Addendum Number 1

Date:	08/03/2023
Project:	Interpretive Center Project
Owner:	Trinidad Rancheria

This addendum provides changes and/or clarifications, to the Contract Documents. These modifications pertain to the sections referenced below and to all other referenced or applicable sections in the Contract Documents.

Please sign the addendum receipt acknowledgment form and return to the Owner with your cost proposal and other required forms and documents.

Changes and/or clarifications to the contract documents are as follows:

1. What are the permits required, and what is the status of permitting?

The project will require both a Coastal Development Permit and a Building permit from the City of Trinidad. No work on the project can start until all permits are obtained by the Trinidad Rancheria. Permitting may take several months to complete. Permit conditions that effect work will need to be resolved by contract change order at a later date.

2. Is equipment and fixtures shown on the project plans to be included in the project bid?

Yes: Items are to be included in Bid Items 36 - Kitchen Equipment, and 37 – Fixtures. See also descriptions in Bid Section 011000 and equipment schedule on Plan Sheet A3.

3. What is the federal wage type determination for this project?

Building (Commercial)

4. Is a soils report available for this project?

Yes – See attached

5. Will the Security System be a part of this bid?

No – Security company will be contracted directly from the Trinidad Rancheria. Contractor shall coordinate with the security company for installation of security system and equipment.

Addendum Receipt Acknowledgement Form
Receipt of Acknowledgement:
My firm received Addendum No, consisting of pages, for the
Project on, 20
Name of Firm
Name (Signature)
Date:

END OF SECTION 009100



R2 Soils Report

For

TRINIDAD PIER INTERPRETIVE CENTER
1 BAY STREET
TRINIDAD, CALIFORNIA
APN: 042-071-012

Report Provided For:
TRINIDAD RANCHERIA TRANSPORATION DEPARTMENT
Post Office Box 630
Trinidad CA 95570

Report Provided By:

Trinity Valley Consulting Engineers, Inc. 67 Walnut Way / Post Office Box 1567 Willow Creek, California 95573 (530) 629-3000 Fax: (530) 629-3011



Project Number: 427.11

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- 1. Location Map
- 2. Assessor Parcel Map/Humboldt County GIS Map & Data
- 3. Taber Consultants Trinidad Pier Replacement B-4 Boring Log
- 4. 2013 California Building Code Table 1806.2
- 5. USGS Seismic Hazard Data

Introduction:

Trinity Valley Consulting Engineers, Inc. (TVCE) was secured by the Trinidad Rancheria Transportation Department to evaluate the potential for a new structure that will accommodate the Trinidad Pier Interpretative Center. The center will contain an interpretative viewing area, bait shop, and associated administrative offices at 1 Bay Street, Trinidad, California. The following is an outline of our findings and recommendations.

Project Site Location:

The project site is a portion of Section 26, of Township 8 North, Range 1 East of H.B. & M in the city of Trinidad, in the County of Humboldt, State of California (see Attachment 1 for a Location Map). The Assessor Parcel Number (APN) for the property is 042-071-012. (see Attachment 2 for Assessor Map).

The parcel centroid is Latitude N 40.0554° (41°03'19.44"N) and Longitude W – 124.147° (124°08'49.20"W). The approximate site elevation is twenty three feet (23') above mean sea level according to Google Earth.

Project Site Conditions:

The subject property is currently occupied by the Trinidad Pier and associated facilities. Improvements include a new structure with exterior deck and an accessible ADA path to the pier area. Water services will be provided by City of Trinidad. Electric services will be provided by PG&E. Propane gas will be provided by Campora or Amerigas.

The adjoining features are the Trinidad Pier, Seascape Restaurant, Public Restrooms, Historic Lighthouse, and Trinidad State Beach.

Proposed Project:

The proposed project for this site is the construction of a new interpretative center that will accommodate a bait shop and administrative offices.

Grading for this site will be minimal and consist of excavation for the structure foundation. Total anticipated excavation will not exceed three feet in depth.

Site Soil Conditions:

Site Soil Conditions were interpolated from test boring logs generated by Taber Consultants for the Trinidad Pier Replacement project. The purpose of the investigation that occurred on July 2007 was to determine subsurface conditions subjacent of the former pier structure.

Information from the B-4 boring log closest to shore and approximately less than 100-feet from the proposed structure will be utilized for determining site soil conditions.

Recent marine deposits that mantle (~7 ft in thickness) Cretaceous/Jurassic-age Franciscan Formation (weathered decomposed mudstone, shale, and sandstone) were discovered during the investigation. This thin veneer of marine sediments are comprised of loose to compact gray sand with shell fragments and gravel-sized fragments derived from the adjacent Trinidad Head and Little Head. Subjacent to the sandy materials are very soft gray and green clay, potentially a decomposed product of the underlying claystone and shale.

Site Soil Evaluation:

Site soils by conservative evaluation, will yield a bearing pressure of two thousand (2,000) psf for vertical bearing and one hundred and fifty (150) psf for lateral bearing

for the buildable areas (2019 California Building Code, Table 1806.2, see Attachment 4).

Total settlement is anticipated to be less than one inch (1"), and anticipated differential settlement will be less than three-quarters (¾) inch.

Seismic Considerations:

The project site is situated within a seismically active area, adjacent to several seismic sources capable of generating moderate to strong ground motions. As a result of being close to significant active faults (Trinidad fault to east of the site, the Mad River fault zone to the southeast, and Cascadia subduction zone offshore to the west), and several other faults both on- and off-shore, the project site is expected to experience strong ground-motion in the event a nearby earthquake during the design life of the structure.

The project site lies within one (1) mile of the active trace of the Trinidad Fault, which is a Type A fault. The project site does <u>not</u> lie within an Alquist-Priolo zone.

The project site is located in an area rated with moderate Instability, for seismic safety according to the County of Humboldt Web GIS mapping.

The following coefficients shall be used for seismic design:

Site Class	D
Mapped Spectral Response	2.384 g
Acceleration (short), S _S :	
Mapped Spectral Response	0.989 g
Acceleration (1-sec), S ₁ :	
Site Coefficient, Fa:	1.0
Site Coefficient, Fv:	1.3
Acceleration Spectral	1.589 g
Response (short), S _{DS} :	

Acceleration Spectral Response (1-sec), S _{D1} :	0.857 g
Seismic Design Category:	D
Occupancy Category:	II
Importance Factor:	1.0

Due to the site soils, depth to groundwater, and distance to the nearest known quaternary fault, the potential for surface rupture, liquefaction, soil strength loss and faulting at this site is <u>Low</u>.

Tsunami Considerations:

The project site has been mapped by the State of California as coordinated by Cal EMA to be within a Tsunami Hazard zone. It is typically understood by residents and developers with in these zones accept the risk of a tsunami event. Construction design should, where feasible, allow for the ground floor walls to be able to "blown out" in case of a tsunami to increase the survivability of the proposed structure.

Flood Considerations:

The project and vicinities have not been mapped by FEMA (FIRM Panel Unmapped_060436). However, the project site is located within the vicinity of Trinidad Bay and has a history of minor flooding, primarily associated with winter storms with strong onshore winds, heavy precipitation and high tides.

Conclusion:

No subsurface or seismic conditions were encountered which would prohibit the construction of the proposed single-story structure.

Recommendations:

Site Preparation:

Notify Underground Service Alert (1-800-227-2600) prior to any ground disturbing activities.

Strip and remove all topsoil and vegetation from the project area and for a minimum of three (3) feet to the outside of the proposed building footprint.

Scarify and compact the upper six (6) inches of soils for all areas to receive structural fills or other improvements

Foundation:

Foundations shall be either a raised perimeter, slab on grade, or isolated pier foundation, and shall be designed to provide bracing for all vertical and lateral structural loadings.

Slabs on grade shall have the following minimum requirements:

- 4" Concrete with reinforcement
- 2" Sand
- 6 mil vapor barrier
- 6" Crushed rock

Foundations shall not bear on sands existing at the site location. Alternatively, foundations should bear on subjacent clays or weathered bedrock to reduce risk of soil strength loss and liquefaction potential. Should additional topsoil or fill material be encountered, the foundation shall be extended down to the depth of native material. This can be accomplished by excavating trenches and backfilling to the bottom of the footings with concrete slurry or compacted base rock.

Foundation shall be constructed a minimum of ten (10) feet from the top of fill slopes and five feet from the toe of the cut slope.

All foundations shall be constructed in accordance with the 2019 California Building Code (CBC).

Grading:

All cut and fill slopes shall be 1-1/2:1 or flatter.

All fill material shall be placed in lifts not to exceed nine (9) inches in depth and should be compacted to a minimum of ninety percent (90%) relative compaction per ASTM D1557.

Finished grading should provide a minimum slope of two percent away from buildings and foundations for a minimum of ten linear feet.

Erosion Control:

Use Best Management Practices (BMPs) in order to minimize sediment transport offsite. The following should be implemented for the site at a minimum:

- EC-1: Scheduling of construction and BMP implementation.
- EC-2: Preservation of Existing Vegetation.
- NS-8: Vehicle and equipment cleaning practices.
- NS-9: Vehicle and equipment fueling practices.
- NS-10: Vehicle and equipment maintenance practices.
- NS-12: Concrete curing practices.
- WM-1: Material delivery and storage practices.
- WM-3: Stockpile management.
- WM-4: Spill prevention and control.
- WM-5: Solid waste management.
- WM-6: Hazardous waste management.
- WM-8: Concrete waste management.

References:

California Building Code - Volume 2, 2019

Geologic Map of California California Division of Mines and Geology

Google Earth

US Geologic Survey Hazard Mapping

County of Humboldt GIS Mapping

Attachment 1:

Location Map





6/18/2014 - CXF TVCE Job# 605 Aerial Imagery:

2012 USDA NAIP Imagery

(http://datagateway.nrcs.usda.gov/)

Project: R2 Soils Report Trinidad Rancheria Interpretative Center APN: 042-071-012

Attachment 1 - Location Map

Attachment 2:

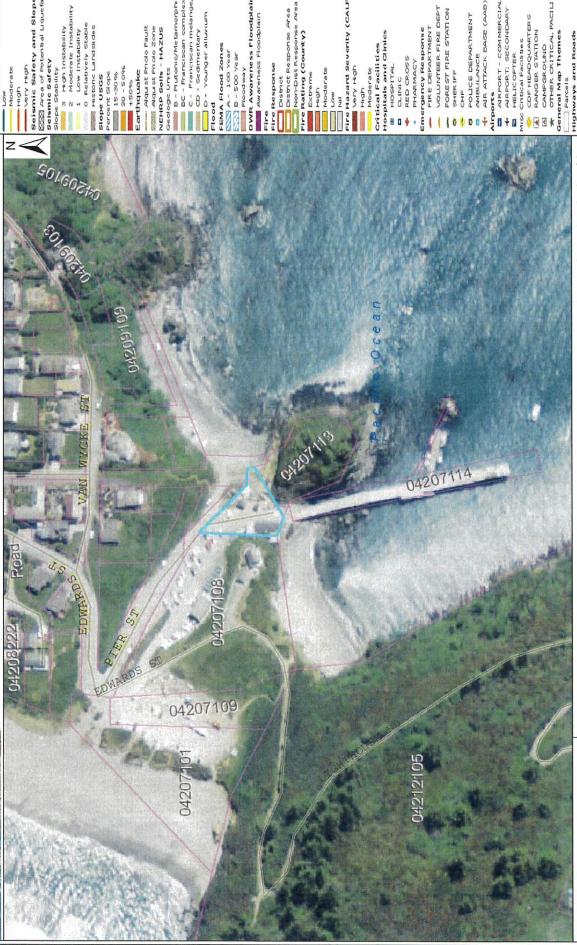
Assessor Parcel Map



Humboldt County Web GIS Map



Coastal and Dam Inundation ► Dams
Dem Failure Inundation



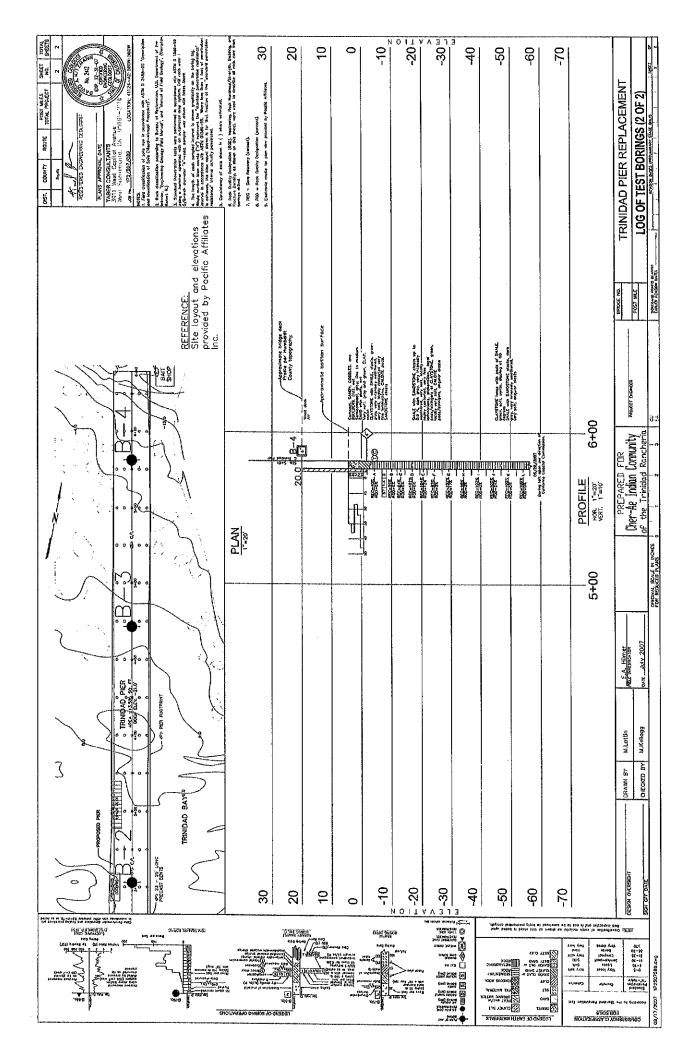
Freeance PDF Printing System http://gis.co.humboldt.ca.us Humboldt County Web GIS

Map Disclaimer: While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force and effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence. Humboldt County assumes no liability or responsibility in the use, or misuse, of this data.

ire Hazard Severity (CALFIRE) AIR ATTACK BASE (AAB) FOREST FIRE STATION VOLUNTEER FIRE DEP POLICE DEPARTMENT

Attachment 3:

Taber Consultants Trinidad Pier Replacement B-4 Boring Log



Attachment 4:

2019 California Building Code Table 1806.2

TABLE 1806.2 PRESUMPTIVE LOAD-BEARING VALUES

· · · · · · · · · · · · · · · · · · ·	13 LLOOD TRAINING VALUES						
		VERTICAL FOUNDATION	LATERAL BEARING	LATERAL SLIDING RESISTANCE			
CLASS OF MATERIALS		PRESSURE (psf)	PRESSURE (psf/ft below natural grade)	Coefficient of frictions	Coheston (psf) ^b		
I. Crystalline bedro	ck	12,000	1,200	0.70			
2. Sedimentary and	foliated rock	4,000	400	0.35	-614		
Sandy gravel and GP)	/or gravel (GW and	3,000	200	0.35			
 Sand, silty sand, gravel and clayey SM, SC, GM and 	gravel (SW, SP,	2,000	150	0.25	and by		
 Clay, sandy clay, silt, silt and sand and CH) 	silty clay, clayey silt (CL, ML, MH	1,500	100	GINGAR	130		

For Si: 1 pound per square foot = 0.0479 kPa, 1 pound per square foot = 0.157 kPa/m.

a. Coefficient to be multiplied by the dead load.

b. Cohesion value to be multiplied by the contact area, as limited by Section 1806.3.2.

Attachment 5:

United States Geological Survey Seismic Hazard Data

ISGS Design Maps Detailed Report

ASCE 7-10 Standard (41.05667°N, 124.14722°W)

Site Class C - "Very Dense Soil and Soft Rock", Risk Category I/II/III

Section 11.4.1 — Mapped Acceleration Parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain $S_{\rm s}$) and 1.3 (to obtain $S_{\rm t}$). Maps in the 2010 ASCE-7 Standard are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

From	Figure	22-1	[1,]

 $S_s = 2.384 g$

From Figure 22-2 [2]

 $S_1 = 0.989 \text{ g}$

Section 11.4.2 — Site Class

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class C, based on the site soil properties in accordance with Chapter 20.

Table 20.3-1 Site Classification

Site Class	- V _s	$\overline{m{N}}$ or $\overline{m{N}}_{ m ch}$	\bar{s}_{u}
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1.000 psf

Any profile with more than 10 ft of soil having the characteristics:

- Plasticity index PI > 20,
- Moisture content w ≥ 40%, and
- Undrained shear strength $\overline{s}_{\rm u}$ < 500 psf

See Section 20.3.1

For SI: $1ft/s = 0.3048 \text{ m/s} \ 1lb/ft^2 = 0.0479 \text{ kN/m}^2$

F. Soils requiring site response analysis in accordance with Section 21.1

Section 11.4.3 — Site Coefficients and Risk-Targeted Maximum Considered Earthquake ($\underline{\mathsf{MCE}}_R$) Spectral Response Acceleration Parameters

Table 11.4-1: Site Coefficient F

Site Class	Mapped M	CE _R Spectral R	esponse Accele Period	ration Paramet	er at Short
	S _s ≤ 0.25	$S_{s} = 0.50$	$S_{s} = 0.75$	$S_{s} = 1.00$	S _s ≥ 1.25
Α	0.8	8,0	0.8	0.8	0.8
В	1.0	1.0	1.0	1.0	1.0
С	1.2	1,2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2,5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_s

For Site Class = C and $S_s = 2.384 \text{ g}$, $F_a = 1.000 \text{ }$

Table 11.4-2: Site Coefficient F,

Site Class	Mapped MCE _R Spectral Response Acceleration Parameter at 1–s Period				
	S₁ ≤ 0.10	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \ge 0.50$
А	0.8	0.8	0.8	0.8	0.8
В	1.0	1.0	1.0	1.0	1.0
С	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2,4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of $\boldsymbol{\mathsf{S}}_{\!\scriptscriptstyle 1}$

For Site Class = C and $S_1 = 0.989 g$, $F_v = 1.300$

Equation (11.4-1):

 $S_{MS} = F_a S_S = 1.000 \times 2.384 = 2.384 g$

Equation (11.4-2):

 $S_{M1} = F_v S_1 = 1.300 \times 0.989 = 1.285 g$

Section 11.4.4 — Design Spectral Acceleration Parameters

Equation (11.4-3):

 $S_{DS} = \frac{7}{3} S_{MS} = \frac{7}{3} \times 2.384 = 1.589 g$

Equation (11.4-4):

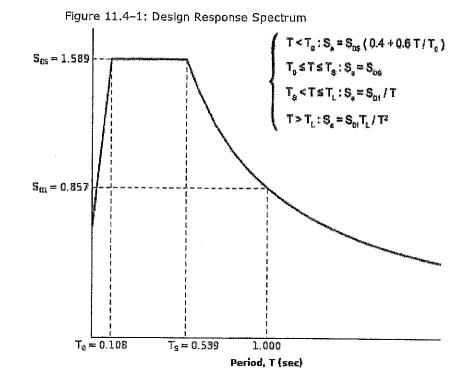
 $S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 1.285 = 0.857 g$

Section 11.4.5 — Design Response Spectrum

From Figure 22-12 [3]

 $T_L = 8$ seconds

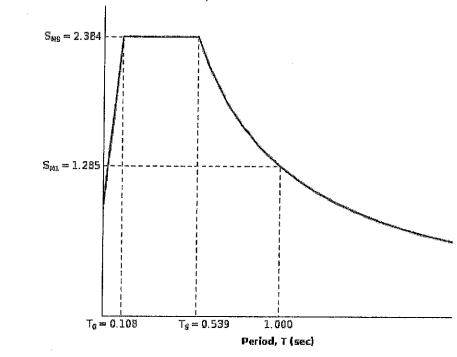




Spectral Response Acceleration, Sa (g)

Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE $_{\rm R}$) Response Spectrum

The $\mathsf{MCE}_\mathtt{R}$ Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



Section 11.6 — Seismic Design Category

Table 11.6-1 Seismic Design Category	y Based on Short Period Response Acceleration Parameter

VALUE OF S _{DS}		RISK CATEGORY	
VALUE OF S _{DS}	I or II	III	IV
S _{os} < 0.167g	А	Α	А
$0.167g \le S_{DS} < 0.33g$	В	В	С
$0.33g \le S_{os} < 0.50g$	С	С	D
0.50g ≤ S _{ps}	D	D	D

For Risk Category = I and $S_{DS} = 1.589 g$, Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

VALUE OF Sp.	RISK CATEGORY				
VALUE OF Sp1	I or II	Ш	ΙV		
S _{p1} < 0.067g	Α	А	А		
0.067g ≤ S _{D1} < 0.133g	В	В	С		
$0.133g \le S_{D1} < 0.20g$	С	С	D		
0.20g ≤ S _{D1}	D	D	D		

For Risk Category = I and $S_{D1} = 0.857$ g, Seismic Design Category = D

Note: When S_1 is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and F for those in Risk Category IV, irrespective of the above.

Seismic Design Category = "the more severe design category in accordance with Table 11.6-1 or 11.6-2'' = E

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

References

- 1. Figure 22-1: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf
- 2. Figure 22-2: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-
- 3. Figure 22-12: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf
- 4. Figure 22-7: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-
- 5. Figure 22-17: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf
- 6. Figure 22-18: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf