

---

**Karuk Community Health Clinic**

64236 Second Avenue  
Post Office Box 316  
Happy Camp, CA 96039  
Phone: (530) 493-5257  
Fax: (530) 493-5270

# Karuk Tribe

**Administrative Office**

Phone: (530) 493-1600 • Fax: (530) 493-5322  
64236 Second Avenue • Post Office Box 1016 • Happy Camp, CA 96039

**Karuk Dental Clinic**

64236 Second Avenue  
Post Office Box 1016  
Happy Camp, CA 96039  
Phone: (530) 493-2201  
Fax: (530) 493-5364

---

## **Request For Proposals**

### **18-RFP-002**

### **Karuk Tribe Facilities Remodel**

Notice is hereby given that the Karuk Tribe (KT) is accepting sealed bids in response to this solicitation for Requests for Proposals (RFP) for the remodel of a single story Karuk Environmental Workforce Development and Training Center (Center) located at 39051 Hwy 96, Orleans, CA 95556.

Only those bidders who attend the mandatory pre-bid site visit and receive a complete RFP solicitation package will be considered registered bidders. The Karuk Tribe shall not be responsible for the accuracy or completeness of documents obtained through any other means other than submitting a written request and registering as a bidder.

Site visit is mandatory, contact Emma Lee Perez- (530) 493-1600, ext. 2017, emmaleeperez@karuk.us to schedule an appointment. Bidder must provide at least two (2) business days' notice prior to desired site visit date. Project is located at the Karuk Tribe Department of Natural Resources, 39051 Hwy 96, Orleans, CA 95556. Bidders shall inspect the site where services are to be performed and shall satisfy themselves as to all general and local conditions that may affect the cost of performance of the contract to the extent such information is reasonably obtainable.

Bids shall be on a lump sum basis and shall include alternate bids, if any. Bids shall be submitted in a sealed envelope no later than **Thursday, February 15<sup>th</sup>, 2018 by 4:00 p.m. (PST)** to the Karuk Tribe at:

Karuk Tribe  
Attention: Emma Lee Perez  
PO Box 1016  
64236 Second Avenue  
Happy Camp, CA 96039

**FAXED OR EMAILED BIDS WILL NOT BE ACCEPTED. Bids will be opened and ranked on the criteria contained in this RFP- See Section VII.**

The Contract Manager for this project is Emma Lee Perez who can be reached at (530) 493-1600, extension 2017, emmaleeperez@karuk.us.

**BID SCHEDULE INSTRUCTIONS:** The Contractor shall provide prices for each schedule. It is intended that an award will be made for based on bid evaluations, available funding, and if award is in the best interest of the Karuk Tribe.

**I. STATEMENT OF WORK:**

The Contractor shall furnish all labor, materials, equipment, and services required for building permits, construction, inspection and commissioning of a remodeled Center located in Orleans, CA. The estimated building footprint is 4,400 gross square feet (GSF). The conference/community room shall include installation of the following equipment: Lutron Quantum - Panels and System Controls (1), Window Coverings-Lutron Quantum Shades (3), Lutron Quantum Ballasts (18), Lutron Quantum Switches and Sensors (4), Television and Sound System and Mounts (1), HD Projectors and Mounts (2), Simtable System (1), Project Screens (2).

The space to be remodeled includes the following and is generally outlined in Attachment C:

- (1) 10 Offices
- (2) 1 Custodial Closet
- (3) 5 Storage Closets
- (4) 1 Conference/Community Room
- (5) 1 Equipment/Server Room

The above list is intended to serve as a functional description and starting point for remodel.

**Additional Alternate Bids:**

- a. Bids should include the costs associated with replacing kitchen countertops, flooring and cabinets. Kitchen countertops should be stainless steel, flooring should be stained concrete and cabinets should be commercial laminate.
- b. Bids should include adding metal buildings which are labeled I, H, and J in attachment D.

II. **DESCRIPTION OF WORK:** The following description of work is intended as a starting point on which to base the remodel.

A. **General:** The project includes the remodel of a workforce and training center. The combined square footage will be approximately 4,400 sf. ADA and NFPA shall have primacy otherwise CCR shall apply.

**B. Civil:**

1. **Storm Water Discharge Permitting:** The total disturbed area including but not limited to building remodel, material and equipment storage, trenches and other disturbed areas as a result of construction activities shall not exceed 1acre in size without prior written approval by KT. If required, the contractor shall be responsible for storm water discharge permits and any associated fees. Required permits shall be in place prior to the start of any ground disturbing activities and shall be conducted in a manner that meets the permit requirements.
2. **Surveying, Drainage and Site Preparation:** All site survey and site preparation work shall be included in the scope of this project. This includes but is not limited to establishing accurate benchmarks, gathering topographic information, construction staking, layout, clearing, grubbing, grading, and compaction. All survey work shall be performed under the supervision of a licensed professional surveyor who is licensed to perform such work in the State of California.
3. **Walks, Curbs, Ramps, and related ADA Accessibility to Building:** Design and construction of ADA compliant sidewalks, ramps, curbs, and related accessibility to building shall be included in the scope of this project.
4. **Utilities:** All utilities shall be included in the scope of this project necessary for a complete and fully functional building and shall meet County and California Building Codes. This includes electric, gas, water and waste water, as required and any associated permits, fees and other costs assessed by local utility providers. Design and construction requirements and considerations include:
  - i. General: Field verification of existing utilities is the sole responsibility of the Contractor. Information provided by KT shall be used for reference purposes only.
  - ii. Liquefied Petroleum Gas (LPG): The design and construction of the building shall incorporate the use of onsite LPG system for other building operations such as water heater(s) and HVAC systems. The LPG storage tank will need to be relocated.
5. **Site Improvements:** Improvement features such as landscaping, street lighting, and parking signage shall be included in this project.
6. **Parking Pavement and Roadway Access:** The design and construction of parking, paving and roadway access shall be included in this project. The existing roadway entrance shall remain open during the construction phase. The parking facility should be approximately 9,300 square feet and fenced. The parking lot should account for stub out of electrical and water to three metal buildings, labeled as buildings I, H, and J in Attachment D.
7. **Building Exterior Lights:** Exterior building lighting, including streets lights shall be included in the scope of this project for the safety and security of visitors, employees and property.

### C. Electrical

1. **General:** The building electrical distribution system and main service entrance shall meet minimum building requirements, based on functionality and efficient operation.
2. **Backup Electrical Power:** The current backup power generator will need to be relocated.
3. **IT/Security:** Low voltage wiring, including telephone and data connections, will be the responsibility of the owner. However, to support later low voltage installation, the contractor needs to provide the following items:
  - i. By default, every office, conference room, breakroom, lobby and the reception area needs to have two (2) standard electrical boxes each designated for later data use. The two boxes must be on different walls of each of the above rooms. When the engineering plans specify data electrical boxes, use the location and number of boxes specified on the engineering plans. From each data box, a 1" conduit must run from the data box on one end and stubbed out in the IT/server room on the other end. If the attic or ceiling crawl space is sufficiently large (at least 3' tall) conduits may be stubbed out in the attic instead of run to the IT/server room. Each conduit needs to avoid sharp 90 degree elbow bends. Each conduit needs a pull string left in it.

### D. Mechanical

1. **General:** The building mechanical systems shall meet minimum building requirements, County and California Codes and will be based on functionality and efficient operation.
2. **Heating, Ventilation, and Air Conditioning:** All design and upgrade of the building heating, ventilation and air conditioning (HVAC) systems shall be included in the scope of this project. HVAC shall be rerouted and ducting and registers replaced, unless determined that a new system is required. Remodel and design requirements and considerations shall include:
  - i. **Equipment Efficiency:** If possible, equipment shall have Energy Star or Federal Energy Management Program (FEMP) designation.
  - ii. **IT/Telecom Rooms:** The HVAC upgrades shall sufficiently account for equipment temperature control requirements in the information technology areas.
  - iii. **Front entrance Vestibule:** The HVAC design and construction shall include a front entrance vestibule.

**E. Life Safety:** All applicable NFPA design and construction requirements shall be included in the scope of this project. This includes illuminated exit signage, recessed fire extinguisher cabinets, and fire extinguishers. Emergency lighting, evacuation route signage and smoke detectors with audible alarms are required and shall also be included in the scope of this project. The scope of this project does not include an automatic fire suppression system (i.e. sprinkler system).

**H. Cultural Monitoring:** Contractor shall notify the Tribe's Construction Representative at least 48 hours prior to scheduled ground disturbance activities to coordinate the

required Construction Monitoring activities. An allowance of \$3,539 has been included in the bid schedule instructions. This amount is to be added to all bids.

### **III. SUBMITTALS**

#### **A. General Requirements:** Submittal format requirements:

1. The Contractor shall provide three (3) copies of all documents scheduled for review.
2. 100% Submittal shall include one (1) original, signed, stamped, printed sets of the drawings and specifications in addition to three (3) copies.
3. Record Drawings shall conform to the format requirements for the 100% submittal. One (1) file containing: 100% drawings and specifications in PDF format, 100% Specifications in MS Word Format, 100% Drawings in AutoCAD DWG format, and all referenced images, files etc.
4. The Contractor shall prepare and submit complete construction documents for review and approval by the Karuk Tribe in accordance with standard professional practice, prevailing codes, and Karuk Tribe's RFP.

#### **B. Professional Licensing:** A registered Engineering Professional seal indicating such license by the state of California shall appear on the final construction documents. The architect whose seal is shown will be known as the Architect of Record.

#### **C. Design Submittal:**

1. The review submission packages will incorporate the comments from the previous review. If any package is not complete for the required stage a post review may be required the cost of which will be borne by the contractor.
2. Each review submission package shall include an index of drawings (by sheet number and title) and specifications (by section number and title) submitted.
3. KT will review the design submission package according to the timelines set forth in the Deliverables section, and provide comments/approvals, either electronically, by fax, or by hard copy delivery.

#### **D. Drawings Submittals:**

1. Drawings shall be independent for architectural, electrical, mechanical, etc., design and shall denote, on separate views, on the same sheet for each function, where possible. Drawings shall be provided to KT in DWG format and layouts shall be 24" X 36" plan sheets. All drawings in project set shall be on same type and size sheets. PDF files are also requested.
2. All views, elevations, sections, details, nomenclatures etc, shall be complete to ensure Contractor compliance without fault to misunderstanding of incomplete or improper views, elevations, sections, details, nomenclatures etc.
3. All drawings for 100% submission must be stamped with professional seal of a licensed architect and/or engineer, as appropriate with discipline, along with name and address of firm.

**E. Construction Submittals:**

1. Construction submittals shall be submitted ten (10) working days, excluding Federal and Tribal holidays, prior to proceeding with that portion of the construction work which requires submittal approval. Delays attributable to untimely and rejected submittals will not serve as a basis for extending contract time for completion.
2. Submittals shall be made as a complete package for each specification section.
3. The Contractor shall retain copies of submittal items. The intent of this requirement is to save time, whereby many questions can be resolved by telephone and to ensure that true copies are available in the event of loss or damage during the reproduction cycle.

**F. Quality Control Submittal:** The contractor shall design and implement a quality control plan to ensure that construction is performed in accordance with the specifications. The quality control plan shall include construction inspection schedules for the duration of construction schedule and at critical junctures to ensure compliance with the specifications. Copies of all inspection reports, commissioning reports, materials testing reports and safety inspections shall be provided to KT.

**G. Costs Submittals:** The Contractor shall prepare preliminary cost estimate, detailed construction cost estimate, and a schedule of values.

1. **Preliminary Construction Estimate:** Estimate shall include all direct construction costs broken down by major specification divisions. Costs shall include line items for construction contractor profit, overhead and risk.
2. **Detailed Construction Estimate:** Estimate shall include all direct construction costs broken down by individual specification section. The estimate shall show all costs and level of effort associated with work items included in the contract. Costs shall include line items for construction contractor profit, overhead and risk. All items over one thousand dollars shall be broken down to the smallest unit practicable. This estimate will be used to create the Schedule of Values against which the Contractor will invoice for construction work performed.
3. **Schedule of Values:** The Contractor, with input and final approval by KT, shall create a schedule of values based on specification sections developed during design phases. This schedule of values shall be used during the construction period to monitor progress as well as provide the bases for construction phase invoicing. The schedule of values shall not be confused with the preliminary and detailed construction estimates that are due as part of the design submittals.

#### **IV. DELIVERABLES:**

##### **A. 60% Design Development Submittal: Due 50 calendar days after NTP (5 days for KT review).**

1. Prepare drawings and specifications in preparation for full contract drawings and specification for the approved design based on schematic design.
2. Provide preliminary cost estimate for project construction.

##### **B. 90% Design Development Submittal: Due 40 calendar days after 60% submittal review (5 days for KT review).**

1. Further prepare drawings and specifications in preparation for full contract drawings and specification for the approved design based on the approved schematic design.
2. Provide detailed cost estimate for project construction.
3. Response to KT's 60% review comments, if applicable.

##### **C. 100% Construction Documents Submittal: Due 30 calendar days after 90% submittal review (10 days for KT review).**

1. Prepare contract drawings and specifications. The intent is to provide a complete set of construction documents for the project.
2. Response to KT's 90% review comments, if applicable.
3. Provide detailed cost estimate for project construction.

##### **D. Project construction: 120 days**

1. The Contractor shall provide all necessary Construction Period Services to include but not limited to construction submittal review, construction inspections and reports, telephone consultation, review of change order proposals, and design changes as necessary.

##### **E. Record Drawings and commissioning reports: Two complete sets of Record Drawings due 30 calendar days after final inspection.**

##### **F. Project Total duration: 305 days from Notice To Proceed (this does not include the Record Drawings and commissioning reports).**

#### **V. APPLICABLE CODES:**

Americans with Disabilities Act (ADA)  
International Building Code (IBC)

#### **VI. PAYMENT**

##### **A. Design Payment:** Payment for preparing construction drawings and specifications will be at the contract lump sum amount for the pay item "Design". Payment for a design submittal will be authorized upon acceptance of the submittal. Payment will be according to the following schedule:

Project Milestone	% of design fee paid at completion.
60% Design Submission	50%
90% Design Submission	25%
100% Construction documents	25%
Construction period services	*10%

\* Construction period services shall be billed based on actual work performed.

**B. Construction Payment:** Payment for construction work shall be billed for as work is completed. Work shall be billed against the schedule of values generated by the detailed construction estimate. A ten percent (10%) retention will be withheld from each payment until project has been completed and accepted by owner.

**C. INDIAN PREFERENCE & TERO**

1. All work awarded and performed under this Contract must comply with the Karuk Tribe Workforce Protection Act. Refer to <http://www.karuk.us/index.php/departments/tero> for more information regarding the Karuk Tribe Workforce Protection Act.
2. The Contractor shall also comply with all other Owner Indian preference and tribal employment rights ordinance requirements, if any.
3. If the Contractor has been awarded this Contract because of Indian preference and it is later determined that the Contractor was not 51% Indian owned and controlled by the requisite Native Americans or Native American organization, the Owner may terminate the Contractor's right to proceed. Furthermore, any Indian-preference Contractor must obtain prior approval from the Owner in order to reduce its Indian ownership and control to less than 51% during the course of this Contract.
4. This contract is subject to all provisions of the Karuk Tribe's TERO Ordinance. Within 10 days of execution of this contract, Contractor shall contact the Karuk Tribal Employment Rights office at 530-493-5305 extension 2030. **An amount equal to 2% (two percent) of this contract sum, and all future change orders is payable to the Karuk Tribe as a TERO fee.** Contractor may include the entire TERO fee in first application for payment, or include the TERO fee in each progress payment applications. Refer to the required Karuk Compliance Plan in Attachment B.



#### **D. REQUIREMENTS IMPOSED BECAUSE OF FEDERAL FUNDING**

1. The additional requirements imposed by federal funding sources set forth in Attachment A (other Federal Requirements) must also be complied with by the Contractor and subcontractors and are made part of this Contract.

#### **E. BONDING AND INSURANCE REQUIREMENTS**

1. The Contractor shall within five days after the receipt of a Notice of Award furnish the Tribe's Contracting Officer with a Performance Bond and a Payment Bond in penal sums equal to the amount of the contract price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of the contract documents, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by the contract documents. Such bonds shall be executed by the Contractor and a corporate bonding company licensed to transact such business in the state in which the work is to be performed. The expense of these bonds shall be borne by the Contractor. If at any time a surety on any such bond is declared as bankrupt or loses its right to do business in the state in which the work is to be performed, the Contractor shall within ten days after notice from the Contract Manager to do so, substitute an acceptable bond (or bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the Contract Manager. The premiums on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond to the Contract Manager.
2. Upon Notice of Award of contract the Contractor is required to provide evidence of Workmans Compensation and General Liability Insurance to the Tribe's Contracting Officer.

#### **VII. EVALUATION FACTORS:**

Proposals will be evaluated and award will be made on the basis of both cost and considerations identified below and what is the best value to the Karuk Tribe. Submitted information shall be specific and clearly delineated. Failure to address evaluation factors may result in disqualification.

- A. Experience (25%):** Past experience over the past 5 years showing ability and experience completing professional projects similar in scope and size of the project described. This shall include 3 references for successfully completed design build projects including project name, project description, owner name, and owner contact information.
- B. Cost (50%):** Cost shall include completed bid schedule as well as description of cost control approach and long term energy efficiencies incorporated into the finished completed building design and construction.

- C. Team Composition and Key Personnel (15%):** Team composition and description including company names and roles of each member including other professional firms, general contractors and/or any form of subcontracting. Also included shall be the professional qualifications, expertise, experience, and education of key team personnel who will be directly involved in the project.
- D. Management Strategy and Quality Control (10%):** Description including narrative that addresses the coordination and scheduling of design and construction with team members and KT personnel. This shall include design development and process approach during both the design and construction phases. Scheduling shall demonstrate knowledge of project starting from Notice to Proceed to contract completion including milestones and major portions of contract work. Design phase should include but is not limited to submittal time lines, testing, permitting, meetings, and internal quality assurance and control milestones. Construction phases should include but is not limited to mobilization/demobilization, excavations, interior finish, exterior finish, site utilities, commissioning, prefinal inspection, and final inspection.

## **ATTACHMENT A -OTHER FEDERAL REQUIREMENTS**

1. The work to be performed under this Contract is on a project subject to section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e (b) which requires that to the greatest extent feasible: (a) preference and opportunities for training and employment shall be given to Indians; and (b) preferences in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. The parties to this Contract shall comply with the provisions of section 7(b) of this Act. In connection with this Contract, the Contractor shall, to the greatest extent feasible, give preference in the award of any subcontracts to Indian organizations and Indian-owned Economic Enterprises, and preferences and opportunities for training and employment to Indians. The Contractor shall include this section 7(b) clause in every subcontract in connection with the Contract, and shall, at the direction of the Owner, take appropriate action pursuant to the subcontract upon a finding by the Owner or the U.S. Department of Housing and Urban Development (HUD) that the subcontractor has violated this section 7(b) clause of this Act. Furthermore, to the greatest extent feasible preference in the award of contracts and subcontracts shall be given to low income locals in accordance with section 3 of the Housing and Urban Development Act of 1968 but not in derogation of compliance with section 7(b). The section 3 requirements however apply only to projects or activities that exceed \$200,000.
2. Compliance with Executive Order 11246 of September 24, 1965 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967 and as supplemented in Department of Labor regulations (41 CFR Chapter 60) (All construction contracts awarded in excess of \$10,000).
3. Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR part 3) (All contracts and sub grants for construction or repair).
4. Compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) as supplemented by Department of Labor regulations (29 CFR part 5) (Construction contracts in excess of \$2,000 when required by Federal grant program legislation).
5. Compliance with Sections 103 and 107 of the contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR part 5) (Construction contracts in excess of \$2,000, and in excess of \$2,500 for other contracts which involve the employment of mechanics or laborers).
6. Access to and retention of records for a period of three (3) years relating to this Project as required by 24 CFR 85.36(j) (10) and (11). Cooperation and provision of all necessary information and documentation as may be required for reporting relating to this project.
7. Affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible (24 CFR 85.36(e); E.O. 11625).
8. No award or subcontract at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension".
9. Compliance with the provisions of the Hatch Act (5 U.S.C. 1501-1508) and the Intergovernmental Personnel Act of 1970 as amended by Title VI of Civil Service Reform Act (Pub. L. 95-454 Section 4728) prohibiting use of federally appropriated funds for influencing or attempting to influence the award of any federal monies and to make such reports and disclosures as are required there under. The signing of the contract in which this Attachment is referenced is a certification of agreed compliance.

10. Prohibition against personal or financial interest in or benefit from this contract obtained by certain affiliates, associates, board members or employees of Owner or its grantees, either from themselves or their families or business associates, during their tenure or for one year thereafter.
11. Compliance with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821, et seq.) and implementing regulations at 24 CFR 570.608, as well as compliance with the requirements regarding asbestos of 40 CFR Part 61 and 40 CFR Part 763, as well as 29 CFR 1910.1001 and 1926.58.
12. Except as Indian Preference requirements and the provisions of the Native American Housing Assistance and Self-Determination Act (NAHASDA), 25 U.S.C. 1401, et seq. may supersede, compliance with prohibitions against discrimination as provided by Title VI of the Civil Rights Act of 1976 (Pub. L. 88-352) and related HUD regulations, Age Discrimination Act of 1975 and the implementing regulations at 24 CFR Part 146, Section 504 of the Rehabilitation Act of 1973, as amended, 24 CFR Part 8, title VIII of the Civil Rights Act of 1968; 25 U.S.C. 1301-1303.
13. In part because of agreements regarding the monies utilized to fund this contract and federal requirements, the Owner and HUD have reserved certain rights to licenses and copyrights regarding work developed or purchases made relating to said funds.

**Attachment B- Karuk Compliance Plan**

**TRIBAL EMPLOYMENT RIGHTS OFFICE  
COMPLIANCE PLAN FOR BIDDERS**

Bidder/Employer Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, State and Zip Code: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Bid Amount: \$\_\_\_\_\_ TERO Fee (2%): \$\_\_\_\_\_

**THIS IS AN AGREEMENT BETWEEN THE KARUK TRIBE’S TRIBAL  
EMPLOYMENT RIGHTS OFFICE (TERO) AND \_\_\_\_\_  
\_\_\_\_\_, HEREINAFTER KNOWN AS “EMPLOYER” CONDUCTING COMMERCE  
AND EMPLOYMENT ACTIVITY WITHIN THE ANCESTRAL TERRITORY OF THE  
KARUK TRIBE.**

- Employer shall provide the completed compliance plan with the submission of bid.
- Upon notification of the award, Employer shall contact the TERO Office within ten (10) days prior to any work to be performed.
- Employer shall contact the TERO Office and Contract/Project Manager immediately, in writing, advising of any contract or sub-contractor changes to obtain approval prior to working on the job site.
- Employer understands and agrees to comply with the requirements and procedures in the selection of contractors, sub-contractors, employees and recruitment of viable Indian applicants in accordance with the Karuk Tribe’s Employment Rights Ordinance and the Karuk Tribe’s Workforce Protection Act (WPA).

By signing below the Employer certifies the position information is true and correct and there have been no omissions in the completion of the labor force projections. Falsification of the information provided will result in sanctions, penalties, fines and/or debarment with the Karuk Tribe.

\_\_\_\_\_  
Employer Signature

\_\_\_\_\_  
Date

### **PRE-AWARD LABOR FORCE PROJECTION**

**Core Crew:** Is defined as a member of a business, Contractor or Subcontractor's crew who is a regular employee and is in a supervisory or other key position such that the employer would face a serious financial loss if that position were filled by a person who had not previously worked for that employer.

**All other positions** will be filled by the TERO office unless sufficient justification can be made that they are not replaceable for the work that is to be done or unless TERO does not have an individual to refer.

List Core Crew (Full Name):	Job Title/ Years w/Company/Justification:

### **List Native American Contractors/Sub-contractors to be hired for this Project:**

Contractor/Sub-contractor Contact Person, Phone # and E-mail:	Work to be Performed:

**List Non-Native Contractor/Sub-contractors to be hired for this Project:**

Contractor/Sub-contractor Contact Person, Phone # and E-mail:	Work to be Performed:

**Open Positions:** Employer agrees to hire 100% of all its open positions/Sub-contractors for this project through the TERO Skills Bank. If Employer is unable to hire 100% then company representatives will need to meet with the TERO Director. Failure to comply with this hiring requirement will result in sanctions and/or penalties.

Job Title/Sub-contractor Needed:	Skills Required:

Number of positions to be filled for this project: \_\_\_\_\_

Contact person/info for job referrals: \_\_\_\_\_

Date TERO referrals needed: \_\_\_\_\_

**For Internal Use Only:**

Contract Number #: \_\_\_\_\_ Project Manager: \_\_\_\_\_

TERO Office Approval \_\_\_\_\_ Date: \_\_\_\_\_

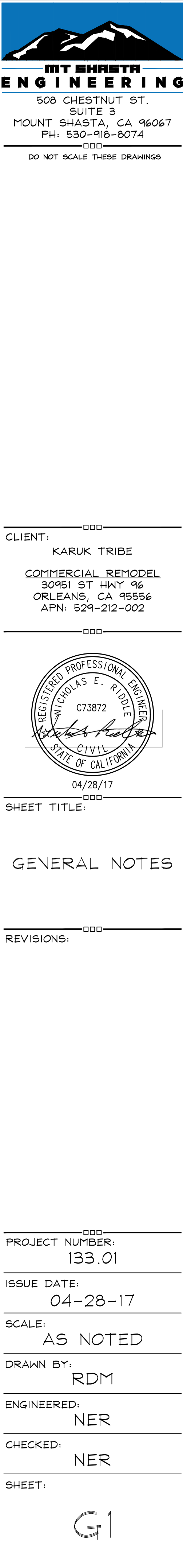
Comments:



SHEET INDEX		COMMERCIAL REMODEL		PROJECT DATA	
<div>GENERAL SHEETS:</div> <div>COVER SHEET</div> <div>GENERAL NOTES</div> <div>STRUCTURAL NOTES</div> <div>PLOT PLAN</div> <div>DESIGN SHEETS:</div> <div>EXISTING FLOOR PLAN</div> <div>PROPOSED FLOOR PLAN</div> <div>REFLECTED CEILING PLAN</div> <div>POWER AND DATA PLAN</div> <div>CS</div> <div>G1</div> <div>G2</div> <div>C1</div> <div>A1.1</div> <div>A1.2</div> <div>A1.3</div> <div>A1.4</div>		ORLEANS, CA		APPLICABLE CODES:	
		INITIAL ISSUE: 04-28-17		2016 CALIFORNIA ADMINISTRATIVE CODE (C.A.C.)	
		CONTACT LIST		2016 CALIFORNIA BUILDING CODE (C.B.C.)	
		OWNER'S REPRESENTATIVE:		2016 CALIFORNIA RESIDENTIAL CODE (C.R.C.)	
		BILL TRIPP		2016 CALIFORNIA ELECTRICAL CODE (C.E.C.)	
		KARUK TRIBE		2016 CALIFORNIA MECHANICAL CODE (C.M.C.)	
		30951 ST HWY 96		2016 CALIFORNIA PLUMBING CODE (C.P.C.)	
		ORLEANS, CA 95556		2016 CALIFORNIA ENERGY CODE (C.E.C.)	
		PH: (530) 627-3446		2016 CALIFORNIA HISTORICAL BUILDING CODE (C.H.B.C.)	
		ENGINEER:		2016 CALIFORNIA FIRE CODE (C.F.C.)	
		NICHOLAS RIDDLE, P.E.		2016 CALIFORNIA EXISTING BUILDING CODE (C.E.B.C.)	
		MT SHASTA ENGINEERING, INC.		2016 CALIFORNIA GREEN BLDG. STDS. CODE (C.G.B.S.C.)	
		508 CHESTNUT ST., STE 3		2016 CALIFORNIA REFERENCED STD. CODE (C.R.S.C.)	
		MOUNT SHASTA, CA 96067		AND ANY OTHER APPLICABLE LOCAL, STATE AND	
		PH: (530) 918-8074		FEDERAL LAWS.	
		VICINITY MAP		PROJECT DESCRIPTION:	
		NOT TO SCALE		REMODEL OF EXISTING COMMERCIAL OFFICE SPACE.	
				BUILDING INFORMATION:	
				CONSTRUCTION TYPE: V-B	
				OCCUPANCY: EXISTING B AND A3	
				SQUARE FOOTAGE: UNCHANGED	
				BUILDING HEIGHT: UNCHANGED	
				SPRINKLERS: NOT REQUIRED	
				STATEMENT OF SPECIAL INSPECTIONS	
				SPECIAL INSPECTIONS AND TESTS OF ELEMENTS AND NONSTRUCTURAL COMPONENTS OF BUILDINGS AND STRUCTURES SHALL MEET THE APPLICABLE REQUIREMENTS OF C.B.C. SECTION 1705. SPECIAL INSPECTIONS AND TESTS SHALL BE PROVIDED BY ONE OR MORE APPROVED AGENCIES AND SHALL BE IDENTIFIED TO THE BUILDING OFFICIAL PER C.B.C. 1704.2. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS AND EXPOSURE TO WORK FOR WHICH SPECIAL INSPECTION OR TESTING IS REQUIRED UNTIL COMPLETION OF THE REQUIRED INSPECTIONS OR TESTS. APPROVED AGENCIES SHALL KEEP RECORDS OF SPECIAL INSPECTIONS AND TESTS AND SUBMIT REPORTS TO THE BUILDING OFFICIAL AND REGISTERED DESIGN PROFESSIONAL PER C.B.C. 1704.2.4 AND 1704.5. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND OR SEISMIC FORCE RESISTING COMPONENT LIST BELOW SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO COMMENCEMENT OF WORK PER C.B.C. 1704.4. WHERE STRUCTURAL OBSERVATIONS ARE REQUIRED FOR SEISMIC RESISTANCE AND WIND REQUIREMENTS PER C.B.C. 1704.6, A REGISTERED DESIGN PROFESSIONAL SHALL PERFORM STRUCTURAL OBSERVATIONS. THE FOLLOWING IS A COMPLETE LIST OF SPECIAL INSPECTIONS, PER C.B.C. CHAPTER 17, WITH REQUIREMENTS NOTED:	
		DEFERRED / SEPARATE SUBMITTALS		1. 1704.2.5 SPECIAL INSPECTION OF FABRICATED ITEMS. <b>NOT APPLICABLE</b>	
		THIS PROJECT IS BEING SUBMITTED FOR PERMIT REVIEW. THE FOLLOWING ITEMS LISTED BELOW, SHALL BE DEFERRED SUBMITTALS PROVIDED UNDER SEPARATE COVER. THESE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW, COORDINATION AND SUBMITTAL. SUBMITTAL SHALL BE MADE TO HUMBOLDT COUNTY FOR REVIEW AND APPROVAL WHICH SHALL ALSO INCLUDE A LETTER STATING THAT REVIEW HAS BEEN PERFORMED.		2. 1704.5 STRUCTURAL OBSERVATION. <b>NOT REQUIRED</b>	
				3. 1705.1.1 SPECIAL CASES. <b>NOT APPLICABLE</b>	
				4. 1705.2 STEEL CONSTRUCTION. <b>NOT APPLICABLE</b>	
				5. 1750.3 CONCRETE CONSTRUCTION. <b>NOT REQUIRED</b>	
				6. 1705.4 MASONRY CONSTRUCTION. <b>NOT REQUIRED</b>	
				7. 1705.5 WOOD CONSTRUCTION. <b>NOT REQUIRED</b>	
				8. 1705.6 SOILS. <b>NOT REQUIRED</b>	
				9. 1705.7 DEEP DRIVEN FOUNDATION ELEMENTS. <b>NOT APPLICABLE</b>	
				10. 1705.8 CAST-IN-PLACE DEEP FOUNDATION ELEMENTS. <b>NOT APPLICABLE</b>	
				11. 1705.9 HELICAL PILE FOUNDATIONS. <b>NOT APPLICABLE</b>	
				12. 1705.10 FABRICATED ITEMS. <b>NOT APPLICABLE</b>	
				13. 1705.11 SPECIAL INSPECTIONS FOR WIND RESISTANCE. <b>NOT REQUIRED</b>	
				14. 1705.12 SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE. <b>NOT REQUIRED</b>	
				15. 1705.13 TESTING FOR SEISMIC RESISTANCE. <b>NOT APPLICABLE</b>	
				16. 1705.14 SPRAYED FIRE-RESISTANT MATERIALS. <b>NOT APPLICABLE</b>	
				17. 1705.15 MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS. <b>NOT APPLICABLE</b>	
				18. 1705.16 EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS). <b>NOT APPLICABLE</b>	
				19. 1705.17 FIRE-RESISTANT PENETRATIONS AND JOINTS. <b>NOT APPLICABLE</b>	
				20. 1705.18 TESTING FOR SMOKE CONTROL. <b>NOT APPLICABLE</b>	
				21. 1706 DESIGN STRENGTH OF MATERIALS. <b>NOT APPLICABLE</b>	
				22. 1708 IN-SITU LOAD TESTS. <b>NOT APPLICABLE</b>	
				23. 1709 PRECONSTRUCTION LOAD TESTS. <b>NOT APPLICABLE</b>	
				24. <b>NOTIFICATION.</b> CONTRACTOR SHALL COORDINATE ALL INSPECTIONS WITH THE PROJECT ENGINEER AND NOTIFY THE PROJECT ENGINEER OR SPECIAL INSPECTOR A MINIMUM OF TWO BUSINESS DAYS PRIOR TO THE REQUIRED INSPECTIONS.	
				PROJECT ENGINEER:	
				MT SHASTA ENGINEERING, INC.	
				PH: 530-918-8074	
				CLIENT:	
				KARUK TRIBE	
				COMMERCIAL REMODEL	
				30951 ST HWY 96	
				ORLEANS, CA 95556	
				APN: 529-212-002	
				REGISTERED PROFESSIONAL ENGINEER	
				NICHOLAS E. RIDDLE	
				C73872	
				CIVIL	
				STATE OF CALIFORNIA	
				04/28/17	
				SHEET TITLE:	
				COVER SHEET	
				REVISIONS:	
				PROJECT NUMBER:	
				133.01	
				ISSUE DATE:	
				04-28-17	
				SCALE:	
				AS NOTED	
				DRAWN BY:	
				RDM	
				ENGINEERED:	
				NER	
				CHECKED:	
				NER	
				SHEET:	
				CS	



ENTER LINE	INCH	STL	STEEL	1. THE WORD "CONTRACTOR" USED HEREIN MEANS THE GENERAL CONTRACTOR, SUBCONTRACTORS AND ALL PERSONS DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM.	MAINTAIN, IN GOOD CONDITION, ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDAS, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT.
PROPERTY LINE OR PLATE	INSUL	STR	STRUCTURAL	2. ALL STANDARD NOTES CONTAINED HEREIN ARE TYPICAL, UNLESS NOTED OTHERWISE.	23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE JOB IS IN PROGRESS AND UNTIL JOB IS COMPLETE.
POUND(S) OR NUMBER	INT	SUSP	SUSPENDED	3. ALL TRADE NAMES AND BRAND NAMES CONTAINED HEREIN ESTABLISH QUALITY STANDARDS. SUBSTITUTIONS ARE PERMITTED WITH PRIOR APPROVAL BY OWNER. BURDEN OF PROOF OF SUBSTITUTIONS IS ON CONTRACTOR.	24. CONTRACTOR SHALL MAINTAIN THE SITE IN A CLEAR AND ORDERLY MANNER. ALL DEBRIS SHALL BE REMOVED FROM PREMISES, AND ALL AREAS SHALL BE LEFT IN A BROOM-CLEAN CONDITION AT ALL TIMES.
ANGLE	JAN	JST	JOIST	4. THE SCOPE OF DESIGN AND ENGINEERING SERVICES IS LIMITED TO PROVIDING A "BUILDER'S SET" OF PLANS. THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT AND TO CONVEY DESIGN INTENT AND REQUIREMENTS; HOWEVER ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT NECESSARILY DESCRIBED IN THIS "BUILDER'S SET." CONSTRUCTION FROM THESE PLANS REQUIRES AN OWNER/CONTRACTOR THOROUGHLY KNOWLEDGEABLE WITH THE APPLICABLE BUILDING CODES AND INDUSTRY STANDARD ACCEPTABLE METHODS OF CONSTRUCTION. THE PLANS AND GENERAL NOTES DELINEATE AND DESCRIBE ONLY LOCATIONS, DIMENSIONS, TYPES OF MATERIALS AND GENERAL METHODS OF ASSEMBLING OR FASTENING. THEY ARE NOT INTENDED TO SPECIFY PARTICULAR PRODUCTS, SPECIFIC MATERIALS OR CONSTRUCTION METHODS.	25. THE CONTRACTOR SHALL LOCATE AND MAINTAIN A TRASH BIN AT THE SITE. SUCH BIN SHALL BE OF ADEQUATE DIMENSION TO KEEP THE SITE CLEAN AT ALL TIMES. THE BIN SHALL BE REMOVED AND EMPTIED AS REQUIRED.
AND	AT	JOINT	JOINT	5. THESE DRAWINGS MAY NOT TAKE IN TO ACCOUNT ALL EXISTING SITE CONDITIONS. CONDITIONS AFFECTING SLOPES, GRADES, RETAINING WALLS, FOUNDATIONS, CUT AND FILL, ETC. THAT DEVIATE FROM THESE DRAWINGS SHALL BE IMMEDIATELY CONVEYED TO THE ENGINEER.	26. CONTRACTOR SHALL PROVIDE PEDESTRIAN PROTECTION IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES.
DIAMETER	K	KIP(S)	(1000 LBS)	6. STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER DESIGN DRAWINGS, DETAILS AND NOTES. CONTRACTOR SHALL CROSS CHECK DESIGN AND STRUCTURAL DRAWINGS AND PROVIDE NOTIFICATION TO ENGINEER OF ANY PERCEIVED DISCREPANCIES.	27. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES.
EXISTING	KD	KILN DRIED		7. ALL CARPENTRY SHALL BE CAREFULLY LAID OUT, CUT, FITTED AND ERECTED. BRACE, PLUMB AND/OR LEVEL ALL MEMBERS AND PLACE THEM TO BEAR FULLY AND ACCURATELY. SOLID BLOCK ALL JOISTS AND BEAMS AT BEARINGS AND ENDS. PROVIDE ATTACHMENTS AS SHOWN AND REQUIRED. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL COMPONENTS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.	28. CONTRACTOR SHALL PROVIDE ALL REQUIRED PROTECTION INCLUDING, BUT NOT LIMITED TO, SHORING, BRACING, AND ALL SUPPORTS NECESSARY TO MAINTAIN OVERALL STRUCTURAL INTEGRITY OF THE BUILDING.
NEW	LAB	LABORATORY		8. DOORS AND CASED OPENINGS WITHOUT DIMENSIONS ARE TO BE FOUR (4) INCHES FROM FACE OF ADJACENT WALL OR CENTERED BETWEEN WALLS.	29. NO STRUCTURAL MEMBERS SHALL BE CUT TO ACCEPT PIPES, VENTS, DUCTS, ETC. EXCEPT AS DETAILED OR SPECIFIED HEREIN.
OVER OR ON	LAV	LAVATORY		9. THIS PROJECT CONTAINS GLAZING THAT WILL BE SUBJECT TO FEDERAL, STATE AND LOCAL GLAZING STANDARDS. THE GLAZING SUBCONTRACTOR SHALL BE FOR ADHERENCE TO THESE REQUIREMENTS. IF THE GLAZING SUBCONTRACTOR FINDS ANYTHING IN THE DOCUMENTS NOT IN COMPLIANCE WITH THE STANDARDS, THEY SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING.	30. GYPSUM WALLBOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.
WITH	LBS	POUNDS		10. PROVIDE FLASHING SYSTEMS WHERE SHOWN, AND WHERE NOT SHOWN, BUT REQUIRED FOR A COMPLETE WATERTIGHT INSTALLATION. FLASH AND COUNTER FLASH TO PROVIDE A WATERTIGHT DETAIL. STEP FLASH AT CHIMNEYS, SKYLIGHTS, AND ROOF TO WALL DETAILS.	31. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL REPLACE OR REMEDY ANY FAULTY, IMPROPER OR INFERIOR MATERIALS OR WORKMANSHIP AND/OR ANY DAMAGE WHICH SHALL APPEAR WITHIN ONE (1) YEAR AFTER THE COMPLETION AND ACCEPTANCE OF THE WORK UNDER THIS CONTRACT.
ANCHOR BOLT	LG	LONG		11. HEARTH EXTENSIONS AND FIREBOX CLEARANCES SHALL COMPLY WITH TABLE R1001.1 (C.R.C.) AND THE MANUFACTURER'S INSTALLATION REQUIREMENTS. WHERE CONFLICTING INFORMATION OCCURS, THE MORE STRICT REQUIREMENT SHALL PREVAIL. APPLIANCE DRAFT AND VENTING SHALL COMPLY WITH CMC 802.3.	32. IN ADDITION TO EQUIPMENT WARRANTIES, FURNISH OWNER A WRITTEN GUARANTEE AGAINST LATENT AND PATENT DEFECTS IN MATERIALS AND WORKMANSHIP FOR ONE YEAR. GUARANTEE SHALL INCLUDE REPAIR, DAMAGE TO, OR REPLACEMENT OF, ANY PART OF EQUIPMENT PROVIDED.
ABOVE	LL	LIVE LOAD		12. PROVIDE MANUFACTURER'S INSTALLATION SPECIFICATIONS AND PRODUCT LISTINGS PRE-MANUFACTURED FIREPLACES OR WOOD STOVES TO BUILDING INSPECTOR PRIOR TO INSTALLATION.	33. ALL ELECTRICAL, MECHANICAL, AND PLUMBING WORK SHALL CONFORM TO THE REQUIREMENTS OF LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION.
ASPHALTIC CONCRETE	LLH	LONG LEG HORIZ		13. PROVIDE A MINIMUM 20"x30" OPENING TO ANY ATTIC AREA IN A READILY ACCESSIBLE AREA HAVING A CLEAR HEIGHT OF OVER 30". PROVIDE 30" MINIMUM HEADROOM AT OR ABOVE THE ACCESS OPENING MEASURED VERTICALLY FROM THE BOTTOM OF THE CEILING FRAMING MEMBERS. APPLIANCES LOCATED IN ATTIC SPACES SHALL BE ACCESSIBLE PER CMC 304.4.	34. CONTRACTOR SHALL REFER AND CONFORM TO ALL RECOMMENDATIONS AND FINDINGS SET FORTH IN THE SOILS REPORT. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THE FINDINGS NOR THE FINAL RECOMMENDATIONS.
ADDITIONAL	LLV	LONG LEG VERTICAL		14. EXTERIOR WALLS WEATHER PROTECTION SHALL COMPLY WITH CRC R703 AND/OR AS APPLICABLE. BUILDINGS LOCATED WITHIN A HIGH FIRE HAZARD AREA OR WILDLAND URBAN INTERFACE (WUI) AREA SHALL COMPLY WITH CBC 7A.	35. THE CONTRACTOR SHALL NOTIFY ENGINEER FOR INSTRUCTIONS PRIOR TO CONTINUING WORK SHOULD ANY UNUSUAL CONDITIONS BECOME APPARENT DURING GRADING OR FOUNDATION CONSTRUCTION.
ADJACENT	LOC	LOCATE OR LOCATION(S)		15. HOSE BIBBS AND IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH APPROVED BACKFLOW PREVENTION DEVICES.	36. ALL PAINT COLOR AND/OR MATERIAL TRANSITIONS ARE TO OCCUR AT INSIDE CORNERS (U.N.O.).
ABOVE FINISHED FLOOR	LT	LIGHT		16. ALL MIRRORED CLOSET DOORS SHALL BE TEMPERED.	37. ROOF OBSTRUCTIONS SUCH AS T.V. ANTENNAE, GUY WIRES, SOLAR PANELS, AND RAZOR WIRE/RIBBON SHALL NOT PREVENT FIRE DEPARTMENT ACCESS OR EGRESS IN THE EVENT OF A FIRE.
ALTERNATE OR ALTERNATIVE	LVR	LOUVER		17. EMERGENCY ESCAPE AND RESCUE OPENINGS FOR RESIDENTIAL PROJECTS SHALL HAVE A MINIMUM OPENING AREA OF NOT LESS THAN 5.7 SQUARE FEET (EXCEPT AT GRADE, OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FEET) CRC R310.2. THE NET CLEAR HEIGHT SHALL NOT BE LESS THAN 24 INCHES AND THE NET CLEAR WIDTH SHALL NOT BE LESS THAN 20 INCHES. WHERE A WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE THE BOTTOM OF THE CLEAR OPENING GREATER THAN 18 INCHES MEASURED FROM THE FLOOR. WHERE THE SILL HEIGHT IS BELOW GRADE, IT SHALL BE PROVIDED WITH A WINDOW WELL PER CRC R310.2.3.	38. CONTRACTOR SHALL NOT EXCAVATE TRENCHES OR EXCAVATIONS FIVE (5) FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND WITHOUT PRIOR BUILDING DEPARTMENT APPROVAL.
AMERICAN PLYWOOD ASSOCIATION ALL-THREADED ROD	MA	MASTER			39. THE GENERAL CONTRACTOR SHALL INSTALL ALL MATERIALS AND PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE ICBO REPORTS.
	MAT	MATERIAL			40. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE NOTES OR SPECIFICATIONS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR IN THE CONSTRUCTION DOCUMENTS.
BATHROOM	MAX	MAXIMUM			41. NEITHER THE ENGINEER NOR THE OWNER SHALL BE RESPONSIBLE FOR: CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF THE CONTRACTOR; SAFETY PRECAUTIONS AND PROGRAMS OF THE CONTRACTOR; THE ACTS OR OMISSIONS OF THE CONTRACTOR; OR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
BOARD	MACH	MACHINE			42. THESE PLANS ARE FOR GENERAL CONSTRUCTION PURPOSES ONLY. THEY ARE NOT EXHAUSTIVELY DETAILED OR FULLY SPECIFIED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SELECT, VERIFY, RESOLVE, AND INSTALL ALL MATERIALS AND EQUIPMENT.
BELOW FINISHED GRADE	MB	MACHINE BOLT			43. DECORATIVE MATERIALS SHALL BE NONCOMBUSTIBLE OR FLAME-RETARDANT TREATED IN AN APPROVED MANNER. SHALL BE PROVIDED WITH A STATE FIRE MARSHAL'S CERTIFICATION STAMP, AND SHALL BE APPROVED BY THE FIRE DEPARTMENT PRIOR TO INSTALLATION.
BUTTHENE	MBM	METAL BLDG MANUFACTURER			44. STORAGE DISPENSING, AND USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIALS, SHALL COMPLY WITH ALL APPLICABLE FIRE CODE REGULATIONS.
BUILDING	MC	MEDICINE CLOSET			45. CONTACT FIRE DEPARTMENT/DISTRICT (MINIMUM TWO WORKING DAYS NOTICE REQUIRED) FOR REQUIRED INSPECTIONS AND FINAL INSPECTION OF THE BUILDING PRIOR TO OCCUPANCY.
BLOCK(ING)	MECH	MECHANICAL			46. THE WATER SERVICE CONNECTION MUST BE PROTECTED FROM THE BACKFLOW OF PREMISES WATER, INCLUDING ANY AND ALL REQUIRED LANDSCAPING.
BEAM	MEMB	MEMBER			47. BACKWATER VALVE SHALL BE INSTALLED AT SEWER CLEAN-OUT ON LOWER END OF BUILDING DRAIN.
BOUNDARY NAILING	MEMB	MEMBRANE			48. CONTRACTOR AND SUBCONTRACTORS TO COMPLY WITH SCHEDULES ESTABLISHED BY OWNER.
BOTTOM OF	MTL	METAL			49. ALL WARRANTIES DUE TO THE OWNER SHALL BE FORWARDED IN DUPLICATE TO THE OWNER UPON COMPLETION OF THE JOB.
BOTTOM	MEZZ	MEZZANINE			50. CHANGES IN THE DESIGN OR MATERIALS WILL NOT BE ACCEPTED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER AND PROJECT ENGINEER.
BEARING	MFR	MANUFACTURER			
BETTER	MH	MANHOLE			
BETWEEN	MW	MALLEABLE IRON WASHER			
	MIN	MINIMUM			
CAB'S	MISC	MISCELLANEOUS			
CALCULATION	MLDG	MOLDING			
CANTILEVER	MR	MOISTURE RESISTANT			
CALIFORNIA BUILDING CODE	MTD	MOUNTED			





STRUCTURAL NOTES

GENERAL

- ALL WORK SHALL BE IN CONFORMANCE WITH THE CALIFORNIA BUILDING CODE (CBC) AS ADOPTED BY THE LOCAL GOVERNING AGENCY, AND ANY APPLICABLE LOCAL ORDINANCES.
- ALL CONDITIONS AND DIMENSIONS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR, ANY DISCREPANCIES THAT REQUIRE CLARIFICATION OR REVISIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE COMMENCING WITH THE WORK.
- CONTRACTOR SHALL PROVIDE THE REQUIREMENTS OF ALL STRUCTURAL DETAIL CALLOUTS DENOTED AS "TYPICAL" OR "TYP" AT SPECIFICALLY NOTED CONDITIONS AND AT ALL LIKE CONDITIONS THROUGHOUT THE PROJECT, UNLESS NOTED OTHERWISE. ALL DETAILS ON DETAIL SHEETS TITLED AS "TYPICAL," AND NOT DIRECTLY REFERENCED ON PLANS, SHALL BE INCORPORATED AT OCCURRING LOCATIONS THROUGHOUT THE PROJECT. REQUIREMENTS OF DETAILS NOT DENOTED OR TITLED AS "TYPICAL" SHALL BE PROVIDED AT THE SPECIFIC LOCATION SHOWN ON THE PLAN AND ADJACENT AREAS AS APPLICABLE. REQUIREMENTS OF DETAILS DENOTED AS "SIMILAR" OR "SIM" SHALL BE PROVIDED WITH DIFFERENCES AS INDICATED OR IMPLIED ON REFERENCED DETAILS AND PLANS.
- DETAILS MAY BE DETIOTED DIAPHRAMMATICALLY, FOR EXAMPIE, ROOF PITCHES, FLOOR/ROOF/WALL THICKNESSES, FRAMING MEMBERS, ETC., MAY DIFFER IN CONTEXT WITH OTHER DRAWINGS CONVEYING STRUCTURAL AND ARCHITECTURAL DESIGN INTENT.
- STRUCTURAL DESIGN OR REVIEW OF TEMPORARY SHORING, ADDITIONAL REINFORCING, BRACING, FORMWORK, SCAFFOLDING, ERECTION METHODS, ETC., REQUIRED FOR PROPER CONSTRUCTION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- SEE ARCHITECTURAL DRAWINGS FOR WALL LOCATIONS AND DIMENSIONS, UNLESS NOTED OTHERWISE. DRAWINGS SHALL NOT BE SCALED.
- SEE ARCHITECTURAL DRAWINGS FOR ALL FLASHING, WATERPROOFING, FINISHES AND VENTING REQUIREMENTS.
- REFER TO ARCHITECTURAL PLANS FOR FINISH FLOOR ELEVATIONS, FLOOR DEPRESSIONS, OPENINGS, SLOPES, DRAINS, CURBS, PADS, EMBEDDED ITEMS, NON-BEARING PARTITIONS, STAIRS, ETC. REFER TO CIVIL, MECHANICAL AND ELECTRICAL PLANS FOR UTILITIES, SLEEVES, PIPES, DUCTS, EQUIPMENT, ETC.
- SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST APPROVED CONTRACT DOCUMENTS.
- DIMENSIONS, UNLESS OTHERWISE SHOWN, ARE TO CENTERLINE OF COLUMNS AND BEAMS, OR TO THE FACE OF CONCRETE SURFACES AND ROUGH FINISHING.
- ALL REFERENCED PUBLICATIONS SHALL BE THE LATEST EDITION, UNLESS NOTED OTHERWISE.
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SAFETY AND SEQUENCE.

PRODUCT SUBSTITUTIONS

- MATERIAL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO USE. SUBSTITUTIONAL DESIGNS MAY REQUIRE ADDITIONAL DESIGN COSTS. THESE ADDITIONAL COSTS SHALL BE PAID BY THE PERSON OR COMPANY REQUESTING THE SUBSTITUTION.
- SUBSTITUTED PRODUCTS SHALL HAVE ICC-ES APPROVAL AND SHALL BE INSTALLED PER PRODUCT MANUFACTURER'S SPECIFICATIONS. SUBSTITUTED PRODUCT MATERIALS, FINISHES, DETAILS, AND INSTALLATION SHALL BE OF A NATURE SIMILAR TO ORIGINALLY SPECIFIED PRODUCT SO AS TO NOT CONFLICT WITH ANY INTENDED STRUCTURAL OR ARCHITECTURAL DESIGN CONDITIONS, WHETHER DESIGNED OR IMPLIED ON PLANS OR SPECIFICATIONS. THE SUBSTITUTED PRODUCT SHALL HAVE DESIGN VALUES (I.E. DESIGN LOADS, IMPACT RESISTANCE, ETC.) WHICH SHALL BE EQUAL TO OR GREATER THAN THE ORIGINALLY SPECIFIED PRODUCT MANUFACTURER FOR THE ITEM TO BE SUBSTITUTED SHALL HAVE SIMILAR WARRANTIES OFFERED BY THE SUBSTITUTED PRODUCT MANUFACTURER.
- SUBMIT TO THE ARCHITECT/ENGINEER A LIST OF ONLY THE ITEMS TO BE SUBSTITUTED, COMPLETE WITH ALL PERTINENT MATERIAL INCLUDING BUT NOT LIMITED TO MANUFACTURER'S SUPPLIED DESIGN LOADS LISTED FOR THE ORIGINALLY SPECIFIED PRODUCT AND THE PROPOSED SUBSTITUTION PRODUCT.

CONCRETE AND REINFORCEMENT

MATERIALS

- CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS.

	28 DAY STRENGTH	MAX SLUMP	MAX AGG	RATIO H2O/CEMENT	AD MixTURES
SLAB ON GRADE	3000 PSI	4"±1"	1"	0.50	N/A
FOUNDATIONS	3000 PSI	4"±1"	1-1/2"	0.65	N/A
RETAINING WALLS	3000 PSI	4"±1"	1"	0.55	N/A
SHOTCRETE	3000 PSI	2"±1"	¾"	0.40	N/A

NOTE:

- PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE II.
- CONCRETE CONTAINING REINFORCING MATERIAL SHALL CONTAIN NO MORE THAN 30%, BY WEIGHT, OF FLY ASH (ASTM C618, TYPE C OR F) AND/OR SLAG (ASTM C989).
- ABOVE TABLE ASSUMES NO AD MixTURES. AD MixTURE DOSAGE REQUIREMENTS DEPEND ON JOB CONDITIONS AT THE TIME OF CONCRETE PLACEMENT.
- REINFORCING STEEL SHALL CONFORM TO ASTM C615, (INCLUDING SUPPLEMENT S1), GRADE 60 FOR #5 BARS AND LARGER AND GRADE 40 FOR #4 BARS AND SMALLER. STEEL SHALL BE KEPT CLEAN AND FREE OF RUST SCALES.
- REINFORCING TO BE WELDED SHALL BE ASTM A706, GRADE 60
  - ELECTRODES FOR WELDING REINFORCING SHALL BE AS SPECIFIED BELOW  
SMAW: E90XX LOW HYDROGEN
- SMOOTH DOWELS SHALL BE NEW PLAIN BILLET STEEL CONFORMING TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 40 FOR ¾" DIAMETER, GRADE 60 FOR 5/8" DIAMETER AND LARGER.
- WELDED WIRE FABRIC SHALL CONFORM WITH ASTM A185, AND SHALL BE LAPPED 9" MINIMUM AT SPLICES.
- HIGH-STRENGTH, NON-SHRINK GROUT SHALL BE MASTER BUILDERS "CONSTRUCTION GROUT."
- MECHANICAL ANCHORS INSTALLED IN CONCRETE WHERE SPECIFIED ON THE PLANS SHALL BE ICC-ES APPROVED. ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS UNLESS NOTED OTHERWISE.

INSTALLATION

- MINIMUM REINFORCING STEEL COVER REQUIREMENTS:
  - CAST AGAINST AND EXPOSED TO EARTH: 3"
  - EXPOSED TO EARTH OR WEATHER: 2"
  - NOT EXPOSED TO EARTH OR WEATHER:  
SLABS, WALLS: 3/4"  
BEAMS AND COLUMNS: 1-1/2"
- MINIMUM CLEAR DISTANCE BETWEEN BARS SHALL BE 1-1/2 TIMES THE BAR DIAMETER, 1-1/3 TIMES THE MAXIMUM AGGREGATE SIZE, OR 1-1/2", WHICHEVER IS GREATEST.
- REINFORCING BARS SHALL BE IN LENGTHS AS LONG AS PRACTICABLE. ALL REINFORCING BENDS SHALL BE "COLD BENT." ALL REINFORCING BARS SHALL END IN A STANDARD HOOK UNLESS DETAILED OTHERWISE.
- REINFORCING, ANCHOR BOLTS AND INSERTS SHALL BE RIGIDLY HELD IN PLACE PRIOR TO PLACING CONCRETE.
- SEE TYPICAL DETAILS FOR NOTES ON REINFORCING STEEL.
- WHEN CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE WHERE SLAB OR WALL CONTROL JOINTS ARE NOT PRESENT, THE INTERFACE SHALL BE CLEAN AND FREE OF LAITANCE. THE SURFACE SHALL BE CLEANED AND ROUGHENED BY REMOVING THE ENTIRE SURFACE AND EXPOSING CLEAN AGGREGATE SOLIDLY EMBEDDED IN A MORTAR MATRIX. IN THE EVENT THAT THE CONTACT SURFACE BECOMES COATED WITH EARTH, SAW DUST, ETC., AFTER BEING CLEANED, THE SURFACE SHALL BE RECLEANED PRIOR TO CONCRETE PLACEMENT. ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED IMMEDIATELY BEFORE NEW CONCRETE IS PLACED.
- CONSTRUCTION JOINTS IN CONCRETE SHALL BE CLEAN WITH EXPOSED AGGREGATE SOLIDLY EMBEDDED. THE CONTRACTOR SHALL OBTAIN THE ARCHITECT'S/ENGINEER'S APPROVAL OF CONSTRUCTION JOINT LOCATION NOT INDICATED ON STRUCTURAL DRAWINGS.
- EXPANSION ANCHOR BOLTS AND POWDER DRIVEN FASTENERS (PDF) SHALL NOT BE INSTALLED UNTIL CONCRETE HAS REACHED DESIGN STRENGTH. PDF SHALL NOT BE USED IN CURBS U.N.O.
- CONSOLIDATE ALL CONCRETE BY VIBRATION, SPADING, RODDING OR FORKING. THOROUGHLY WORK CONCRETE AROUND REINFORCEMENT, AND EMBEDDED ITEMS. ELIMINATE ALL AIR AND STONE POCKETS WHICH MAY CAUSE HONEYCOMBING, PITTING OR PLANES OF WEAKNESS.
- WELDING AND PREHEATING OF REINFORCING SHALL CONFORM TO AWS D1.4 LATEST EDITION.

CURING

- EXPOSED SURFACES OF CONCRETE SHALL BE PROPERLY CURED IN A MOIST CONDITION AT A TEMPERATURE ABOVE 50 DEGREES FAHRENHEIT. EXPOSED CONCRETE SHALL BE THOROUGHLY WETTED AS NECESSARY TO MAINTAIN SURFACE IN A MOIST CONDITION. SEE ACI 308 LATEST EDITION.
- COLD WEATHER REQUIREMENTS:
  - SEE ACI 306 FOR CURING.
  - COVER CONCRETE WITH INSULATING BLANKETS AND MONITOR TEMPERATURES DURING CURING TO MAINTAIN 36 DEGREES FAHRENHEIT OR LESS TEMPERATURE DIFFERENTIAL BETWEEN SURFACE CONCRETE AND INTERNAL CONCRETE.
- HOT WEATHER REQUIREMENTS:
  - SEE ACI 305 FOR CURING.

- CONTINUOUS MOIST CURING SHOULD BEGIN IMMEDIATELY FOLLOWING THE FINAL FINISHING OPERATIONS TO PREVENT SURFACE DRYING.
- FORMWORK SHALL BE WETTED AT LEAST TWICE DAILY TO MAINTAIN A MOIST CONDITION FOR SEVEN (7) DAYS AFTER PLACEMENT OF CONCRETE.
- EXPOSED SURFACES OF CONCRETE SHALL BE COVERED WITH EVAPORATION RETARDANT PER MANUFACTURER'S SPECIFICATIONS.
- FINAL CURING:** FOR FINAL CURING OF CONCRETE CAST AND FINISHED FLAT, CURE BY ONE OF THE FOLLOWING METHODS FOR A MINIMUM OF SEVEN (7) DAY U.N.O.
  - PLASTIC MEMBRANE:** COMPLETELY COVER CONCRETE WITH A WHITE POLYETHYLENE SHEET (4 MIL. OR THICKER). THE FILM SHALL MEET THE REQUIREMENTS OF ASTM C171. LAP ALL JOINTS A MINIMUM OF SIX (6) INCHES AND SEAL WITH TAPE, MASTIC, GLUE OR BY WEIGHTING DOWN TO PREVENT DAMAGE FROM WIND. COVERINGS SHALL REMAIN IN PLACE DURING THE REQUIRED CURING PERIOD AND TORN PIECES SHALL BE REPLACED PROMPTLY. IF NEED LIFT UP A SECTION AT A TIME AND SPRAY WATER UNDER COVERING TO KEEP THE SLAB MOIST DURING THE CURING PERIOD. NOTE: PLASTIC MEMBRANE CURING SHALL NOT BE USED FOR CURING COLORED FLOORS OR WHERE APPEARANCE IS OF CRITICAL IMPORTANCE.
  - WATER CURING:** FLATWORK MAY BE CONTINUOUSLY WATER-CURED WITH A FOG SPRAY OR FLOODED FOR A PERIOD OF SEVEN (7) DAYS MINIMUM (INCLUDING HOLIDAYS AND WEEKENDS). CARE SHALL BE TAKEN TO AVOID THE FORMATION OF "DRY SPOTS" DURING THE INITIAL SEVEN-DAY CURE PERIOD.
  - BURLAP:** COVER CONCRETE WITH WET BURLAP AS SOON AS IT CAN BE PLACED WITHOUT MARKING THE SURFACE. KEEP THE BURLAP CONTINUOUSLY WET AND IN PLACE DURING THE CURING PERIOD.
  - REINFORCED PAPER:** REINFORCED PAPER SHOULD COMPLY WITH ASTM C171. PAPER SHEETS SHALL HAVE ONE WHITE SURFACE. SEE PLASTIC MEMBRANE CURING NOTES FOR ADDITIONAL INFORMATION.
  - ALTERNATE METHOD:** CURE CONCRETE FOR A MINIMUM OF FIVE CONSECUTIVE DAYS PER FINAL CURING SECTION AND THEN APPLY A CURE/SEALER.
  - CURE/SEALER:** VERIFY THAT OTHER FINISHES WILL NOT BE AFFECTED BY CURE/SEALER COMPOUND. CURE/SEALER SHALL BE A HIGH-SOLIDS-TYPE WITH A MAXIMUM MOISTURE LOSS OF 0.55KG/M² AT A COVERAGE OF 200 FT²/GAL. UPON COMPLETION OF FINISHING, APPLY AN APPROVED CURE/SEALER TO FLATWORK PER MANUFACTURER'S INSTRUCTIONS.

FINISHING

- FLATNESS/LEVELNESS: CONCRETE SLAB SURFACES SHALL CONFORM TO THE "F-NUMBER" REQUIREMENTS AS DEFINED BY ACI 302 AND HAVE AN OVERALL COMBINATION OF FF =30/FF =20 AND LOCAL COMBINATION OF FF=15/FF=10.
- LEVEL SCORED TO A TRUE SURFACE WITH A MAXIMUM DEVIATION OF 1/8 INCH IN 10'-0" LENGTH IN ANY DIRECTION.
- SLAB FINISH TYPES:
  - GENERAL: FINISH SLABS TO THE FOLLOWING TOLERANCES AS DEFINED IN ACI 301:
    - ALL SLABS, UNLESS NOTED OTHERWISE: CLASS A.
    - SLABS WITH SCRATCHED OR FLOATED FINISH: CLASS B.
  - FINISHING METHODS SHALL CONFORM TO ACI 302 TO ACHIEVE THE FLATNESS AND LEVELNESS REQUIREMENTS NOTED ON THE PLANS.
  - SPECIAL FINISHES
    - BROOM FINISH FOR EXTERIOR SLABS WHERE NOTED ON DRAWINGS SHALL BE FINISHED SAME AS STEEL TROWEL FINISH EXCEPT THAT AFTER HAND TROWELING FINISH SURFACES BY SCORING IN PARALLEL LINES WITH A FINE HAIR STABLE BROOM.
    - SCRATCHED: AFTER THE CONCRETE HAS BEEN PLACED, CONSOLIDATED, STRUCK OFF, AND LEVELED, THE SURFACE SHALL BE ROUGHENED WITH STIFF BRUSHES AND RAKES BEFORE FINAL SET.
    - STEEL TROWELED: THE SURFACE SHALL FIRST BE FLOAT-FINISHED AS SPECIFIED. IT SHALL NEXT BE POWER TROWELED, AND FINALLY HAND TROWELED. THE FIRST TROWELING AFTER POWER FLOATING SHALL PRODUCE A SMOOTH SURFACE WHICH IS RELATIVELY FREE OF DEFECTS, BUT WHICH MAY STILL SHOW SOME TROWEL MARKS. ADDITIONAL TROWELINGS SHALL BE DONE BY HAND AFTER THE SURFACE HAS HARDENED SUFFICIENTLY. THE FINAL TROWELING SHALL BE DONE WHEN A RINGING SOUND IS PRODUCED AS THE TROWEL IS MOVED OVER THE SURFACE. THE SURFACE SHALL BE THOROUGHLY CONSOLIDATED BY THE HAND TROWELING OPERATIONS. THE FINISHED SURFACE SHALL BE ESSENTIALLY FREE OF TROWEL MARKS, UNIFORM TEXTURE AND APPEARANCE AND SHALL BE PLANNED TO SPECIFIED TOLERANCE ON SURFACES INTENDED TO SUPPORT FLOOR COVERINGS, ANY DEFECTS OF SUFFICIENT MAGNITUDE THAT MIGHT SHOW THROUGH THE FLOOR COVERING SHALL BE REMOVED BY GRINDING.
    - EXPOSED AGGREGATE:
      - APPLY EXPOSED AGGREGATE FINISH TO RAMPS, WALKS AND ELSEWHERE AS INDICATED ON THE ARCHITECTURAL DRAWINGS.
      - AFTER COMPLETION OF FLOAT FINISHING, AND BEFORE STARTING TROWEL FINISH, UNIFORMLY SPREAD 2.5 LBS OF DAMPED AGGREGATE PER SQ. FT. OF SURFACE. TAMP AGGREGATE FLUSH WITH SURFACE USING A STEEL TROWEL, BUT DO NOT FORCE BELOW SURFACE. AFTER BROADCASTING AND TAMPING, APPLY TROWEL FINISHING AS HEREIN SPECIFIED.
      - AFTER FINISHING APPLY AND USE APPROVED SURFACE RETARDER PER MANUFACTURER'S RECOMMENDATIONS OR LIGHTLY WORK SURFACE WITH A STEEL WIRE BRUSH OR AN ABRASIVE STONE AND WATER TO EXPOSE AGGREGATE AS DIRECTED BY ARCHITECT.

CONCRETE FORMWORK

- RESPONSIBILITY: THE DESIGN, CONSTRUCTION, AND SAFETY OF ALL FORMWORK SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ALL FORMS, SHORES, BACKSHORES, FALSEWORK, BRACING, AND OTHER TEMPORARY SUPPORTS SHALL BE ENGINEERED TO SUPPORT ALL LOADS IMPOSED INCLUDING THE WET WEIGHT OF CONCRETE, CONSTRUCTION EQUIPMENT, LIVE LOADS, LATERAL LOADS DUE TO WIND AND WET CONCRETE IMBALANCE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR DETERMINING WHEN TEMPORARY SUPPORTS, SHORES, BACKSHORES, AND OTHER BRACING MAY BE SAFELY REMOVED.

CONCRETE CRACKING

- SOME MINOR CRACKING OF SLABS AND WALL PANELS SHOULD BE ANTICIPATED. CRACKS IN THE CONCRETE CAN BE THE RESULT OF MAY CONDITIONS, CONCRETE SHRINKAGE, FINISHING, JOINT TYPE AND INSTALLATION, CEMENT CONTENT, WATER TO CEMENT RATIO, AND RESTRAINT.

CARPENTRY

MATERIALS

- SAWN LUMBER USED FOR LOAD-SUPPORTING PURPOSES SHALL BE IDENTIFIED BY THE GRADE MARK OF A LUMBER GRADING OR INSPECTION AGENCY THAT HAS BEEN APPROVED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS 20 OR EQUIVALENT AND SHALL BE DOUGLAS FIR-LARCH MEETING OR EXCEEDING THE FOLLOWING COMMERCIAL GRADES UNLESS NOTED OTHERWISE.
  - STUDS UP TO 10'-0" IN HEIGHT, PLATES AND BLOCKING: STANDARD OR BETTER
  - STUDS GREATER THAN 10'-0" IN HEIGHT, JOISTS, RAFTERS, LEDGERS AND 4X BEAMS AND POSTS (F.O.H.C.): NO 2 OR BETTER
  - BEAMS AND POSTS 6X AND LARGER (F.O.H.C.): NO 1
- LUMBER SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF INSTALLATION.
- PRESERVATIVE-TREATED WOOD
  - ALL PRESERVATIVE-TREATED WOOD (P.T.D.F.) SHALL BE DOUGLAS FIR WITH GRADE PER PLAN, UNLESS NOTED OTHERWISE.
  - TREATMENT AND USAGE SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE AWPA STANDARD U1 AND M4 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. PRESERVATIVE S SHALL BE LISTED IN SECTION 4 OF AWPA U1.
  - ALL PRESERVATIVE-TREATED LUMBER SHALL BE CLEAN, DRY AND FREE FROM SURFACE RESIDUE.
  - FIELD TREAT CUTS, NOTCHES, BORINGS, ETC. AND HANDLE TREATED LUMBER IN ACCORDANCE WITH AWPA STANDARD M4.
  - ALL PRESERVATIVE-TREATED WOOD SHALL BEAR THE QUALITY MARK OF AN INSPECTION AGENCY THAT MAINTAINS CONTINUING SUPERVISION, TESTING AND INSPECTION OVER THE QUALITY OF THE PRESERVATIVE-TREATED WOOD. INSPECTION AGENCIES FOR PRESERVATIVE-TREATED WOOD SHALL BE LISTED BY AN ACCREDITATION BODY THAT COMPLIES WITH THE REQUIREMENTS OF THE AMERICAN LUMBER STANDARDS TREATED WOOD PROGRAM, OR EQUIVALENT. THE QUALITY MARK SHALL BE ON A STAMP OR LABEL AFFIXED TO THE PRESERVATIVE-TREATED WOOD, AND SHALL INCLUDE THE FOLLOWING INFORMATION:
    - IDENTIFICATION OF TREATING MANUFACTURER
    - TYPE OF PRESERVATIVE USE
    - MINIMUM PRESERVATIVE RETENTION (PCF)
    - END USE FOR WHICH THE PRODUCT IS TREATED
    - AWPA STANDARD TO WHICH THE PRODUCT WAS TREATED.
    - IDENTITY OF THE ACCREDITED INSPECTION AGENCY
- ALL STRUCTURAL SHEATHING PANELS SHALL BE IDENTIFIED WITH THE APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION AND SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN DOC PS 1 OR PS 2. EACH PANEL OR MEMBER SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY. IN ADDITION, PANELS WHEN PERMANENTLY EXPOSED IN OUTDOOR APPLICATIONS SHALL BE OF EXTERIOR TYPE, EXCEPT THAT WOOD STRUCTURAL PANEL, ROOF SHEATHING EXPOSED TO THE OUTDOORS ON THE UNDERSIDE IS PERMITTED TO BE INTERIOR TYPE BONDED WITH EXTERIOR GLUE, EXPOSURE 1. PANEL THICKNESS AND SPAN RATING SHALL BE AT LEAST EQUAL TO THAT SHOWN ON THE DRAWINGS.
- STRUCTURAL COMPOSITE LUMBER (SCL) INCLUDING LVL, LSL & PSL.
  - SCL SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES, UNLESS NOTED OTHERWISE:
    - 1/2" THICK SCL MEMBERS:  
E = 2.0 X 10<sup>6</sup> PSI  
FV = 2800 PSI  
FV = 285 PSI  
FC (PERP) = 750 PSI

- FC (PARL) = 3000 PSI
  - 3 1/2" TO 7" THICK SCL MEMBERS:  
E = 2.0 X 10<sup>6</sup> PSI  
FB = 3100 PSI  
FV = 285 PSI  
FC (PERP) = 750 PSI  
FC (PARL) = 3000 PSI
- MULTIPLE PIECE SCL BEAMS SHALL NOT BE SUBSTITUTED FOR FULL SIZE SCL BEAMS UNLESS SPECIFICALLY NOTED ON DRAWINGS.
- NAIL BUILT-UP 1-3/4" THICK SCL BEAMS WITH THREE ROWS OF 16d NAILS AT 12" O.C. STAGGERED, TYPICAL UNLESS NOTED OTHERWISE.
- MANUFACTURED "I" JOISTS
  - WOOD "I" JOISTS SHALL BE "BCI" AS MANUFACTURED BY BOISE CASCADE OR APPROVED EQUIVALENT. WOOD "I" JOISTS SHALL BE INSTALLED AND BRACED PRIOR TO SHEATHING ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
  - UNLESS NOTED OTHERWISE ON PLAN, JOIST HANGERS SHALL BE "ITS" OR "IUS" TYPE PER SIMPSON STRONG-TIE COMPANY, PLEASANTON, CALIFORNIA. FILL ALL NAIL HOLES WITH SIMPSON STRONG-TIE "N10" NAILS (10d X 1-1/2).
  - HOLES IN "I" JOIST WEBS SHALL NOT BE PERMITTED UNLESS THEIR SIZE AND PLACEMENT CONFORM TO MANUFACTURER'S SPECIFICATIONS.
  - DO NOT CUT OR NOTCH TOP OR BOTTOM FLANGES OR "I" JOISTS.
  - WOOD "I" JOIST SHALL BE PROTECTED FROM MOISTURE ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
- GLULAM BEAMS
  - GLULAMS SHALL BE DF/DF COMBINATION 24F-V4 FOR SIMPLE SPAN CONDITIONS AND 24F-V8 FOR CONTINUOUS AND CANTILEVER CONDITIONS WITH A 3500' RADIUS CAMBER, UNLESS NOTED OTHERWISE. EACH STRUCTURAL GLUE LAMINATED BEAM SHALL BE STAMPED BY A GRADE MARK OR HAVE A CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY. FURNISH CERTIFICATE OF INSPECTION TO THE BUILDING DEPARTMENT. GLULAM BEAMS SHALL CONFORM TO ANSI/AOTC A190.1 AND ASTM D3737.
  - ALL EXTERIOR GLULAM BEAMS EXPOSED TO WEATHER SHALL BE ALASKA YELLOW CEDAR. ALL HEARTWOOD SHALL BE USED. ALASKA YELLOW CEDAR GLULAMS SHALL BE COMBINATION 24F-V12 FOR SIMPLE SPAN CONDITIONS AND 20F-V12 WITH TENSION LAMS BALANCED TOP AND BOTTOM FOR CONTINUOUS AND CANTILEVER BEAMS UNLESS NOTED OTHERWISE.

FASTENERS/CONNECTORS

- NAILS
  - NAILS SHALL CONFORM TO REQUIREMENTS OF ASTM F 1667. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE A MINIMUM AVERAGE BENDING YIELD STRENGTH AS FOLLOWS:  
80 KSI FOR SHANK DIAMETERS LARGER THAN 0.177 INCH BUT NOT LARGER THAN 0.254 INCH;  
90 KSI FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LESS THAN 0.177 INCH;  
100 KSI FOR SHANK DIAMETERS OF AT LEAST 0.099 INCH BUT NOT LARGER THAN 0.142 INCH.
  - ALL NAILING NOT SPECIFICALLY CALLED OUT ON PLANS SHALL BE PER TYPICAL DETAILS, CBC TABLE 2304.9.1 AND THE TABLE BELOW:

CONNECTION	FASTENING/APPLICATION	
JOIST TO SILL OR GIRDER	(3) 8d COMMON OR 10d BOX/TOENAIL	
2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d COMMON/BLIND AND FACE NAIL	
SOLE PLATE TO JOIST OR BLOCKING	16d BOX @ 16" O.C. OR 10d BOX @ 8" O.C./FACE NAIL	
SOLE PLATE TO JOIST OR BLOCKING AT S.W.	(3) 16d BOX PER 16" OR (4) 10d BOX PER 16"/FACE NAIL	
TOP PLATE TO STUD	(2) 16d COMMON OR (3) 10d BOX/END NAIL	
STUD TO SOLE PLATE	(4) 8d COMMON OR (4) 10d BOX/TOE NAIL OR AT 2X SOLE PLATE OR (2) 16d COMMON OR (3) 10d BOX/END NAIL, OR AT 3X SOLE PLATE (2) 20d BOX/END NAIL	
DOUBLE STUDS	16 COMMON @ 24" O.C. OR 10d BOX @ 8" O.C./FACE NAIL	
DOUBLED TOP PLATES	10d COM @ 24" O.C./FACE NAIL AND (8) 16d COM @ LAP SPLICE	
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	(3) 8d COM OR (3) 10d BOX/TOENAIL	
RIM JOIST TO JOIST	(3) 16d COMMON OR (4) 10d BOX/FACE NAIL	

- NAILS SHALL BE AS INDICATED BELOW U.N.O. ON PLAN.
  - ROOF AND FLOOR SHEATHING: COMMON NAILS.
  - STRUCTURAL WALL SHEATHING: COMMON, HOT DIPPED GALVANIZED BOX OR TUMBLEED GALVANIZED BOX (ELECTROPLATED BOX NAILS ARE NOT ACCEPTABLE).
  - FRAMING: WHERE NOT SPECIFICALLY NOTED, USE COMMON NAILS.
  - METAL CONNECTORS: AS RECOMMENDED BY CONNECTOR MANUFACTURER, UNLESS NOTED OTHERWISE.
- | TYPICAL NAIL SIZE | LENGTH | SHANK DIAMETER |
|-------------------|--------|----------------|
| 8d COMMON         | 2-1/2" | 0.131"         |
| 10d COMMON        | 3"     | 0.148"         |
| 10d BOX           | 3"     | 0.128"         |
| 16d COMMON        | 3-1/2" | 0.162"         |
| 16d BOX           | 3-1/2" | 0.135"         |
| 16d SINKER        | 3-1/4" | 0.148"         |
| 20d COMMON        | 4"     | 0.192"         |
| 20d BOX           | 4"     | 0.148"         |

NOTES:

- COMMON NAILS MAY BE SUBSTITUTED FOR BOX OR SINKER NAILS.
- 16d SINKERS MAY BE SUBSTITUTED FOR 10d COMMON OR 16d BOX.
- CONNECTORS AND FASTENERS EXPOSED TO WEATHER AND/OR IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED, ZINC-COATED STEEL CONFORMING TO TABLE 1 OF ASTM A153 OR SHALL BE STAINLESS STEEL. CONNECTOR MATERIAL AND/OR CORROSION PROTECTION SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS. FASTENER MATERIAL/FINISH TYPE SHALL MATCH CONNECTOR MATERIAL/FINISH TYPE AT EACH CONNECTION.
- MACHINE BOLTS SHALL CONFORM TO ASTM A307. ANCHOR BOLTS AND ANCHOR RODS SHALL CONFORM TO ASTM F1554 GRADE 36. PROVIDE STANDARD CUT WASHERS UNDER HEAD AND NUT WHERE BEARING IS AGAINST WOOD, UNLESS NOTED OTHERWISE. BOLT HOLES IN WOOD SHALL BE 1/16" LARGER THAN BOLT SIZES UNLESS NOTED OTHERWISE. NUTS SHALL BE TIGHTENED WHEN PLACED AND RETIGHTENED BEFORE CLOSING IN.
- STANDARD CUT WASHERS SHALL CONFORM TO ASTM F844 WITH DIMENSIONS PER ANSI/ASME B18.22.1. AS NOTED BELOW:

NOMINAL	INSIDE	OUTSIDE	
WASHER SIZE	DIAMETER	DIAMETER	THICKNESS
1/2"	0.562"	1.375"	0.109"
5/8"	0.688"	1.750"	0.134"
3/4"	0.812"	2.000"	0.148"
1"	1.062"	2.500"	0.165"

- JOIST HANGERS, METAL CONNECTORS AND OTHER MISCELLANEOUS TIMBER CONNECTORS SHALL BE PER SIMPSON STRONG-TIE COMPANY, PLEASANTON, CALIFORNIA, UNLESS NOTED OTHERWISE. NAIL OR BOLT AT ALL PRE-DRILLED HOLES, PER MANUFACTURER'S INSTRUCTIONS, UNLESS NOTED OTHERWISE. ALL STRAPS SHALL BE CENTERED ON SPLICE UNLESS NOTED OTHERWISE.
- THREADED ROD (A.T.R.) SHALL CONFORM TO ASTM A307 GRADE A OR ASTM A193 GRADE B7, UNLESS NOTED OTHERWISE.
- FOR FASTENINGS OF 2X WOOD MEMBERS TO STEEL MEMBERS, USE SIMPSON PDPA OR HILTI X-U 52 P8 POWDER-DRIVEN FASTENERS (P.D.F.) AT 12" O.C. THROUGH 14 GAUGE X 1" SQUARE WASHERS UNLESS NOTED OTHERWISE.

INSTALLATION

- ALL CARPENTRY SHALL CONFORM TO THE CONVENTIONAL CONSTRUCTION PROVISIONS OF THE CBC SECTION 2308 UNLESS DETAILED OTHERWISE.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE-TREATED, UNO.
- SOLID BLOCK UNDER ALL BEAMS AND POSTS TO PROVIDE CONTINUOUS SUPPORT TO FOUNDATION OR POST BELOW.
- ALL BEAMS, JOISTS AND RAFTERS SHALL BE SUPPORTED LATERALLY AT EACH END AND AT INTERIOR SUPPORTS BY SOLID BLOCKING OR SIMILAR FRAMING TO PREVENT ROTATION OF MEMBER.
- AT NAILED CONNECTIONS, WOOD TENDS TO SPLIT, REPLACE MEMBER AND PRE-DRILL HOLES.
- DO NOT NOTCH BEAMS, JOISTS, RAFTERS AND STUDS UNLESS NOTED OTHERWISE OR APPROVED BY ENGINEER. SEE TYPICAL DETAILS.
- ALL OPENINGS SHALL BE BETWEEN FRAMING MEMBERS, UNLESS NOTED OTHERWISE ON DRAWINGS.
- STUD WALLS SHALL BE FRAMED WITH 2X6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. FRAME ALL STUD WALLS FULL HEIGHT, CONTINUOUS TO BOTTOM OF FLOOR JOISTS, TRUSSES OR RAFTERS. ALL EXTERIOR STUD WALLS GREATER THAN 10 FEET HIGH SHALL HAVE 2X6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. CORNERS SHALL BE FRAMED WITH NOT LESS THAN THREE STUDS UNLESS NOTED OTHERWISE.

- WHERE CRIPPLE WALLS ARE FRAMED WITH STUDS LESS THAN 14" HIGH, PROVIDE SOLID BLOCKING.
- CARE SHALL BE TAKEN TO ALLOW FOR THE EFFECTS OF LUMBER SHRINKAGE. IF NECESSARY TO AVOID SAGGING, BRACE JOISTS, RAFTERS AND BEAMS AT MIDSPAN UNTIL LUMBER HAS REACHED A STABLE MOISTURE CONTENT.
- STRUCTURAL SHEATHING INSTALLATION SHALL BE IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE AMERICAN PLYWOOD ASSOCIATION. NAILS SHALL BE DRIVEN SO THAT THEIR HEAD IS FLUSH WITH SURFACE OF THE SHEATHING.
- BREAK DOUBLE TOP PLATES OVER STUDS, OFFSET TOP & BOTTOM JOINTS @ 48" MIN.
- PROVIDE DOUBLE JOISTS UNDER INTERIOR STRUCTURAL SHEATHED WALLS, UNLESS NOTED OTHERWISE.
- PROVIDE SOLID BLOCKING UNDER INTERIOR STRUCTURAL SHEATHED WALLS WHEN JOISTS ARE PERPENDICULAR TO WALLS.
- INSTALL EXTERIOR STRAPS OVER SHEATHING.
- ATTACH INTERIOR SHEAR WALLS TO ROOF DIAPHRAGM, TO BLOCKING IN TRUSSES OR RAFTERS (SEE PLAN).

MASONRY

MATERIALS

- CONCRETE MASONRY UNITS (C.M.U.) SHALL BE GRADE N, NORMAL WEIGHT, CONFORMING TO ASTM C90, AND HAVING A COMPRESSIVE STRENGTH OF 1900 PSI
- PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE II.
- MORTAR SHALL BE TYPE S, CONFORMING TO ASTM C270 AND TMS 602/ACI 530.1/ASCE 6. MASONRY CEMENT WILL NOT BE PERMITTED.  
MORTAR MINIMUM COMPRESSIVE STRENGTH: 1800 PSI
- GROUT SHALL MEET ALL REQUIREMENTS OF ASTM C476. USE 8 SACK MINIMUM, 8"-10" SLUMP. USE COARSE GROUT WITH PEAK GRAVEL UNLESS NOTED OTHERWISE.  
GROUT MINIMUM COMPRESSIVE STRENGTH: EQUAL TO O GREATER THAN CMU COMPRESSIVE STRENGTH BUT NOT LESS THAN 2000 PSI.
- AD MixTURES AS APPROVED BY THE ENGINEER OR AS FOLLOWS:
  - MORTAR: NONE
  - GROUT: SIKKA GROUT AID, 1 LB. PER SACK OF CEMENT.
- COMPRESSIVE STRENGTH OF COMPLETED MASONRY SHALL BE F'M=1500 PSI
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, (INCLUDING SUPPLEMENT S1), GRADE 60 FOR #5 BARS AND LARGER AND GRADE 40 FOR #4 BARS AND SMALLER. STEEL SHALL BE KEPT CLEAN AND FREE OF RUST SCALES. REFER TO "CONCRETE AND REINFORCEMENT" NOTES.

INSTALLATION

- PLACE BLOCK IN RUNNING BOND UNLESS NOTED OTHERWISE.
- CONCRETE MASONRY UNITS SHALL BE KEPT DRY PRIOR TO GROUTING.
- THE MORTAR SHALL BE SUFFICIENTLY PLASTIC AND UNITS SHALL BE PLACED WITH SUFFICIENT PRESSURE TO EXTRUDE MORTAR FROM THE JOINT AND PRODUCE A TIGHT JOINT. DEEP FURROWING, WHICH PRODUCES VOICES, SHALL NOT BE USED.
- HOLLOW-MASONRY UNITS. ALL HEAD AND BED JOINTS SHALL BE FILLED WITH MORTAR FOR A DISTANCE IN FROM THE FACE OF THE UNIT NOT LESS THAN THE THICKNESS OF THE SHELL.
- PRIOR TO GROUTING, THE GROUT SPACE SHALL BE CLEANED SO THAT ALL SPACES TO BE FILLED WITH GROUT DO NOT CONTAIN MORTAR PROJECTIONS GREATER THAN ½", MORTAR DROPPINGS OR OTHER FOREIGN MATERIAL.
- ALL CELLS SHALL BE FULLY GROUTED WITH NO VOIDS.
- CONCRETE SURFACE SHALL BE CLEAN AND ROUGH PRIOR TO PLACEMENT OF GROUT.
- ALL GROUT SHALL BE THOROUGHLY CONSOLIDATED BY VIBRATING AFTER PLACING OF GROUT AND SHALL BE RECONSOLIDATED PRIOR TO LOSS OF PLASTICITY.
- LOW LIFT GROUTING: LAY MASONRY UNITS 5'-0" MAXIMUM HEIGHT WITHOUT CLEANOUTS. PLACE GROUT IN A CONTINUOUS POUR NOT TO EXCEED 5'-0". GROUT SHALL BE STOPPED 1" TO 1-1/2" BELOW TOP OF THE LAST COURSE OF MASONRY UNITS. GROUT SHALL NOT BE STOPPED AT A BOND BEAM COURSE.
- HIGH LIFT GROUTING: LAY MASONRY UNITS TO 24'-0" MAXIMUM HEIGHT WITH CLEANOUTS AT EACH VERTICAL BAR AND AT 32" O.C. MAXIMUM. PLACE GROUT IN A CONTINUOUS POUR IN GROUT LIFTS NOT EXCEEDING 6'-0". BETWEEN LIFTS GROUT SHALL BE STOPPED 1-1/2" BELOW MORTAR JOINTS. GROUT SHALL NOT BE STOPPED AT A BOND BEAM COURSE.
- ALL HORIZONTAL STEEL SHALL BE PLACED IN BOND BEAM BLOCKS.
- ALL REINFORCING BARS SHALL BE SECURELY TIED AT EACH END, AT THE TOP AND BOTTOM OF EACH POUR AND AT A MAXIMUM OF 10' ON DIAGONALS OR CENTER.
- WHEN TEMPERATURE DROPS BELOW 40 DEGREES FAHRENHEIT, COLD WEATHER CONSTRUCTION PROCEDURES AND COLD WEATHER PROTECTION REQUIREMENTS SHALL BE USED. SEE CBC SECTION 2104 FOR THE "COLD WEATHER CONSTRUCTION REQUIREMENTS". NO ANTIFREEZE LIQUIDS, CHLORIDE SALTS, OR OTHER SUCH SUBSTANCES SHALL BE ADDED TO THE MORTAR OR GROUT.
- SEE CBC SECTION 2104 WHEN CONSTRUCTION OCCURS IN HOT WEATHER. HOT WEATHER IS DESIGNATED AS THE AMBIENT TEMPERATURE EXCEEDING 100 DEGREES FAHRENHEIT; OR EXCEEDING 90 DEGREES FAHRENHEIT WITH A WIND VELOCITY GREATER THAN 8 MILES PER HOUR.
- PROVIDE ONE #5 BAR AT 12" ON CENTER OF OPENINGS. EXTEND BARS 24 INCHES BEYOND THE CORNERS OF OPENINGS AND PROVIDE TWO #5 FULL HEIGHT TRANS BARS AT EACH SIDE OF OPENINGS. THESE BARS ARE IN ADDITION TO TYPICAL REINFORCEMENT SHOWN ON THE PLANS, UNLESS NOTED OTHERWISE.

STEEL

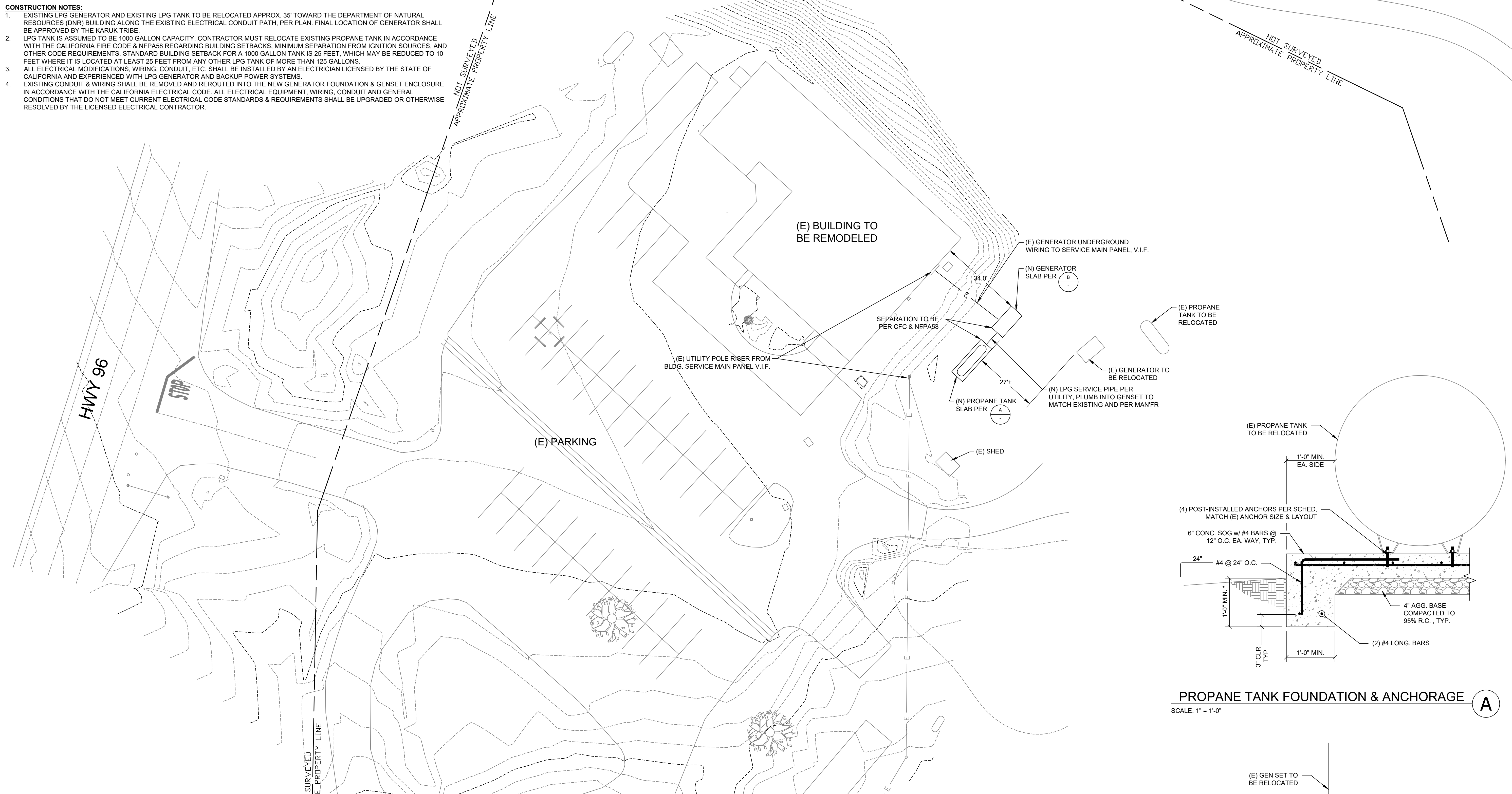
- ALL WORK SHALL BE IN CONFORMANCE WITH AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", LATEST EDITION.
- STEEL W SHAPES AND WT SHAPES SHALL CONFORM TO ASTM A992.
- RECTANGULAR, SQUARE AND ROUND HSS SHALL CONFORM TO ASTM 500, GRADE B.
- STEEL HP SHAPES SHALL CONFORM TO ASTM A572, GRADE 50.
- STEEL PIPES SHALL CONFORM TO ASTM A53, GRADE B.
- STEEL PLATES AND OTHER SHAPES SHALL CONFORM TO ASTM A36 OR ASTM A572, GRADE 50.
- COLD FORMED STEEL FRAMING MEMBERS SHALL CONFORM TO ASTM A446, GRADE D.
- HOLES IN FLANGES SHALL BE AT STANDARD GAUGE, UNLESS NOTED OTHERWISE.
- ALL STRUCTURAL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.1, LATEST EDITION.
- ALL SHOP AND FIELD WELDERS SHALL BE CERTIFIED ACCORDING TO AWS PROCEDURES FOR THE WELDING PROCESS AND WELDING POSITION USED.
- WELD METAL SHALL MATCH BASE METAL PER AWS REQUIREMENTS. ELECTRODES FOR WELDING SHALL BE AS SPECIFIED BELOW:
  - ELECTRODES FOR STRUCTURAL STEEL:
    - SMAW: E70XX LOW HYDROGEN.
    - FCAW: E7XX-2 (EXCEPT -2, -3, -10, -GS) (AWS A5.20).
    - ALL COMPLETE-JOINT-PENETRATION GROOVE WELDS USED IN THE SEISMIC FORCE RESISTING SYSTEM SHALL COMPLY WITH REQUIREMENTS FOR DEMAND CRITICAL WELDS PER AISC "SEISMIC PROVISIONS OF STRUCTURAL STEEL BUILDINGS" SECTION 7.3D AND SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT MINUS 20 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION. THE ELECTRODES SHALL PRODUCE WELD METAL WITH CVN TOUGHNESS OF AT LEAST 20 FT-LBS AT 0 DEGREES FAHRENHEIT AND 40 FT-LBS AT 70 DEGREES FAHRENHEIT.
  - ALL STEEL EXPOSED TO WET CONDITIONS SHALL BE GALVANIZED OR EPOXY PRIMED AND EPOXY PAINTED. ALL EPOXY PAINT APPLIED TO STEEL SHALL BE COMPATIBLE WITH THE PRIMER USED.
- ALL INTERIOR EXPOSED STEEL SHALL BE PRIME COATED UNLESS NOTED OTHERWISE.
- A307 BOLTS SHALL BE TIGHTENED WITH AN IMPACT WRENCH TO A SNUG TIGHT CONDITION. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY A SNUG IMPACT OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH.
- ALL STRUCTURAL STEEL AND REINFORCING STEEL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS, LATEST EDITION. ALL SHOP AND FIELD WELDERS SHALL BE CERTIFIED ACCORDING TO AWS PROCEDURES FOR THE WELDING PROCESS AND WELDING POSITION USED.

FOUNDATIONS & SITE WORK



CONSTRUCTION NOTES:

- EXISTING LPG GENERATOR AND EXISTING LPG TANK TO BE RELOCATED APPROX. 35' TOWARD THE DEPARTMENT OF NATURAL RESOURCES (DNR) BUILDING ALONG THE EXISTING ELECTRICAL CONDUIT PATH, PER PLAN. FINAL LOCATION OF GENERATOR SHALL BE APPROVED BY THE KARUK TRIBE.
- LPG TANK IS ASSUMED TO BE 1000 GALLON CAPACITY. CONTRACTOR MUST RELOCATE EXISTING PROPANE TANK IN ACCORDANCE WITH THE CALIFORNIA FIRE CODE & NFPA58 REGARDING BUILDING SETBACKS. MINIMUM SEPARATION FROM IGNITION SOURCES, AND OTHER CODE REQUIREMENTS. STANDARD BUILDING SETBACK FOR A 1000 GALLON TANK IS 25 FEET, WHICH MAY BE REDUCED TO 10 FEET WHERE IT IS LOCATED AT LEAST 25 FEET FROM ANY OTHER LPG TANK OF MORE THAN 125 GALLONS.
- ALL ELECTRICAL MODIFICATIONS, WIRING, CONDUIT, ETC. SHALL BE INSTALLED BY AN ELECTRICIAN LICENSED BY THE STATE OF CALIFORNIA AND EXPERIENCED WITH LPG GENERATOR AND BACKUP POWER SYSTEMS.
- EXISTING CONDUIT & WIRING SHALL BE REMOVED AND REROUTED INTO THE NEW GENERATOR FOUNDATION & GENSET ENCLOSURE IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE. ALL ELECTRICAL EQUIPMENT, WIRING, CONDUIT AND GENERAL CONDITIONS THAT DO NOT MEET CURRENT ELECTRICAL CODE STANDARDS & REQUIREMENTS SHALL BE UPGRADED OR OTHERWISE RESOLVED BY THE LICENSED ELECTRICAL CONTRACTOR.



LEGEND	
PARCEL BOUNDARY	---
ROAD OR PAVING	---
WATER LINE	---
SANITARY SEWER	---
POWER LINE	---
(E) FENCE	---
FINISH GRADE SPOT ELEVATION	3492.6
SURFACE DRAINAGE DIRECTION/SLOPE	1.8%
EXISTING GRADE MAJOR CONTOUR	3500
EXISTING GRADE MINOR CONTOUR	---

NOTES

MAPPING NOTES:

- FOR REFERENCE ONLY. THIS SITE PLAN IS DIAGRAMMATIC ONLY AND NOT TO BE CONSIDERED AN ACCURATE SURVEY. MT SHASTA ENGINEERING, INC. IS NOT RESPONSIBLE FOR ACCURACY OF BOUNDARIES & DIMENSIONS OF THE SITE.
- ALL EXISTING CONDITIONS & DIMENSIONS SHALL BE VERIFIED TO BE TRUE & ACCURATE PRIOR TO BEGINNING WORK. ANY INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF MT SHASTA ENGINEERING IMMEDIATELY.
- SITE FEATURES & TOPOGRAPHY BASED UPON TOPOGRAPHIC SURVEY CONDUCTED BY TRINITY VALLEY CONSULTING ENGINEERS ON 8/12/2015.

UTILITY NOTES:

- CONTRACTOR SHALL FIELD LOCATE & VERIFY ALL UTILITY CONNECTIONS & REQUIREMENTS.
- CONTRACTOR SHALL CALL IN USA UTILITY LOCATES AS REQUIRED BY LAW PRIOR TO EXCAVATIONS IN ACCORDANCE WITH USA NORTH REQUIREMENTS, DIAL 811.
- LPG RELOCATION & SERVICE PIPELINE INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH THE LOCAL UTILITIES REQUIREMENTS. CONTRACTOR SHALL CONTACT THE LOCAL LPG SERVICE COMPANY PRIOR TO CONSTRUCTION.

GRADING & DRAINAGE NOTES:

- FINISHED GRADE SHALL SLOPE AWAY FROM THE BUILDING AT A MINIMUM SLOPE OF 5% FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE EXTERIOR WALL. IF OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF SLOPE, PROVIDE 5% SLOPE TO AN APPROVED ALTERNATE DRAINAGE SYSTEM. CONCRETE SLABS, EXTERIOR PAVING OR OTHER IMPERVIOUS SURFACES WITHIN 10 FEET OF THE FOUNDATION SHALL SLOPE A MINIMUM OF 2% AWAY FROM THE BUILDING.

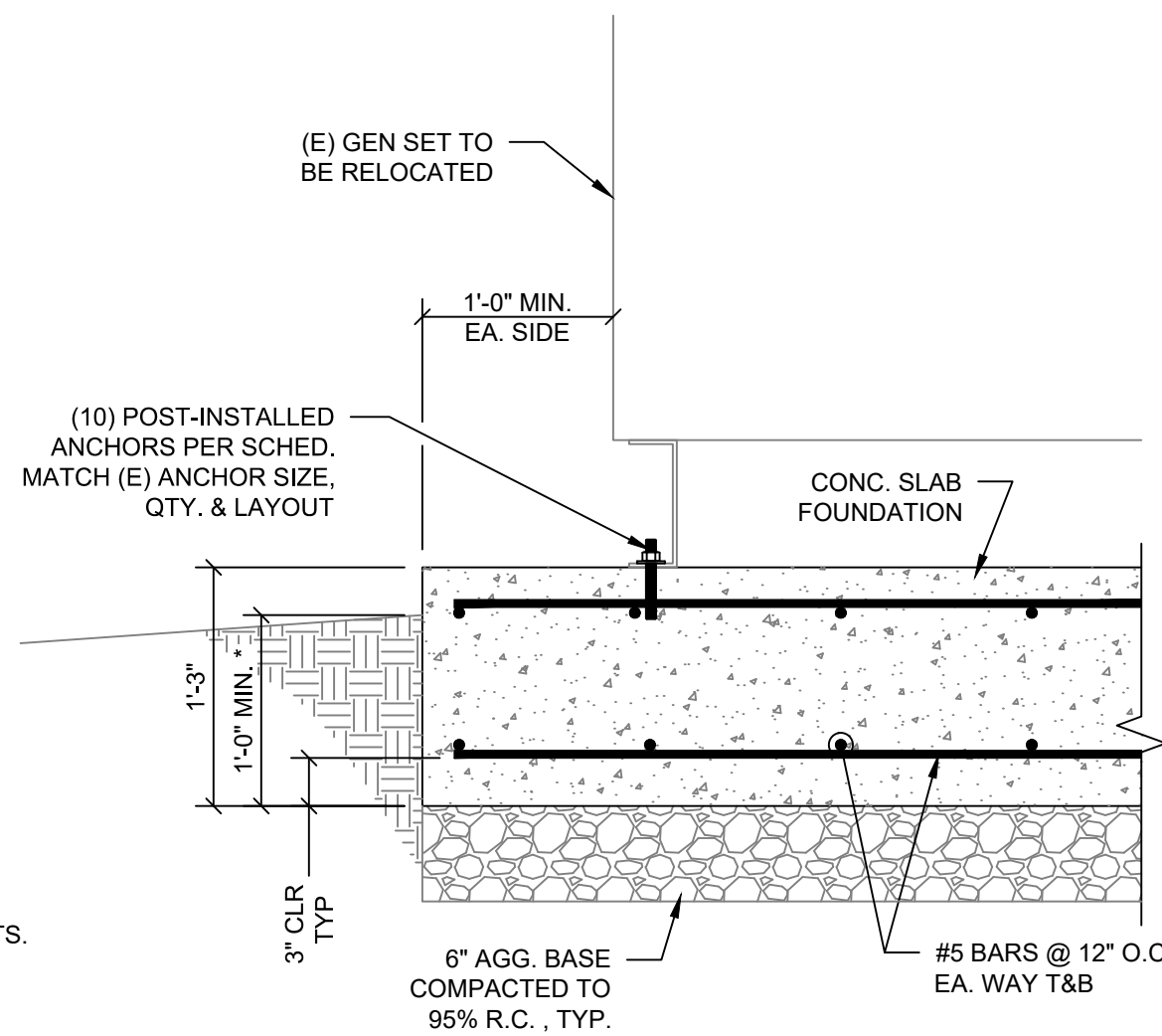
POST-INSTALLED ANCHORS	MIN. A.B. EMBED
1/2"Ø HILTI KWIK BOLT TZ	3-1/4"
1/2"Ø SIMP. STRONG-BOLT 2	2-3/4"
5/8"Ø HILTI KWIK BOLT TZ	3-9/16"
5/8"Ø SIMP. STRONG-BOLT 2	3-3/8"
1/2"Ø A.T.R. w/ HILTI HIT-HY 200 OR HIT-RE 500 V3	2-3/4"
5/8"Ø A.T.R. w/ HILTI HIT-HY 200 OR HIT-RE 500 V3	3-1/8"

POST-INSTALLED ANCHOR NOTES:

- SEE GENERAL NOTES FOR SPECIAL INSPECTION REQUIREMENTS.
- INSTALLATION OF POST-INSTALLED ANCHORS SHALL BE IN ACCORDANCE WITH THESE NOTES & THE MANUFACTURER'S SPECIFICATIONS & INSTALLATION INSTRUCTIONS.
- HOLE DIAMETER & MINIMUM CONCRETE THICKNESS SHALL BE PER THE MANUFACTURER'S SPECIFICATIONS.
- HOLES FOR POST-INSTALLED ANCHORS SHALL BE THOROUGHLY CLEANED PER THE MFR'S INSTRUCTIONS.

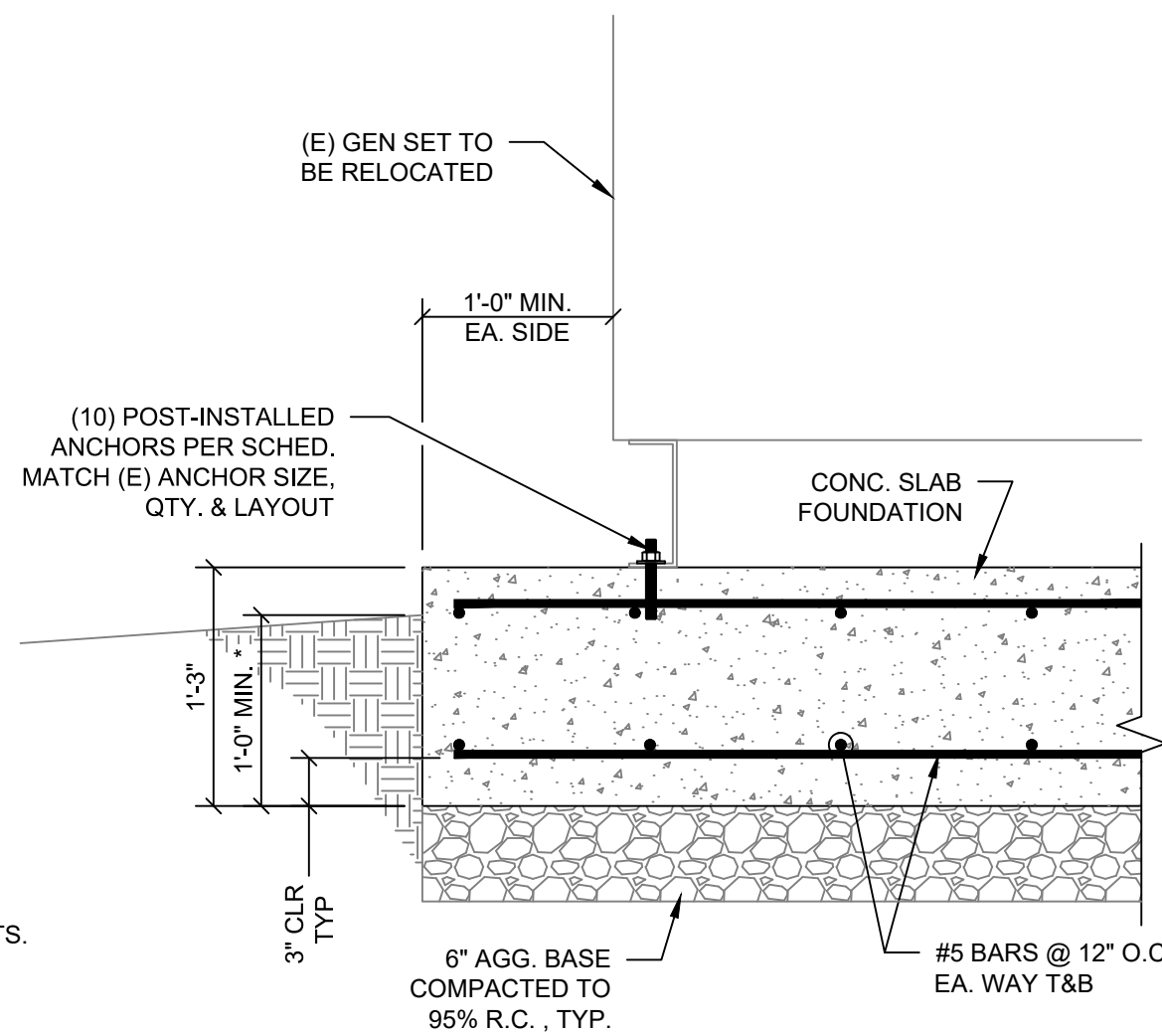
PROPANE TANK FOUNDATION & ANCHORAGE

SCALE: 1" = 1'-0"



GEN SET FOUNDATION & ANCHORAGE

SCALE: 1" = 1'-0"



MT SHASTA  
ENGINEERING

508 CHESTNUT ST.  
SUITE 3  
MOUNT SHASTA, CA 96067  
PH: 530-918-8074

DO NOT SCALE THESE DRAWINGS

CLIENT: KARUK TRIBE  
COMMERCIAL REMODEL  
30951 ST HWY 96  
ORLEANS, CA 95556  
APN: 529-212-002



04/28/17  
SHEET TITLE:

PLOT PLAN

REVISIONS:

PROJECT NUMBER:  
133.01

ISSUE DATE:  
04-28-17

SCALE:  
AS NOTED

DRAWN BY:  
RDM

ENGINEERED:  
NER

CHECKED:  
NER

SHEET:

C1





FLOOR PLAN NOTES

PLATE HEIGHTS  
FIRST FLOOR: EXISTING  
TYPICAL HEADER: 4x6 DF, UNO

HAND/GUARD RAILS  
HANDRAILS AT WALL @ +36" ABV. T.O. NOSING.  
HANDRAILS AT OPEN SIDES @ +36" ABV. T.O. NOSING.  
HANDRAIL/GUARDRAIL AT OPEN SIDE OF STAIR OR INTERMEDIATE LANDING @ +36" ABV. TREAD NOSING OR A.F.F.  
GUARDRAIL @ +42" A.F.F.  
GUARDRAILS REQ'D @ LOCATIONS HIGHER THAN +30" ABV. FINISHED FLOOR/GRADE.

WINDOWS & DOORS  
ALL NEW GLAZING TO BE DUAL PANED INSULATING GLASS.  
WINDOW HEAD HEIGHTS: MATCH EXISTING  
DOOR HEAD HEIGHTS: MATCH EXISTING  
ALL GLAZING, WHEN LOCATED WITHIN DOORS, WITHIN 24" OF DOOR SWING, AND WITHIN 18" A.F.F. MUST BE TEMPERED. ALL GLAZING TO HAVE 1 PANE TEMPERED PER CBC 7A.

ABBREVIATIONS:  
SC - SOLID-CORE  
SCD - SELF-CLOSING/LATCHING DEVICE  
SGD - SLIDING GLASS DOOR  
FX - FIXED  
SH - SINGLE-HUNG  
DH - DOUBLE-HUNG  
SL - SLIDER  
PR - PAIR  
PK - POCKET DOOR  
HM - HOLLOW METAL  
BI - BIFOLD DOORS  
T - TEMPERED

WALL LEGEND

REFERENCE STRUCTURAL DRAWINGS FOR WALL TYPES, THICKNESS, CONNECTIONS AND LOCATIONS

(N) 2x4 WD. FRAME  
(N) 2x6 WD. FRAME  
(N) 2x8 WD. FRAME  
EXISTING WALLS

**MT SHASTA ENGINEERING**  
508 CHESTNUT ST. SUITE 3  
MOUNT SHASTA, CA 96067  
PH: 530-918-8074  
DO NOT SCALE THESE DRAWINGS

CLIENT: KARUK TRIBE  
COMMERCIAL REMODEL  
30951 ST HWY 96  
ORLEANS, CA 95556  
APN: 529-212-002

04/28/17

SHEET TITLE:  
EXISTING FLOOR PLAN

REVISIONS:

PROJECT NUMBER:  
133.01

ISSUE DATE:  
04-28-17

SCALE:  
AS NOTED

DRAWN BY:  
RDM

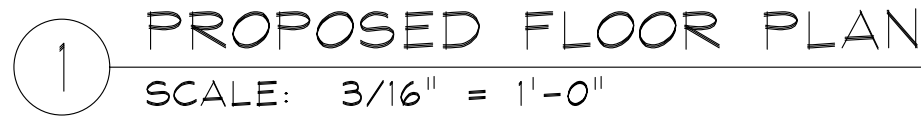
ENGINEERED:  
NER

CHECKED:  
NER

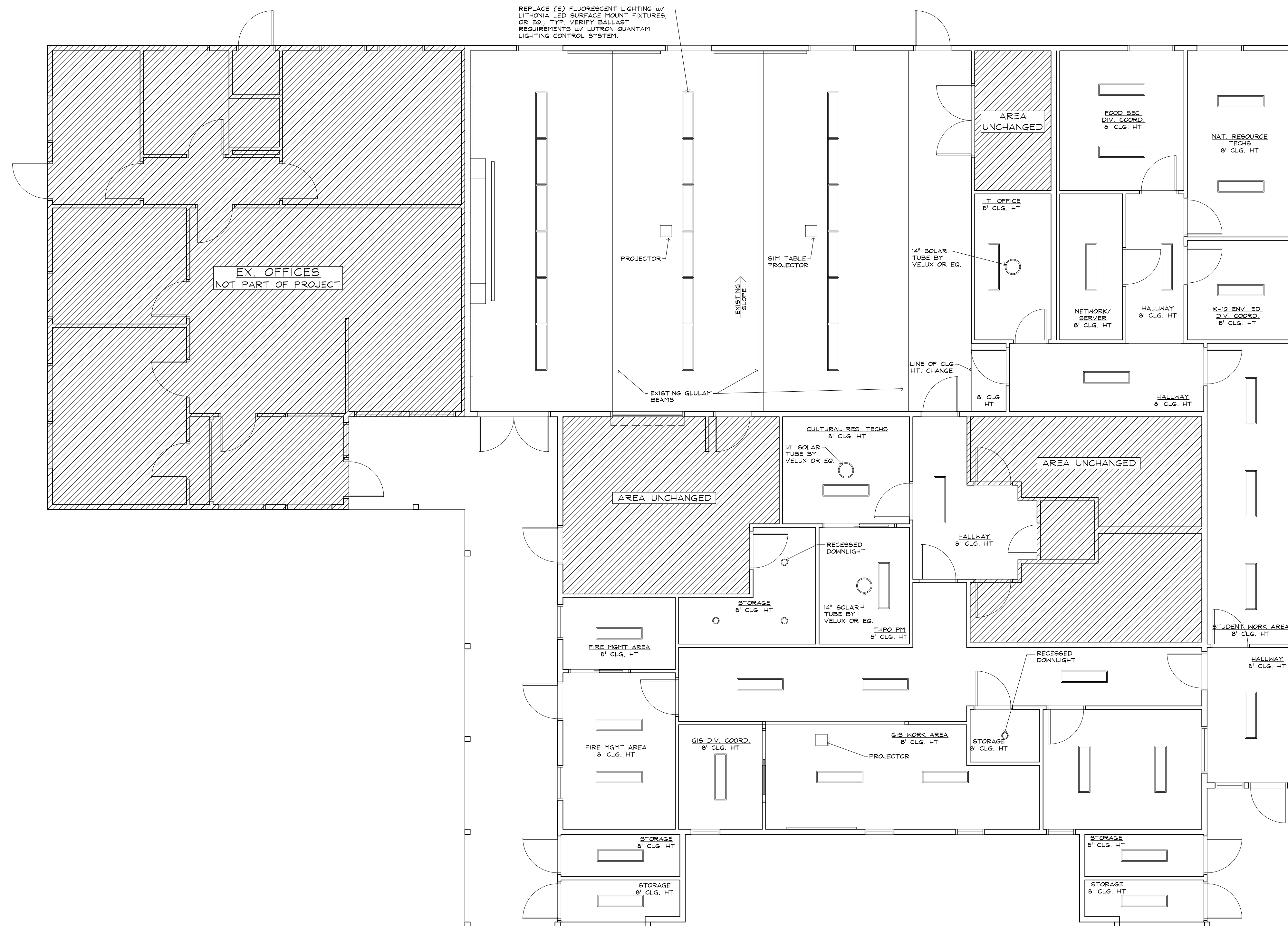
SHEET:  
A1.1

1 EXISTING FIRST FLOOR PLAN  
SCALE: 3/16" = 1'-0"





A1.2



# ELECTRICAL NOTES

COMPONENTS LISTED MAY BE SUBSTITUTED WITH EQUAL PRODUCTS AND APPROVED BY OWNER. ELECTRICAL CONTRACTOR SHALL DESIGN ENTIRE ELECTRICAL SYSTEM AND SUBMIT DRAWINGS FOR OWNER'S APPROVAL PRIOR TO ORDERING MATERIALS OR EQUIPMENT. CONTRACTOR SHALL VERIFY INDOOR LIGHTING PHOTOMETRICS, NUMBER OF LIGHTS REQUIRED AND SPACING REQUIREMENTS. SYSTEMS SHALL BE DESIGNED TO COMPLY WITH ALL CODES. ALL COLORS PER OWNER.

ENERGY MANAGEMENT SYSTEM  
QUANTUM BY LUTRON. VERIFY BALLAST REPLACEMENT FOR LIGHTING REQUIREMENTS AT COMMUNITY ROOM.


LIGHTING  
SURFACE MOUNT:  
LITHONIA LBL LED WRAPAROUND  
DOWNLIGHTING:  
LITHONIA REALITY 6" LED MODULE

SHADES  
LUTRON SIVOIA Q5 SHADING SYSTEM

DATA  
ALL DATA PORTS SHALL BE QUAD DATA PORT  
ETHERNET RJ-45 CAT6 WALL PORTS

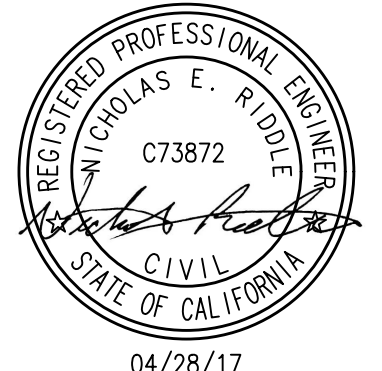
TELECONFERENCE  
STARLEAF FT MINI MODEL 3330 - VERIFY COMPONENTS w/ OWNER. PROVIDE POWER AND DATA PER MANUFACTURER, LOCATE PER OWNER.

PODIUM  
AMPLIVOX SW3235 WIRELESS MULTIMEDIA PRESENTATION PODIUM - VERIFY COMPONENTS w/ OWNER. PROVIDE POWER AND DATA PER MANUFACTURER, LOCATE PER OWNER.



**MT SHASTA  
ENGINEERING**  
508 CHESTNUT ST.  
SUITE 3  
MOUNT SHASTA, CA 96067  
PH: 530-918-8074  
DO NOT SCALE THESE DRAWINGS

CLIENT: KARUK TRIBE  
COMMERCIAL REMODEL  
30951 ST HWY 96  
ORLEANS, CA 95556  
APN: 529-212-002



04/28/17

SHEET TITLE:  
**REFLECTED  
CEILING PLAN**

REVISIONS:

PROJECT NUMBER:  
133.01

ISSUE DATE:  
04-28-17

SCALE:  
AS NOTED

DRAWN BY:  
RDM

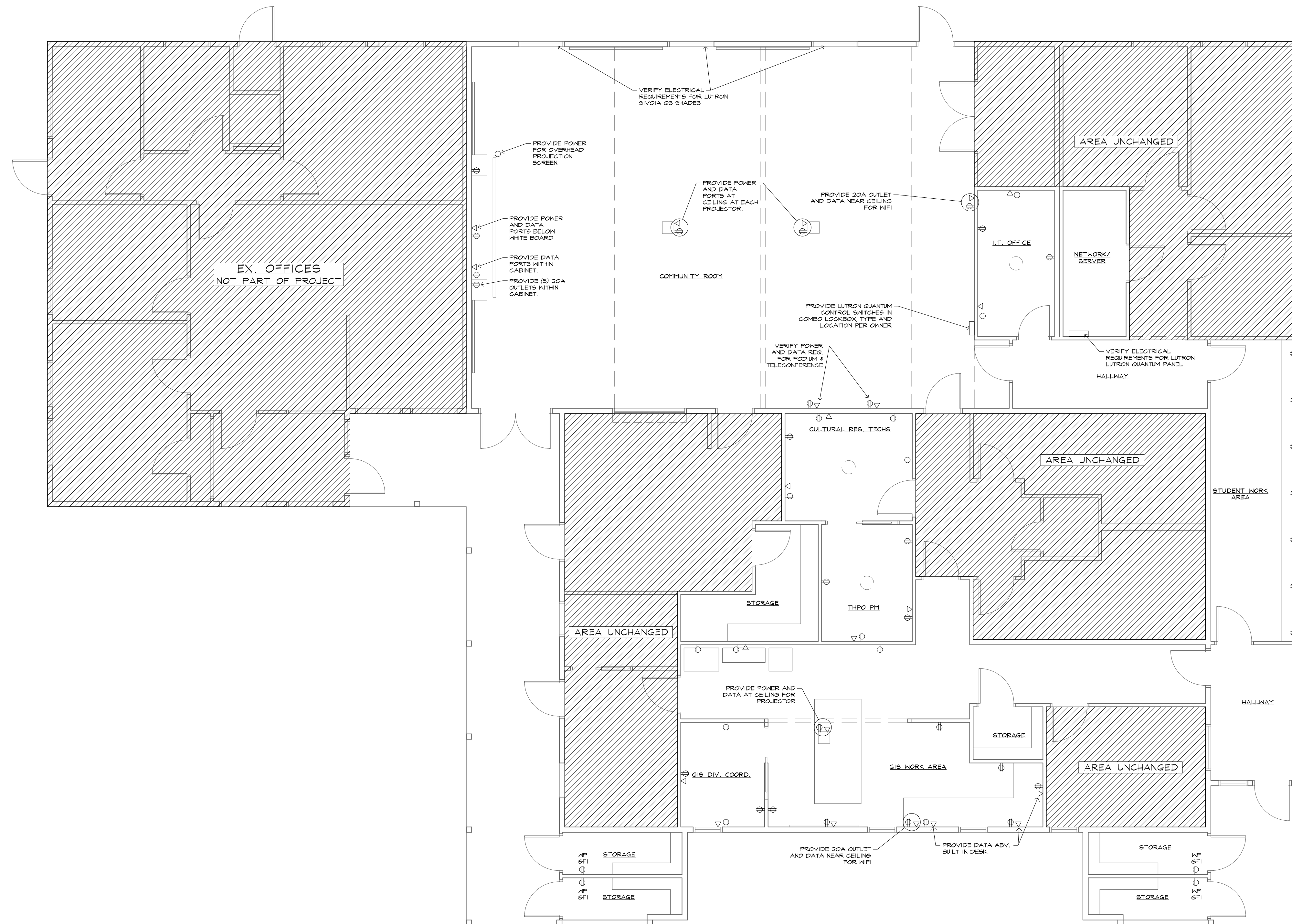
ENGINEERED:  
NER

CHECKED:  
NER

SHEET:  
**A1.3**

1 REFLECTED CEILING PLAN  
SCALE: 3/16" = 1'-0"





ELECTRICAL NOTES

COMPONENTS LISTED MAY BE SUBSTITUTED WITH EQUAL PRODUCTS AND APPROVED BY OWNER. ELECTRICAL CONTRACTOR SHALL DESIGN ENTIRE ELECTRICAL SYSTEM AND SUBMIT DRAWINGS FOR OWNER'S APPROVAL PRIOR TO ORDERING MATERIALS OR EQUIPMENT. CONTRACTOR SHALL VERIFY INDOOR LIGHTING PHOTOMETRICS, NUMBER OF LIGHTS REQUIRED AND SPACING REQUIREMENTS. SYSTEMS SHALL BE DESIGNED TO COMPLY WITH ALL CODES. ALL COLORS PER OWNER.

ENERGY MANAGEMENT SYSTEM  
QUANTUM BY LUTRON. VERIFY BALLAST REPLACEMENT FOR LIGHTING REQUIREMENTS AT COMMUNITY ROOM.

LIGHTING  
SURFACE MOUNT:  
LITHONIA LBL LED WRAPAROUND  
DOWNLIGHTING:  
LITHONIA REALITY 6" LED MODULE


SHADES  
LUTRON SIVOIA QS SHADING SYSTEM

DATA  
ALL DATA PORTS SHALL BE QUAD DATA PORT  
ETHERNET RJ-45 CAT6 WALL PORTS

TELECONFERENCE  
STARLEAF FT MINI MODEL 3330 - VERIFY COMPONENTS w/ OWNER. PROVIDE POWER AND DATA PER MANUFACTURER, LOCATE PER OWNER.


PODIUM  
AMPLIVOX SW3235 WIRELESS MULTIMEDIA PRESENTATION PODIUM - VERIFY COMPONENTS w/ OWNER. PROVIDE POWER AND DATA PER MANUFACTURER, LOCATE PER OWNER.

1 POWER AND DATA PLAN  
SCALE: 3/16" = 1'-0"



**MT SHASTA  
ENGINEERING**  
508 CHESTNUT ST.  
SUITE 3  
MOUNT SHASTA, CA 96067  
PH: 530-918-8074  
DO NOT SCALE THESE DRAWINGS

CLIENT: KARUK TRIBE  
COMMERCIAL REMODEL  
30951 ST HWY 96  
ORLEANS, CA 95556  
APN: 529-212-002



04/28/17

SHEET TITLE:  
**POWER AND  
DATA PLAN**

REVISIONS:

PROJECT NUMBER:  
133.01

ISSUE DATE:  
04-28-17

SCALE:  
AS NOTED

DRAWN BY:  
RDM

ENGINEERED:  
NER

CHECKED:  
NER

SHEET:

A1.4



# Attachment D

