

REQUEST FOR BIDS



County of Mendocino
Facilities & Fleet

Bid No. 01-17

Job/Project Description: Ukiah Veterans Hall
Basement Stair Replacement

Issue Date: January 6, 2017

Due Date: January 26, 2017

Mendocino County is seeking bids from General Building contractors to replace the basement stairs at the Ukiah Veteran's Hall located at 293 Seminary Ave, Ukiah, CA.

Sealed Bids will be accepted at the Facilities and Fleet Division Office, at 851 Low Gap Road, Ukiah, until 2:00 p.m. January 26, 2017.

REQUIRED LICENSING

The CSLB license required for this Project is "B" License. **Contractor's License#** _____ **Expires** _____

☐ Contractor has registered with the State of California's DIR (Department of Industrial Relations) website.

DIR Registration # _____.

Contractor's current Mendocino County Business License # _____. At the time of contract award, all contractors who are not exempt and do not already have a MCBL shall apply for one, which shall be obtained prior to performance of any work by that contractor.

AWARD OR REJECTION OF BIDS

The contract shall be awarded to the lowest responsive and responsible bidder complying with these instructions, provided the bid is deemed reasonable and in the best interest of the County of Mendocino.

TIME OF COMPLETION

Bidder agrees to commence work on or before a date to be specified and to fully complete the project within Thirty (30) calendar days.

MANDATORY WALK THROUGH

A mandatory pre-quote conference will be held on Tuesday January 17, 2017 at 9:00 a.m. at the Project site, 293 Seminary Ave, Ukiah, California.

FOR MORE INFORMATION

Plans and bid documents are available on line at <http://www.co.mendocino.ca.us/gs/central/rfps.htm>

For additional details and information, contact Doug Anderson, Facilities and Fleet, at (707) 234-6054.

SCOPE OF WORK

Provide new concrete basement stairs, plaster patch and related repairs per the attached plans and specifications.

BID

Total Bid Price: _____ (\$ _____)

ADDENDUM ACKNOWLEDGEMENT: I have received the following addendum pertaining to the bid and they are included as part of my bid. Addendum Numbers: _____

THIS FORM MUST BE COMPLETED, SIGNED AND DATED FOR YOUR BID TO BE VALID:

Signature: _____

Date: _____

Print Name _____

Address: _____

Company: _____

E-mail: _____

Phone: () - _____

An engineer's estimate has not been prepared for this project. For the convenience of bidders this project has been placed in the budget category noted below. Acceptance or rejection of bids is not limited by the range indicated.

■ Less than \$45,000 * No bonding required

PAYMENT OF PREVAILING WAGES

Pursuant to the provisions of the Labor Code of the State of California, the Department of Industrial Relations has made a determination of the rate of per diem wages to be paid on the prevailing rate of pay for regular, holiday and overtime work in the locality in which the public work is to be performed, for each craft, classification, or type of workman needed to execute the contract. All County of Mendocino projects greater than \$1,000 require that contractors adhere to Prevailing Wage requirements (California Labor Code, Sections 1770 through 1775). The rates can be found online here: <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>

CONTRACTOR REGISTRATION

Per Labor Code Section 1771.1(a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

CERTIFIED PAYROLL RECORDS

Per Labor Code Section 1776 each contractor and subcontractor shall keep accurate payroll records. A certified copy of all payroll records for work performed under this contract shall be furnished upon request to a representative of the awarding body. Per SB 854 contractors and subcontractors are required to furnish certified payroll reports directly to the Department of Industrial Relations.

EMPLOYMENT OF APPRENTICES

Each contractor and subcontractor performing work in an apprenticeable craft or trade shall comply with Section 1777.5 relating to Apprentices on public works projects.

LAWS AND GOVERNANCES

In the performance of the work contemplated by this contract, the contractor shall conform to and abide by all labor requirements and provisions of State and Federal Laws and City and County Ordinances and Regulations which may in any manner affect those engaged or employed on the work project, including but not limited to the overtime provisions of the Labor Code section 1813 and 1815 of the State of California.

INSURANCE REQUIREMENTS

Insurance coverage in a minimum amount set forth herein shall not be construed to relieve CONTRACTOR for liability in excess of such coverage, nor shall it preclude COUNTY from taking such other action as is available to it under any other provisions of this Agreement or otherwise in law.

CONTRACTOR agrees to indemnify and hold harmless COUNTY, its elected or appointed officials, employees or volunteers against any claims, actions, or demands against them, or any of them, and against any damages, liabilities or expenses, including costs of defense and attorney's fees, for personal injury or death, or for the loss or damage to the property, or any or all of them, to the extent arising out of the performance of this Agreement by CONTRACTOR.

CONTRACTOR affirms that s/he is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for the Workers' Compensation or to undertake self insurance in accordance with the provisions of the Code and CONTRACTOR further assures that s/he will comply with such provisions before commencing the performance of work under this Agreement. CONTRACTOR shall furnish to COUNTY certificate(s) of insurance evidencing Worker's Compensation Insurance coverage to cover its employees, and CONTRACTOR shall require all subcontractors similarly to provide Workers' Compensation Insurance as required by the Labor Code of the State of California for all of CONTRACTOR'S and subcontractors' employees.

CONTRACTOR shall furnish to COUNTY certificates of insurance with Automobile Liability/General Liability Endorsements evidencing at a minimum the following:

- a. Combined single limit bodily injury liability and property damage liability - \$1,000,000 each occurrence.
- b. Vehicle / Bodily Injury combined single limit vehicle bodily injury and property damage liability - \$500,000 each occurrence.

ATTACHMENT A GENERAL PROVISIONS

1. CONTRACT DOCUMENTS

The contract documents shall consist of the County's standard form contract as well as this Request for Bids, all documents listed in the above SCOPE of WORK section, all addenda issued prior to bid and information provided at any mandatory pre-bid walkthrough. As a public project, applicable provisions of the California Public Contract code shall apply, as does the California State Labor Code, the federal Davis Bacon Act and the Americans with Disabilities Act of 1990. Regardless of any information presented to the contrary, all work shall comply with the California Building Code, Mendocino County Building Code, Title 24 and any referenced code standards required in the jurisdiction where the work shall take place. A copy of the County's standard form contract will be furnished to bidders upon request.

2. BIDDING REQUIREMENTS

To be considered for award, the bid form must be completed in its entirety. Successful responses must include the contractor's license number and expiration date, valid DIR registration number, the bid price in words and numbers, acknowledgement of all addenda issued by the County for this project, the bidders signature, the date signed, the bidder's printed name, and the company name and address under which the contractor's license is issued. Any missing information or invalid license or registration information will be grounds for disqualification. All correspondence will be by US mail unless the contractor provides the email or phone information requested. The County of Mendocino reserves the right to reject any and all bids, to waive any informality in the bids, and to accept the responsive and responsible bid that appears to be in the best interest of the County of Mendocino.

3. SUBMISSION OF BIDS

Bids must be received by the due date and time at the location specified above. Post marks do not count. Bids and modifications or corrections thereof received after the closing time specified above will not be considered. Quotations will not be accepted via email, telephone or facsimile unless specifically authorized within the contract documents.

4. PRODUCTS

Unless otherwise stated, the use of the name of a manufacturer, or of any special brand or make in describing any item contained in these plans and specifications does not restrict bidders to that manufacturer's specific article with the exception of carpet, tile, and paint (the County must adhere to a specific brand/style of carpet, tile, and paint which will be specified within the Scope of Work). The manufacturer, brand and products named are used simply to indicate the character or quality of the article desired. The equipment on which proposals are submitted must be acceptable as equal in character, quality, and utility to brand and/or make indicated herein. The selected contractor will be required to comply with all submittal requirements in the contract documents where it will be the contractor's burden to demonstrate that the submitted product is equal to that specified. The decision of the County will be final.

5. TAXES and FEES

All bids shall include required California State sales tax, freight and shipping costs to the project site, and all licensing, registration, permits and application fees required to complete the work. The County will secure planning and building approvals and is exempt from building permit fees. Encroachment permits and public works inspections and fees are the responsibility of the contractor.

All contractors must have a Mendocino County Business License (MCBL), as required by Mendocino County Code Chapter 6.04, to work on this contract. At the time of contract award, all contractors who are not exempt and do not already have a MCBL shall apply for one, which shall be obtained prior to performance of any work by that contractor.

The contractor/bidder is responsible for ensuring that all of its non-exempt subcontractors have a valid MCBL.

6. SAMPLES

Samples of items, when required, must be furnished free of expense to the County of Mendocino and if not destroyed by tests will, upon request, be returned at the bidder's expense. Samples of selected items may be retained for comparison.

7. PAYMENT

Payments shall be made upon receipt of an approved invoice. The County will approve progress invoices for projects lasting more than 28 calendar days for work completed prior to the invoice date based on the percentage completion of an approved schedule of values. Final invoices will be approved after all work has been completed and all required certified payroll reports, lien releases, manuals, training, as-build drawings and warranties have been received by the County.

8. ADDENDA/RFI

Addenda will be issued by the County, as required, to clarify the bidding documents and in response to bidder's questions. Addenda questions must be submitted at least 10 days prior to bid opening to be included in the addendum. Requests for Information may be forwarded to the County to provide written notice of discrepancies in the contract documents or conditions differing from those represented in the documents or observable at the time of bid.

9. CHANGES

The contractor shall secure written authorization before proceeding with any additional work, whether requested by the County or required to complete the contract. The cost for any changes to the contract price, whether requested by the County or the Contractor will be approved only after submitting the contractor's true costs for the work and related equipment costs and site expenses. The final change order price may include a fee for administrative overhead and profit not to exceed 15%.

10. COMPLIANCE WITH COUNTY POLICIES

The Board of Supervisors has passed various policies regarding the preservation of our natural resources which may impose specific requirements on the contractor.

- Storm Water Management Program includes specific requirements for grading and construction projects within the County including the implementation of Best Management Practices (BMP) to prevent the discharge of construction waste, debris, sediment or contamination from entering the storm drainage system or natural waterways. For more information refer to the County Planning and Building web page.
- Purchase products that minimize environmental impacts, toxics, pollution, and hazards to worker and community safety to the greatest extent practicable, and purchase products that include recycled content, are durable and long-lasting, conserve energy and water, use agricultural fibers and residues, reduce greenhouse gas emissions, and use unbleached or chlorine free manufacturing processes, are lead-free and mercury-free.
- Waste Stream Reduction goals include programs to maximize the salvage and recycling of demolition and construction debris and document waste stream diversion. For more information refer to the County Planning and Building web page.

11. MSDS SHEETS

Material Safety Data Sheets for all materials used in all phases of the project shall be presented to the County prior to beginning work. No materials, other than those that have MSDS sheets, shall be permitted on County premises.

DOCUMENTS INCLUDED

UKIAH PUBLIC HEALTH BUILDING ACCESSIBLE EMPLOYEE ENTRANCE

Bidding Documents

1. Request for Bids – 4 pages
 - a. Bid Form
 - b. Notices and Requirements
 - c. General Provisions
 - d. Documents Included

Project Plans

1. Cover Page – Floor Plan
2. A01 – Section and Framing Plan

Specifications

1. 00650 – Construction Site Storm Water Policy – 2 pages
2. 01010 – Summary of Work – 3 pages
2. 03300 – Cast in Place Concrete – 6 Pages
3. 05521 – Steel Handrails and Railings– 5 pages

SECTION 00650

CONSTRUCTION SITE STORM WATER POLICY

PART I – GENERAL

1.1 SUMMARY

- A. Mendocino County Ordinance No. 4313 STORM WATER RUNOFF POLLUTION PREVENTION PROCEDURE (Mendocino County Code Chapter 16.30 et.seq.) requires any person performing construction and grading work anywhere in the county shall implement appropriate Best Management Practices (BMP) to prevent the discharge of construction waste, debris, sediment or contaminants from construction materials, tools and equipment from entering the storm drainage system or natural waterways (off-site).
- B. By commencing work in this contract, the contractor agrees to comply with Mendocino County Code Section 16.30.140 Inspection and monitoring. The County may enter the worksite whenever necessary to perform inspections related to the Storm Water Runoff Pollution Prevention Procedures for the project including inspection of BMP's and records relating to storm water plan compliance.

1.2 SUBMITTALS

- A. Prior to beginning construction activities, submit construction site Best Management Practice (BMP) Plans and Specifications prepared by a Qualified Storm Water Developer (QSD) or the Contractor referencing Mendocino County Building and Planning Services Documents noted below:
 - 1. Construction Best Management Practices for over-the-counter building permits for projects that do not disturb any soil.
 - 2. Small Construction Site Storm Water Erosion and Sediment Control Plan Template for projects that will disturb any soil.
- B. Submittal shall include a project specific BMP plan for all areas of soil disturbance and possible contamination source generated by the project. Attach copies of the relevant current BMP fact sheets from the California Storm Water BMP Handbook Portal planned to address each potential source of contamination generated by the project.
- C. A County approved BMP plan is required prior to beginning work on the project.

Part 2 – PRODUCTS

2.1 MATERIALS

- A. Provide Materials in Compliance with Approve BMP fact sheets in appropriate quantities to mitigate possible runoff, sedimentation and/or contamination in accordance with the approved BMP plan.

Part 3 – EXECUTION

3.1 PREPARATION

- A. Prepare BMP schedule to identify dates when BMP's will be installed.
- B. Ensure that BMP Materials are on site in the event of an untimely rain event and prior to October 15th.
- C. Identify and mark Storm Drain Inlets and drainage features leading to storm drains or natural waterways.
- D. Identify and provide instruction and training to on site personnel responsible for installation and management of BMP's.

3.2 INSTALLATION

- A. Complete BMP installation Prior to October 1st or prior to ground disturbance activities between October 1st and April 15th, and call the project manager for an inspection of the installed BMP plan. Do not start grading activities without BMP's in place.
- B. Comply with installation guidelines included with BMP fact sheets and suitable to site conditions.
- C. Remove Contamination and Sediment BMP's after sources of sedimentation, or contamination have been removed from the site or final soil stabilization is complete. Do not remove Erosion Control BMP's until permanent Erosion Control features are established unless directed by the County.

3.3 INSPECTION

- A. It is the responsibility of the Contractor to provide regular inspection of BMP's throughout the rainy season. Maintain and replace all BMP's in accordance with the approved BMP plan.
- B. Prior to significant rain events, inspect installed BMP's to ensure all potential sources of contamination, sedimentation or erosion are protected by approved BMP's.
- C. During significant rain events verify that installed BMP's are adequate to the flows on the project site.
- D. Record inspection findings as required by approved BMP plan.
- E. Maintain Inspection records and a copy of the approved BMP plan on the project site for inspection by County and NCWRCB.
- F. Failure of the Contractor to comply with the requirements of these specifications and the provisions of the approved Storm Water pollution Prevention Plan or BMP plan may result in work stoppage, a written citation, monetary fine or any combination thereof.

END OF SECTION

SECTION 01010
SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. The General Conditions and Division 1 - General Requirements apply to the Work of all Sections.
- B. Contractor is hereby specifically directed to notify and apprise all subcontractors and other parties engaged in the Work as to the Contents of the General Provisions.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work shall be performed at a Project site located at the Ukiah Veterans Hall, 293 Seminary Ave, Ukiah, County of Mendocino.
- B. The Work of this Contract comprises construction of Concrete Basement Steps and miscellaneous repairs as per attached plans and per the Scope of Work below:

Scope of Work:

- 1. Work shall include but is not limited to, construction of the lower run of basement steps including handrails, re-building the landing, and all appurtenant work required under the Contract Documents.
- 2. Additional requirements of all parties to the Contract are included in the Request for Bids, requirements and general provisions.
- 3. If certain features or systems are not fully shown or called for in the Contract Documents, their construction shall be of the same character and quality as for similar conditions that are shown, called for, or reasonably inferred.
- 4. Contractor shall provide all labor, equipment, and materials that are required to provide a complete properly operating and safe site. The extent of the work as indicated on the Drawings and as described in the Specifications shall include all that may be reasonably inferred to be required for proper execution or installation of work and for complete systems.
- 5. Should the General Provisions or Contract Documents contradict themselves, Contractor shall provide the more stringent or higher quality or quantity unless otherwise accepted by County.
- 6. The Drawings shall be recognized as diagrammatic in nature and not completely descriptive of all requirements for construction. Whatever work may be specified, and not drawn, or drawn and not specified, is to be executed as fully as if described in both these ways; and should any workmanship or material be necessary which is not either directly or indirectly noted in these specifications, or shown on the Drawings, but is nevertheless necessary for the purpose of properly carrying out the obvious intention thereof, Contractor is to understand the same to be implied, and is to provide for the same in its bid, as fully as if it were particularly described or delineated.

1.3 TYPE OF CONTRACT

- A. Contractor shall construct the Work under a single fixed-price Contract incorporating segregated lump sum prices for various optional portions of the Work.

1.4 PRECEDENCE OF DOCUMENTS

- A. In the case of discrepancy or ambiguity in the Contract Documents the following order of precedence shall prevail:
 - 1. Modifications in inverse chronological order and in alphanumeric order.
 - 2. Signed Agreement and terms and conditions referenced in the Signed Agreement.
 - 3. General Provisions
 - 4. Division 1 specifications.
 - 5. Drawings and Division 2 through 16 specifications.
 - 6. Written numbers and figures, unless obviously incorrect.
 - 7. Figured dimensions over scaled dimensions.
 - 8. Large format drawings over small-scale drawings.
- B. Any conflict between the Drawings and Division 2 through 16 specifications will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are not the same or are not determinable, then in favor of the specifications.
- C. Any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete the Work required, then the actual quantity shall take precedence.

1.5 USE OF PREMISES

- A. General: Comply with requirements in General Conditions and Section 01500.
- B. Area available for Contractor's use for work and storage, if any, is limited to the area designated on the Drawings.
- C. Fire Department Access: Contractor's use of premises shall not limit required Fire Department access.

1.6 EXAMINATION

- A. General: The Contractor is responsible for inspection of the existing site conditions prior to bidding and shall include in the Contract any and all work required as a result of Contractor's inspection to complete the work as shown whether or not field conditions or dimensions are clearly shown or indicated in the documents. All such modifications shall be included in the bid.
- B. Persons performing work shall examine conditions that affect their work and shall report in writing to Contractor, who will forward a copy to County, conditions detrimental to work.
 - 1. Failure to examine and report makes the person responsible, at no increase in the Contract Sum, for corrections necessary for the proper installation of their work.
 - 2. Commencement of Work constitutes acceptance of existing condition.
- C. Field Verification: Contractor shall verify all existing conditions in the field prior to commencing the Work.

1.7 PERMITS FOR WORK

The County shall secure building permit approval; it is the Contractor's responsibility to call for and pass all required inspections.

1.8 USE AND OCCUPANCY BY COUNTY PRIOR TO COMPLETION

County may use and occupy portions of the building during the course of this contract.

- A. Contractor will not be held responsible for any damage to the occupied portion of the site directly resulting from County's occupancy.
- B. Access by County shall not be deemed to constitute a waiver of existing claims on behalf of County or Contractor against each other.
- C. Contractor shall maintain on a 24-hour-a-day, 7-day-a-week basis, utility services, and other operational systems, in usable condition for the duration of the project.
- D. Occupancy of portions of the site shall not, in itself, indicate acceptance of all Work in areas of occupancy or indicate acceptable completion of the Work in total.

1.9 REQUEST FOR INFORMATION (RFI)

- A. Requirement: It is Contractor's responsibility to review Contract Documents a minimum of thirty (30) days in advance of the work to be executed, and to request information so that County will have sufficient time to respond to Requests for Information prior to the start of actual construction of that part of the Work to which the RFI relates. Contractor shall be responsible for all delays, disruptions and other related impacts as a result of untimely RFI's submitted to County.
- B. Contractor shall coordinate all requests for information to prevent duplication. Requests for information that are duplicative, uncoordinated with each other, or do not allow for a reasonable time for response will be returned to Contractor.
 - 1. Contractor shall promptly notify County in writing of any discrepancies, and shall not proceed with the Work until such discrepancies have been resolved.
 - 2. Failure to notify County shall not relieve Contractor of its responsibility for resulting damage and/or defect, and for the cost of any corrective work that may be required due to Contractor's failure to notify.
- C. Contractor shall prioritize RFI's and request a response based on its most current and accepted CPM schedule.
- D. Reply:
 - 1. County will endeavor to reply to all RFI's promptly as work schedule of the consultants allows; generally no later than fifteen (15) days from the day received.
 - 2. When an RFI involves a complex subject, extensive research or development, or substantial input from other governmental agency, County will inform Contractor and request additional time to prepare the reply. Contractor shall cooperate and agree to a reasonable time extension.
 - 3. The reply shall be a clarification or an interpretation of the Contract Documents; the reply is not an authorization of change in the Contract Sum or Time.
 - 4. Such written interpretation or clarification will be binding on Contractor and County. If County or Contractor believes that a written interpretation or clarification justifies an adjustment in the Contract Sum or Time, then County or Contractor may make a written request for change therefor as provided in the General Conditions, Article 1.07.

END OF SECTION 01010

SECTION 03300
CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes cast-in-place concrete, including reinforcement, concrete materials, mixture design, placement procedures, and finishes.
- B. Related Sections:
 - 1. Section 05500 for Steel handrails and embedded metals.
 - 2. Section 06100 for Coordination and layout for framed openings and embedded anchors.
 - 3. Section 09700 for Sealants.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Other Action Submittal:
 - 1. Design Mixtures: For each concrete mixture.
 - 2. Reinforcing Shop Drawings and Mill Certificates.

1.4 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- B. Comply with the following sections of ACI 301, unless modified by requirements in the Contract Documents:
 - 1. "General Requirements."
 - 2. "Formwork and Formwork Accessories."
 - 3. "Reinforcement and Reinforcement Supports."
 - 4. "Concrete Mixtures."
 - 5. "Handling, Placing, and Constructing."
- C. Comply with ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- D. Reinforcing steel is to be tested in accordance with ASTM A615.

PART 2 - PRODUCTS

2.1 FORMWORK

- A. Embedded nailers, Grade C or better, Industrial Clear Douglas Fir pressure preservative treated with Kopper "Celon" penta or approved equal in accordance with AWP standards. Plywood shall be five-ply exterior type Douglas Fir. Forms ties shall be of a type which permits neat patching at every hole.
- B. Form Materials:
 - 1. Non-exposed Surface Formwork Facing: Forms for concrete which is not exposed to view may be of plywood as specified for exposed surfaces, or square edge 1 inch or 2 inch x nominal Douglas Fir, Construction Grade, SIS2E.
 - 2. Exposed Surface Formwork Facing: Forms for all exterior and interior concrete flat surfaces unless otherwise specified as board formed shall be new Douglas Fir Plywood (APA) 5-ply, 5/8-inch, B-B Plyform, Class 1, Exterior Type, oiled and edge sealed conforming to U.S. Product Standard PS-1-97 in large sheet sizes to achieve joint patterns shown or approved.
 - 3. All exposed concrete edges shall be chamfered as noted on the Drawings.
- C. Release Agent:
 - 1. Form Sealer: "Nox-crete" or approved equal for wood forms only.
 - 2. Spray-on compounds shall not affect color, bond or subsequent treatment of concrete surfaces and shall be approved by Engineer.

2.2 STEEL REINFORCEMENT

- A. Reinforcing bars: New billet steel, ASTM A615, Grade 40-No. 4 and smaller, Grade 60-No.5 and larger.
- B. Welded wire fabric shall conform to ASTM A82 and ASTM A185.
- C. Setting adhesive for dowels: Set XP by Simpson Strong-tie or equal, installed in accordance with manufacturer's recommendations.

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout Project:
 - 1. Portland Cement: ASTM C 150, Type I and Type II.
 - a. Fly Ash: ASTM C 618, Class C or F.
 - b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.
- B. Normal-Weight Aggregate: ASTM C 33, graded, Maximum aggregate size shall be 1" at slabs and 1-1/2" at footings.
- C. Water: ASTM C 94/C 94M.

2.4 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C 260.
- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
 - 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
 - 2. Retarding Admixture: ASTM C 494/C 494M, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
 - 4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
 - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
 - 6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.
 - 7. Concrete Hardener: Sonneborn or approved equal, factory-prepared solution of floursilicates and wetting agents

2.5 CONCRETE MIXTURES

- A. Comply with ACI 301 requirements for concrete mixtures.
- B. Normal-Weight Concrete: Prepare design mixes, proportioned according to ACI 301, as follows:
 - 1. Minimum Compressive Strength: 2500 psi at 28 days.
 - 2. Maximum Water-Cementitious Materials Ratio: 0.45.
 - 3. Slump Limit: 4 inches, plus or minus 1 inch.
 - 4. Air Content: Maintain within range permitted by ACI 301. Do not allow air content of trowel-finished floor slabs to exceed 3 percent.

2.6 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116, and furnish batch ticket information.
 - 1. When air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

2.7 CONCRETE ACCESSORIES

- A. Expansion joints in exterior concrete slabs - ASTM D-1751.
- B. Concrete Bonding Agent: ASTM C 1059, Type I or II Acrylic Latex liquid bonding agent, applied in accordance with manufacturer's recommendations.
- C. Curing Compounds: ASTM C-309, Type I, resin base which will not discolor concrete or affect bonding of other finishes, applied in accordance with manufacturer's recommendations.

2.8 DRY PACK

Dry pack for cosmetic concrete repairs only shall consist of one part cement to three parts sand (screen out all materials retained on No. 4 sieve), mixed with a minimum amount of water, in small amounts. The consistency shall be such that when a ball of the mixture is compressed in the hand it will maintain its shape, showing finger marks, but without showing any surface water.

2.9 SLURRY

Slurry shall consist of lesser proportions of cement to fine aggregates used in the regular concrete mix (coarse aggregate only omitted) and shall be well mixed with such amount of water as will produce a thick consistency. The consistency of slurry shall be determined by Engineer for the intended use and shall be capable of attaining a 28-day strength of 2000 psi.

2.10 GROUT

Grout for Base Plates and Other Bearing Supports: Non-shrink grout shall be used for all grouting. Grout shall be metallic type, Embeco 636 for concealed work and non-metallic type Embeco 713 for exposed work as manufactured by Master Builders or approved equal.

PART 3 - EXECUTION

3.1 FORMWORK

- A. Design, construct, erect, brace, and maintain formwork according to ACI 301 (ACI 301M).
- B. All footing excavations shall be done as neat and as close to footing dimensions as practicable. Overexcavations in depth shall be filled with concrete; in width may be filled with concrete or compacted backfill. All loose soil shall be removed from excavations prior to placement of reinforced concrete. All unformed footings, wall excavations shall be two inches wider than the detailed width.
- C. Forms shall conform to the shapes, lines and dimensions indicated on the Drawings and shall be substantial to prevent unacceptable deflections and sufficiently tight to prevent leakage of mortar. They shall be properly braced and shored so as to maintain position under all live and dead loads incident to placing of the concrete and incident to other loads applied prior to stripping.
- D. Forms shall be left in place until the concrete is cured and the concrete has attained sufficient strength to permit their removal with safety.
- E. Pipes and conduits shall not be located in concrete except at specifically approved locations.

3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.3 STEEL REINFORCEMENT

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- C. Bars shall be continuous, straight, level and plumb. All splices that may be required in steel reinforcing bars shall be located only as shown on the Drawings. Except where noted, bars may be wired together at laps. Wherever possible splices of adjacent bars shall be staggered at least five feet apart. Splices in wire fabric shall be at least one mesh wide. Steel reinforcement, at the time concrete is placed, shall be free of rust, scale, loose mill scale, oil, paint or any coating that will destroy or reduce the bond between steel and concrete.
- D. Steel reinforcement shall not be bent or straightened in a manner that will injure the material. Bars already installed shall not be bent or straightened. Bars with kinks or bends not shown on the Drawings shall not be used. Heating of reinforcing for bending is not permitted.
- E. The clear spacing between parallel bars (except provided otherwise) shall be no less than one and one-half (1-1/2) times the nominal diameter for round bars, but in no case shall the clear distance be less than one and one-third (1-1/3) times the size of the maximum aggregate.
- F. Coverage of bars (other than stirrups and column ties) shall, unless otherwise shown, be as follows:
 - Footings, Caissons: 3" soil face, 2" sides
 - Slabs (exterior): 2" soil face
 - Slabs (interior): 2" soil face
 - Walls (exterior): 2" soil face

3.4 CONCRETE PLACEMENT

- A. Concrete shall not be placed until the forms and reinforcements have been reviewed by Engineer or by its authorized representative and until all preparations for the pour have been completed and the preparations have been checked by the Inspector subject to the review of Engineer.
- B. Comply with ACI 301 for placing concrete.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
- D. A record shall be kept on the work of the time and date of placing the concrete in each portion of the structure. Such record shall be taken until the completion of the structure.
- E. Consolidate concrete with mechanical vibrating equipment.

3.5 FINISHING

- A. General: Comply with ACI 302.1R for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. B. Maximum Allowable Deviations: Elevation of surfaces shall be as shown or approved and deviations shall not exceed the following tolerances, plus or minus:
- C. Exterior flat work and other horizontal surfaces: 1/8-inch, unless otherwise noted within 10 feet.
- D. Concrete curing shall meet the requirements of Section 2605 CBC.

3.9 GROUTING AND DRY PACK

- A. Provide for setting steel plates or bolts on concrete. Prepare using approved non-shrink grout aggregate to produce mortar 4,000 psi min. at 28 days. Completely fill all voids. Dry pack may be compacted in place or be placed as a mortar bed prior to placing sill plates. Level full contact bearing shall be made between bearing plates, sill plates and drypack.
- B. Bolts or insert which have been dry packed or grouted in place shall not be tensioned sooner than seven days after packing.

3.10 EXPANSION JOINTS IN ON-GRADE SLABS

Construction joints at exterior slabs shall be placed so that the maximum area of unbroken concrete shall be 500 square feet. The maximum spacing of expansion joints in any direction shall be 25 feet.

3.11 DEFECTIVE WORK

- A. Form ties to be cut back at least 3/4" from outside surfaces. Remove all defective materials such as loose stones, cut back all voids to solid material and correct out of line concrete by chipping and/or grinding. Fill all voids and rough surfaces with a mortar composed of one part cement and two parts concrete sand with only enough water to make workable. Wet all surfaces to be filled before applying mortar. Repaired surfaces shall match adjacent surfaces.
- B. Remove and replace concrete that does not comply with requirements in this Section.

3.12 FIELD QUALITY CONTROL

Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

3.13 CLEAN UP

Remove and dispose of all debris and surplus materials resulting from the work of this section.

END OF SECTION 03300

SECTION 05521

STEEL HANDRAILS AND RAILINGS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This Section includes all steel railing systems.
- B. Related Sections: The completion of the Work described in this Section may require work in or coordination with other Sections of these Specifications. Contractor and Subcontractor shall be responsible for identifying and including all related work in other Sections of these Specifications and/or Drawings necessary for a complete installation of the work described in this Section. These related Sections include but are not limited to the following:
 - 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
 - 2. Section 03300 – Cast in Place Concrete.

1.2 PERFORMANCE REQUIREMENTS

- A. General: In engineering handrail and railing systems to withstand structural loads, determine allowable design working stresses of railing materials based on the following:
 - 1. Steel: ASCE "Specification for the Design of Cold-Formed Steel Structural Members."

1.3 SUBMITTALS

- A. Shop Drawings: Show fabrication and installation of handrails and railings, including plans, elevations, sections, details of components, and attachments to other units of work.
- B. Product Data: Submit product data for each component of the system showing properties and fabrication details to permit verification of applicability for intended use.

1.4 STORAGE

- A. Store handrails and railing systems inside a well-ventilated area, away from uncured concrete and masonry and protected from weather, moisture, soiling, abrasion, extreme temperatures, and humidity.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Where handrails and railings are indicated to fit to other construction, check actual dimensions of other construction by accurate field measurements before fabrication; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 – PRODUCTS

2.1 METALS

- A. General: Provide metal free from surface blemishes where exposed to view in the finished unit. Exposed-to-view surfaces exhibiting pitting, seam marks, roller marks, stains, discolorations, or other imperfections on finished units are not acceptable.
- B. Fabricate to design, dimensions and details indicated. Member size shall be 1-1/2" o.d. Railings and handrails shall comply with ADA requirements.
- C. Steel: Grade and type designated below for each form required:
 - 1. Tubing: ASTM A513-T1.
 - 2. Pipe: ASTM A53B.
 - 3. Plate: ASTM A36.
- D. Brackets, Flanges, and Anchors: Cast or formed metal of the same type material and finish as supported rails, unless otherwise indicated.

2.2 MISCELLANEOUS MATERIALS

- A. Filler Metal and Electrodes: Provide type and alloy of filler metal and electrodes as recommended by producer of metal to be welded as required for color match, strength, corrosion resistance, and compatibility in fabricated items.

2.3 FASTENERS

- A. Fasteners for Anchoring Railings to Other Construction: Select fasteners of the type, grade, and class required to produce connections that are suitable for anchoring railing to other types of construction indicated and capable of withstanding design loadings.
 - 1. For steel railings, provide fasteners fabricated from steel.
- B. Fasteners for Interconnecting Railing Components: Use fasteners of same basic metal as the fastened metal. Do not use metals that are corrosive or incompatible with materials joined.
- C. Cast-in-Place and Postinstalled Anchors: Provide anchors fabricated from corrosion-resistant materials with capability to sustain, without failure, a load equal to 4 times the load imposed when installed in concrete.

2.4 GROUT AND ANCHORING CEMENT

- A. Nonshrink, Nonmetallic Grout: Master Builders Technologies, Inc. "Masterflow 928 and 713," Sonneborn Building Products—ChemRex, Inc. "Sonogrout 14," or approved equal premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.

2.5 FABRICATION

- A. General: Fabricate handrails and railing systems to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including post spacings and anchorage.
- B. Assemble railing systems in shop to the greatest extent possible to minimize field splicing

and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.

- C. Form changes in direction of railing members by using radius bends, by bending, by mitering at elbow ends or by insertion of prefabricated flush elbow fittings.
- D. Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain profile of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
- E. Welded Connections: Where indicated, fabricate railing systems and handrails for connecting members by welding. For connections made during fabrication, weld corners and seams continuously to comply with the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
- F. Nonwelded Connections: Where exposed fasteners are indicated, fabricate railing systems and handrails by connecting members with fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.
- G. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to connect handrail and railing members to other construction.
- H. Provide inserts and other anchorage devices to connect handrails and railing systems to concrete work. Fabricate anchorage devices capable of withstanding loads imposed by handrails and railing systems. Coordinate anchorage devices with supporting structure.
- I. Ease exposed edges to a radius of approximately 1/32", unless otherwise indicated. Form bent-metal corners to the smallest radius possible without causing grain separation or otherwise impairing work.
- J. Cut, reinforce, drill, and tap components, as indicated, to receive finish hardware, screws, and similar items.
- K. Provide weep holes or another means to drain entrapped water in hollow sections of railing members that are exposed to exterior or to moisture from condensation or other sources.
- L. Fabricate joints that will be exposed to weather in a watertight manner.
- M. Close exposed ends of handrail and railing members with prefabricated end fittings.
- N. Provide wall returns at ends of wall-mounted handrails. Close ends of returns unless clearance between end of the railing and wall is 1/4" or less.

2.6 FINISHES

- A. Paint Steel Steel Handrails with the following system:
 - a. Prime Coat: Primer, quick dry, for metal, MPI #76.
 - b. Intermediate Coat: interior, matching topcoat.
 - c. Topcoat: Alkyd, Quick Dry, Semi-gloss, MPI #81
 - d. Low VOC Topcoat: Latex, Interior, Institutional Low Odor/VOC Semi-gloss, MPI #147.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installing anchorages, such as concrete inserts, anchor bolts, and miscellaneous items having integral anchors, that are to be embedded in concrete construction. Coordinate delivery of such items to Project site.

3.2 INSTALLATION, GENERAL

- A. Fit exposed connections accurately together to form tight, hairline joints.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing handrails and railings. Set handrails and railings accurately in location, alignment, and elevation, measured from established lines and levels and free from rack.
 - 1. Do not weld, cut, or abrade surfaces of handrails and railing components that have been coated or finished after fabrication and are intended for field connection by mechanical or other means without further cutting or fitting.
 - 2. Set posts plumb within a tolerance of 1/4" in 12 feet.
 - 3. Align rails so that variations from level for horizontal members and from parallel with rake of steps and ramps for sloping members do not exceed 1/4" in 12 feet.
- C. Field Welding: Comply with the following requirements:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
- D. Adjust handrails and railing systems prior to anchoring to ensure matching alignment at abutting joints.
- E. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing handrails and railings systems and for properly transferring loads to in-place construction.

3.3 RAILING CONNECTIONS

- A. Nonwelded Connections: Use mechanical fasteners for connecting railing components where indicated.

- B. Welded Connections: Use fully welded joints for permanently connecting railing components by welding where indicated. Cope or butt components to provide 100% contact, or use fittings designed for this purpose.
- C. Expansion Joints: Install expansion joints at locations required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2" beyond joint on either side; fasten internal sleeve securely to one side; locate joint within 6" of post.

3.4 ANCHORING POSTS

- A. Anchor posts in concrete with anchoring cement in cored hole with minimum 1/2" clear to existing concrete.

3.5 ANCHORING RAILINGS

- A. Anchor railings to existing precast concrete with allthread rods in epoxy adhesive or expansion anchors.
- B. Anchor railings to existing wood with #10 wood screws.

3.6 PROTECTION

- A. Protect finishes of railing systems and handrails from damage during construction period.
- B. Restore finishes damaged during installation and construction period so that no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

END OF SECTION 05521

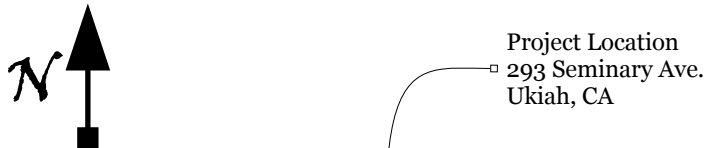
PROJECT DATA

BUILDING: UKIAH VETERANS HALL
SF 4,000
BUILDING TYPE: UNKNOWN
AREA OF WORK: BASEMENT
SF 275
OCCUPANCY TYPE: UNKNOWN
OCCUPANCY LOAD: UNKNOWN

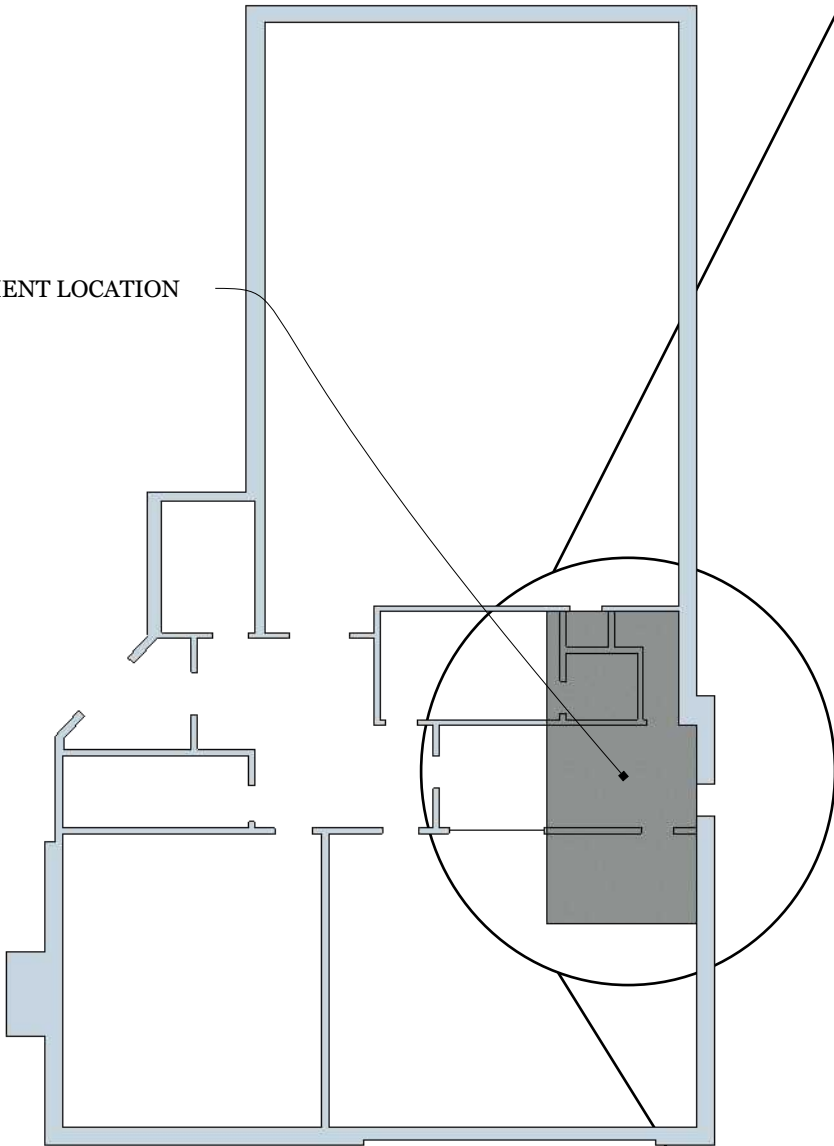
APPLICABLE CODES (CBC)

2013 CALIFORNIA BUILDING CODE
2013 CALIFORNIA MECHANICAL CODE
2013 CALIFORNIA ELECTRICAL CODE
2013 CALIFORNIA PLUMBING CODE
2013 CALIFORNIA FIRE CODE
2013 CALIFORNIA ENERGY CODE
2013 CALIFORNIA GREEN CODE

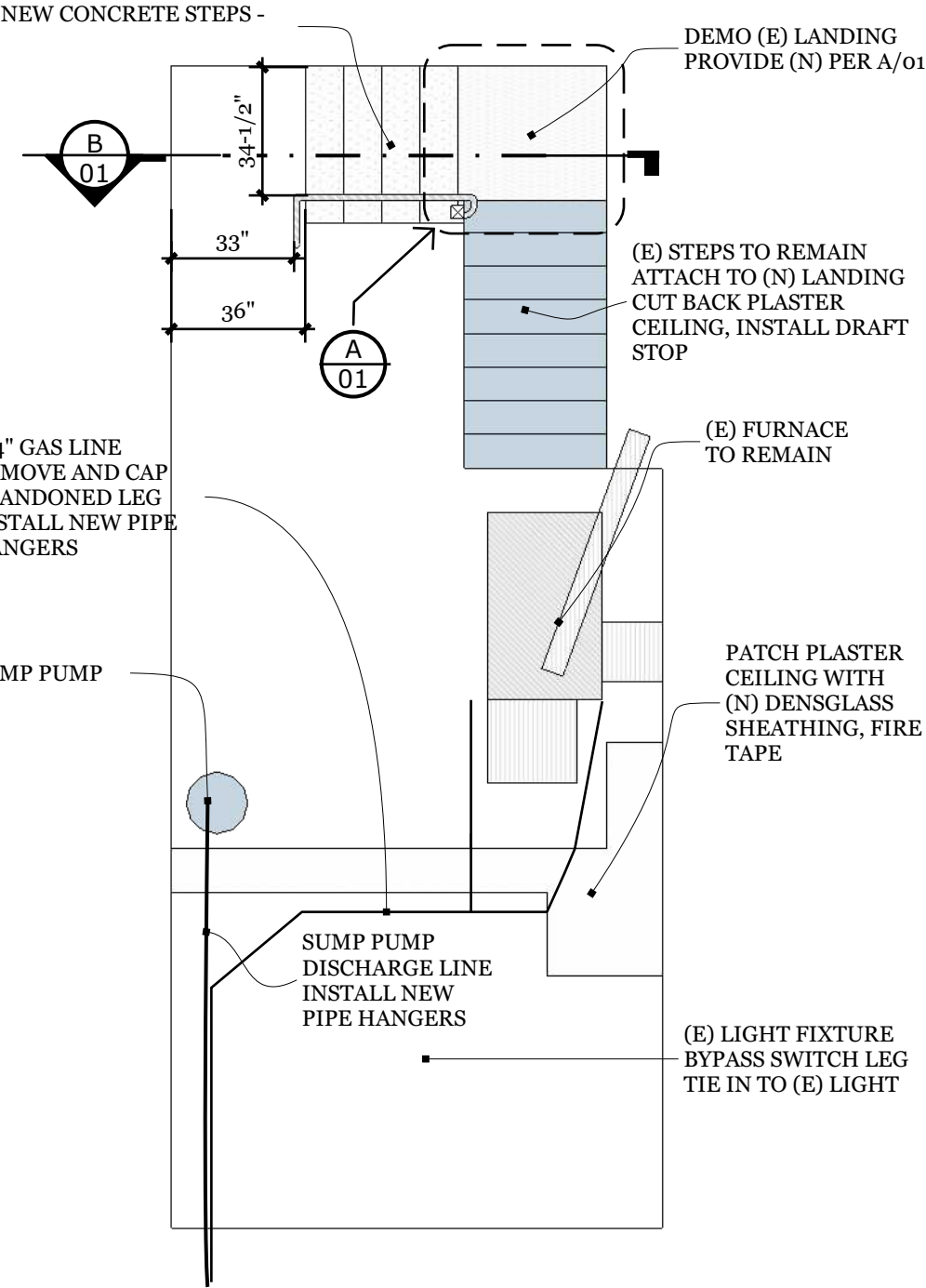
SITE MAP



BASEMENT LOCATION



VETERANS HALL FLOOR PLAN



VETERANS HALL BASEMENT PLAN

UKIAH VETERANS HALL
BASEMENT REPAIRS



County of Mendocino
Executive Office
Facilities and Fleet Division

851 Low Gap Road
Ukiah, CA 95482
707-234-6068

Project No. PRF/Bid No.
Project Manager: Doug Anderson
Issue Date:
Submittal Type: Permit Application

November 28, 2016

