0-0.99	Remote

TABLE D: Human Impact Rating

Ranking	Hazard	0% of the Population Exposed	<25% of the population Exposed	25-49% of the Population Exposed	50%+ of the Population Exposed	Impact Score	Impact Rating
		0	1	2	3		
1	Severe Winter Storm	0%	0%	0%	83%	2.49	Extreme
	Wildfire	0%	0%	0%	83%	2.49	Extreme
	Extreme Cold	0%	0%	0%	83%	2.49	Extreme
4	Landslide/Mudslide	0%	17%	17%	50%	2.01	Major
	Structural Fire	0%	17%	17%	50%	2.01	Major
6	Earthquake	0%	33%	0%	50%	1.83	Major
7	HazMat Event	0%	33%	17%	33%	1.66	Moderate
8	Riverine Flooding	17%	0%	33%	33%	1.65	Moderate
9	Flash Flood	17%	0%	0%	50%	1.5	Moderate
	Volcanic Eruption	33%	0%	0%	50%	1.5	Moderate
11	Dam Failure	33%	0%	17%	33%	1.33	Moderate
12	Riot/Civil Disorder	33%	0%	50%	0%	1.00	Moderate
13	Extreme Heat	0%	0%	0%	33%	0.99	Minor
	High Winds	0%	0%	0%	33%	0.99	Minor
	PSPS	0%	0%	0%	33%	0.99	Minor
16	Terrorism	33%	17%	33%	0%	0.83	Minor
17	Active Shooter	0%	0%	0%	17%	0.51	Minor
	Drought	0%	0%	0%	17%	0.51	Minor
	Pandemic	0%	0%	0%	17%	0.51	Minor
	Nuclear Event	66%	0%	0%	17%	0.51	Minor

LEGEND	
Human Impact Score	Human Impact Rating
2.25+	Extreme
1.75-2.24	Major
1.0-1.74	Moderate
0-0.99	Minor

TABLE E: Property Impact Rating

Ranking	Hazard	0% of the Property Value Damaged	<15% of the Property Value Damaged	15-29% of the Property Value Damaged	30%+ of the Property Value Damaged	Impact Score	Impact Rating
		0	1	2	3		
1	Wildfire	0%	0%	0%	83%	2.49	Extreme
2	Severe Winter Storm	0%	17%	17%	50%	2.01	Major
	Structural Fire	0%	17%	17%	50%	2.01	Major
4	Landslide/Mudslide	0%	0%	50%	33%	1.99	Major
5	HazMat Event	0%	17%	33%	33%	1.82	Major
6	Flash Flood	17%	0%	33%	33%	1.65	Moderate
7	Riverine Flooding	17%	0%	50%	17%	1.51	Moderate
8	Earthquake	0%	17%	66%	0%	1.49	Moderate
9	Extreme Cold	17%	17%	33%	17%	1.34	Moderate
10	Dam Failure	33%	0%	17%	33%	1.33	Moderate
11	Volcanic Eruption	17%	33%	17%	17%	1.18	Moderate
12	High Winds	0%	0%	0%	33%	0.99	Minor
	PSPS	0%	0%	0%	33%	0.99	Minor
14	Riot/Civil Disorder	33%	33%	0%	17%	0.84	Minor
15	Terrorism	50%	17%	0%	17%	0.68	Minor
	Nuclear Event	50%	17%	0%	17%	0.68	Minor
17	Extreme Heat	17%	0%	0%	17%	0.51	Minor
	Drought	0%	0%	0%	17%	0.51	Minor
	Pandemic	0%	0%	0%	17%	0.51	Minor
20	Active Shooter	17%	0%	0%	0%	0.00	Minor

LEGEND	
Property Impact Score	Property Impact Rating
2.25+	Extreme
1.75-2.24	Major
1.0-1.74	Moderate
0-0.99	Minor

TABLE F: Economic Impact Rating

Ranking	Hazard	0% Economic Revenue Loss	<9% Economic Revenue Loss	10-19% Economic Revenue Loss	20%+ Economic Revenue Loss	Impact Score	Impact Rating
		0	1	2	3		
1	Wildfire	0%	0%	0%	83%	2.49	Extreme
2	Structural Fire	0%	0%	33%	50%	2.16	Major
3	Severe Winter Storm	0%	17%	17%	50%	2.01	Major
	Extreme Cold	0%	17%	17%	50%	2.01	Major
	Landslide/Mudslide	0%	17%	17%	50%	2.01	Major
	HazMat Event	0%	17%	17%	50%	2.01	Major
7	Riverine Flooding	17%	0%	17%	50%	1.84	Major
	Flash Flood	17%	0%	17%	50%	1.84	Major
9	Earthquake	0%	17%	50%	17%	1.68	Moderate
10	Dam Failure	33%	0%	33%	17%	1.17	Moderate
11	Terrorism	33%	17%	17%	17%	1.02	Moderate
	Riot/Civil Disorder	33%	17%	17%	17%	1.02	Moderate
13	PSPS	0%	0%	0%	33%	0.99	Minor
14	High Winds	0%	0%	17%	17%	0.85	Minor
	Volcanic Eruption	50%	0%	17%	17%	0.85	Minor
16	Nuclear Event	33%	33%	0%	17%	0.84	Minor
17	Extreme Heat	0%	0%	33%	0%	0.66	Minor
18	Drought	0%	0%	0%	17%	0.51	Minor
	Pandemic	0%	0%	0%	17%	0.51	Minor
20	Active Shooter	0%	0%	17%	0%	0.34	Minor

LEGEND	
Economic Impact Score	Economic Impact Rating
2.25+	Extreme
1.75-2.24	Major
1.0-1.74	Moderate
0-0.99	Minor

e. Documented Extreme/Major Hazard History

Hazard history for the Big Sandy Rancheria includes severe winter storms, flash flooding, hazardous materials spills, and wildfire events.

i. Severe Winter Storm

In January 2005, a major winter snowstorm caused regionwide road closures and power outages for up to three weeks in the communities surrounding Big Sandy Rancheria. The impacts in eastern Fresno County primarily occurred above 4,000 feet in elevation. Damage included the following:

- Eight storm-related injuries
- Estimated $3.5 million in damage from trees falling on homes and other structures.
- Estimated $2.5 million in damage to the power distribution grid.
- $250,000 to open and repair road system
- 10,000-15,000 merchantable trees were damaged or killed.
- $250,000 in miscellaneous damage from heavy snow and falling trees.
- All businesses closed and without power, estimated $500,000 in loss of business and product or inventory.
- Schools closed for over two weeks.

Similar storms are likely to occur in the future. Weather trends in recent years included extremely high precipitation and, due to warmer temperatures, the snow/rain transition occurred at higher elevations.

ii. Flash Flooding

Big Sandy Rancheria lies within one primary watershed – the San Joaquin River watershed, which greatly influences the foothills and valley floor. Flooding and soil erosion due to heavy rains and snow runoff is a historical problem. Because of widespread tree mortality, large fires, and the efforts to recover from the impacts of these fires, there is the potential for debris flows and increased erosion and sediment from forestlands and flowing into the major reservoirs. Abundant snowfall in the mountains combined with rain and steep terrain can lead to rapid runoff and flooding. In the foothills, many streams, such as Big Sandy Creek, which flows south to north through the Rancheria, are seasonal. Water flow can be high in peak runoff periods with historical downstream flooding. Much of the area on the valley floor below the Rancheria is subject to flooding and ponding from the San Joaquin river and from several lesser watershed drainages. Severe thunderstorms and heavy rain in the

summer also can cause incidental flooding along the creek bed.

Previous major flood events in the region are described below:

- December 1955—A rain on snow event caused local and downstream flooding. The event occurred on the western side of the Sierras and eastern Fresno County, affecting the entire valley region. An unknown number of homes were damaged, and roads, bridges, and some dam facilities were destroyed or damaged. School and road closures resulted.
- January 1997—A region-wide high elevation rain on snow event caused local flooding and downstream valley-wide flooding. Homes and a trailer park flooded in the area surrounding Big Sandy Rancheria, but numbers and values are unknown. Bridges, roads, and other infrastructure near waterways washed out. The event caused hundreds of millions in damage in the valley. Damage occurred to much of the flood control/dam system on the San Joaquin River as water threatened to overtop the dams. Spillway gates were opened to prevent that occurrence. This created flooding to about a dozen mobile homes in the region and resulted in the evacuation of approximately 500 people. In the aftermath of the event, debris and mud had to be cleared from structures, roads, and facilities throughout the region. Many culverts failed, washing out roads, and the approach to one major bridge on the San Joaquin River connecting Fresno and Madera County was washed away, closing that vital route for over a month. Washouts, mudslides, plugged culverts, and rockfalls along roads required months of work to clean up and correct. Some secondary mountain roads on the Sierra National Forest have never been repaired due to the cost. In most cases, the environment was left to recover on its own due to a lack of available funds.

Based on these past events, major rain on snow events occurs every 30-35 years. The direct impacts from flooding within Big Sandy Rancheria include loss of wildlife habitat; damage to roads, bridges; and flooding of homes. Winter road closures could require large-scale evacuations and create difficulties in providing emergency services to areas cut off by flooding in the case of a rain on snow event. Big Sandy Rancheria is only serviced by one primary access road, and in the winter, secondary or emergency roads can become impassable. If the primary road is closed by a flood, it is likely that secondary roads will also be impacted as well. If the repair time is extended, emergency services may be required to protect the population until repairs can be made.

Since Big Sandy Rancheria lies within a special conservation district, participation in the National Flood Insurance Program (NFIP) does not apply. NFIP Repetitive Loss and Severe Repetitive Loss properties are not tracked for the Rancheria; therefore,

the Tribe does not have this data available.

iii. Hazardous Material Incident

On July 26, 2002, Highway 168 closed for two days due to a gas tanker spill during peak summer use season and cut off more than 700 residences in the area. The driver was injured, and direct access to the hospital was not available. The accident damaged the roadbed and culvert, and underground power lines were relocated. The 10,000-gallon spill caused environmental damage to stream and surrounding timber—one-half acre of timber was lost. It caused economic losses to businesses, and people were unable to get to or from work. Hazardous material releases that cut off access to the Rancheria for an extended period of time could lead to the need for mass evacuation due to the inability to access food and healthcare resources.

Big Sandy Rancheria is especially vulnerable to isolation due to transportation-related hazardous materials releases such as the Highway 168 spill because only one road serves the community. Exacerbated by the steep, narrow, and winding nature of the roadway, this can present a risk for hazardous materials transportation through the area.

iv. Wildfire

In 1933 the Tollhouse fire started when a local resident was cutting, stacking, and burning brush in late August along Lodge Road. The fire burned across fields and grazing lands and encircled the Town of Tollhouse, which at that time was a large and important hub for the timber industry in eastern Fresno County. The Town of Tollhouse was evacuated for safety. The fire burned portions of the flume that carried logs and boards from Shaver Lake to the valley floor. The fire raced up the hill and burned into Jose Basin and over Burrough Mountain into Blue Canyon, burning hot and destroying conifers. The once abundant conifers that grew on the slopes did not grow back; the hill is barren of good timber. It is mostly brushed now.

In 1964 a wildfire began near Sugarloaf Hill, spreading southwest toward the Big Sandy Rancheria area. Thanks to recently completed brush conversion projects and constructed fire roads, crews were quickly provided access to the area with a large number of personnel and equipment. The fire was extinguished before causing any significant damage.

In July of 1989, the Powerhouse fire burned through the Sierra National Forest near the communities of Big Sandy Rancheria and Auberry. Burning nearly 21,000 acres, the fire was suspected to be started by arson. The fire raced up the canyon, skirting Powerhouse Road in Auberry, traveling mid-slope behind the settlement of Jose Basin. Fingers of the fire touched New Auberry and the Town of Auberry. The fire burned across the front of Bald Mountain into Mile High and threatened Meadow

Lakes and all the homes in its path. An all-out assault by air and ground stopped the fire at Sugarloaf Road at 3,800 feet in elevation. Roads were blocked, people did not know if they had homes to return to, and pets were a big concern. The fire destroyed seven homes and 16 barns and garages throughout the region.

In September of 2020, the Creek Fire began near Shaver Lake and burned 379,000 acres of the Sierra National Forest. The fourth-largest wildfire and the largest single source fire in modern California history, hundreds of people were rescued by National Guard helicopters. As a result of the fire, Big Sandy Rancheria was fully evacuated for 12 days. The Creek Fire destroyed at least 856 buildings and cost over $193 million (2020 USD) in fire suppression costs, while the total property damage is currently unknown. The cause of the fire has not yet been determined.

f. Ingress/Egress

Highway 168 is the primary access and evacuation route for this area. It is well maintained and has adequate carrying capacity for evacuation purposes. Highway 168 joins Highway 180 at Clovis, 49 miles southwest of Big Sandy Rancheria.

Secondary roads of importance include the following:

- Auberry Road transits from Prather, through the Sierra National Forest, to Alder Springs, a distance of approximately 15 miles. It is well paved but, in some places, quite windy with sharp turns. Past Big Sandy Rancheria, the road becomes winding as it passes through Meadow Lakes. In the winter, the road can become impassable.
- Powerhouse Road transits from Auberry Road at Auberry to Route 225 at North Fork, a distance of approximately 15 miles. Powerhouse Road also becomes Route 222 at the crossing of Kerckhoff Lake. It is well paved but, in some places, quite winding with sharp turns. At Kerckhoff Lake, the road has a two-lane bridge. In the winter, the road can become impassable.
- Jose Basin Road transits from Auberry Road at Big Sandy Rancheria, through the Sierra National Forest, to Matthews Mill, a distance of approximately 26 miles. It is mostly paved but, in some places, quite winding with sharp turns. The road becomes gravel graded as it passes Sugarloaf Road. In the winter, the road can become impassable.
- Auberry Mission Road transits through Big Sandy Rancheria from Jose Basin Road to Auberry Road, a distance of approximately 2 miles. The northern 2/3 of the road is well paved but, the southern 2/3 is a mix of gravel and dirt grading. In some places, the road is steep and quite winding with sharp turns. In the winter, the road can become impassable.

Wildfire could impact and compromise all these routes. Compounding this issue, Jose Basin Road serves as the only way in and out of Big Sandy Rancheria, which, if impassible, cuts off access to the remaining ingress/egress routes.

g. Adaptation Strategies

As an additional component of the Plan development process, through the Community Engagement Plan, stakeholders had the opportunity to suggest what adaptation strategies they felt were most needed to facilitate the safe evacuation of the Rancheria. Among those answers provided through the two-engagement effort, the most cited strategies were community preparedness efforts, the building and/or paving of an additional roadway, a fleet/resource management plan, and a comprehensive emergency communications plan.

Community Preparedness Program

A Community Preparedness Program offers engagements that are open to all members of the community and gives residents the opportunity to enhance their knowledge and skills as well as become better prepared for the hazards that face the Tribe.

Through opportunities such as the Community Emergency Response Team (CERT) curriculum, residents of the Rancheria can work to prepare for, and adapt and respond to disasters. Topics which can be covered through a Community Preparedness Program include Disaster Preparedness, Disaster Psychology, Medical Operations, Damage Assessment, Fire Suppression, and Light Search and Rescue. Research has shown that basic training in disaster survival and rescue skills improves the ability of citizens to survive until responders or other assistance arrives.

Prior to emergencies, CERT members work to have an awareness of their own neighborhoods and to predetermine possible evacuation sites that will facilitate effective, safe, and rapid response to emergencies. During a hazard scenario, these groups assume a leadership role, work to establish Evacuation Assembly Areas, and help facilitate the evacuation of community members.

Additional Roadway Building/Paving

During a no-notice evacuation, tribal leadership will need to make tough decisions about which evacuation routes and traffic management tactics to use. Decisions will be based on the capacity, safety, and potential chokepoints of those roads, among other factors. However, if there are insufficient roadways suitable for evacuation purposes, communities may be forced to use unimproved routes to evacuate their population.

The development and/or paving of an additional evacuation-appropriate roadway was the most cited adaptation strategy among community members and stakeholders. An

in-depth analysis of the opportunity and feasibility of building an additional evacuation route is presented in Section III: Transportation Analysis.

Fleet/Resource Management Plan

Managing personnel, specialized teams, vehicles, equipment, and supplies are an intricate part of response planning and incident management. Resource management procedures should be included as an element of an emergency management program and have the flexibility and depth to address uncertainties associated with all-hazard responses.

Effectively incorporating tribal, contracted, and private resources into an emergency management program can streamline a multifaceted response, resulting in a more effective and timely effort. If managed properly, available resources can also reduce potential community risks and vulnerabilities. Through the development of a Fleet/Resource Management Plan, tribal leaders can organize and facilitate the vehicles, drivers, and resources needed to evacuate the community-at-large effectively.

Emergency Communications Plan

When an emergency occurs, the need to communicate is immediate. If the community is placed at risk, residents will want to know how they will be impacted. Emergency response agencies may need to be notified, and tribal officials will need to know what is going on in their community. Residents living in nearby communities may need information—especially if an evacuation is declared on the Rancheria. All of these "audiences" will want information before the Tribe has a chance to begin communicating.

An important component of the preparedness program is the emergency communications plan. Tribal administration must be able to respond promptly, accurately, and confidently during an emergency in the hours and days that follow. Many different audiences must be reached with information specific to their interests and needs. The Plan should include coordination with public safety officials to develop protocols and procedures for advising the public of any hazards and the most appropriate protective action that should be taken if warned.

h. Fire Protection/Mitigation

Big Sandy Rancheria is located within the sphere of influence of the Bureau of Land Management and is listed on the National Register as a Community at Risk.

Thinning and mechanical treatments throughout the Rancheria are needed. A 200-foot fuel break constructed across the top of the drainage could help stop a fire from traveling into the community and further uphill, eventually endangering the Meadow Lake Community. There is the remnant of an old fuel break running through this

drainage.

The Highway 168 Fire Safe Council has proposed that a fuel break be created along Jose Basin Road for about three miles ending near Forest Service property at Italian Bar. This could connect to the Lerona Fuel Break that extends off Sugarloaf Road, where a fuel break was completed about 11 years ago by the Fire Safe Council. This section has recently been worked on by the California Department of Forestry and Fire Protection (CAL FIRE). The fuel along Jose Basin Road is thick and continuous. Residents along this road would be trapped if a fire were to travel through this area.

i. Funding Resources

To aid in the process of executing the adaptation strategies, several funding resources may be available to the Big Sandy Rancheria Tribe. These sources, available through competitive and non-competitive grant application processes, are made available directly to BSR due to its self-governing status as a federally recognized tribal nation.

Tribal Homeland Security Grant Program (THSGP)

The THSGP provides funding directly to eligible tribes to strengthen their capacity to prevent, prepare for, protect against, and respond to potential terrorist attacks. The Tribal Homeland Security Grant Program (THSGP) plays an important role in the implementation of the National Preparedness System by supporting the building, sustaining, and delivery of core capabilities essential to achieving the National Preparedness Goal of a secure and resilient nation.

Emergency Management Performance Grant (EMPG)

The Emergency Management Grant provides state, local, tribal, and territorial emergency management agencies with the resources required for the implementation of the National Preparedness System and works toward the National Preparedness Goal of a secure and resilient nation. The EMPG's allowable costs support efforts to build and sustain core capabilities across the prevention, protection, mitigation, response, and recovery mission areas.

Tribal Mitigation Planning Grant

Mitigation planning is the process used to understand risks from natural hazards and to develop and implement strategies that can reduce future damages to people, property, and the environment. The Federal Emergency Management Agency (FEMA) mitigation planning program provides guidance, training, and technical assistance to support Indian tribal governments ("tribe") with developing and implementing mitigation plans. FEMA's Hazard Mitigation Assistance (HMA) program provides grants to tribes looking to develop or update their mitigation plans as well as for planning-related activities.

Building Resilient Infrastructure and Communities (BRIC)

Building Resilient Infrastructure and Communities (BRIC) will support states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program. The BRIC program's guiding principles are supporting communities through capability- and capacity-building, encouraging, and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.

EPA Tribal Brownfields Program

The EPA Brownfields Program's goal is to empower states, tribes, communities, and other stakeholders in economic development to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields. Section 128(a) State and Tribal Response Program funding can be used to create new or to enhance existing environmental response programs. The funding can also be used for limited for other activities that increase the number of response actions conducted or overseen by a state or tribal response programs, such as the development of a Tribal Emergency Response Committee (TERC), the writing of an Emergency Response Plan (ERP), or the hiring of an Emergency Response Manager for the tribe.

Federal Highway Administration Tribal Transportation Program (TTP)

The Office of Tribal Transportation (OTT) administers the Tribal Transportation Program (TTP) and provides stewardship and oversight for direct funding agreements with 135 federally recognized Tribes. The OTT also provides support for all FHWA activities affecting tribal transportation. This support includes the administration of TIGER/BUILD grants awarded to Tribes and the transfer of funds from states and other local governments to Tribes through the 202(a)(9) transfer process. In addition, the FHWA Office of Tribal Transportation manages the Tribal Transportation Program Bridge Program and the Tribal Transportation Program Safety Fund for all federally recognized Tribes. These grant programs are set-asides from the overall Tribal Transportation Program.

TIGER/BUILD Grants

The Better Utilizing Investments to Leverage Development, or BUILD Transportation Discretionary Grant program, provides a unique opportunity for the DOT to invest in road, rail, transit, and port projects that promise to achieve national objectives. Previously known as Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grants, Congress has dedicated nearly $8.9 billion for twelve rounds of National Infrastructure Investments to fund projects that have a significant

local or regional impact. Since 2009, the program has awarded nearly $3.4 billion in Federal funding to 299 projects to support rural and tribal communities across the nation, leveraging an estimated $6.2 billion in non-BUILD/TIGER funding.

Tribal Transportation Program Safety Fund (TTPSF)

This program is jointly administered by the BIA and the Federal Highway Administration. Each year under the FAST Act, 2% of the available TTP funds are set aside to address transportation safety issues in Native America. TTPSF grants are available to federally recognized Indian tribes through a competitive, discretionary program. Awarded annually, projects are chosen whose outcomes will address the prevention and reduction of death or serious injuries in transportation-related incidents, such as motor vehicle crashes. Transportation fatalities and injuries severely impact the quality of life in Indian countries. Statistics are consistently higher than the rest of the nation as a whole.

Tribal Transportation Self-Governance Program (TTSGP)

The Tribal Transportation Self-Governance Program (TTSGP) provides federally recognized Tribes and Tribal organizations with greater control, flexibility, and decision-making authority over federal funds used to carry out tribal transportation programs, functions, services, and activities (PFSAs) in tribal communities. In the TTSGP, federal funds (e.g., FHWA or FTA formula funds) awarded to a Tribe or Tribal organization will be transferred in advance to the Tribe or Tribal organization in accordance with the terms of the funding agreement to carry out tribal transportation PFSAs. The TTSGP funds are subject only to the terms and conditions in 23 USC §207, applicable federal statutory and government-wide requirements, the TTSGP final rule, and the terms of the TTSGP compact and funding agreement that are negotiated between the Department and a Tribe or Tribal organization.

Fixing America's Surface Transportation Act (FAST)

The FAST Act provides modest funding increases for the Tribal Transportation Program (TTP), which provides access to basic community services to enhance the quality of life in Indian countries. Funds are distributed under a statutory formula based on road mileage, tribal population, and relative need.

Federal Transit Authority Opportunities for Tribal Entities

Federally-recognized Indian tribes or Alaska Native villages, groups, or communities as identified by the US Department of the Interior (DOI) Bureau of Indian Affairs (BIA) are eligible direct recipients and sub-recipients for numerous FTA programs. Typically, tribal entities working with FTA are the recipients of FTA's Tribal Transit Program (TTP) funds. The TTP program provides two different types of funding: formula program funds and competitive program funds.

Tribal Transit Program Formula Program

Provides funds directly to tribal entities for the purposes of capital, operating, planning, and administrative expenses for public transit projects that meet the growing needs of rural tribal communities. To access TTP formula program funds, prospective recipients must have reported to the National Transit Database (NTD) in the most recent NTD report year at the time of apportionment to be allocated funds under the TTP formula program.

Tribal Transit Competitive Program

To access TTP competitive program funds, prospective recipients may respond to a published NOFO and compete for planning, capital, or operating funds for transit projects. Tribal entities that do not currently operate public transportation service may apply to the Tribal Transit **competitive program for a planning project or start-up costs.**

Rural Areas Formula Program

Provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations of less than 50,000, where many residents often rely on public transit to reach their destinations. Tribal entities are eligible recipients or sub-recipients of this FTA formula program.

Enhanced Mobility of Seniors and Individuals with Disabilities

Supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities in all areas – large urbanized (over 200,000), small urbanized (50,000-200,000), and rural (under 50,000). Eligible projects include both traditional capital investment and non-traditional investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services. Tribal entities are eligible recipients or sub-recipients of this FTA formula program.

j. Special Considerations

On Big Sandy Rancheria, cell phone coverage is spotty, and the 2019 American Community Survey estimated that only 6.5% of the rural residents in Fresno County have landline phones, making direct evacuation notifications difficult.

As an independent tribal organization, Big Sandy Rancheria is equipped with the ability to declare local emergencies and order evacuations. However, FCSO additionally reserves the right to declare an evacuation in the event of an emergency. Evacuations may be declared at any time, with no prior notice provided to the community or its administration.

k. Area Map

Under Development

Insert Detailed Roadway/Transportation Map

I. Traffic Control Points

Traffic Control Points facilitate traffic flow on evacuation routes by managing intersecting, entering, or exiting vehicles that could otherwise create significant traffic congestion.

TABLE F: Traffic Control Points

Intersection	Restrict or Deny Entry	Contra-Flows
Jose Basin Rd @ Auberry Mission Rd	X	
Auberry Mission Rd @ Auberry Rd	X	
Auberry Rd @ Jose Basin Rd.	X	X
Auberry Rd @ Powerhouse Rd.	X	X
Auberry Rd @ Hwy 168 (Prather)	X	X
Jose Basin Rd @ Marvin Ranch Rd	X	
Auberry Rd @ Hwy 168 (Pineridge)	X	

The following are situation-dependent, as directed by on-scene fire or law enforcement officials:

- **Restricted Entry:** Only individuals who can demonstrate a critical need are allowed entry.
- **Deny Entry:** The situation is critical, or entry could possibly interrupt outbound traffic flow.
- **Contra-Flow:** The traffic load is such that it is necessary to convert all traffic lanes to flow in a single direction.

m. Critical Infrastructure

TABLE G: Critical Infrastructure Inventory

Facility	Address	Coordinates
Multi-Purpose Gym	37387 Auberry Mission Road	37.08269369045345, -119.46389329146876
Tribal Administration House		37.08686662492048, -119.46695332604376
Water Treatment Facility		37.083451678508794, -119.46054689395199
Transitional Building		37.08228066854195, -119.46363260324951
Tammy Walker House	37163 Jose Basin Rd.	37.08667786339131, -119.46538107065415
Tanya Walker House	37163A Jose Basin Rd.	37.08706031962215, -119.46601782077039
Leslie Perez House	37153 Jose Basin Rd.	37.0870021691801, -119.46706116546267
Wanda Lewis House	37620 Auberry Mission Rd.	37.07690800338729, -119.46010782652377
Head Start Building	37802 Jose Basin Rd,	37.086110373719215, -119.46498350297578
Baty House	37523 Auberry Mission Rd.	37.08339512117264, -119.46175932027253
Humbolt House		
Maintenance Shed		
Marlene Johnson Mobile	37638 Auberry Mission Rd.	37.077718832117704, -119.46041483439059
Phyllis Lewis Mobile	37161A Jose Basin Rd	37.087073879564215, -119.46659671243229
Gina Riley Mobile	37406 Auberry Mission Rd.	37.08097303935777, -119.46556668014088

Modtech Triple Wide 1999		
Doupnik Double Wide 1989		
American Modular Double Wide 1997		

n. Transportation Resources

The transportations listed in the inventory below are those owned by the tribe or partner organizations, available to be utilized for the transport of community members during periods of evacuation.

TABLE F: Transportation Resources Inventory

Resource	Owner	Details
2004 Chevy Van	Big Sandy Rancheria Tribe	VIN #:1GAGG25UX41199455
2015 Chevy School bus 24 passenger	Big Sandy Rancheria Tribe	VIN #:1GB6G5BG9F1116964
2015 Nissan Frontier	Big Sandy Rancheria Tribe	VIN #:1N6AD0FR6FN769304
2016 Chevy Impala	Big Sandy Rancheria Tribe	VIN #:2G1WB5E32G1115999
2015 Chevy Equinox	Big Sandy Rancheria Tribe	VIN #:1GNALBEK8FZ141573
2003 Chevrolet Express Van	Big Sandy Rancheria Tribe	VIN #1GAGG25U931202909
2003 Chevrolet Express Van	Big Sandy Rancheria Tribe	VIN#1GAGG25U031202703
2004 Chevrolet Express Van	Big Sandy Rancheria Tribe	VIN #1GAGG25U141178655
2004 Chevrolet Express Van	Big Sandy Rancheria Tribe	VIN #1GAGG25U941143278
Wheelchair Equipped Vans	Fresno County Rural Transit Agency (FCRTA)	59 Wheelchair Equipped Vans
Minivan	Fresno County Rural Transit Agency (FCRTA)	5 Minivans
Meal Delivery Vans	Fresno County Rural Transit Agency (FCRTA)	31 Meal Delivery Vans
School Buses	Fresno County Rural Transit Agency (FCRTA)	29 School Buses

School Buses	Sierra Unified School District	31 School Buses

o. Evacuation Centers

The facilities listed in the inventory below are those surveyed and certified to be suitable as evacuation centers, available to be utilized for the safe refuge of community members during periods of evacuation.

TABLE G: Evacuation Center Inventory

Facility Name	Location	Address
Big Sandy Rancheria Multi-Purpose Building	Big Sandy Rancheria	37387 Auberry Mission Road
Auberry Elementary School	Auberry	33367 N Auberry Road
Pine Ridge Elementary	Auberry	45828 Auberry Road
Foothills Elementary School	Prather	29147 Auberry Road
TEP-Foothill Elementary School	Prather	29147 Auberry Rd
Sierra Elementary School	Tollhouse	27444 E Tollhouse Rd
Sierra High School	Tollhouse	33326 Lodge Road
Sierra Oaks Senior Center	Tollhouse	33276 Tollhouse Rd
Clovis East High School	Clovis	4300 N. De Wolf Ave
Clark Intermediate School	Clovis	902 Fifth Ave.
Alta Sierra Intermediate School	Clovis	380 W. Teague
Buchanan High School	Clovis	1560 N. Minnewawa
Reyburn Intermediate School	Clovis	2901 De Wolf Ave
Clovis High School	Clovis	1055 Fowler Ave

III. TRANSPORTATION ANALYSIS

a. Infrastructure Overview

i. Auberry Mission Rd. (Section 1)

A minor arterial of general use serving most residences and facilities in the community area, including homesites, a convenience store, casino, and tribal government buildings, public areas, and a cemetery. The road has a 20'-wide bituminous surface, having a pavement depth of approximately 2 inches, with curbing on one side, no shoulders, or sidewalks, and generally follows flat terrain for a little over a half-mile in a generally north/south direction. Drainage features are minimal, and the road may experience drainage problems during a rainstorm or other flood event.

ii. Auberry Mission Rd. (Section 2)

A quarter-mile of 10'-wide substandard earth road that serves as a secondary access connection to Auberry Road. The roadbed is minimal with inadequate drainage and alignment, no shoulders, and generally follows the existing ground. The tribe has determined that improving this section is a priority and vital for emergency evacuation use during a wildfire. There are sight distance mitigation concerns where it intersects with Auberry Road.

iii. Jose Basin Road

A minor arterial of general use serving all residents and visitors to the rancheria. It is the only good transportation route connecting the BSR to Auberry Road. The road has a 20'-wide bituminous surface, having a pavement depth of approximately 2 inches, and enters the northwest portion of the rancheria following a downhill curving south along the west side of a Backbone Mountain creek drainage, which flows to the north. As it reaches the bottom and starts curving back to the north, it passes through the BSR community area, then proceeds further and uphill to the north along the east side of the drainage and continues on for about 8 miles to Mathews Mill. There is some curbing along this route as it passes through the developed area of the community. There are no shoulders or sidewalks, and drainage features are minimal, and the road may experience drainage problems during a rainstorm or other flood event.

iv. Utilities Rd. (Section 1)

A local use road that serves tribal public facilities for administration and for aggregate and other material storage further to the north. The road has a 2"-15'-wide bituminous surface, with a pavement depth of approximately 2-inches

that is experiencing raveling and needs pavement rehabilitation and other improvements. There are no shoulders, and the road ends about a half-mile to the north at the back of the materials storage area.

v. Utilities Rd. (Section 2)

A quarter-mile of unimproved primitive trail that departs from Utilities Rd. (Sec. 1) on the west side and continues west up a steep grade, then plateaus and turns to the south, where it eventually connects to the north side of Jose Basin Road near the intersection to Auberry Road. Parts of the trail were recently bladed for fire control during the recent Creek Fire.

b. Access Considerations

The general principle of efficient emergency access is to move pedestrians and vehicles from roads having lower functional classifications to roads having higher classifications in as short a distance as practicable. The highest classification roads have the highest capacities and allow for the highest travel speeds, and therefore are the best candidates for rapidly departing from an emergency situation. The highest classification road immediately available to the Big Sandy Rancheria is Auberry Road, a county road. State Highway 168, located approximately 3,500 feet south of Auberry Road, has a higher classification than Auberry Road and so would be a desirable target for an evacuation road. However, the feasibility of an emergency access route to State Highway 168 has not been evaluated at the site. Construction cost, land ownership issues, and sight distance considerations may limit the feasibility of this evacuation route.

The type of vehicle used during an emergency evacuation is an important factor affecting the size and location of an emergency egress route. Area residents may evacuate by foot, using their own vehicles ranging from motorcycles to ATVs to cars to trucks of various sizes. Helicopters may be used under the most severe circumstances. However, it seems most likely that most residents evacuating under emergency conditions will choose to use their own cars and trucks, so the emergency route design should accommodate these vehicles. Additionally, emergency access routes may also serve as fire fighting vehicles. In an urban setting, the fire apparatus used by municipal fire departments are quite large and heavy, and the access routes need to be designed with wider roads and stronger structural sections to support the vehicles. However, it seems most likely that firefighting vehicles in this area will be wildland fire vehicles, typically mounted on a pickup truck chassis. The design requirements for these vehicles are not as strict as needed for municipal fire department fire apparatus. If helicopters are to be used, then designated landing areas will be

needed.

The overall lack of shoulder width and absence of pedestrian facilities in the transportation system could present problems for pedestrians who are likely to be sharing the roads with vehicles during an emergency evacuation. The lack of shoulder space increases the risk of traffic congestion or blockage in the event of vehicle crashes or stalling. However, the Federal Highway Administration is currently promoting safety projects as an effective means of improving the national transportation system overall. These could include pedestrian-friendly projects like installing sidewalks, signage, street lighting, and traffic-calming treatments.

Development of Auberry Mission Rd. (Sec. 2) may require relocating at least one residence. The design feasibility is still to be determined, and a study will need to address the potential for mitigating the site distance concern at the intersection with Auberry Road. However, the BSR is determined to improve this section, which they consider vital for emergency evacuation use during a wildfire. The BSR owns the land where the house is located, and that may need to be removed. The tribe also owns the Right of Way (ROW) access along the proposed route.

c. Preferred South Emergency Access Route to Auberry Road (County Road)

The Tribes' preferred emergency access route is an extension of Auberry Mission Road south to Auberry Road. This would involve improving an existing single-lane road that presently exists. A portion of this road was recently improved with base rock and asphalt to a width of 16 feet from an existing cul-de-sac located at the south end of Auberry Mission Road to an existing house, a distance of approximately 530 feet. The current road continues past the house as a single lane dirt track another 660 feet to a driveway on Auberry Road.

The fully improved emergency access route could be configured as either a two-lane public roadway or as a single-lane restricted-access emergency-only road. Of the two options, the two-lane public road would clearly be preferable, as it would provide a second way out of the Rancheria besides Jose Basin Road. The two-lane public roadway would require that the new intersection meet the sight distance requirements of Fresno County, the agency with jurisdiction over Auberry Road. If the county sight distance requirements cannot be met, a single-lane restricted-access emergency-only road would be the only remaining option.

Sight distances were measured in the field on January 25, 2021 and are described in a separate report (Exhibit A). To the right of the intersection, the

available sight distance was measured to be 428 feet. To the left of the intersection, the available sight distance was measured to be 447 feet. Measures to increase the available sight distance, such as trimming and/or removing trees and vegetation within the public right-of-way and removal of an existing rock outcropping, appear to be feasible within a reasonable construction budget.

Sight distance requirements for Auberry Road were discussed with Sebastian Artal of the Design Division of the Fresno County Public Works Department on February 25, 2021. The County's sight distance requirements are found in the 2011 edition of the AASHTO Green Book, Section 9.5. It was thought that the design speed for this section of Auberry Road is 45 miles per hour (mph), but that remains to be confirmed.

The AASHTO Green Book, Section 9.5 addresses intersection sight distance, describing the procedure to be used to evaluate so-called "Sight Distance Triangles," specified areas along intersections and their associated corners that need to be clear of obstructions that might block a driver's view of potentially conflicting vehicles. Two cases are of particular interest at the proposed intersection, which is assumed to be controlled by a stop sign at the Auberry Road, requiring motorists on the proposed new south public road to stop before entering Auberry Road. In the discussion that follows, the proposed new public road is called the minor road, and Auberry Road is called the major road. The first case is identified as Case B1 in the AASHTO Green Book, in which a driver on the stop-controlled minor road makes a left turn onto the major road. In this case, the required intersection sight distance is 500 feet, assuming a 45-mph design speed. The second case is identified as Case B2 in the AASHTO Green Book, in which a driver on the stop-controlled minor road makes a right turn onto the major road. In this case, the required intersection sight distance is 430 feet, assuming a 45-mph design speed. Because we have assumed both right and left turns will be allowed at the intersection, we used the greater of the two required intersection sight distances, 500 feet, to evaluate the intersection.

The proposed intersection does not currently meet the AASHTO sight distance requirements. However, it is our opinion that that mitigative measures can be taken at a reasonable cost to provide the small additional lengths needed to meet sight distance requirements. At the left side of the intersection, trees and vegetation can be removed or trimmed to provide an additional 53 feet of needed sight distance. It appears the conflicting vegetation is located within the public right-of-way and so does not require the agreement of any private property owner to perform the needed work. At the right side of the intersection, the primary obstruction to sight distance appears to be a rock outcropping

located approximately 3 feet from the north edge of the pavement. This outcropping measured 43 feet long at its base and averaged approximately 6 feet in height. It appears that somewhere between 5 to 10 feet of the rock face would need to be removed to provide the needed sight distance. While the cost to do this work is not inconsiderable, it can be done using readily available road construction equipment. Within the context of the overall project budget, it does not appear to represent an unreasonable portion of the overall project cost.

i. Exhibit A: Sight Distance Measurement

Big Sandy Rancheria

The intersection of Auberry Road & S Extension of Auberry Mission Rd

Measured by Paul Knox, PE, Akana, 1/25/2021

Available sight distances were measured at the intersection, at a point 10' behind theedge of the travel lane. The driver's eye and object height were both 3.5'. A photo of thepoint in the intersection from which the sight distances were measured is shown below (Figure 1).

Figure 1- Position in the proposed intersection from which sight distances were measured.

To the left of the intersection, the available sight distance was measured to be 447'. Sight distance can be improved by trimming brush along the south edge of the pavement. A large tree may need to be trimmed or removed, but it appears to be located within county right-of-way, assuming it is 60’ wide. See Figure 2 below.

Figure 2- Sight distance measurement to the left of the intersection.

To the right of the intersection, the available sight distance was measured to be 428'. By trimming an existing rock outcropping on the roadside, we estimate that 85-90 additional feet of sight distance could be added. Figure 3 shows the point in the intersection from which the sight distance was measured, viewing traffic from the right. Figure 4 shows the point at which the available sight distance was measured at the right side of the intersection. Figure 5 shows the rock outcropping, which is granite, measuring 43' long, with a maximum height of 9'. The average height of the rock outcropping is estimated to be 6’.

Figure 3 - Point in the intersection where the sight distance was measured from the right.

Figure 4 - Sight distance measurement to the right of the intersection.

Figure 5 - Rock outcropping to be trimmed to improve sight distance.

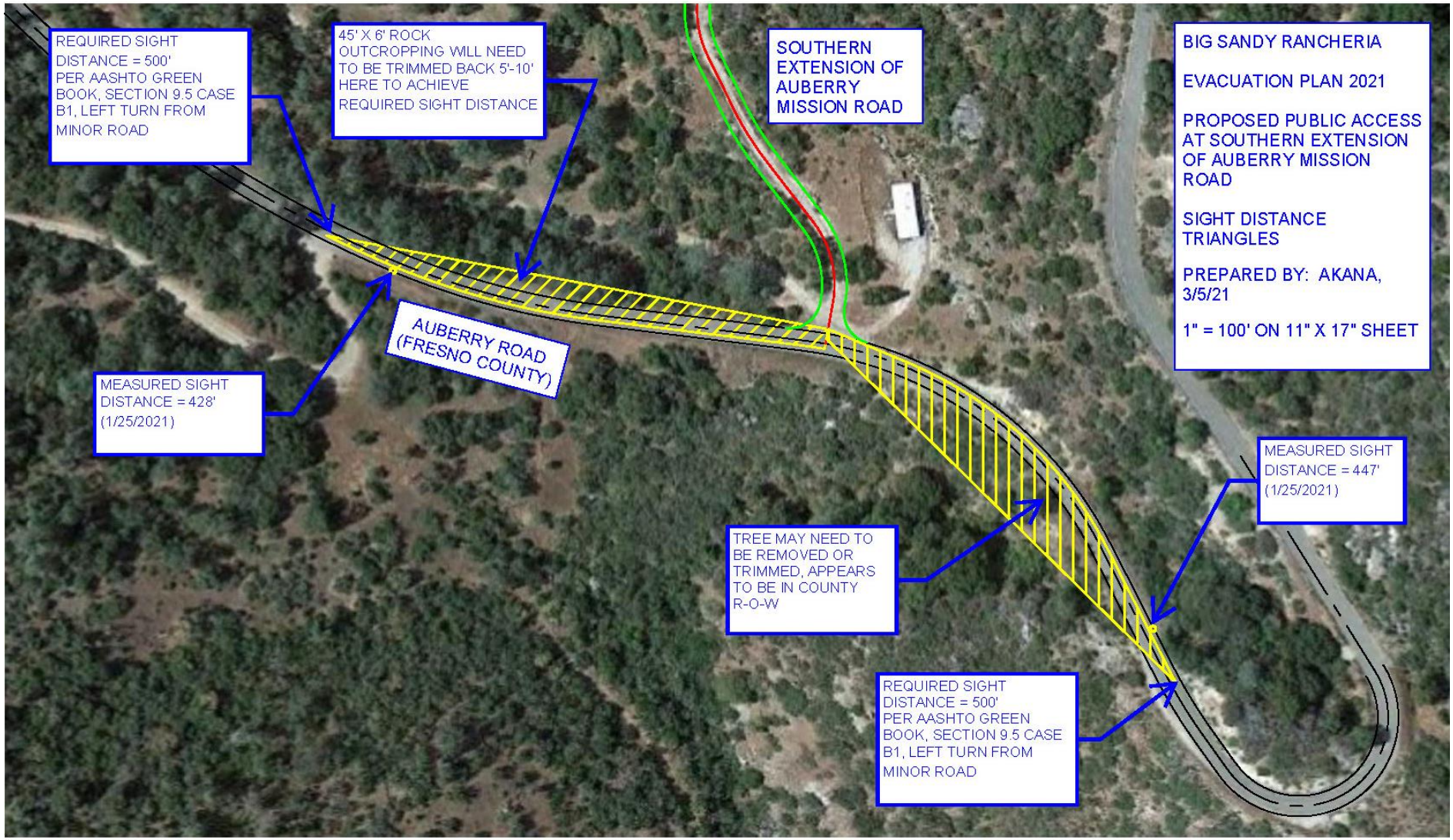
An exhibit (Exhibit B) showing the proposed intersection, measured, and required sight distances, and the sight distance triangles are attached.

Another significant issue that affects the feasibility of the preferred south access is the presence of an existing house located midway between the cul-de-sac on Auberry Mission Road and Auberry Road. Two design options can be considered to address the house; the first would be to route the roadway around the existing house, the second would be to relocate the existing house. Prior to visiting the site, it was our opinion that routing the road to avoid the house would be preferable. However, upon visiting the site, it became clear that existing steep slopes and the presence of a seasonal stream beside the house will add considerable cost to the design and construction of the roadway, as retaining walls and steep stretches of roadway are likely to be needed, and a significant portion of the recently improved asphalt roadway may need to be removed or abandoned. It is our recommendation that the existing house is relocated.

The remaining design and construction issues appear to be relatively straightforward. Three culverts will need to be extended at their existing line and grade. Roadway widening will require some grading into rocky terrain, but the visible areas of the rock appear to be fractured and friable, leading us to believe that ordinary earthmoving

equipment may be sufficient to move the material. The recently improved asphalt road is currently 16 feet wide. Adding another 8 feet of width will allow two full travel lanes.

ii. EXHIBIT B: Sight Vision Triangles

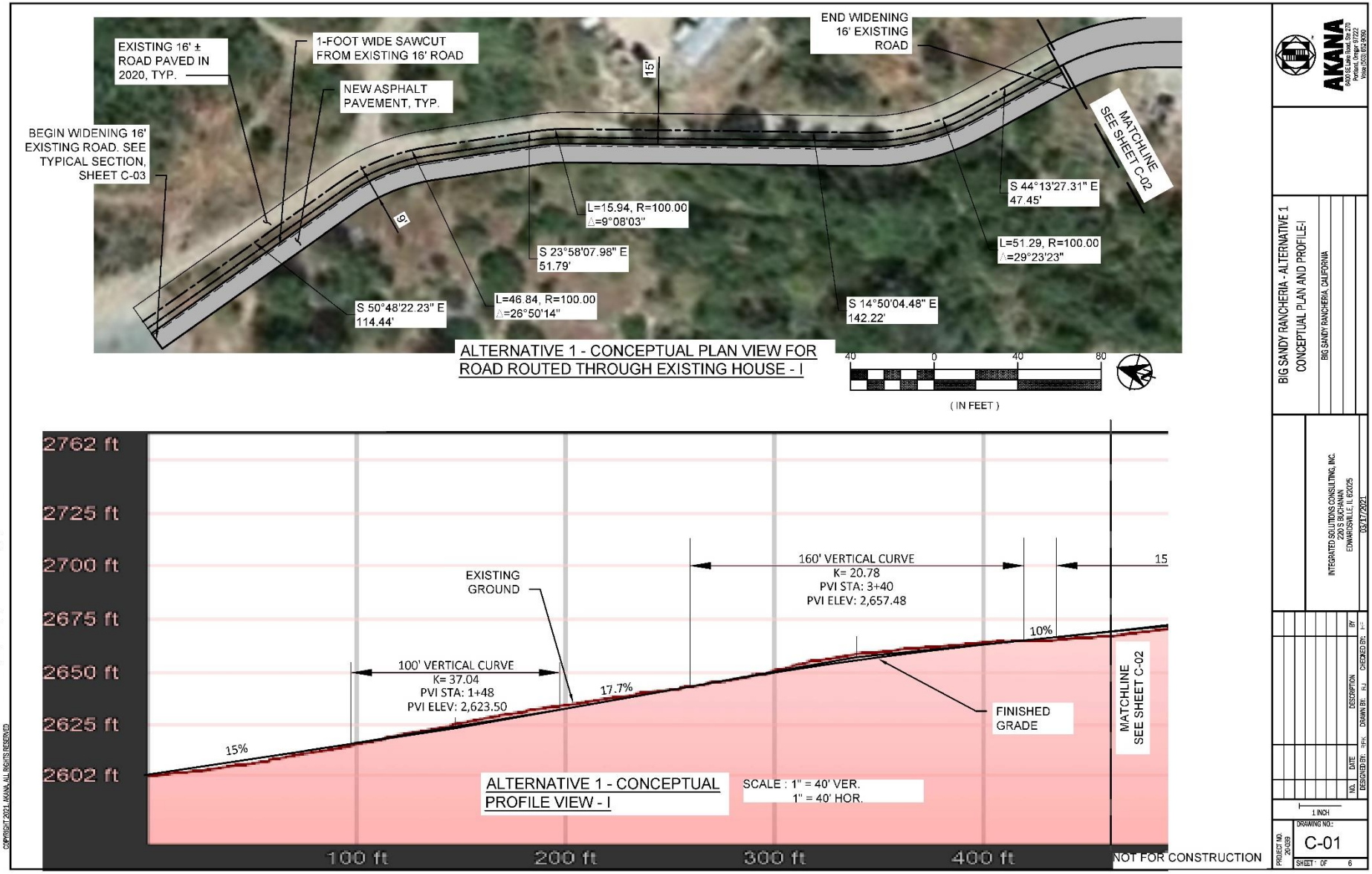


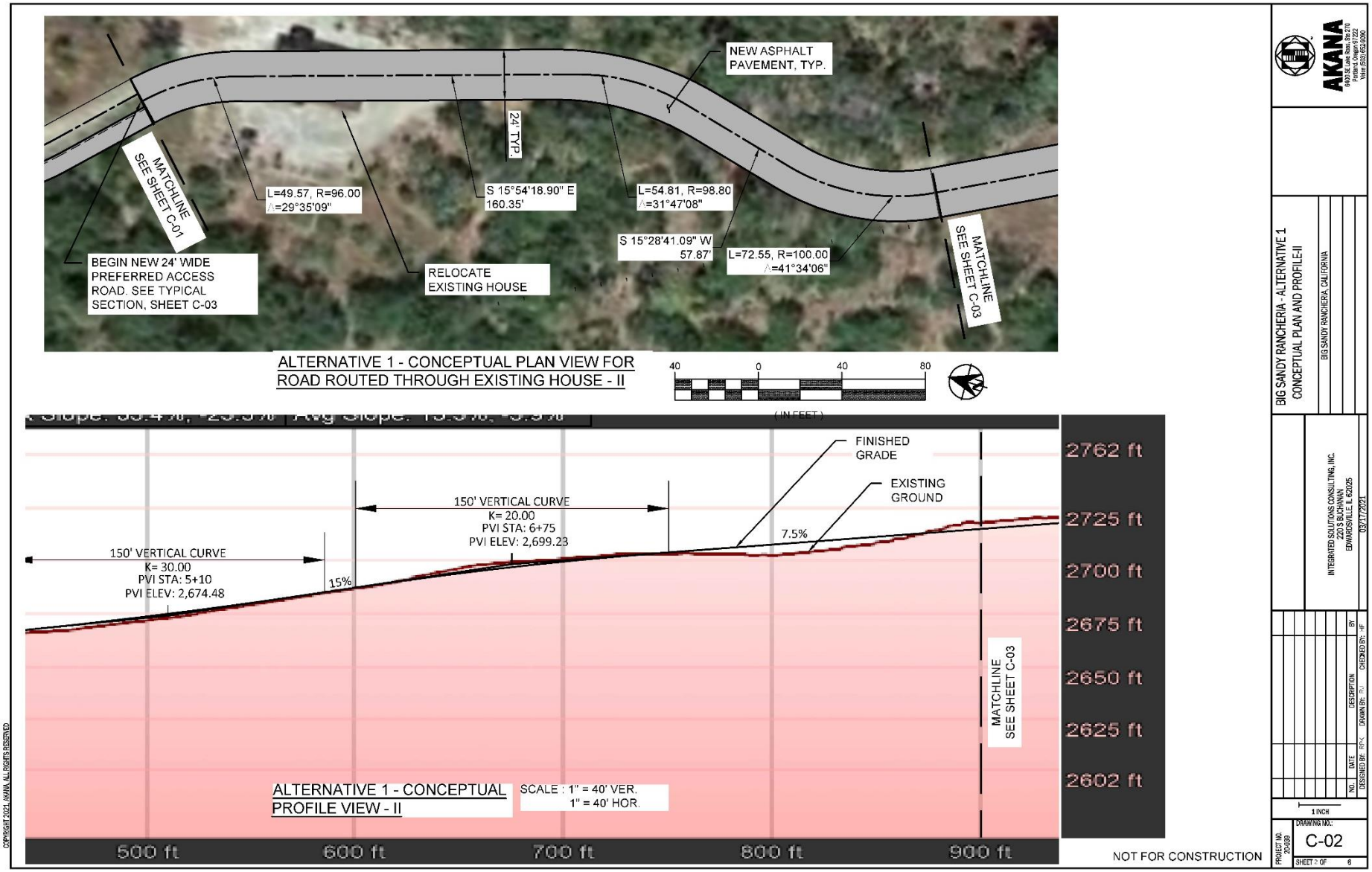
Two alternatives have been developed for the preferred south access road. Alternative 1 goes through an existing house, which would need to be relocated or demolished. Alternative 2 routes the road around the house. Conceptual plan and profiles (Exhibit C) and budget-level construction cost estimates (Exhibit D) have been developed for each alternative. The conceptual designs are based on a combination of publicly available information (Google Earth) and conditions observed during the site visit. Earthwork quantities are based on assumed conditions and should be considered to be very much approximate estimates based on the limited information available. The details related to widening the recently improved asphalt road at the lower section of the preferred route are shown in a typical section shown the third sheet of each alternative. It is our understanding that the existing roadway is to be preserved, which will require that the widened portion of the road may have steep slopes to match the existing roadway. For the new roadway, a maximum slope of 15% has been used for the conceptual design. It is to be expected that the design parameters may change as more reliable survey data is collected for design.

The principal advantage of Alternative 1 is a lower construction cost. However, the cost to relocate the existing house has not been included with this alternative, as it is not yet clear where the house would be relocated to or whether it might instead be demolished and replaced at another location.

The principal advantage of Alternative 2 is that the existing house can remain in its current location, minimizing the disruption to the family that lives there. A new driveway will need to be constructed to the access road. Ingress and egress to the house during construction, noise, and earthmoving activities will affect the residents while the new road is being built.

i. Exhibit C: Combined Conceptual Plan and Profiles




NEW ASPHALT PAVEMENT, TYP.
24' TYP.
MATCHLINE SEE SHEET C-01
L=49.57, R=96.00
Δ=29°35'09"
S 15°54'18.90" E
160.35'
L=54.81, R=98.80
Δ=31°47'08"
S 15°28'41.09" W
57.87'
L=72.55, R=100.00
Δ=41°34'06"
MATCHLINE SEE SHEET C-03
BEGIN NEW 24' WIDE PREFERRED ACCESS ROAD. SEE TYPICAL SECTION, SHEET C-03
RELOCATE EXISTING HOUSE
ALTERNATIVE 1 - CONCEPTUAL PLAN VIEW FOR ROAD ROUTED THROUGH EXISTING HOUSE - II
40 0 40 80
(IN FEET)
FINISHED GRADE
EXISTING GROUND
150' VERTICAL CURVE
K= 20.00
PVI STA: 6+75
PVI ELEV: 2,699.23
150' VERTICAL CURVE
K= 30.00
PVI STA: 5+10
PVI ELEV: 2,674.48
15%
7.5%
MATCHLINE SEE SHEET C-03
2762 ft
2725 ft
2700 ft
2675 ft
2650 ft
2625 ft
2602 ft
500 ft
600 ft
700 ft
800 ft
900 ft
ALTERNATIVE 1 - CONCEPTUAL PROFILE VIEW - II
SCALE : 1" = 40' VER.
1" = 40' HOR.
NOT FOR CONSTRUCTION
BIG SANDY RANCHERIA - ALTERNATIVE 1
CONCEPTUAL PLAN AND PROFILE-II
BIG SANDY RANCHERIA, CALIFORNIA
AKANA
8400 SE Lake Road, Ste 270
Portland, Oregon 97222
Voice (503) 652-0266
INTEGRATED SOLUTIONS CONSULTING, INC.
220 S BUCHANAN
EDWARDSVILLE, IL 62025
03/17/2021
DESIGNED BY:
DRAWN BY:
CHECKED BY:
NO.
DATE
DESCRIPTION
BY
1 INCH
PROJECT NO. 20-039
DRAWING NO.: C-02
SHEET 2 OF 6
P:\PDX PROJECTS\2020\20-039 BIC Big Sandy Rancheria EW & NDE Plan\CAD\2-Sheets\Civil\C-01 Plan and Profile.dwg 3/18/2021 2:09 PM
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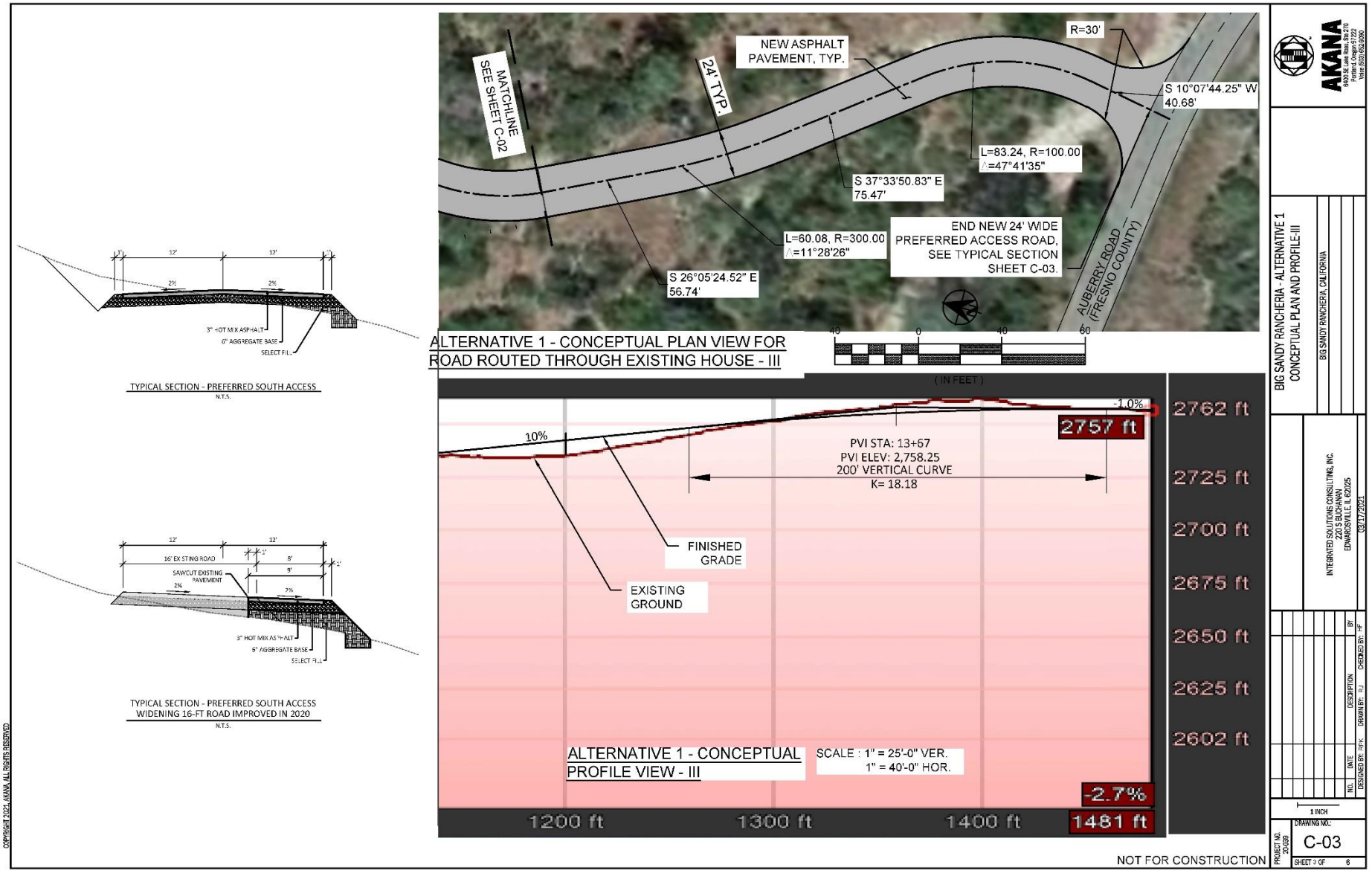
MATCHLINE SEE SHEET C-02
24' TYP.
NEW ASPHALT PAVEMENT, TYP.
R=30'
S 10°07'44.25" W 40.68'
L=83.24, R=100.00
Δ=47°41'35"
S 37°33'50.83" E 75.47'
L=60.08, R=300.00
Δ=11°28'26"
S 26°05'24.52" E 56.74'
END NEW 24' WIDE PREFERRED ACCESS ROAD, SEE TYPICAL SECTION SHEET C-03.
AUBERRY ROAD (FRESNO COUNTY)
ALTERNATIVE 1 - CONCEPTUAL PLAN VIEW FOR ROAD ROUTED THROUGH EXISTING HOUSE - III
40 0 40 80
(IN FEET)
TYPICAL SECTION - PREFERRED SOUTH ACCESS
N.T.S.
3" HOT MIX ASPHALT
6" AGGREGATE BASE
SELECT FILL
TYPICAL SECTION - PREFERRED SOUTH ACCESS WIDENING 16-FT ROAD IMPROVED IN 2020
N.T.S.
16' EX STING ROAD
SAWCUT EXISTING PAVEMENT
-1.0%
10%
2757 ft
PVI STA: 13+67
PVI ELEV: 2,758.25
200' VERTICAL CURVE
K= 18.18
FINISHED GRADE
EXISTING GROUND
ALTERNATIVE 1 - CONCEPTUAL PROFILE VIEW - III
SCALE : 1" = 25'-0" VER.
1" = 40'-0" HOR.
-2.7%
2762 ft
2725 ft
2700 ft
2675 ft
2650 ft
2625 ft
2602 ft
1200 ft
1300 ft
1400 ft
1481 ft
NOT FOR CONSTRUCTION
AKANA
BIG SANDY RANCHERIA - ALTERNATIVE 1
CONCEPTUAL PLAN AND PROFILE-III
BIG SANDY RANCHERIA, CALIFORNIA
INTEGRATED SOLUTIONS CONSULTING, INC.
2201 S BUCHANAN
EDWARDSVILLE, IL 62025
03/17/2021
DRAWING NO.: C-03
PROJECT NO. 20-039
SHEET 3 OF 6
P:\PDX PROJECTS\2020\20-039 ISC Big Sandy Rancheria EW & NDE Plan\CAD\3-Sheets\Civil\C-01 Plan and Profile.dwg 3/18/2021 2:10 PM
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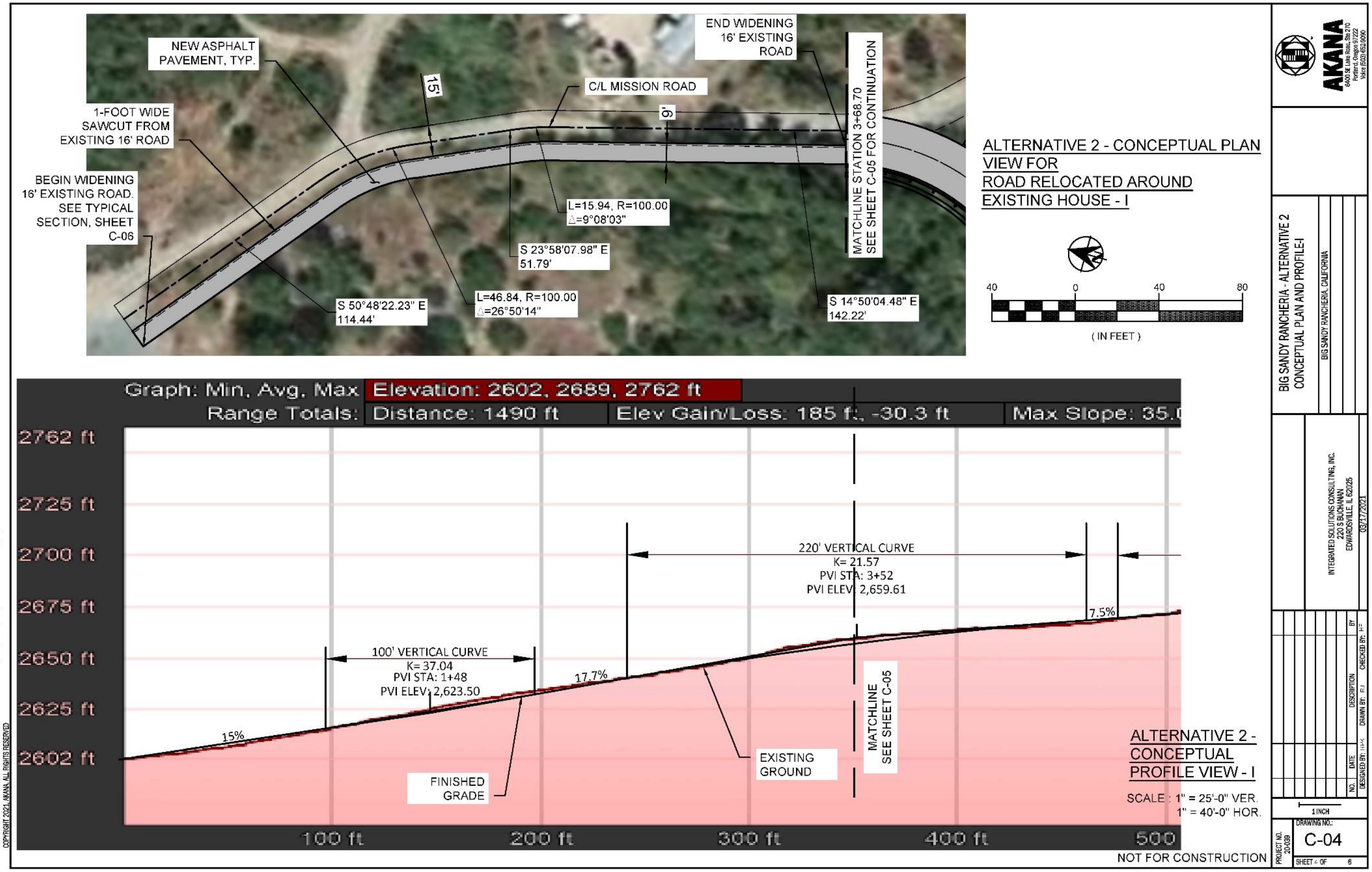
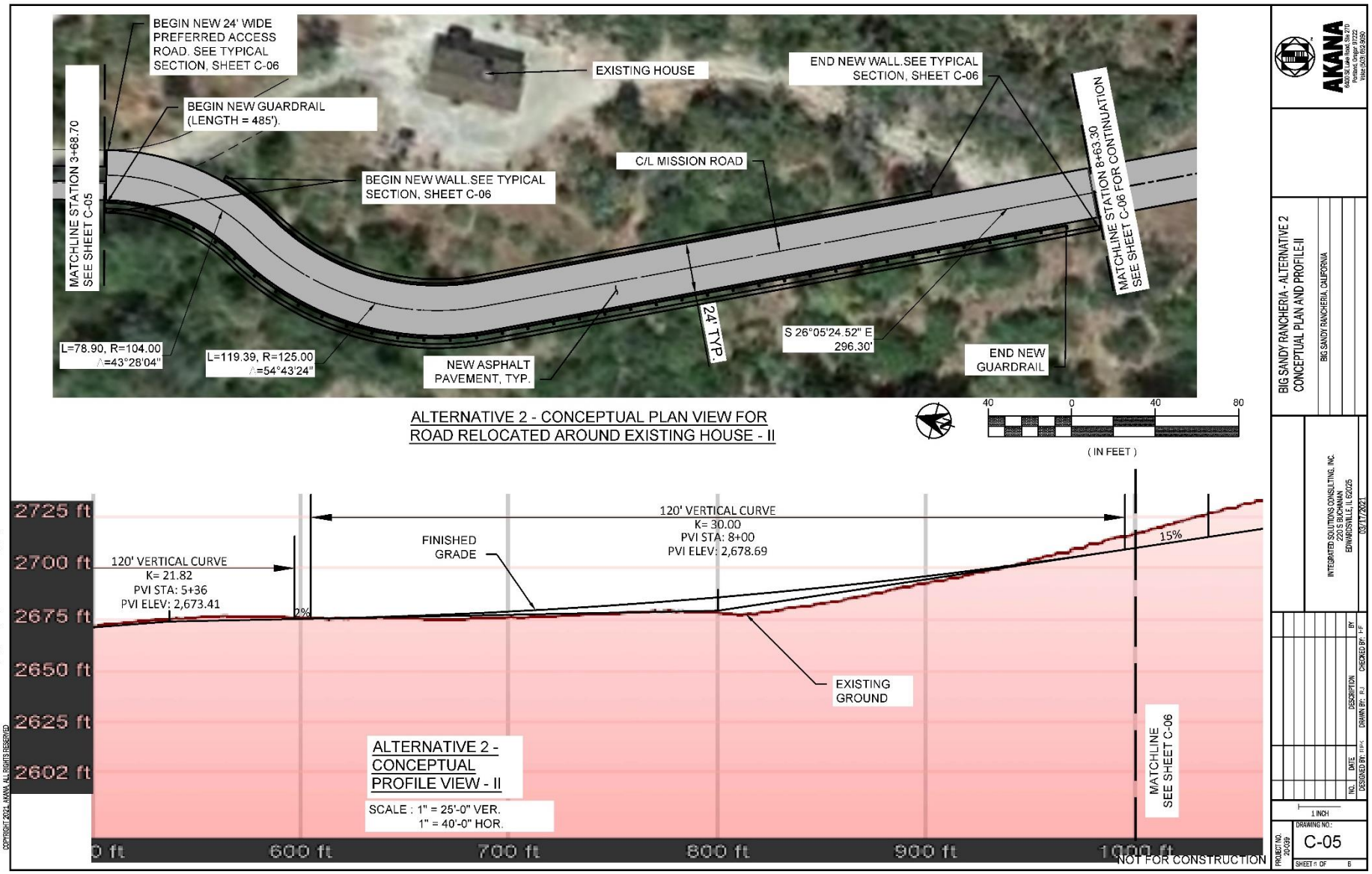

NEW ASPHALT PAVEMENT, TYP.
1-FOOT WIDE SAWCUT FROM EXISTING 16' ROAD
BEGIN WIDENING 16' EXISTING ROAD. SEE TYPICAL SECTION, SHEET C-06
END WIDENING 16' EXISTING ROAD
C/L MISSION ROAD
15'
6'
L=15.94, R=100.00 △=9°08'03"
S 23°58'07.98" E 51.79'
L=46.84, R=100.00 △=26°50'14"
S 50°48'22.23" E 114.44'
S 14°50'04.48" E 142.22'
MATCHLINE STATION 3+68.70 SEE SHEET C-05 FOR CONTINUATION
ALTERNATIVE 2 - CONCEPTUAL PLAN VIEW FOR ROAD RELOCATED AROUND EXISTING HOUSE - I
40 0 40 80
(IN FEET)
Graph: Min, Avg, Max Elevation: 2602, 2689, 2762 ft
Range Totals: Distance: 1490 ft Elev Gain/Loss: 185 ft, -30.3 ft Max Slope: 35.0
2762 ft
2725 ft
2700 ft
2675 ft
2650 ft
2625 ft
2602 ft
100' VERTICAL CURVE
K= 37.04
PVI STA: 1+48
PVI ELEV: 2,623.50
220' VERTICAL CURVE
K= 21.57
PVI STA: 3+52
PVI ELEV: 2,659.61
15%
17.7%
7.5%
FINISHED GRADE
EXISTING GROUND
MATCHLINE SEE SHEET C-05
100 ft
200 ft
300 ft
400 ft
500
ALTERNATIVE 2 - CONCEPTUAL PROFILE VIEW - I
SCALE : 1" = 25'-0" VER.
1" = 40'-0" HOR.
NOT FOR CONSTRUCTION
AKANA
BIG SANDY RANCHERIA - ALTERNATIVE 2 CONCEPTUAL PLAN AND PROFILE-I
BIG SANDY RANCHERIA, CALIFORNIA
INTEGRATED SOLUTIONS CONSULTING, INC.
03/17/2021
DRAWING NO.:
C-04
SHEET 4 OF 6


BEGIN NEW 24' WIDE PREFERRED ACCESS ROAD. SEE TYPICAL SECTION, SHEET C-06
EXISTING HOUSE
END NEW WALL.SEE TYPICAL SECTION, SHEET C-06
BEGIN NEW GUARDRAIL (LENGTH = 485').
MATCHLINE STATION 3+68.70 SEE SHEET C-05
C/L MISSION ROAD
BEGIN NEW WALL.SEE TYPICAL SECTION, SHEET C-06
MATCHLINE STATION 8+63.30 SEE SHEET C-06 FOR CONTINUATION
24' TYP.
L=78.90, R=104.00 Δ=43°28'04"
L=119.39, R=125.00 Δ=54°43'24"
NEW ASPHALT PAVEMENT, TYP.
S 26°05'24.52" E 296.30'
END NEW GUARDRAIL
ALTERNATIVE 2 - CONCEPTUAL PLAN VIEW FOR ROAD RELOCATED AROUND EXISTING HOUSE - II
40 0 40 80
(IN FEET)
2725 ft
2700 ft
2675 ft
2650 ft
2625 ft
2602 ft
120' VERTICAL CURVE K= 21.82 PVI STA: 5+36 PVI ELEV: 2,673.41
FINISHED GRADE
120' VERTICAL CURVE K= 30.00 PVI STA: 8+00 PVI ELEV: 2,678.69
2%
15%
EXISTING GROUND
ALTERNATIVE 2 - CONCEPTUAL PROFILE VIEW - II
SCALE : 1" = 25'-0" VER. 1" = 40'-0" HOR.
MATCHLINE SEE SHEET C-06
600 ft
700 ft
800 ft
900 ft
1000 ft
NOT FOR CONSTRUCTION
AKANA
BIG SANDY RANCHERIA - ALTERNATIVE 2 CONCEPTUAL PLAN AND PROFILE-II
BIG SANDY RANCHERIA, CALIFORNIA
INTEGRATED SOLUTIONS CONSULTING, INC.
220 S BUCHANAN
EDWARDSVILLE, IL 62025
03/17/2021
DESCRIPTION
DRAWN BY: RJ
CHECKED BY: HFF
DESIGNED BY: HFK
1 INCH
PROJECT NO. 20-039
DRAWING NO.: C-05
SHEET n OF 8
P:\PDX PROJECTS\2020\20-039 BSC Big Sandy Rancheria EW & NDE Plan\ADD\2 Sheets\Civil\C-03 Plan and Profile.dwg, 3/18/2021 2:13 PM
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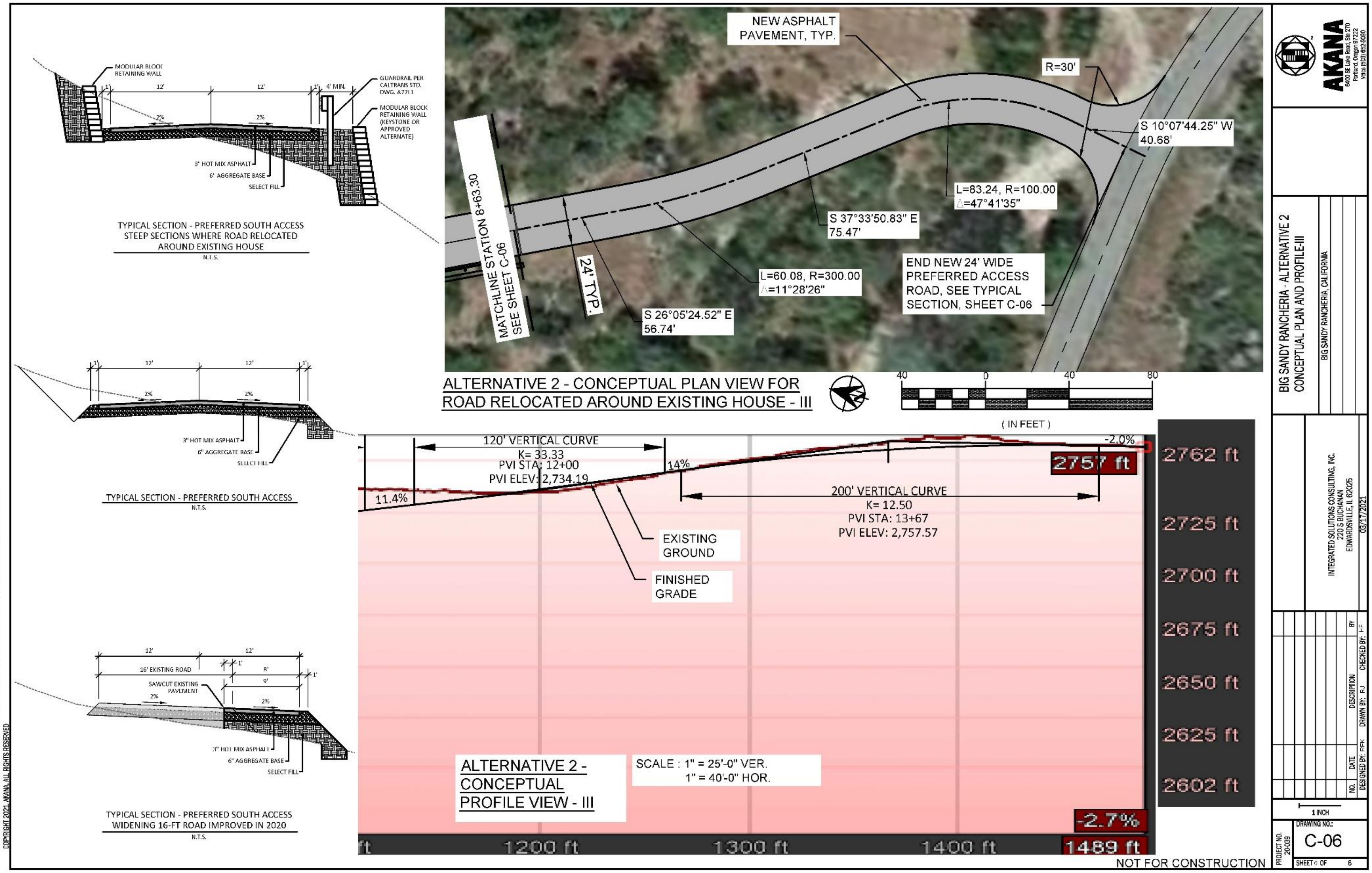
TYPICAL SECTION - PREFERRED SOUTH ACCESS
STEEP SECTIONS WHERE ROAD RELOCATED
AROUND EXISTING HOUSE
N.T.S.
TYPICAL SECTION - PREFERRED SOUTH ACCESS
N.T.S.
TYPICAL SECTION - PREFERRED SOUTH ACCESS
WIDENING 16-FT ROAD IMPROVED IN 2020
N.T.S.
NEW ASPHALT
PAVEMENT, TYP.
R=30'
S 10°07'44.25" W
40.68'
L=83.24, R=100.00
Δ=47°41'35"
S 37°33'50.83" E
75.47'
MATCHLINE STATION 8+63.30
SEE SHEET C-06
24' TYP.
L=60.08, R=300.00
Δ=11°28'26"
END NEW 24' WIDE
PREFERRED ACCESS
ROAD, SEE TYPICAL
SECTION, SHEET C-06
S 26°05'24.52" E
56.74'
ALTERNATIVE 2 - CONCEPTUAL PLAN VIEW FOR
ROAD RELOCATED AROUND EXISTING HOUSE - III
(IN FEET)
120' VERTICAL CURVE
K= 33.33
PVI STA: 12+00
PVI ELEV: 2,734.19
11.4%
14%
200' VERTICAL CURVE
K= 12.50
PVI STA: 13+67
PVI ELEV: 2,757.57
-2.0%
2757 ft
EXISTING
GROUND
FINISHED
GRADE
2762 ft
2725 ft
2700 ft
2675 ft
2650 ft
2625 ft
2602 ft
ALTERNATIVE 2 -
CONCEPTUAL
PROFILE VIEW - III
SCALE : 1" = 25'-0" VER.
1" = 40'-0" HOR.
-2.7%
1200 ft
1300 ft
1400 ft
1489 ft
NOT FOR CONSTRUCTION
AKANA
BIG SANDY RANCHERIA - ALTERNATIVE 2
CONCEPTUAL PLAN AND PROFILE-III
BIG SANDY RANCHERIA, CALIFORNIA
INTEGRATED SOLUTIONS CONSULTING, INC.
220 S BUCHANAN
EDWARDSVILLE, IL 62025
03/17/2021
DRAWING NO.:
C-06
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ii. EXHIBIT D: Budget Level Cost Estimates

BUDGET LEVEL COST ESTIMATE

PROJECT ISC Big Sandy Rancheria EW & NDE Plan — P. Knox / RJ

Preffered South Evacuation Route - Relocate House
Estimate - Alternative 1

DATE: 17-Mar-21

No.	ITEM NO.	ITEM	UNIT	UNIT PRICE	AMOUNT	TOTAL PRICE
1	999990	MOBILIZATION (ASSUMED AT 5%)	LS	$16,020.00	All Req'd	$ 16,020.00
2	390132	HOT MIX ASPHALT (TYPE A - 3 INCH THICK)	TON	$200.00	401	$ 80,200.00
3	260203	CLASS 2 AGGREGATE BASE (6 INCH THICK)	CY	$80.00	537	$ 42,960.00
4	190161	ROCK EXCAVATION	CY	$160.00	96	$ 15,360.00
5	N/A	EXTEND EXISTING CULVERT (18 INCH CPE)	LF	$50.00	36	$ 1,800.00
6	190123	ROADWAY EXCAVATION (TOPSOIL)	CY	$25.00	200	$ 5,000.00
7	190101	ROADWAY EXCAVATION	CY	$50.00	3500	$ 175,000.00
8	210010	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	$5,000.00	All Req'd	$ 5,000.00
9	733000	PRE/POST CONSTRUCTION SURVEYS	EA	$8,000.00	All Req'd	$ 8,000.00
10	N/A	ASPHALT PAVEMENT SAWCUT	LF	$10.00	500	$ 5,000.00
					Subtotal:	**$354,340.00**
					Contingency (20%)	**$70,868.00**
					Total:	**$425,208.00**

The cost estimates above have been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final cost of the project will depend upon the actual labor and material costs, competitive market conditions, construction phasing, and other variable factors. The estimate is based on material, equipment, and labor pricing as of March 2021. However, the costs will fluctuate based on worldwide conditions, recent market shortages, and energy prices.

BUDGET LEVEL COST ESTIMATE

PROJECT ISC Big Sandy Rancheria EW & NDE Plan — P. Knox / RJ

Preffered South Evacuation Route - Reroute Road Around House - Alternative 2

DATE: 17-Mar-21

No.	ITEM NO.	ITEM	UNIT	UNIT PRICE	AMOUNT	TOTAL PRICE
1	999990	MOBILIZATION (ASSUMED AT 5%)	LS	$29,000.00	All Req'd	$ 29,000.00
2	390132	HOT MIX ASPHALT (TYPE A - 3 INCH THICK)	TON	$200.00	428	$ 85,600.00
3	260203	CLASS 2 AGGREGATE BASE (6 INCH THICK)	CY	$80.00	519	$ 41,520.00
4	832005	MIDWEST GUARDRAIL SYSTEM	LF	$45.00	485	$ 21,825.00
5	832006	MIDWEST GUARDRAIL SYSTEM (STEEL POST)	LF	$40.00	485	$ 19,400.00
6	394073	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	$25.00	510	$ 12,750.00
7	839581	END ANCHOR ASSEMBLY (TYPE SFT)	EA	$1,700.00	1	$ 1,700.00
8	839584	ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA	$3,000.00	2	$ 6,000.00
9	475010	RETAINING WALL (MASONRY WALL)	SQ.FT	$35.00	4,000	$ 140,000.00
10	190161	ROCK EXCAVATION	CY	$160.00	96	$ 15,360.00
11	N/A	EXTEND EXISTING CULVERT (18 INCH CPE)	LF	$50.00	36	$ 1,800.00
12	190123	ROADWAY EXCAVATION (TOPSOIL)	CY	$25.00	560	$ 14,000.00
13	190101	ROADWAY EXCAVATION	CY	$50.00	4400	$ 220,000.00
14	210010	MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	$5,000.00	All Req'd	$ 5,000.00
15	733000	PRE/POST CONSTRUCTION SURVEYS	EA	$8,000.00	All Req'd	$ 8,000.00
16	N/A	ASPHALT PAVEMENT SAWCUT	LF	$10.00	400	$ 4,000.00

Subtotal:	**$625,955.00**
Contingency (20%)	**$125,191.00**
Total:	**$751,146.00**

The cost estimates above have been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final cost of the project will depend upon the actual labor and material costs, competitive market conditions, construction phasing, and other variable factors. The estimate is based on material, equipment, and labor pricing as of March 2021. However, the costs will fluctuate based on worldwide conditions, recent market shortages, and energy prices.

e. Proposed South Emergency Access Route to State Highway 168

While at the site, Paul Knox of Akana walked along a potential single-lane emergency access route further south to State Highway 168, making a visual assessment of the route. It is our opinion that a single-lane emergency access route can feasibly be constructed along this route. A graded single-lane roadbed already exists along this route. Earthen humps have been placed at a regular spacing to discourage vehicular access. The existing road alignment is steep, and hard rock outcroppings are located near the surface in several locations, but it appears a new gravel road could be re-established without too much difficulty. The principal challenge is likely to occur at the crossing of a seasonal stream. Very large boulders (greater than 20 feet in diameter) and mature trees are located at the current stream crossing, and it appears that relocating the stream crossing to a location upstream of its current position could minimize construction and environmental impacts. The stream falls down a granite cliff that measured more than 20 feet, so it seems unlikely that fish passage will be a significant factor in the design of the new stream crossing. An existing road, beginning as gravel and later becoming paved, continues from the stream crossing downstream to Highway 168. The existing roadway matches the highway at a sharp angle, and a similar condition will likely be needed at the intersection with Auberry Road. While it is generally desirable to have intersections match as closely to perpendicular as possible, this road would not be open to general traffic and would only be used under emergency conditions. It appears that this emergency access route is located on US Forest Service property, so an agreement will need to be reached with that agency to develop this potential access route.

f. Northern Alternative Evacuation Routes

Three routes on the northern part of the reservation are briefly considered.

i. Upper Jose Basin Road

About a quarter-mile north of where the Utilities Road intersects with Jose Basin Road, this alternative route exits west from the Utilities Road and climbs uphill for about 750 ft. before plateauing and turning to the south for about another 600' connecting with the upper part of the Jose Basin Road grade. The total length of this alternative is about a quarter-mile. If built, it could by-pass a 0.33-mile section of Jose Basin Road in an emergency. The entire route is within the boundaries of BSR owned land.

ii. Comstock Lane

This alternative route section would start about a half-mile north of the Utilities Road intersection with Jose Basin Road. It would extend the Utilities Road for about a

quarter-mile through recently acquired Tribal property. For about a half-mile after exiting the Tribal property boundary, the route would start climbing west and south through private land, wrapping around a ridge before plateauing and continuing south to connect with the existing Comstock Lane.

iii. Mountaintop Ranch Rd.

This alternative route would also extend the Utilities Road for about a quarter-mile, following the path of the Comstock Lane route through the Tribal property, but after exiting the Tribal property and turning west, it would continue westerly over private land for over half a mile through a small basin with rolling hills and mountainous terrain until connecting with the existing Mountaintop Ranch Rd.

iv. Conclusions

All of the routes considered on the Northern portion of the Reservation would incur the extra costs associated with building on mountainous terrain. The Upper Jose Basin Road route appears to be the most feasible of the northern route alternatives. It would be the least expensive to build, and the entire route is located within Tribal land.

For residents on the Reservation, the Comstock Lane alternative provides less than a 10th of a mile additional by-pass gain between the Auberry Rd./Comstock Lane and Jose Basin Rd./Utilities Rd North intersections compared to the Upper Jose Basin Road alternative, while requiring over a half-mile more of road construction over rougher terrain.

The Mountaintop Ranch Road alternative provides about twice as much by-pass area as the Upper Jose Basin Road and Comstock Lane alternatives, and if constructed, might provide an alternative evacuation route for a large number of neighboring off-reservation residents who are cut off by fire from the west and south and need to evacuate through the Reservation. Because there are more property owners involved, advance planning and coordination would be required to develop consensus and rights-of-way.

IV. PLANNING CONSIDERATIONS AND GUIDANCE

a. Transportation Resources

Every effort should be made to encourage evacuees to leave in their own vehicles if it is safe to do so. Residents without a vehicle should be encouraged to carpool, utilize Rancheria-owned/operated vehicles, private transport services (taxis, uber, etc.), or public transportation.

Fresno County Rural Transit Agency (FCRTA) provides public transit services for Big Sandy Rancheria. FCRTA has a diverse system of long-distance and local fixed routes, plus two Dial-A-Ride Americans with Disabilities Act (ADA) paratransit services.

The FCRTA vehicle fleet consists of 123 vehicles, including 29 school buses, 59 wheelchair-equipped vans, five minivans, and 31 meal delivery vans. These transportation assets are sufficient and available for evacuation purposes. Most of the units are stored and maintained at the FCRTA Maintenance and Operations Facility in the City of Selma.

FCRTA assets are not stored in a wildfire vulnerable location. Thus, there is no need to remove critical transit vehicles during a fire-related emergency. It will be the responsibility of the Tribal Council Chair, Incident Commander, or County Emergency Operations Center (EOC) Transportation Unit Leader to organize the transportation assets prior to evacuation orders being issued. In emergency situations where Big Sandy Rancheria is evacuated as subject to a regional order, the EOC Transportation Unit Leader or Incident Commander (if established) will oversee the organization of transportation assets. During independent evacuations, this responsibility will fall to the Tribal Council Chair.

The Sierra Unified School District maintains and operates 31 school buses. These assets are potentially available for evacuation purposes, the limiting factors being the time of year (schools in session) and the availability of qualified drivers. In the summer, qualified drivers may be difficult to secure. The Tribal Council Chair, Incident Commander, or EOC Transportation Unit Leader should direct all school bus requests to the Sierra Unified School District Administrative Office.

b. Evacuation Route Selection

Currently, Jose Basin Road is the sole evacuation route operation conducted independently by Big Sandy Rancheria. However, the selection of evacuation routes during regional operations will be made in the field at the Incident Command Post. The following criteria should be evaluated when selecting an evacuation route:

- The shortest paths to established shelters or safe area(s).

- The maximum number of lanes that provide continuous flow through the evacuation area.
- Roadways that are not expected to become impassable while the evacuation is in progress.
- Routes that minimize traffic crossing conflicts at intersections.
- Availability of infrastructure to disseminate real-time conditions and messages to the traveling public (e.g., media and variable message traffic boards/signs).
- The minimal number of potentially hazardous points and bottlenecks on evacuation routes such as bridges and roadways at risk for landslides.
- Maximum existing capacity.
- Ability to add capacity on a temporary basis.
- Availability of real-time traffic flow and route condition information to decision-makers and the public (e.g., from closed-circuit television cameras, traffic detectors, or spotters).

c. Traffic Control

Command and General Staff will develop a Traffic Control Plan during an incident. The Plan will identify specific actions that ensure a smooth flow from evacuation zones to the host shelter or evacuation assembly areas. The Plan will be executed in conjunction with the County Department of Transportation, Caltrans, California Highway Patrol (CHP), FCSO, and, when appropriate, local city police departments. The Plan will contain the following:

- Traffic control points and the responsible agency for providing staffing and operational control.
- Barricade plans, including location and staffing.
- Potential contra-flow operations.

In appropriate situations, the Traffic Control Plan should look at the use of non-traditional personnel such as non-essential tribal and county employees, the California National Guard, and other volunteer groups to staff barricades. Special consideration will be given to providing appropriate personal protective equipment to personnel at barricades or traffic control points.

d. Perimeter/Access Security

Once an area is evacuated, incident commanders will direct the development of a

Security Plan to prevent looting and to establish control points to limit entry into evacuated areas. Perimeter/Access Security will be executed in conjunction with FSCO, CHP, and, when appropriate, local city police departments under the advisement of tribal leadership. When possible, periodic patrols should be conducted to deter premature re-entry. To the best extent possible, the Security Plan should include measures to ensure continued fire protection. The California National Guard is an excellent resource in providing perimeter security.

e. Access and Functional Needs

California Governor's Office of Emergency Services (CalOES) designates those populations requiring additional assistance due to physical, mental, emotional, or psychological conditions as People with Access and Functional Needs (PAFN). Examples include people with limited mobility, visual impairments, carless populations, those with limited English proficiency, and those reliant on service animals, durable medical equipment, or prescription medications. The following concepts apply specifically to Access and Functional Needs (AFN) populations and evacuations:

- In an incident involving environmental quality issues, such as a hazardous materials incident, smoke, or a flood event, people with compromised immune systems or serious health issues (e.g., emphysema or asthma) may need additional assistance.
- During evacuations, the physical and mental health of some PAFN will deteriorate faster than those in the general population.

AFN populations may also:

- Have difficulty communicating with rescuers during an evacuation (e.g., hearing or speech impairment, behavioral or cognitive impairment).
- Choose not to evacuate during a disaster and then become trapped and require rescue.
- Be resistant to search and rescue personnel during an evacuation or rescue operation.
- Become separated from their caregiver or the community with which they live.
- Have durable medical equipment and/or a service animal that need to be rescued with them.

Public information statements must include information targeted towards AFN populations. For example, they may identify who to call when transportation or

evacuation assistance is needed (e.g., a specially established hotline). The Incident Action Plans (IAP) will target AFN populations and residential care/nursing facilities with door-to-door notifications wherever practical.

The IAP will also delineate the coordination of school buses, transit buses, or specialty vehicles to pick up people with access and functional needs at pre-arranged locations (e.g., group homes, nursing homes, and hospitals). Additionally, transportation resources that can be used for the transportation of access and functional need populations include, but are not limited to, the following:

- Paratransit vehicles
- Ambulances
- Portable steps and/or ramps for bus entry
- Appropriate transport vehicles are provided by non-profit community partners.

In addition to PAFN locations identified in each planning area below, the Fresno County Department of Public Health – Public Health Emergency Preparedness (PHEP) division maintains a comprehensive PAFN list that details an individual's specific access and functional need along with their contact information. Using data from the U.S. Census, the PHEP tracks the following information for the:

- The total number of individuals in the county with a disability (listed into four categories: Hearing difficulty, vision difficulty; cognitive difficulty; and ambulatory difficulty).
- Culture. The ethnicity and primary language(s) spoken at home within the county.
- Age. The age (across the life spectrum) of individuals in the county.

f. Evacuations During School

Generally, schools are used as Emergency Evacuation Centers. The typical school campus has large open areas for playgrounds or sports fields, which may be used as a safety zone.

Operating independently of the Big Sandy Rancheria leadership, Sierra Unified Schools evacuation will be coordinated by the District administration, in coordination with the County EOC and the Fresno County Superintendent of Schools. Normally, school buses will be used for this. However, these evacuations may need to be augmented by other transportation resources. If the schools are not in session, the buses will be a resource for other transportation needs (e.g., group homes, nursing homes, and hospitals).

Sierra Unified School District has detailed plans for the evacuation of school campuses. These plans provide for the use of school buses to transport students to other campuses until they can either safely be transported home or reunified with their families. Evacuation of schools will be done in coordination with District security. The District will be prepared for the arrival of parents at schools that have been either evacuated or used as a shelter for displaced students.

g. Evacuation Assembly Areas

An evacuation assembly area is a designated location, either within or outside of the evacuation area, designed to hold people safely during an emergency until they can be evacuated to a shelter or other facility. The assembly area is set aside for situations when independently evacuating may not be possible or is otherwise unsafe.

The following evacuation assembly areas have been identified as desired for use in the case of a necessitating emergency:

TABLE H: Evacuation Assembly Area Inventory

Name	Location	Primary/Secondary
Comstock Gravel Utility Site	37.09083633790529, -119.46829645024665	Primary
Topham Ranch-Auberry Airport (Historical)	37.099671, -119.5184689	Secondary
Old Auberry Mill	37.06624905604777, -119.48506879652658	Secondary
Auberry Elementary School	33367 Auberry Rd	Secondary

h. Pet Evacuation

When faced with an evacuation order, people are understandably reluctant to leave pets behind. Having a plan in place will help residents and their pets evacuate at a moment's notice. Pet owners should plan ahead to ensure their pets will not be left behind. If left during an evacuation, pets may not survive the impacts of the hazard or may not be found upon return.

Local and state health and safety rules may not allow for animals to stay in evacuation shelters. However, many are now working to provide pet sheltering services to co-locate pets and their owners at shared or nearby facilities. Pet owners should plan for their pet's needs during the time of an emergency evacuation. Some planning

considerations could include the following:

- Make a list of boarding facilities and veterinarians who shelter animals in an emergency; include 24-hour phone numbers.
- Pre-arrange to stay with family or friends who live outside of the immediate area or to evacuate to a pet-friendly motel or hotel.
- Arrange transportation for the evacuee and their pet in advance, coordinate with neighbors, family, or friends for assistance.
- Exchange pet information, evacuation plans, and house keys with trusted neighbors, friends, or family.
- Prepare copies of the pet's registration information, vaccine documents, medical records, and a schedule of the pet's feeding or health needs.
- List and tell others of the hiding places of the pets.
- Ensure quick and easy access to a pet carrier for each of the pets.
- Keep a bag of the supply items that the pet will need when evacuating.
- Leave a sign on the window to let rescuers know the resident pets have left the property.

Refer to the following resources when evacuating with pets:

- Pet-Friendly Hotels
  - http://www.pet-friendly-hotels.net/
  - http://www.pets-allowed-hotels.com/us/California/index.html
  - https://www.petfinder.com/animal-shelters-and-rescues/
- Pet Boarding Facilities
  - Red Cross shelters may have the option to board pets. Partnerships with local veterinary facilities may be available.
  - Center for Disease Control and Prevention:
  - http://www.bt.cdc.gov/disasters/petprotect.asp

i. Interagency Coordination

In most cases, an evacuation of the Rancheria will require coordination with other jurisdictions. In cases where the evacuation zone includes other jurisdictions, communication of essential information will occur through one or more of the following methods:

- Big Sandy Rancheria Tribal Council Chair to FCSO Dispatch or Fresno County Office of Emergency Services (OES) Staff Duty Officer.
- FCSO Dispatch to the other jurisdiction's public safety dispatch centers.
- Communication from the Fresno OES Staff Duty Officer to the designated Emergency Management Staff Duty Officer of the affected jurisdiction.
- Incident Command Post – Fire or Law Enforcement Liaison Officers.

V. CONCEPT OF OPERATIONS

a. Evacuation Management

i. Evacuation Management Decision Points

The decision to evacuate will be based on maximizing the preservation of life first, then protecting the environment, property, and the economy. Several factors will need to be considered, including:

- The capacity to safely move or shelter all population groups.
- The transportation system and roadway conditions.
- The expected event duration will influence the decision of whether to evacuate or shelter in place.
- Ground transportation routes will generally be the primary means of evacuation. Air evacuations may be considered on an individual basis.
- Major ground transportation corridors in the county (Auberry Rd, Powerhouse Rd, Highway 168) will be used as primary evacuation routes during an evacuation effort. While it can be expected that these corridors will remain largely intact, every effort should be taken to assure their operability.
- The weather forecast.
- The rate of spread (wildfire), level of flooding, and plume size (hazardous material).
- Fire behavior modeling.

ii. Authority to Issue Evacuations

On Big Sandy Rancheria, the Tribal Council Chair maintains the authority to issue evacuation orders for the Tribe. This will typically only take place in the circumstance of hazards posing a threat solely to BSR or when deemed necessary in the absence of other evacuation orders.

In the County, FCSO can authorize the issuance of evacuation orders. Once an event exceeds the capability of local first responders, FCSO, normally coordinating with Unified Command, has the authority and responsibility to issue and carry out necessary evacuation orders.

iii. Incident Command Posts/Emergency Operations Center

In cases where the event involves a county-wide or large-scale emergency, the County EOC will be activated. The EOC provides county-wide executive-level policy,

emergency public information, and coordination. The EOC may provide this in support of one or more Incident Command Posts (ICP) established by response agencies or in support of Operational Area cities' or special districts' EOCs. Incident Commanders are delegated legal authority to command-and-control responses in the field. The EOC does not direct response but rather coordinates and ensures that all ICPs are supported and operating in compliance with county policies. See the Fresno County Master Emergency Services Plan for more details.

iv. Alerting the Evacuation Area

Upon receiving a request from the Incident Command Post or a notification from the Fresno County EOC, FCSO's Dispatch Center will make the following notifications:

- Fresno County Director of Emergency Services
- Big Sandy Rancheria Tribal Council Chair or designee

Upon authorization from either the Big Sandy Rancheria Tribal Council Chair or Fresno County OES will post the orders or notices as follows:

- Everbridge
- Emergency Alerting System (EAS)
- Cellular phone, text messages
- Media releases
- Telephone (voice or fax)
- Email
- Assistive Technology
- Interpreters / Translators
- Satellite Information System
- Radio Amateur Civil Emergency Services (RACES)
- Direct in-person notification (door to door)
    - Consistent with CalOES guidance, law and fire field units will go door to door or use their siren function and Public Announcement (PA) systems to alert residents of evacuation orders.

v. Emergency Amateur Radio Communications

If traditional forms of communication (telephone, cell phone, and internet) become non-operational, the Fresno County RACES (Radio Amateur Civil Emergency Services) will be activated by OES. Upon notification, RACES personnel will activate

the amateur radio room at the EOC. Volunteer amateur radio operators, at the direction of OES, will be dispatched to critical facilities within the county, including Big Sandy Rancheria Tribal Headquarters.

Amateur radio operators will maintain communications with their appropriate EOCs (OES, CAL FIRE, or Sierra Unified School District) for the duration of the event.

All amateur radio operations for an emergency will be in accordance with the RACES emergency procedures manual.

vi. Situations and Assumptions

The following **situations** apply to the concepts of Public Action Notices, Evacuation Warnings, and Evacuation Orders:

- In most cases, evacuation carries the highest "life safety" priority in incident management.
- On Big Sandy Rancheria, there are a limited number of public safety resources available to facilitate an evacuation order.
- Mutual Aid resources to assist with evacuations on the Rancheria may not be readily available (1 to 2-hour response time).
- It may be necessary for the public to shelter-in-place due to a variety of situations. These cases are considered to be "protective actions." The boundary of the protective actions area may be extremely limited or may be widespread.
- Evacuations will require strategies that specifically address the challenges associated with moving PAFN.

The following **assumptions** apply to the concepts of evacuation:

- Most people at risk will evacuate when ordered to do so. Historically, public safety officials have noted that approximately 80 percent of urban dwellers will comply. Rural residents have a higher tendency to stay behind to protect property and livestock.
- Evacuees leaving voluntarily are more likely to seek shelter with friends or relatives or use hotels rather than a public shelter. Historically, shelter/welfare unit leaders estimate that only 5 percent of evacuees will require public shelter assistance.
- The proportion of the population that will evacuate typically increases as a threat becomes more obvious and serious to the public.
- Large-scale evacuations will require the issuance of public warnings and

orders. The County OES through the FCSO Dispatch Center is responsible for these notifications. A high level of coordination will be necessary to effectively communicate protective actions, evacuation corridors, and shelter information to evacuees.

- Evacuations on Big Sandy Rancheria will involve multiple jurisdictions due to the direct impacts of transportation routes, the location of safe zones or assembly areas, evacuation centers, pet/livestock shelters, and the need for mutual aid resources.
- Evacuations will likely involve a variety of buildings, including residential, commercial, daycares, retail, public, etc.
- The need to evacuate an area may occur at any time of the day or night, and the duration may be short or long-term, dependent upon the type of incident.
- The transportation system will be disrupted on both a local level and most likely on a regional level during large events.
- During a large evacuation, there may not be enough transport capacity available to move the people and pets needing to evacuate safely.
- An evacuation will require expedited coordination between all tribal and county departments, Caltrans, California Highway Patrol (CHP), and the local police departments.
- Evacuations will require substantial personnel and equipment, which could stress and/or exceed the capabilities of the tribe. Specific procedures may need to be developed regarding the pre-deployment of mutual aid personnel and equipment resources as required to manage the event/evacuation.
- The process for the selection of evacuation routes, evacuation centers, shelters, or termination of evacuations will vary based on the specific hazard, degree of vulnerability, the number of people impacted, and projected area of event impact.
- Some people will not receive the order to evacuate or understand the order if it is received.
- Some people will not have the ability and/or resources to evacuate without assistance.
- Evacuating and shelter in place populations will include individuals subject to judicial and/or administrative orders restricting their freedom of movement, such as sex offenders and parolees.

vii. Evacuation Response

Evacuation response begins when there is the awareness that an incident or event may occur or is already in progress. This includes any pre-event activities that may be undertaken prior to the onset of conditions leading up to the decision to evacuate an area (Warning Phase). It consists of the following major tasks:

- Identify areas where previous evacuations have occurred and forecast additional areas that may require large-scale evacuation in the future based on the severity of the event.
- Review the population of the areas at risk and identify facilities that may require special assistance during the evacuation (daycares, senior residences, etc.)
- Review the transportation options and corridors for public transit in the areas at risk and identify possible alternative options.
- To the best extent possible, identify individuals with special medical needs who may require assistance in evacuating and maintain contact information for those individuals.
- Initiate procedures for evacuation of pets and livestock.
- Reinforce the need to take appropriate food, clothing, medicines, and other disaster supplies during an evacuation and to include pets in the planning.
- Remind people of the importance of helping neighbors who may need assistance.
- Emphasize the importance of carpooling.
- Inform citizens of where to obtain timely information.

viii. Evacuate vs. Shelter in Place

Evacuation involves an organized and supervised effort to relocate people from an area of danger to a safe location. The decision of whether to evacuate or shelter in place must be carefully considered with the timing and nature of the incident. Initially, this decision is made at the Incident Command Post or as an event evolves at the EOC. Although evacuation is an effective means of moving people out of a dangerous area, due to its complexity and the stress it causes to systems and people, it should be conducted under great consideration.

Depending on the nature of the threat, it may be appropriate to direct citizens to shelter in place instead of evacuating. The act of sheltering in place consists of sealing off a room or building to protect occupants from external threats. Normally, sheltering in place is a short-term action needed to mitigate an immediate threat. The threat could include chemical, radiological, industrial, or weather-related threats. Key

factors for directing residents to shelter in place include:

- Is the outside environment more hazardous, or likely to be more hazardous, than the interior environment?
- Is the duration of the threat event limited to the extent that a sealed building can sustain life until the threat has abated?
- Can people be safely evacuated before the onset of hazardous conditions?

Upon directing people to shelter in place, the worst-case scenario should be considered when determining the size and scope of the affected area. When evaluating the options of sheltering in place versus evacuation, decision-makers should consider the inherent dangers of evacuation. Specific protective measures that may need to be communicated to the community include:

- Immediately move people and pets indoors.
- Close and lock all exterior doors and windows.
- Turn off all heat and air conditioning systems.
- Close chimney flues and all other openings into the structure.
- Access disaster preparedness materials (72-hour kit, cell phone, radio, etc.)
- Move to an interior room or basement (if appropriate).
- Monitor broadcasts for additional instructions.

ix. Duration

Depending on the type, size, and scope of the hazard causing the evacuation, the duration may be quite short such as several hours, or it may be extended, such as for months. For example, a wildfire burning through flashy light fuels (grass) may require the evacuation of a subdivision for only a short period of time (hours). However, the same size fire burning through heavy timber impacting a similar-sized subdivision will require a much longer evaluation period (days). In general, the heavier the damage to property and infrastructure, the longer the evacuation period.

x. Reunification

Following an evacuation scenario, accounting for all missing persons, whether alive, injured, or deceased, will require effective communication and coordination among multiple agencies and organizations, each of which may have responsibility for a different component of reunification.

The American Red Cross and other non-governmental organizations (NGOs) that traditionally provide family reunification services in disaster response in accordance

with the requirements of their charters will coordinate and work with tribal and county officials. NGOs, such as the National Center for Missing & Exploited Children (NCMEC), may provide services at the request of tribal leadership. The Tribal Council Chair and/or their designee will provide guidance on the reunification efforts to these organizations.

Priorities to consider when conducting reunification operations include:

- Evacuee access to communications to include telephone, cellular phones, and/or internet to connect with email, social media, and reunification systems.
- Seamless coordination and the ability to share information among agencies and organizations with reunification responsibilities.
- Timely and consistent public messaging to survivors and the public outside the disaster area on available reunification mechanisms.

b. Organizational Responsibilities

i. Big Sandy Rancheria Departments/Agencies

All tribal departments and agencies:

- Develop and maintain their own Standard Operating Procedures (SOP) and Continuity of Operations Plans (COOP).
- Support evacuation operations by providing personnel and/or resources as requested by the Tribal Council Chair.
- Maintain expenditure records to facilitate reimbursement.

ii. Big Sandy Rancheria Tribal Council Chair

- Serve as the Tribal Incident Commander and work with the Tribal Council and Department Directors during an emergency.
- Work to effectively manage emergency expenditures and maximize emergency and disaster cost recovery.
- Provide reports on the condition and status of all tribal facilities within any established evacuation zone.
- Assist in staffing the EOC.

iii. Big Sandy Rancheria Assistant Tribal Administrator/Environmental Director

- Coordinate the development and update of this Annex.
- Coordinate the activation of the EOC in support of any evacuation.

- Ensure continued coordination through the incident, particularly with outside agencies, including county, state, and/or federal resources.
- Coordinate the development of any repopulation plan developed at the EOC.
- Coordinate the inspection of structures within the evacuation zone after the event has been stabilized.

iv. Incident Command

Depending upon the type of incident impacting the Tribe, subject matter experts (flood, fire, hazardous materials) will work with emergency managers (Law, Fire, and OES) in Unified Command of the incident. Typically, during the initial phase of the event, evacuation activities will be managed and directed from the Incident Command Post. Once an EOC (either tribal or county) is sufficiently staffed, certain activities may be delegated to the EOC as appropriate. Responsibilities of the Incident Command (or Unified Command) are:

- When practical, provide recommendations to the Tribal Council Chair and FCSO regarding the need for evacuation.
- Define the evacuation or shelter in place area. This effort will usually be led by the lead agency responsible for managing the event.
- Through the Public Information Officer (PIO) coordinate the development and delivery of emergency protective action notice(s) to the County OES and FCSO Dispatch to ensure effective communications of evacuation procedures or needed actions by the public.
- Determine any other recommended protective actions.
- Identify any recommended transportation routes/corridors for evacuees and emergency response personnel.
- Determine mass transit resources or other modes of transportation (air, off-road vehicles) as appropriate to the incident.
- Initiate field warning operations (door-to-door, public address systems, etc.)
- Identify staging areas for evacuation-related resources.
- Track assigned and unassigned resources supporting evacuation operations.
- Initiate AFN population-specific needs and special considerations.

v. Fresno County Sheriff-Coroner's Office

- Manage evacuation operations, including defining the course of action, recommended protective actions, parameters of evacuation zones, transportation routes, and field warning operations (door-to-door, public address systems, etc.)
- Provide crowd and traffic control, site, and perimeter security.
- Investigate crime scenes and collect evidence.
- Assist in the development of traffic plans and management of evacuation routes.
- Provide Command Staff level participation in the EOC.
- Through FCSO Dispatch, facilitate notification of and communication between the incident command post and neighboring jurisdictions (cities and counties) that may be within an evacuation zone defined as determined by the incident commander.

vi. CalFire Fresno-Kings Unit

- Assist FCSO in managing evacuation operations, including defining the course of action, recommended protective actions, parameters of evacuation zones, transportation routes, field warning operations (door-to-door, public address systems, etc.)
- Provide subject matter expertise for all hazards on which fire is the lead agency.
- Provide Command Staff level participation in the EOC.
- Through FCSO Dispatch Office, facilitate notification of and communication between the incident command post and neighboring jurisdictions who may be within an evacuation zone as determined by the Incident Commander.

vii. Fresno County Department of Transportation, Caltrans, California Highway Patrol

Depending on the location, size, and transportation system impacts, these three agencies, supported by local law enforcement, will coordinate with the EOC in the following manner:

- Identify evacuation routes and adjust routes to changing conditions.
- Develop transportation plans for evacuees, which include the

feasibility of using transportation modes such as air, water, rail, road, and public transportation.

- Develop, implement, and continually adjust traffic plans to ensure that evacuation routes are kept clear.
- Monitor traffic congestion.
- Assist with traffic plans by providing barricades and/or personnel to assist at traffic control points.

viii. Fresno County Public Health – Public Health Emergency Preparedness (PHEP) Division

- Coordinate with the American Red Cross for the activation of care and shelter facilities.
- Provide subject matter expertise for events where a health emergency may necessitate quarantine or an evacuation of an area.
- Provide guidance and technical assistance regarding medical facilities, long-term care facilities, adult day facilities, and healthcare agencies for planning and carrying out emergency evacuation and relocation of medically dependent persons.
- Coordinate transportation arrangements for individuals under care who will require special transportation needs when evacuating.
- Identify AFN population-specific needs and special considerations prior to, during, and after an evacuation.
- Ensure that human and pet evacuation resources, and shelter resources, if needed, have been identified and activated.
- Recognize that evacuation and transport of pets will require significant logistical support.
- Work with the PIO to include messaging reminding evacuees not to leave pets behind
- Assess family reunification needs and coordinate effort.

ix. Fresno County Rural Transportation Authority

- Provide mass transportation for movement of evacuees to designated public shelters, evacuation assembly areas, or other safe areas as requested.
- Coordinate and notify the EOC of the resources used, destination, and

the number of people transported.

- Assist in the development of traffic plans to ensure the continuation of mass transit outside the evacuation zone.

x. Sierra Unified School District

- Coordinate the resources of the school district, including buses, vans, and facilities.
- Notify the EOC of the resources used, destination, number of people transported, and the number of people in shelter/welfare.

xi. American Red Cross

- Coordinate with the Health and Human Services Agency and Indian Health Service for the activation of care and shelter facilities.
- Ensure shelter resources have been identified and activated.

c. Post-Evacuation

i. Repopulation

As soon as possible after an evacuation, a Repopulation Plan should be developed. The pressure on local politicians and command staff to allow re-entry will be significant. In most events, the Repopulation Plan will be developed at the EOC in coordination with tribal administration and subject matter experts.

ii. Repopulation Task Force

Large emergency events causing significant and widespread damage to Big Sandy Rancheria may result in the need for the EOC to establish a Repopulation Task Force. The Task Force will be responsible for the development and implementation of procedures for managing the re-entry of business owners and residents who have a legitimate need to reenter the evacuated area.

This Task Force will:

- Coordinate with tribal administration and the EOC command staff to develop criteria to determine who can enter the evacuation zone, under what circumstances, and when.
- Establish a centralized point for fielding requests from businesses and residents who may indeed have a valid reason to enter the evacuation zone prior to the order being lifted.

iii. Authorization

In most cases, the authorization for re-entry will be made by FCSO in consultation with the EOC staff and Tribal Administration.

iv. Considerations for Allowing Repopulation

The following considerations should be assessed before repopulation can take place, including:

- Have safety and security concerns been addressed?
- Have the necessary inspections taken place? (Assistant Tribal Administrator/Environmental Director)
- Have hazardous material concerns been mitigated?
- Is there a security plan for repopulation?
- Have essential services been reestablished?
- Are there resources available for managing repopulation?
- Have repopulation routes been identified?
- Has appropriate messaging been developed for release?
- Is there transportation for those who were evacuated, including pets?
- Have arrangements been made for PAFN, including companion animals?
- Has the Tribal Council been notified of the Repopulation Plan?

Once it has been determined that it is safe for re-entry and a plan has been implemented, evacuees may return. Some evacuees will return to their homes; others may attempt to return to the impacted area, but their homes may have been significantly damaged or destroyed. Sheltering may still be required for those who are unable to occupy their homes.

v. Recovery

Recovery, different than repopulation, includes short-term and long-term efforts to rebuild and revitalize areas affected by a disaster. For the purposes of this Plan, recovery includes the following tasks:

- Support communication systems and processes that assist in the reunification of families.
- Carry out appropriate public information activities.

- Coordinate temporary housing for those who cannot return to their homes.
- Coordinate assistance for those with access and functional needs in returning to a safe housing situation.
- Initiate recovery activities for evacuees who have suffered a loss of or damage to their homes or businesses as outlined in the Fresno County Recovery Plan.
- Consolidate paperwork for the post-incident after-action review and possible state and federal reimbursement.

VI. AFTER ACTION AND IMPROVEMENT PLANNING

The After-Action Review (AAR) process is an evaluation of the Tribe's incident management response and recovery efforts to a major emergency/disaster. It should occur after every full activation of the Plan. The output of the review is a report of findings detailing how the incident could have been handled better. Specific to this Plan, the following evaluations should include:

- The use and effectiveness of transportation and route selection between the evacuation zone and shelter(s).
- Assessment of public compliance with issued protective action notices.
- The coordination between transportation resources and the Tribe to safely evacuate residents.
- Appropriate assignment of responsibilities.
- The effectiveness of collaborating with neighboring jurisdictions, schools, and businesses.
- The ability to ensure that the Tribe's AFN populations were effectively handled.

Several activities associated with reducing the need for evacuations and managing the evacuation process can take place in the normal daily operations of tribal government. These include the following:

- Develop community evacuation routes and plans in new development projects.
- Where possible, undertake mitigation for known hazards that have in the past led to an evacuation. Examples include fuel reduction projects, controlled burns, and flood control projects.
- Coordinate Big Sandy Rancheria's evacuation plans and policies with the local county, regional, state, and federal agencies to ensure effective execution of evacuations.
- Review and test department-level workplace evacuation plans, employee emergency contact information, and Standard Operating Procedures (SOPs) and Continuity of Operations Plans (COOPs).
- Enhance the Tribe's Emergency Alerting System (EAS) to increase warning times and reduce the need for hasty evacuations.
- Discourage development, particularly residential construction, in potential high-risk areas, including floodplains, areas downstream from suspect

dams and dikes, and areas adjacent to facilities that make, use, or store hazardous materials.

- Adopt the most current Building and Fire Codes in order to minimize losses when a disaster strike.
- To the best extent possible, identify individuals with special needs who would require assistance in evacuating and maintain contact information for those individuals.
- Identify and preplan with transportation providers and develop Memorandums of Understanding (MOUs) with the Sierra Unified School District and the Fresno County Rural Transit Authority for the use of buses and vans.
- Include evacuations in the scenario of periodic emergency drills and exercises.
- Conduct public information programs to increase citizen awareness of possible reasons for evacuation, preplanned evacuation routes, availability of transportation options. Emphasize the need to take appropriate food, clothing, and other disaster supplies during an evacuation. Encourage neighbors to help neighbors who may need assistance during an evacuation.
- The BSREVAC Core Planning Group should reconvene annually to ensure continuation and support of the recommendations listed in the Hazard Mitigation Plan and ongoing support of public safety providers.
- Continue to educate the public on fire safety preparedness and the procedures to be followed during an evacuation.

VII. PLAN IMPLEMENTATION AND MAINTENANCE

As outlined in the Organizational Responsibilities section, the Plan will be maintained by Big Sandy Rancheria and reviewed by the Assistant Tribal Administrator/Environmental Director annually. As needed, the Assistant Tribal Administrator will facilitate changes to the Plan, coordinating and communicating this work with the core planning team.

Training on the BSREVAC should occur annually as either a new orientation or refresher training to all tribal staff that may be expected to participate in an emergency response. A record of this training should be retained in employee records and with OES.

An annual exercise should be conducted to maintain the ability to execute the Plan. The Assistant Tribal Administrator/Environmental Director will facilitate the design, execution, and evaluation of these exercises. The exercises may take the form of a tabletop, functional, or full-scale exercise, although a functional exercise will occur at least every three years.

Each year, the Assistant Tribal Administrator/Environmental Director will prepare an annual report of the emergency management program's accomplishments, needs, and improvement planning, presenting this report to the Tribal Council.

VIII. APPENDICES

a. Acronyms

Acronym	Definition
AAR	After Action Review
ADA	Americans with Disabilities Act
AFN	Access and Functional Needs
BSR	Big Sandy Rancheria Band of Western Mono Indians
BSREVAC	Extreme Weather and Natural Disaster Evacuation Plan
CAL FIRE	California Department of Forestry and Fire Protection
CHP	California Highway Patrol
COOP	Continuity of Operations Plan
CWPP	Community Wildfire Protection Plan
EAS	Emergency Alert System
EMP	Emergency Management Program
EOC	Emergency Operations Center
FCOG	Fresno Council of Governments
FCRTA	Fresno County Rural Transit Agency
FCSO	Fresno County Sheriff-Coroner's Office
IAP	Incident Action Plan
ICP	Incident Command Post
ICS	Incident Command System
NIMS	National Incident Management System
OES	Fresno County Office of Emergency Services
PHEP	Public Health Emergency Preparedness
PIO	Public Information Office
RACES	Radio Amateur Civil Emergency Services
ROW	Right of Way
SEMS	Standardized Emergency Management System
SOP	Standard Operating Procedure

b. Evacuation Notice Template

Proclamation of Order to Evacuate

Recent events including **(insert hazard)** have resulted in **(insert vulnerability)** affecting the following areas: **(insert sections of the rancheria)**. The effects of **(insert hazard)** are **(insert risks)**. **(Insert further situational-descriptive information)**.

Under California Government Code 8557, elected officials of political subdivisions to include any city, city and county, county, district, or other local governmental agency or public agency authorized by law, may invoke California Penal Code 409.5 and "close the area where the menace exists for the duration thereof." "Any unauthorized person who willfully and knowingly enters an area closed… or… who willfully remains within the area after receiving notice to evacuate or leave shall be guilty of a misdemeanor."

It is hereby proclaimed the EVACUATION of **(all / part of)** Big Sandy Rancheria is necessary and expedient for the health, safety, welfare, and good order to protect the public peace, preserve lives and property, and economic stability.

NOW, THEREFORE, Big Sandy Rancheria issues this Order to Evacuate for the following area(s):

(Insert N, E, S, & W boundaries / Areas directly abutting XXXX / Physical boundary description / Areas apparent to be impacted by the hazard); and

Be it further Ordered that the Big Sandy Rancheria Tribal Council be notified by the filing of the written declaration with the Tribal Administrator on the first regular business day following the declaration, and the Tribal Administrator shall present the written proclamation to the Big Sandy Rancheria Tribal Council for ratification at its first meeting following such a declaration.

Set forth this day, the __st/th of ____, 202**X**.

_____

(Insert Name)

c. California Authorities for Local Evacuation

California Constitution Article XI, § 2(a).

California Constitution Article XI, § 4(a).

California Constitution Article XI, § 7.

California Government Code § 8557

California Government Code § 8570

California Government Code § 8589.5

California Government Code § 8600

California Government Code § 8625

California Government Code § 8670.3

California Government Code § 41601.

California Government Code § 41611

California Health & Safety Code § 114685

California Penal Code § 409.5

California Penal Code § 409.6

California Emergency Services Act [§ 8550 - 8669.7]

California Emergency Management Agency, *State of California Emergency Plan*

DeAryan v. Butler (1953) 119 Cal. App. 2d 674

DeVita v. County of Napa (1995) 9 Cal. 4th 763

d. Evacuation Checklist

EVACUATION CHECKLIST

If evacuation is anticipated and time allows, follow this checklist to give your family and home the best chance of survival. Complete the Family Communication Plan on the opposite side for each family member and keep in your wildfire and emergency "Go Kit(s)."

EVACUATION NOTIFICATIONS & INFORMATION *Register for Everbridge to receive evacuation and fire information notices!*

EVERBRIDGE www.everbridge.org
Used by **Fresno County** when **emergency action** is needed at a **specific address**: wildfires, imminent flooding, evacuations, or other public safety incidents where lives may be at risk; critical information about evacuation routes, hazards, and shelters. *Online registration required!*

SOCIAL MEDIA, RADIO, TV
Used to provide less critical and low level frequent **updates** intended for larger populations: traffic updates, road closures, incident updates, and contact information; safety announcement, power outages, minor issues; disaster recovery resources.

EVACUATION ORDER: Leave now! Evacuate immediately. Do not delay to gather valuables or prepare your home. Follow any directions given in the evacuation order.

EVACUATION WARNING: Evacuate as soon as possible. A short delay to gather your *Go Kit* and prepare your home may be OK. Leave if you feel unsafe or conditions change.

SHELTER IN PLACE: Stay in your current location or the safest nearby building or unburnable area. May be required when evacuation is impossible, too dangerous, or unnecessary.

ALWAYS:

COMMUNICATIONS

- ☐ Keep your cell phone fully charged.
- ☐ Notify an out-of-area contact of your phone number, location and status. Update regularly.
- ☐ Leave a note with your contact info and out-of-area contact taped to fridge or inside a front window.
- ☐ Check on or call neighbors to alert them to prepare at first sign of fire.

ON YOUR PERSON

- ☐ Dress all family members in long sleeves and long pants; heavy cotton or wool is best, no matter how hot it is.
- ☐ Wear full coverage goggles, leather gloves, head protection.
- ☐ Cover faces with a dry cotton or wool bandanna or scarf over an N95 respirator. Tie long hair back.
- ☐ Carry a headlamp *and* flashlight (even during the day).
- ☐ Carry car keys, wallet, ID, cell phone, and spare battery.
- ☐ Drink plenty of water, stay hydrated.
- ☐ Put "Go Kits" *(reverse)* in your vehicle.

PETS & ANIMALS

- ☐ Locate your pets and place in carriers NOW. You won't be able to catch them when the fire approaches.
- ☐ Be sure your pets wear tags and are registered with microchips.
- ☐ Place carriers (with your pets in them) near the front door, with fresh water and extra food.
- ☐ Prepare horses and large animals for transport and consider moving them to a safe location early, before evacuation is ordered.

IF TIME ALLOWS:

INSIDE THE HOUSE

- ☐ Shut all windows and doors (interior too) and leave them *unlocked*.
- ☐ Remove combustible window shades and curtains; close metal shutters.
- ☐ Move furniture to the center of the room, away from windows.
- ☐ Leave indoor and outdoor lights on.
- ☐ Shut off HVAC and ceiling fans.

OUTSIDE & IN NEIGHBORHOOD

- ☐ Place combustible outdoor items (patio furniture, toys, doormats, trash cans, etc.) in garage or 30' from structures (optional: place in a pool).
- ☐ Shut off gas at the meter or propane tank; move small tanks at least 15' away from combustibles.
- ☐ Connect garden hoses with squeeze-grip nozzles to outdoor spigots for use by firefighters.
- ☐ Fill water buckets and place around outside of house, especially near decks and fences.
- ☐ Clean your gutters and blow leaves away from house.
- ☐ Back your car into driveway, loaded, with doors and windows closed.
- ☐ Prop open fence and side gates.
- ☐ Place ladder(s) at the corner(s) of structures for firefighters.
- ☐ Seal attic and ground vents with pre-cut plywood or metal covers (even duct tape will protect from ember entry) if time allows.
- ☐ Patrol your property and monitor conditions. Leave if spot fires ignite or conditions change.

WHEN YOU LEAVE:

- ☐ Leave immediately if ordered.
- ☐ Don't wait for an evacuation order if you feel unsafe or conditions change; leave early if unsure.
- ☐ Assist elderly or disabled neighbors.
- ☐ Carpool with neighbors to reduce traffic.
- ☐ Take only essential vehicles with adequate fuel.
- ☐ In your car, turn on headlights, close windows, turn on inside air and AC, tune to local radio.
- ☐ Drive slowly and defensively; be observant.
- ☐ The best evacuation route is usually the one you know best. Take the fastest *paved* route to a valley floor, away from the fire if possible.
- ☐ Proceed downhill, away from the fire if possible. Know at least two routes.
- ☐ If roads are impassable or you are trapped: take shelter in a building, car, or an open area; park in an *outside turn* if trapped on a hillside; stay far from vegetation; look for wide roads, parking lots, playing fields, etc.
- ☐ If trapped, you are better protected inside a building or vehicle.
- ☐ Don't abandon your car in the road if passage is impossible. If you must leave your car, park it off the road and consider other options for shelter.
- ☐ Evacuate on foot *only as a last resort.*
- ☐ Don't evacuate by fire road, uphill, or into open-space areas with unburned vegetation.
- ☐ Remain calm - panic is deadly.

BIG SANDY RANCHERIA

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Your Family's Name

Family Emergency Communications Plan

HOUSEHOLD INFORMATION

ADDRESS .....
.....
PHONE .....
EMAIL .....

NAME .....
MOBILE .....
EMAIL .....
OTHER # or SOCIAL MEDIA .....

NAME .....
MOBILE .....
EMAIL .....
OTHER # or SOCIAL MEDIA .....

NAME .....
MOBILE .....
EMAIL .....
OTHER # or SOCIAL MEDIA .....

NAME .....
MOBILE .....
EMAIL .....
OTHER # or SOCIAL MEDIA .....

NAME .....
MOBILE .....
EMAIL .....
OTHER # or SOCIAL MEDIA .....

SCHOOL, CHILDCARE, CAREGIVER, WORKPLACE

NAME .....
ADDRESS .....
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PHONE .....
EMAIL .....
WEB .....
EMERGENCY PLAN/PICKUP .....
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NAME .....
ADDRESS .....
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PHONE .....
EMAIL .....
WEB .....
EMERGENCY PLAN/PICKUP .....
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NAME .....
ADDRESS .....
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PHONE .....
EMAIL .....
WEB .....
EMERGENCY PLAN/PICKUP .....
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LOCAL CONTACTS

NAME .....
ADDRESS .....
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PHONE .....
EMAIL .....

NAME .....
ADDRESS .....
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PHONE .....
EMAIL .....

OUT-OF-AREA CONTACTS

NAME .....
ADDRESS .....
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PHONE .....
EMAIL .....

NAME .....
ADDRESS .....
.....
PHONE .....
EMAIL .....

EMERGENCY MEETING LOCATIONS

LOCATION 1 .....
INSTRUCTIONS .....
.....
LOCATION 2 .....
INSTRUCTIONS .....
.....
LOCATION 3 .....
INSTRUCTIONS .....
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IMPORTANT NUMBERS & INFORMATION

FIRE & MEDICAL EMERGENCIES IN BSR 911 or 559-885-2777
POLICE, SHERIFF EMERGENCIES IN BSR 911 or 559-600-3111
POISON CONTROL IN FRESNO or CA 800-222-1222

PHYSICIAN .....
PEDIATRICIAN .....
VETERINARIAN .....

INSURANCE

HOMEOWNER/RENTER POLICY .....
.....
AUTO POLICY .....
MEDICAL POLICY 1 .....
MEDICAL POLICY 2 .....

WILDFIRE & EMERGENCY "GO KIT"

Put together an emergency supply kit in advance for each family member and keep it easily accessible. Plan to be away from your home for an extended period of time. Each person should have their own Go Kit. Store kits in backpacks.

- ☐ Bandana, N95 respirator, goggles, leather gloves, long shirt and pants (cotton or wool), boots, hat
- ☐ Flashlight and headlamp with spare batteries
- ☐ Extra car keys, credit cards, cash
- ☐ Map marked with two evacuation routes (if possible)
- ☐ Prescription medications
- ☐ Extra eyeglasses or contact lenses
- ☐ First aid kit
- ☐ Battery-powered radio and extra batteries
- ☐ Copies of important docs (birth certificates, passports, insurance policies, etc.)
- ☐ Pet food and water, leashes, pet supplies and medications
- ☐ Water bottles and food
- ☐ Sanitation supplies
- ☐ Change of clothing
- ☐ Spare chargers for cell phones, laptops, etc.

Items to take *only if time allows*:

- ☐ Easily carried valuables
- ☐ Family photos, small heirlooms, and other irreplaceable items
- ☐ Personal computer data and digital information backups on hard drives and/or disks