



# **HISTORIC CITY HALL REUSE REQUEST FOR PROPOSALS**

## **REQUEST FOR PROPOSALS FOR REUSE OF CITY PROPERTY LOCATED AT 487/489 MAIN STREET, PLACERVILLE, CALIFORNIA**

The City of Placerville, City Manager's Office, is requesting proposals for qualified organizations or private individuals to submit Proposals for the reuse of City owned property located at 487 and 489 Main Street, Placerville, California ("Property").

This Request for Proposal (RFP) defines the scope of the project and outlines the requirements that must be met by Proposers interested in the Property. **Proposers are advised to read all sections of this RFP prior to submitting a proposal.**

**RFP Release: November 26, 2018**

**RFP Due Date: February 26, 2019**

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- Feasibility Study for the Rehabilitation of Old City Hall Building 487& 489 Main Street, Placerville
- 1986 Structural Report
- Old City Hall Drawing

## I. BACKGROUND

The City of Placerville City Manager's Office "City," is requesting proposals from organizations or private individuals for the reuse of Historic City Hall in Placerville located at 487 and 489 Main Street, Placerville, California ("Property").

## II. PROPERTY CONSIDERED FOR REUSE

The subject Property consists of two 2-story buildings one known as Confidence Hall and the second known as Emigrant Jane. Each Building has separate entrances and the buildings are connected on both floors by a doorway.

The Old City Hall is comprised of two 2-story buildings: Confidence Engine Company Hall, built in 1860 (487 Main St, on the west side) and Emigrant Jane Building, built in 1861 (489 Main St, on the east side). Confidence Engine Company Hall (the Confidence building) has walls constructed of unreinforced masonry, mortared stone, and plaster. The Emigrant Jane building shares a common mortared stone wall with the Confidence building, with the other walls being

a combination of mortared stone, brick, and plaster. A reinforced concrete and timber addition was constructed on the North side of the Emigrant Jane building in the early 1900s. The floor and roof framing of the entire structure are timber. The Confidence building is listed in the National Record of Historic Places.

Confidence Hall was the historic Placerville Fire Station prior to being City Hall. It includes approximately 1122 Square Feet on each floor for a total of 2244 Square Feet of total space. Emigrant Jane is approximately 2124 square feet on each floor for a total of 4248 square feet.

The two buildings include approximately 16 parking spaces with some being tandem spaces adjacent to and behind the buildings.

The City will consider all proposals and evaluate them based on the criteria established herein. Proposals should be as complete and detailed as possible and include documentation to support the proposal.

### **III. PERMITTED USE OF BUILDING:**

The Property is located within the City of Placerville and is zoned Commercial Business District (CBD). Any uses allowed under the City of Placerville CBD can be proposed for the facility.

Allowed uses may be viewed on the City's Website at:

[http://sterlingcodifiers.com/codebook/index.php?book\\_id=509](http://sterlingcodifiers.com/codebook/index.php?book_id=509) **(10-5-14: CBD CENTRAL BUSINESS DISTRICT ZONE)**

### **IV. SCHEDULE FOR RFP PROCESS**

November 26, 2018	City Council Approves the RFP and Releases it for distribution and advertising.
January 15, 2019 @ 5:00 p.m.	Deadline for Submittal of RFP Questions
February 22, 2019 @ 5:00 p.m.	City will Release Answers to Submitted RFP Questions
February 26, 2019 @ 5:00	Proposals Due at City Manager's Office
February 26, 2019 – March 5, 2019	City Review of Proposals
March 6, 7, or 8, 2019, Time TBD	Applicants will be invited to present their presentation to the City in an open public meeting.
March 11 – 15, 2019, Time TBD	Sub-Committee finalizes recommendation to City Council.
March 26, 2019	Recommendation made to City Council

## V. PROPOSAL CONTENT

Proposal responses must adhere to the requirements set forth in this section, both for content and sequence. Failure to adhere to these requirements or the inclusion of conditions, limitations or misrepresentations may be cause for rejection of the submittal. Use 8-1/2 x 11 sheets (foldouts are acceptable for charts, etc.) and font size large enough to be easily legible, but not smaller than 10 point. The original proposal and each subsequent copy must be submitted on paper, properly bound, appropriately tabbed and labeled in the following order:

1. **Cover Letter:** Provide a “cover letter” with an introduction of the organization including their purpose and vision along with the name, address, telephone and fax numbers, email address and organization website (if available) of the contact person who will be authorized to make representations for the organization. The letter must be signed by an individual authorized to bind the firm contractually.
2. **Description:** Provide a complete description of the proposed reuse including the following:
  - a. Describe through text and diagram the proposed uses for each area of the buildings (see attached floor plan). If only proposing for one building, show how that use would or would not affect other areas of the two buildings given the current connection.
  - b. Describe how the use would affect the historic character of the buildings. Would it maintain the historic character? Include descriptions and or drawings to show how you would promote the historic character.
  - c. Provide a description of how the uses will enhance the business climate in Historic Downtown Placerville, including details regarding expected number of visitors on a monthly, quarterly, and/or seasonal basis. Provide a detail of the proposed hours of operation.
3. **Financial Capability:** A demonstrated financial ability of the organization as evidenced by submittal of:
  - a. A two (2) year historical financial profit and loss statement:
  - b. A two (2) year historical balance sheet;
  - c. A cash flow statement; and
  - d. The most recent three (3) years of federal tax returns.(if applicable)
4. **Financial Plan:**
  - a. Provide a detailed description of how the required structural improvements and proposed tenant improvements would be financed. These could include grants, private donations, loans or public private partnerships.



- b. Provide a timeline for your project regarding necessary fundraising activities and building improvements.
  - c. Provide a description of how on-going maintenance and operations of the facilities will be funded.
5. **Ownership:** Provide a description of how the buildings will be owned. Organization ownership, City owned with Organization lease, etc.
6. **References:** Provide a minimum of three (3) business references with contact names, phone numbers and email addresses.

## VI. PROPOSERS' QUESTIONS

Questions regarding this RFP must be submitted in writing via email to the City of Placerville, City Manager's Office and must be received no later than **5:00 p.m. on January 15, 2019**. Email must be clearly labeled "**Historic City Hall Reuse Request for Proposals**" and emailed to:

[cmorris@cityofplacerville.org](mailto:cmorris@cityofplacerville.org)

City reserves the right to decline a response to any question if, in City's assessment, the information cannot be obtained and shared with all potential organizations in a timely manner. A summary of the questions submitted, including responses deemed relevant and appropriate by the City, will be emailed on or about **January 22, 2019**.

**Proposers are cautioned that they are not to rely upon any oral statements that they may have obtained. Proposers shall direct all inquiries to the City of Placerville, City Manager's Office.**

## VII. PROPOSAL SUBMITTAL

Proposers must submit one (1) original document (labeled original), three(3) copies of the proposal and one digital copy in PDF format on a Thumb Drive, along with any addenda, in a sealed envelope or container, clearly marked "**Historic City Hall Reuse Request for Proposals.**" Proposals shall be submitted to the following address:

**City Manager's Office  
3101 Center Street  
Placerville, CA 95667**

A Proposer may withdraw its final proposal at any time **prior** to 5:00 pm on April 16, 2019 by submitting a written request for its withdrawal to the City Manager, signed by an authorized agent of the firm. Proposers may thereafter submit a new or modified proposal **prior** to the opening deadline date and time. Modifications offered in any manner, oral or written, will not be considered.

Proposers submitting less than the required number of copies of their proposal may be rejected and considered “non-responsive”. Proposals received beyond the deadline will not be considered, and will be returned unopened.

It is the responsibility of the Proposer to assure that the proposal is received in the City Manager’s Office prior to the proposal deadline date and time. Proposals received beyond the proposal opening deadline will not be accepted and will be returned unopened. Proposals received will be time and date stamped in the City Manager’s Office.

**For questions regarding the Request for Proposal process, contact the City Manager’s Office, at (530) 642-5200.**

## **VIII. EVALUATION CRITERIA**

The following criteria will be utilized for the purpose of determining the most qualified non-profit Proposer:

1. The financial ability of the Proposer to Restore and Implement the Reuse of the building = 20 Points
2. The proposed use of the Building = 40 Points
3. The long term viability of the proposed reuse = 20 Points
4. Positive affect on Historic Downtown Economy = 10 Points
5. Interview/Presentation = 10 Points

## **IX. PROPOSAL INTERVIEWS**

Following initial screening of proposals, a public interview process will be scheduled. All proposers will be invited to present their proposal to a committee appointed by the City Council.

## **X. REVIEW OF PROPOSALS**

Proposals will be reviewed by a committee determined by the Placerville City Council. The committee will determine which Proposal best suits the needs and requirements of the City. Financial viability of the project both in the initial restoration and the on-going maintenance and operations will be key factors. The City recognizes that each proposal will be unique, and contain a variety of variables that cannot be precisely compared with other Proposals. The Council appointed committee will make a recommendation to the City Council and the City Council will make the final decision regarding which Proposal, if any, best meets the needs of the City. The City reserves the absolute right, in its discretion, to reject any and all Proposals.

## **XI. SELECTION CRITERIA**

The selection of a successful Proposer is anticipated to occur through the process outlined herein and based on the described selection criteria and submittal requirements.

## **XII. REJECTION OF PROPOSALS**

Prospective Proposers interested in being considered must submit a Proposal in compliance with this notice. Failure to meet the minimum requirements of the RFP shall be cause for rejection of the Proposal. City reserves the right to reject any or all Proposals.

City may reject a Proposal if it is conditional, incomplete, contains irregularities, or reflects inordinately high cost rates. City may waive immaterial deviations in a Proposal. Waiver of an immaterial deviation shall in no way modify the RFP documents or excuse the proposing organization from other requirements of the RFP.

## **XIII. Contract Negotiation**

Following approval by the City Council, the successful proposer and the City will enter into contract negotiations for the proposed reuse. The negotiations will be based on the specific details of the proposal, however other factors may also be considered to meet both the needs of the City and the proposed reuse.

This RFP does not constitute a contract nor an offer of a Lease. The cost of preparation of proposals shall be the obligation of the Proposer. All proposals, whether accepted or rejected, shall become the property of City and will not be returned. Unnecessarily elaborate responses, enclosures and specialized binding are not required.

## **XIV. CITY'S RIGHTS**

City reserves the right to:

1. Request clarification of any submitted information.
2. Waive any irregularity or immaterial deviation in any proposal.
3. Not enter into any agreement.
4. Not select any Proposer.
5. Cancel this process at any time.
6. Amend this process at any time.
7. Award more than one contract if it is in the best interest of City.
8. Interview Proposers prior to award.
9. Request additional information during an interview.

## **XV. NEXT STEPS**

Approval shall be recommended to the Proposer whose proposal best meets the needs of City. City reserves the right to reject any or all proposals, and to solicit additional proposals if deemed in the best interest of City to do so. The decision of the City Council shall be final in making such determination.

The successful Proposer will receive written notification of the acceptance, along with instructions for finalizing the agreement documents.

Response and selection of a Proposal will not necessarily result in a contract with the City. Proposal opening does not constitute awarding of a contract. Contract award is by action of the City Council and is not in force until an agreement is negotiated and approved.

## **XVI. CONFLICT OF INTEREST**

Prospective Proposers warrant and covenant that no official or employee of City, or any business entity in which an official of the City has an interest, has been employed or retained to solicit or aid in the procuring of the resulting agreement, nor that any such person will be employed in the performance of such agreement without immediate divulgence of such fact to City. Prospective Proposer's Proposal shall contain a statement to the effect that the Proposer is not currently committed to another project that would constitute a conflicting interest with the Project defined in this Request for Proposal (RFP).

## **XVII. PUBLIC RECORDS ACT**

All proposals and materials submitted shall become property of the City and will not be returned. All responses, including the accepted proposal and any subsequent contract, become public records per the requirements of the California Government Code, Sections 6250 - 6270, "California Public Records Act." Proprietary material must be clearly marked as such. Pricing and service elements of the successful proposal are not considered proprietary information. Proposers which indiscriminately identify all or most of their proposal as confidential or proprietary without justification may be deemed unresponsive.

The City will treat all information submitted in a proposal as available for public inspection once the City has selected a Proposal. If you believe that you have a legally justifiable basis under the California Public Records Act (Government Section 6250 et. seq.) for protecting the confidentiality of any information contained within your proposal, you must identify any such information, together with the legal basis of your claim in your proposal, and present such information **separately** as part of your response package

The final determination as to whether the City will assert your claim of confidentiality on your behalf shall be at the sole discretion of the City. If the City makes a determination that your information does not meet the criteria for confidentiality, you will be notified as such. Any information deemed to be non-confidential shall be considered public record.

Upon receipt of a request for disclosure pursuant to the California Public Records Act for information that is set apart and marked as proprietary, City will notify you of the request for disclosure. You shall have sole responsibility for the defense of the proprietary designation of such information. Failure to respond to the notice and enter into an agreement with the City providing for the defense of and complete indemnification and reimbursement for all costs incurred by the City in any legal action to compel the disclosure of such information, shall constitute a complete waiver of any rights regarding the information designated proprietary and such information will be disclosed by the City pursuant to applicable procedures under the California Public Records Act.

## **XVIII. BUSINESS LICENSE REQUIREMENT**

It is unlawful for any person to furnish supplies or services, or transact any kind of business in the City of Placerville without possessing a business license unless exempt under City of Placerville Municipal Code Section 5.1.7. Contact the Finance Department at 3101 Center Street, Placerville, CA 95667, or phone (530) 642-5223, for further information.

It is not a requirement to possess a business license at the time of proposal submittal. Successful Proposers may be required to possess a business license if agreement is reached on a reuse project.

# Attachments

**Feasibility Study for the Rehabilitation of Old City Hall Building  
487& 489 Main Street, Placerville**

# Feasibility Study for the Rehabilitation of Old City Hall Building 487-489 Main Street, Placerville



Prepared by:  
**Burne Engineering Services, Inc.**

December 31, 2015



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## PROJECT OVERVIEW

Burne Engineering Services Inc. was hired by the City of Placerville to study the feasibility and associated cost of bringing the Old City Hall building, located at 487-489 Main Street in Placerville, into substantial compliance with the current CA Building Code requirements so that the City can make an informed decision regarding future use of this structure. The structure is currently vacant, with the exception of one tenant on the main level of 489 Main Street.

The Old City Hall is comprised of two 2-story buildings: Confidence Engine Company Hall, built in 1860 (487 Main St, on the west side) and Emigrant Jane Building, built in 1861 (489 Main St, on the east side). Confidence Engine Company Hall (the Confidence building) has walls constructed of unreinforced masonry, mortared stone, and plaster. The Emigrant Jane building shares a common mortared stone wall with the Confidence building, with the other walls being a combination of mortared stone, brick, and plaster. A reinforced concrete and timber addition was constructed on the North side of the Emigrant Jane building in the early 1900s. The floor and roof framing of the entire structure are timber.

The Confidence building is listed in the National Record of Historic Places. Given the age and historic value of both buildings, a key constraint of the analysis and development of alternatives is to maintain and preserve the building façades and elevations. This means that the unreinforced masonry shell will be preserved as either the structural system or the exterior veneer, so that the exterior aesthetics are unchanged.

This report is broken into two sections: (1) Structural Rehabilitation, and (2) Non-Structural Rehabilitation. The Construction Cost Estimate includes the items of work required to provide a warm shell for the City to seek tenants to occupy the building. Costs not included in the scope of this study are wall and floor finish materials, paint, interior partition walls, lighting, ducting of HVAC equipment, and site-specific electrical designs for any special equipment that may be required for future tenants. Also excluded are the restroom facilities, as the number of stalls and location of facilities will be dependent upon the proposed occupancy of the building. The concluding summary combines the costs of the preferred structural alternative and the non-structural items of work for a total cost for rehabilitation.

# **STRUCTURAL REHABILITATION**

## **DESIGN CRITERIA AND ASSUMPTIONS**

The governing codes used for analysis and retrofit design were the 2013 edition of the California Historic Building Code (2013 CHBC) and the 2013 edition of the California Existing Building Code (2013 CEBC). Additionally, the 2013 edition of ASCE 41 “Seismic Evaluation and Retrofit of Existing Buildings” was used as a reference during analysis. Given the current condition of the buildings, the level of service chosen for our analysis was to retrofit the buildings to meet minimum life safety requirements. The proposed retrofit of the building is designed to provide enough time for evacuation of occupants during a significant seismic event and to prevent collapse of the structure. However, potential damage to the structure caused by a significant ground motion may render the buildings non-operational after such an event.

Information used in the determination of feasible retrofit strategies includes field observation, review of previous non-destructive testing data, analysis, and consultation with masonry and steel specialists. The structural evaluation of the existing building is based on observation of framing and foundation elements that were accessible during field visits. Some of the existing conditions could not be verified by visual inspection and limited non-destructive tests; therefore, condition and configuration of unexposed portions of the structure was based on engineering judgement. Due to these approximations and assumptions, the costs for all alternatives include a 25% contingency.

The assumed Occupancy and associated floor live load for the upstairs suites is that of commercial office space, Occupancy Business Group B. It is important to note that Occupancies such as restaurants and bars (Assembly Group A-2) and retail stores (Mercantile Group M) require the floor framing and foundation to be designed for a larger floor live load than Business Group B. The main level floor areas are assumed to have the 100 psf Assembly Occupant floor live load. The cost to retrofit the floor framing and foundation to accommodate this load is included in the Construction Cost Estimate (in the Foundation and Framing items of work).

## **STRUCTURAL OBSERVATIONS**

Based on visual observation of the existing exterior masonry walls, the buildings were determined to be seismically deficient. Additionally, issues were found with the vertical load carrying system. Specific items of concern are listed below; some photos associated with mentioned items of concern have been included in the next few pages for a clearer understanding of the condition of the structure.

- Cracks in the masonry walls [Figure 1]
- Deterioration of mortar joints in masonry (brick or stone) walls [Figure 2]

- Fire damage in the wood bed joints inset in the masonry walls [Figure 3]
- Collapsed chimney chute, voids in wall [Figure 3]
- Non-integrated closures at existing openings, lintel reconstruction needed [Figure 4]
- Lack of positive connection between walls and floor/roof diaphragms
- Walls pulling away from the floor/roof (up to 6" on the West wall) and bowing
- Unbraced parapets [Figure 5]
- Seismically inadequate floor and roof diaphragms



*Figure 1: Large cracks in the west masonry wall.*





*Figure 2: Deteriorated bed and head joints in masonry walls.*



*Figure 3: Voids in wall at chimney area. Fire damage to inset timbers.*





*Figure 4: Door opening not integrated with lintel. Lintel to be reconstructed.*



*Figure 5: Unbraced roof parapet*

## PRELIMINARY STRUCTURAL FINDINGS

A Tier 1 analysis of the structure was performed, per ASCE 41 “Seismic Evaluation and Retrofit of Existing Buildings.” This analysis consists of a checklist screening of critical elements of a building. Results indicate that the building is non-compliant in terms of complete load path, wall anchorage, transfer to shear walls, and diaphragm aspect ratios.

Further analysis based on 2013 CHBC and 2013 CEBC found the building to be non-compliant on similar grounds as the ASCE 41 criteria. In order to bring the buildings in substantial compliance with the life safety requirements of 2013 CHBC and 2013 CEBC, three retrofit alternatives were developed. Each alternative was analyzed and retrofit elements were sized for cost approximation purposes. The three alternative lateral (seismic) force resisting systems are unreinforced masonry (URM) shear walls, light-frame timber shear walls, and steel special moment frames used in combination with the URM shear walls. These alternatives are described in more detail in the following sections.

## RETROFIT OPTIONS

### Overview of Alternatives

The three proposed alternatives were selected based on constructability, construction cost, and minimizing impact to the existing building façades. The first option, URM shear walls, consists of fixing and maintaining the existing masonry walls as the main lateral force resisting system. The second option, timber shear walls, consists of new light frame shear walls on the inside face of the masonry walls as well as the addition of some new interior timber shear walls. In this scenario, the masonry walls would only act as veneer. The third option, steel special moment frames, combines new two story moment frames at the front and rear walls of the buildings with fixing and maintaining the existing masonry shear walls in the other direction.

The Building Layout, shown as Sheet 1 on the following page, gives a graphical representation of the existing building in order to better describe the retrofit alternatives. The retrofit measures for each alternative are superimposed on the building layout, on subsequent sheets, to show the location and limits of the retrofit measures. This layout is not depicted for each of the two floor levels individually since the retrofit measures are to be implemented for the full height of the building with limited variation between floors.

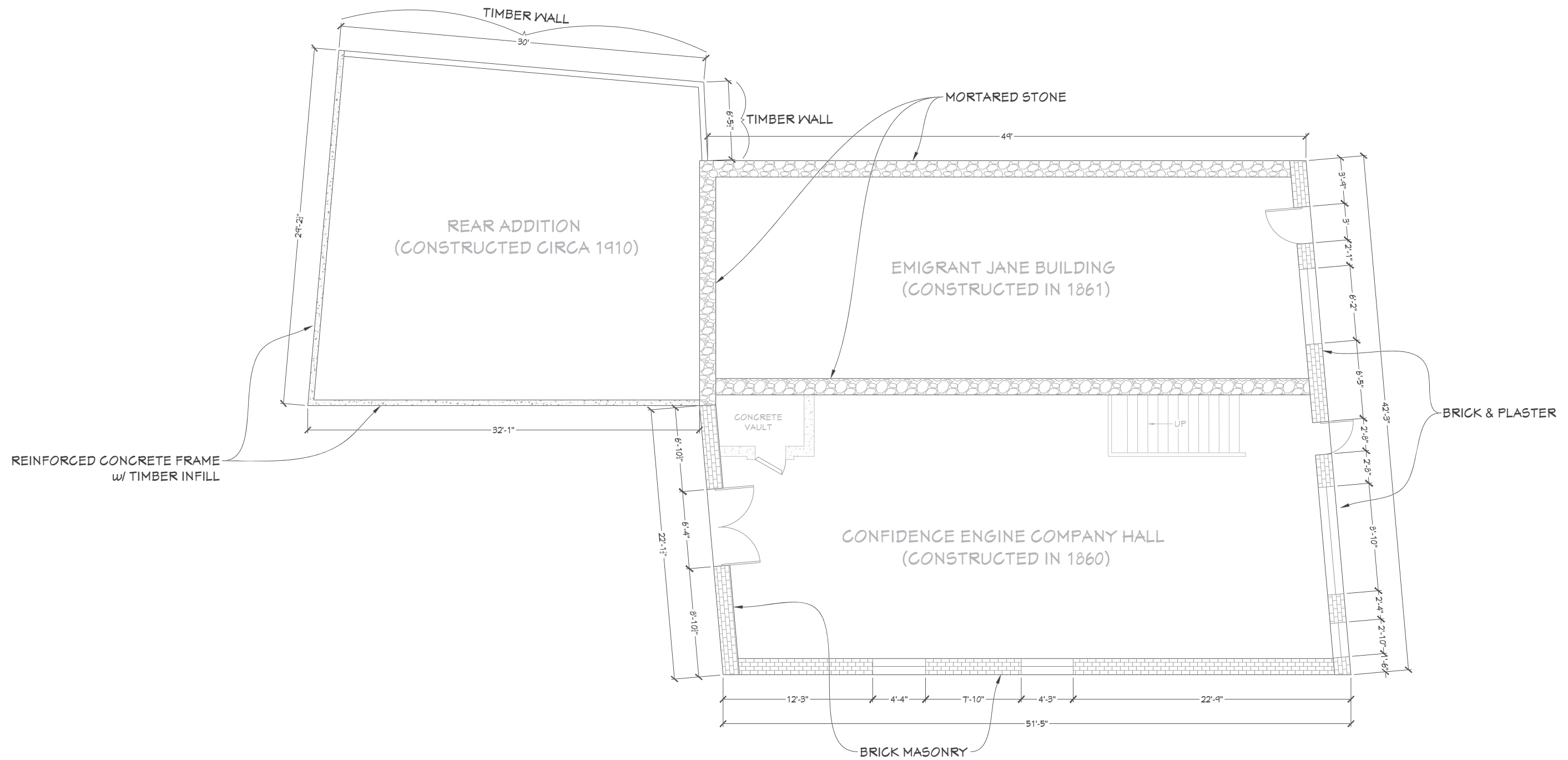
Independently of which of the three lateral force resisting system alternatives is chosen, there are some critical structural issues that will need to be addressed in all scenarios. The cracked and deteriorated portions of the masonry walls will need to be repointed and the cracked bricks will need to be replaced. The chimney chute in the west wall of the Confidence building will need to be filled with new masonry. The roof parapet will need to be braced and/or shortened. The floor and roof diaphragms will need to be sheathed on top of the existing sheathing. Additionally, the roof and floors will need to be anchored to the new or existing framing. All of the exterior landings and stairs may need to be removed and those required for exiting will need to be replaced with new code compliant exits. To simplify the graphical representation of each alternative, these common measures are shown as Sheet R0 and are applicable to all three options.





## WALL LEGEND

- (E) TIMBER
- (E) REINFORCED CONCRETE w/ TIMBER INFILL
- (E) UNREINFORCED BRICK MASONRY
- (E) UNREINFORCED MORTARED STONE



## BUILDING LAYOUT

SCALE 1/4" = 1'-0"





NOTE: INTERIOR WALLS NOT SHOWN.  
EXTERIOR WINDOWS AND DOORS  
ON MAIN LEVEL ARE SHOWN.

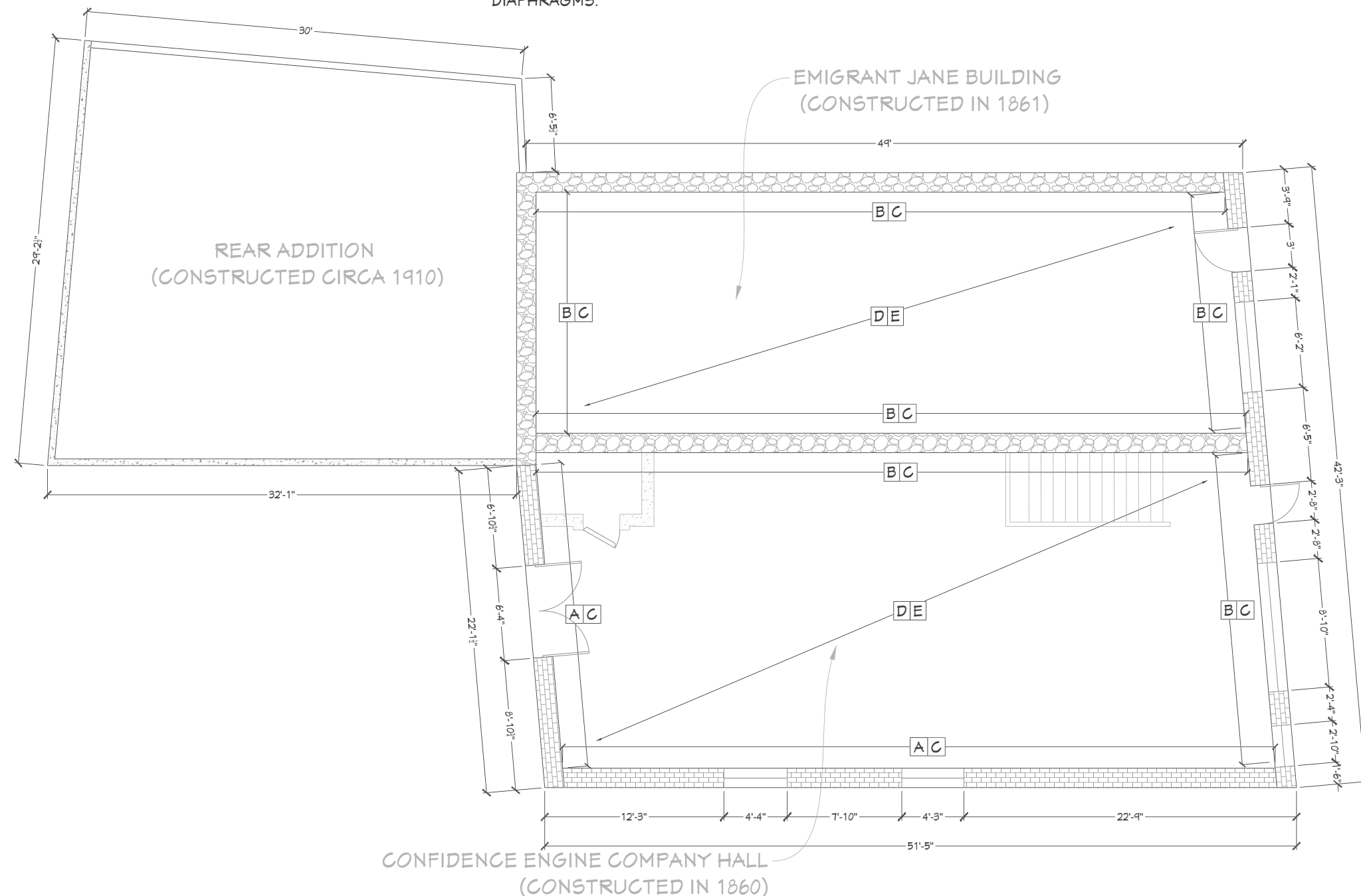


ALL STRUCTURAL REHABILITATION OPTIONS INCLUDE THE FOLLOWING MEASURES:

- A** RE-POINT (E) EXTERIOR WEST AND SOUTH WALLS OF CONFIDENCE BUILDING FROM BOTH SIDES OF THE WALL. INFILL / RECONSTRUCT VOIDS IN WEST WALL AT FIREPLACE CHIMNEY. POINTING SHALL BE DONE IN ACCORDANCE WITH UNIFORM BUILDING CODE STANDARD 21-8. SEE "OPTION 1: URM RETROFIT STRATEGY" SHEET.
- B** RE-POINT OTHER WALLS & FOUNDATION AS REQ'D PER RESULTS OF TESTING.
- C** BRACE PORTIONS OF (E) ROOF PARAPET EXCEEDING 16" ABOVE TOP OF ROOF FRAMING. RE-POINT / REPLACE / REMOVE PORTIONS OF PARAPET AS REQUIRED.
- D** REMOVE ROOF COVERING, PROVIDE NEW ROOF SHEATHING AND CORRECT ROOF DRAINAGE SYSTEM PRIOR TO PLACEMENT OF NEW ROOF COVERING.
- E** ADD NEW PLYWOOD OVER (E) FLOOR SYSTEMS TO STRENGTHEN FLOOR DIAPHRAGMS.

### WALL LEGEND

-  (E) TIMBER
-  (E) REINFORCED CONCRETE w/ TIMBER INFILL
-  (E) UNREINFORCED BRICK MASONRY
-  (E) UNREINFORCED MORTARED STONE



COMMON MEASURES FOR ALL THREE OPTIONS  
OLD CITY HALL BUILDING  
487-489 MAIN STREET  
PLACERVILLE, CA 95667

## Option I: Rehabilitate and Strengthen Existing URM Shear Walls

This option, shown on Sheet R1, consists of using the existing URM walls as both the vertical and lateral load carrying system. In addition to the upgrades common to all alternatives, mentioned above, this alternative would require the following retrofit measures:

- Prior to repointing of the west and south brick walls of the Confidence building, perform in-situ non-destructive testing in accordance with 2013 CEBC Section A106.3 of the other masonry walls in order to determine the strength of the masonry for each wall. Based on results from these tests, the extent of repointing required in these walls, if any, will be determined. Additionally, the required total thickness of the front wall can be established.
- Following the repointing and brick repair of the west and south brick walls of the Confidence building perform non-destructive testing on these walls, per 2013 CEBC Section A106.3. These test results would determine if thickening of the rear wall is also required.
- Thicken the front wall by 8-12 inches at both floor levels, from the foundation to the bottom of the roof framing. This would involve widening the foundation of the front wall and adding two or three wythes to the inside face of the existing front walls.
- Anchor the masonry walls to the floor and roof diaphragms around the perimeter of both buildings and at the common wall.
  - The anchorage of the exterior walls to the roof and floor diaphragms will be achieved by connecting a threaded rod through the wall to a hold down bracket attached to the floor joists/roof rafters. These anchors would need 6" X 6" plates on the outside face of the masonry wall at the floor and roof levels. Alternatively, these plates can be substituted by a continuous steel "band" that wraps around the building.
  - The anchors along the front wall will be drilled and epoxied or mortared from the inside only, and stopped short of the exterior face of the wall, so that the architectural finish of this wall face is not damaged.
  - At the common wall, the anchors will be drilled and epoxied from each side and stopped short of protruding the wall.
- Provide improved bearing for the floor systems along the west wall of the Confidence building. This wall, which provides a bearing seat for the floor and roof framing, is bowed out of plane as much as 4" in the center portion of the wall. The bearing seat width is decreased since the wall is moving outward. The URM alternative and the Steel Moment Frame alternative both utilize this wall to carry vertical and lateral loads. Both of these options will need this retrofit measure, which includes a new foundation on the inside of the west wall and timber stud walls supporting the floor and roof framing. After the

masonry repair, it may be feasible to eliminate the need for a new foundation and install a ledger to the inside face of the masonry wall for improved seat width.

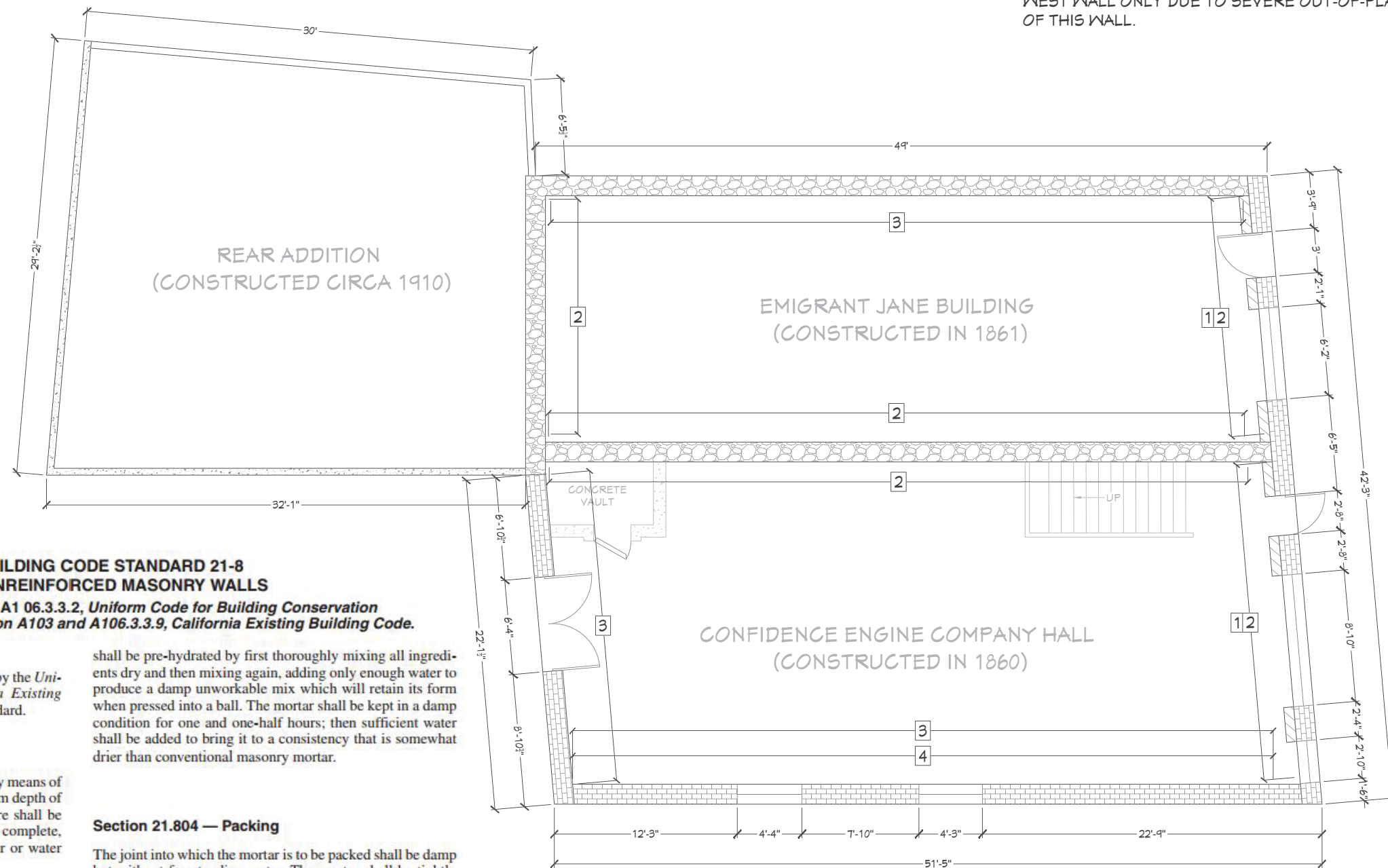
The Retrofit Strategy for Option I is depicted graphically on the next page.



## RETROFIT MEASURES

(IN ADDITION TO MEASURES SHOWN ON SHEET R0)

- 1 THICKEN FRONT WALL WITH 2-3 ADDITIONAL WYTHES OF MASONRY.
- 2 ADD ANCHORS AT BOTH FLOORS AND ROOF DIAPHRAGM. INSTALL FROM INSIDE FACE ONLY.
- 3 ADD ANCHORS THROUGH MASONRY WALLS w/ 6x6 PLATES ON OUTSIDE FACE OF WALL AT BOTH FLOORS & ROOF DIAPHRAGM. OPTION TO USE CONTINUOUS STEEL BAND ON OUTSIDE WALL IN LIEU OF INDIVIDUAL PLATES.
- 4 PROVIDE NEW FOUNDATION AND TIMBER WALLS TO PROVIDE SUPPORT FOR (E) FLOOR & ROOF FRAMING WHERE 2" MIN BEARING IS NOT PROVIDED BY (E) BRICK WALL. THIS IS REQUIRED AT THE WEST WALL ONLY DUE TO SEVERE OUT-OF-PLANE DEFORMATION OF THIS WALL.



### UNIFORM BUILDING CODE STANDARD 21-8 POINTING OF UNREINFORCED MASONRY WALLS

See Appendix Chapter 1, Section A1 06.3.3.2, *Uniform Code for Building Conservation*  
Note: See Appendix Chapter A1, Section A103 and A106.3.3.9, *California Existing Building Code*.

#### Section 21.801 — Scope

Pointing of deteriorated mortar joints when required by the *Uniform Code for Building Conservation (California Existing Building Code)* shall be in accordance with this standard.

#### Section 21.802 — Joint Preparation

The old or deteriorated mortar joint shall be cut out, by means of a toothing chisel or nonimpact power tool, to a uniform depth of  $\frac{3}{4}$  inch (19 mm) until sound mortar is reached. Care shall be taken not to damage the brick edges. After cutting is complete, all loose material shall be removed with a brush, air or water stream.

#### Section 21.803 — Mortar Preparation

The mortar mix shall be Type N or Type S proportioned as required by the construction specifications. The pointing mortar

shall be pre-hydrated by first thoroughly mixing all ingredients dry and then mixing again, adding only enough water to produce a damp unworkable mix which will retain its form when pressed into a ball. The mortar shall be kept in a damp condition for one and one-half hours; then sufficient water shall be added to bring it to a consistency that is somewhat drier than conventional masonry mortar.

#### Section 21.804 — Packing

The joint into which the mortar is to be packed shall be damp but without freestanding water. The mortar shall be tightly packed into the joint in layers not exceeding  $\frac{1}{4}$  inch (6.4 mm) in depth until it is filled; then it shall be tooled to a smooth surface to match the original profile.

FIGURE A: UBC STANDARD 21-8

NOT TO SCALE

### OPTION 1: REHABILITATE & STRENGTHEN EXISTING URM SHEARWALLS

SCALE  $\frac{1}{4}" = 1'-0"$

### WALL LEGEND

- (E) TIMBER
- (E) REINFORCED CONCRETE w/ TIMBER INFILL
- (E) UNREINFORCED BRICK MASONRY
- (E) UNREINFORCED MORTARED STONE
- NEW MASONRY WYTHES

## Option II: Construct New Timber Shear and Bearing Walls

This option, shown on Sheet R2, consists of adding new sheathed timber stud walls along the interior face of the masonry walls to basically replace the masonry walls as the new bearing wall and lateral force resisting system. The masonry walls then become a veneer for the new structural system. In addition to the upgrades common to all alternatives, mentioned above, this alternative would require the following retrofit measures:

- Construct a new foundation on the inside of the existing perimeter foundation of the building. Construct new footings adjacent to the common mortared stone wall, on both sides of the wall.
- Construct new timber walls with plywood sheathing on the inside of the perimeter of the entire building, and on both sides of the common mortared stone wall. These new walls will carry the floor and roof framing.
- Construct a new foundation and new interior timber shear walls, as shown on Sheet R2, to carry the lateral (seismic) forces. This is the only alternative that requires interior shear walls due to the limited strength of the timber shear walls relative to the steel and masonry capacity.
- Anchor the masonry walls to the new timber walls with light gage anchor ties @ 24" on center horizontally and vertically. The larger anchors with plate washers at the roof and floor diaphragm levels are not required for this alternative, since the roof and floor framing will be bearing on and connected to the new timber walls, rather than bearing on the masonry.

The Retrofit Strategy for Option II is depicted graphically on the next page.





## RETROFIT MEASURES

(IN ADDITION TO MEASURES SHOWN ON SHEET R0)

- 1 CONSTRUCT NEW FOUNDATION FOR NEW TIMBER BEARING AND / OR SHEARWALLS.
- 2 CONSTRUCT NEW 2x STUD WALLS WITH PLYWOOD SHEATHING, HARDWARE & HOLDOWNS PER SHEARWALL SCHEDULE. SEE "FIGURE A" FOR CONCEPT.
- 3 ANCHOR (E) MASONRY TO NEW WALLS AT 24" OC HORIZONTALLY AND VERTICALLY.

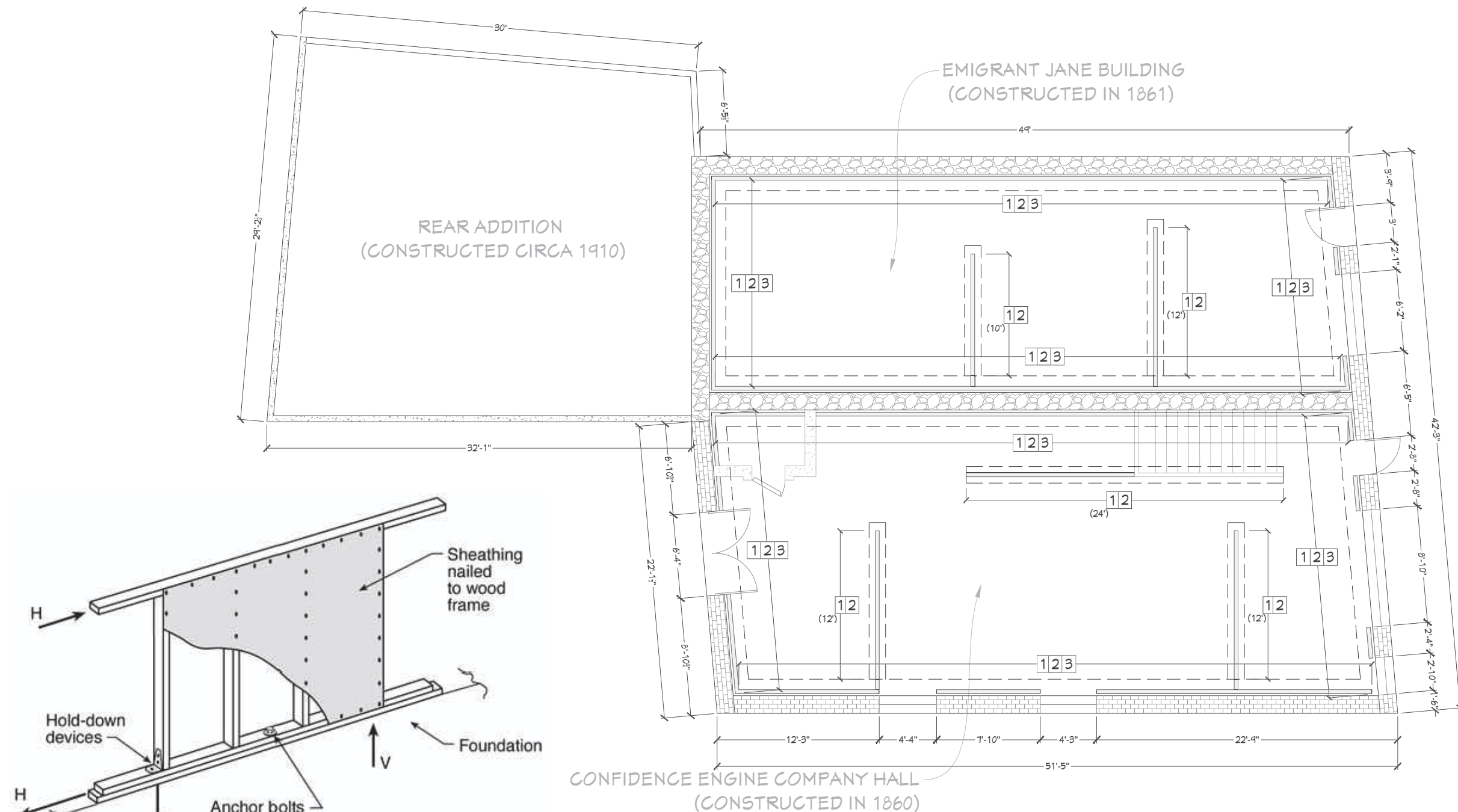


FIGURE A: TIMBER SHEARWALL CONCEPT

NOT TO SCALE

OPTION 2: NEW TIMBER SHEARWALLS

SCALE 1/4" = 1'-0"

## WALL LEGEND

- (E) TIMBER
- (E) REINFORCED CONCRETE w/ TIMBER INFILL
- (E) UNREINFORCED BRICK MASONRY
- (E) UNREINFORCED MORTARED STONE
- NEW TIMBER WALLS AND NEW FOUNDATION

### Option III: Construct New Steel Special Moment Frames

This option, shown on Sheet R3, consists of adding four new steel special moment frames at the front and rear walls of both the Confidence and Emigrant Jane buildings, while maintaining the perpendicular URM walls as the vertical and lateral force resisting system for the structure. In addition to the upgrades common to all alternatives, mentioned previously, this alternative would require the following retrofit measures:

- Construct new large spread footings and grade beams on the inside of the existing front and rear wall foundation of the building.
- Erect new two-story moment frames after removing a few feet of the roof and floor framing members adjacent to the front and rear exterior walls. Steel members would need to be placed using a crane from the top of the building.
- Anchor the masonry walls to the floor and roof diaphragms along the bearing walls of both buildings (east and west walls) and at the common wall.
  - The anchorage of the exterior walls to the roof and floor diaphragms will be achieved by connecting a threaded rod through the wall to a hold down attached to the floor joists/roof rafters. These anchors would need 6" X 6" plates on the outside face of the masonry wall at the floor and roof levels. Alternatively, these plates can be substituted by a continuous steel "band" that wraps around the building.
  - The anchors along the common wall will be drilled from the inside only, and stop short of the exterior face of the wall, so that the architectural finish of this wall is not damaged.
- Construct new timber infill walls within the steel moment frames (around existing door and window openings) along the front and rear walls in order to anchor the masonry veneer to the new wall at 24" oc horizontally and vertically.
- Provide improved bearing for the floor systems along the west wall of the Confidence building. As described in Option I, this wall is bowed out of plane as much as 4" in the center portion of the wall. The bearing seat width is decreased since the wall is moving outward. This retrofit measure would include a new foundation on the inside of the west wall and timber stud walls supporting the floor and roof framing. After the masonry repair, it may be feasible to eliminate the need for a new foundation and install a ledger to the inside face of the masonry wall for improved seat width.

The Retrofit Strategy for Option III is depicted graphically on the next page.





## RETROFIT MEASURES

(IN ADDITION TO MEASURES SHOWN ON SHEET R0)

- 1 ERECT NEW STEEL MOMENT FRAMES INSIDE OF THE EXISTING FRONT AND REAR WALLS.
- 2 CONSTRUCT NEW SPREAD FOOTING AT FRAME COLUMNS WITH GRADE BEAM CONNECTING THEM.
- 3 INFILL FRAME AREA WITH TIMBER STUD WALLS BETWEEN WINDOW AND DOOR OPENINGS IN ORDER TO ANCHOR MASONRY AS A VENEER @ 24" OC HORIZONTALLY & VERTICALLY.
- 4 ADD ANCHORS THROUGH MASONRY WALLS w/ 6x6 PLATES ON OUTSIDE FACE OF WALL AT BOTH FLOORS & ROOF DIAPHRAGM. OPTION TO USE CONTINUOUS STEEL BAND ON OUTSIDE WALL IN LIEU OF INDIVIDUAL PLATES.
- 5 ADD ANCHORS AT BOTH FLOORS AND ROOF DIAPHRAGM. INSTALL FROM INSIDE FACE ONLY.

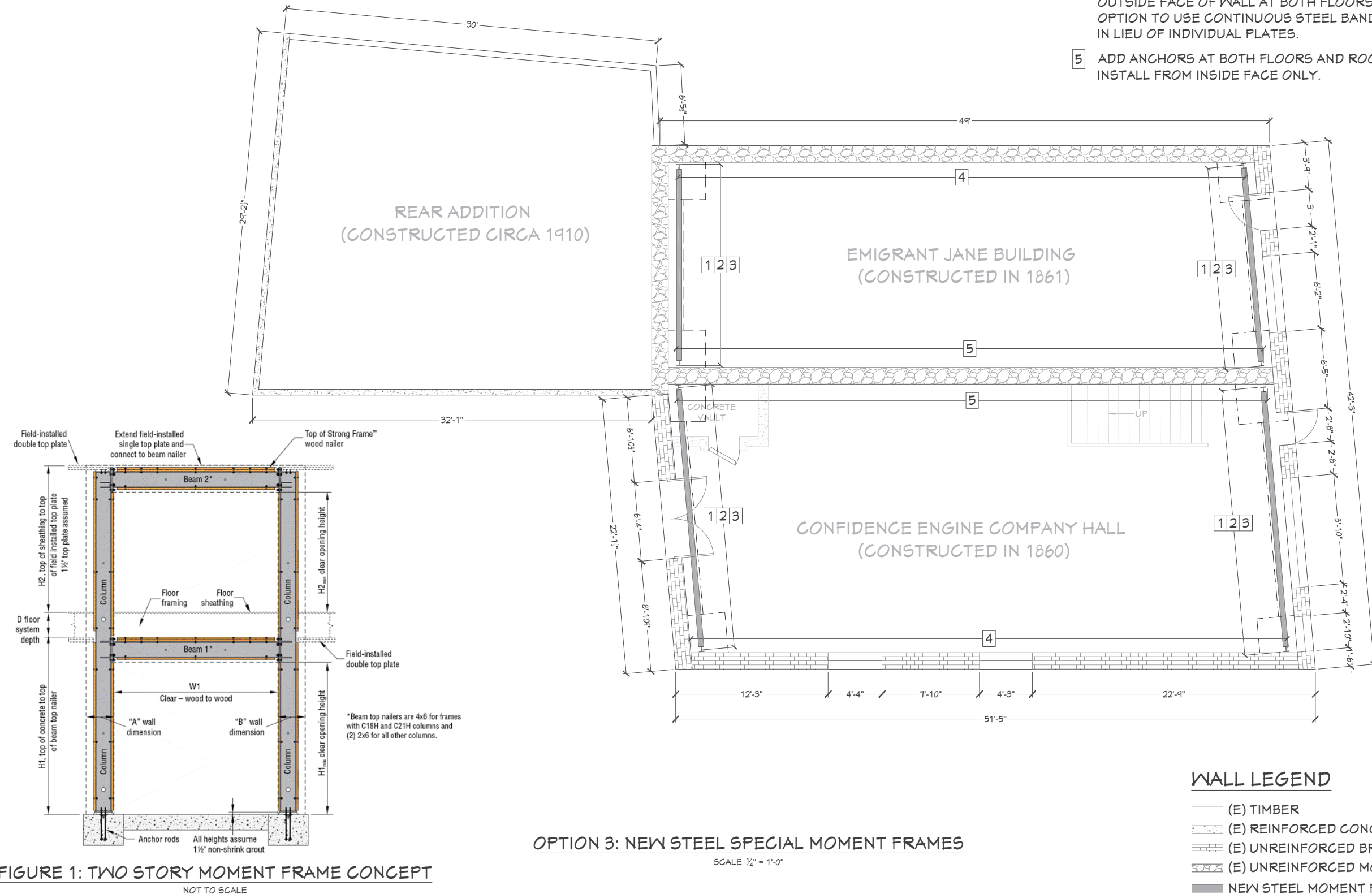


FIGURE 1: TWO STORY MOMENT FRAME CONCEPT

NOT TO SCALE

## OPTION 3: NEW STEEL SPECIAL MOMENT FRAMES

SCALE 1/4" = 1'-0"

## WALL LEGEND

- (E) TIMBER
- (E) REINFORCED CONCRETE w/ TIMBER INFILL
- (E) UNREINFORCED BRICK MASONRY
- (E) UNREINFORCED MORTARED STONE
- NEW STEEL MOMENT FRAMES

## COST ANALYSIS FOR STRUCTURAL REHABILITATION

### Basis for Analysis

A Structural Cost Estimate (SCE) was developed for each proposed alternative. These SCEs should be considered as preliminary estimates. The cost estimate will be refined as the construction documents for the preferred alternative are further developed.

The SCEs presented in this report are generated using work-item estimates and are limited to work-items related to the structural rehabilitation of the unlit, unwarmed building shell. Each work-item is broken down to tasks and the costs associated with the task. The SCEs are generated based on current construction costs, prevailing wages, constructability, and aesthetic considerations. The work-items considered for each alternative are listed below:

- General Set-up, Demo, and Disposal
- Staging, Scaffolding
- Foundation
- Masonry rehabilitation
- Anchorage to masonry
- Structural framing, seismic retrofit
- Roofing

In order to cover costs that may result from incomplete design information, unforeseen and unpredictable conditions, or other uncertainties related to the project and its historical nature, a 25% contingency is added to the estimates.

## Comparison of Structural Alternatives

The SCEs for each alternative are summarized in Table 1 below. A detailed breakdown of the tasks and associated estimated man hours, as well as material and labor costs for each alternative, was provided in Appendix A of the Draft Structural Rehabilitation Alternatives Report dated June 2015. It is not included again in this report.

*Table 1 - Itemized Cost Comparison for alternatives*

Item	Cost per alternative		
	URM	Timber	Steel
General	\$ 35,757	\$ 70,543	\$ 60,283
Staging	\$ 14,400	\$ 14,400	\$ 14,400
Foundation	\$ 19,438	\$ 65,410	\$ 25,429
Masonry Rehabilitation	\$ 155,640	\$ 105,640	\$ 105,640
Anchorage to Masonry	\$ 219,360	\$ 66,939	\$ 169,279
Structural Framing	\$ 66,224	\$ 216,312	\$ 228,894
Roofing	\$ 105,000	\$ 105,000	\$ 105,000
Restore Front Exterior Balcony	\$ 60,000	\$ 60,000	\$ 60,000
Job Site Supervision (5%)	\$ 30,790	\$ 32,211	\$ 35,445
Contractor OH/Profit (15%)	\$ 96,988	\$ 101,465	\$ 111,652
Contingency (25%)	\$ 185,894	\$ 194,475	\$ 214,001
<b>TOTAL</b>	<b>\$1,010,000</b>	<b>\$1,055,000</b>	<b>\$1,150,000</b>

As shown in the table above, the option of maintaining and upgrading the existing URM walls as the main vertical and lateral load resisting system is the least expensive structural alternative.

## STRUCTURAL ALTERNATIVE RECOMMENDATIONS

After careful evaluation of the alternatives on the basis of cost, constructability, and preservation of the aesthetic appearance of this historic structure, rehabilitating and strengthening of the existing URM walls appears to be the preferred structural alternative. This alternative is the easiest to construct, with respect to staging and impact to the parking lot and surrounding pedestrian and vehicular traffic. Use of the masonry walls minimizes the decrease in the existing usable floor area since new walls or frames are generally not required to be constructed on the inside face of the existing masonry. It is important to note that the URM alternative does impact the exterior aesthetics of the building due to the addition of the steel anchoring plates or steel band required to be placed at the roof and floor levels. However, if this item emerges as a major issue from the City's review, an alternative to drill and epoxy a greater number of anchors can be developed (anchors attached from the inside only, eliminating the need for exterior plates) or the shape of the plate can be varied to resemble architectural features of the era.

Although further material testing and a more detailed structural analysis are required prior to determination of the actual construction cost estimates, we expect this alternative to remain the most constructible and cost effective.

## NON-STRUCTURAL REHABILITATION

### SITE OBSERVATIONS

There are two distinctly separate buildings that share a common interior wall: the Emigrant Jane Building and the Confidence Engine Building, referred to here as the Emigrant Building and the Confidence Building accordingly. All square footage is approximate, taken from rough field measurements. The Confidence Building is two-stories with a floor area of 1210 ft<sup>2</sup> on each level. The Emigrant Building is also two-stories and has a floor area of 920 ft<sup>2</sup> plus an 870 ft<sup>2</sup> addition on each level. The approximate gross square footage is 6000 ft<sup>2</sup>, which is measured from the outside face of the exterior walls. The finished floor elevations of each of the buildings are not at the same height, with the Confidence Buildings sitting approximately 24 inches lower at the first floor level and approximately 13 inches lower at the second level than the Emigrant Building. The Confidence Building has a raised landing at the front (South) portion of the space that is approximately 7 inches above the finished floor of the remainder of the space. The bottom of the stair case to the upper level space begins on that raised landing. There is an opening in the common wall between the buildings at the bottom of the stairs (first floor level) that has been partially covered over, but still has three risers leading to the Emigrant Jane building. There is an interior staircase which services both buildings starting at the landing of the Confidence Building leading to the second floor. Access is provided between the two buildings on the second floor via two risers from the Confidence Building to the Emigrant Building. The fact that the two separate buildings are connected and have access openings at the common wall may prove to be an asset to the accessibility solutions for the proposed tenant space because they may be able to share egress and exit facilities, but the difference in the finished floor elevations between the two buildings creates additional obstacles in providing accessibility to the exit facilities.

The Confidence Building has two entrance doors. The south entrance door located on Main Street has a step up from the public sidewalk to the interior finished floor elevation and is recessed more than 8 inches in from the exterior wall. The rear (north) door is at the floor level and has a drop off after the threshold to a brick landing below. At the end of the landing there is another step down leading to an excessive slope on the parking area.

The Emigrant Building has three egress doors. The front door facing Main Street is an in-swinging door with a step into a recessed landing that varies in height because of the sloping public sidewalk. A side (east) exit door is provided which currently provides disabled people access. From this door there is a side path of travel down the drive aisle to access Main Street. There is a third exit door at the rear (north) of the building. This door is approximately 36 inches above the parking surface. A stairway is provided to this door although the stairway has no exterior landing. The Emigrant Building also has an exterior staircase that connects to the exterior path of travel on the lower floor. On the second floor there is a landing that services 2 doors into the building.

There are 3 existing restrooms. The Confidence Building has a single accommodation restroom. The Emigrant Building has a separate men's and women's facility.

From the second floor of the Emigrant Building there is a small staircase leading to the attic. The attic has been insulated with batt insulation and the batt insulation has been installed with direct contact to the roof sheeting without the required 1 inch air space.

The buildings currently have HVAC equipment. The equipment is located in the attic of the Confidence Building and in the basement of the Emigrant Building.

The electrical panels serving both buildings and the public restrooms are located in the northeast corner of the Emigrant Building.

Currently there are no fire sprinklers in the building.

## **FIRE AND LIFE SAFETY**

PRELIMINARY OBSERVATIONS: The existing buildings do not comply with current fire and life safety code. Below is a list of the significant issues that will need to be addressed before the space can be leased.

- There are 5 egress doors on the lower floor. Only the side entrance of the Emigrant Building appears to meet legal requirements for fire and life safety exits.
- Interior and exterior staircases do not meet current code standards.
- The buildings lack the minimum number of exit doors.
- Exit facilities are located too closely together and do not provide sufficient second floor egress.
- A Fire Sprinkler System is not presently installed.

RECOMMENDATIONS: In order to comply with current accessibility code requirements, the proposed solution to creating the minimum number of fire exits is to build a new exit landing in the rear of the building that would serve as the primary entrance to the building. This solution is explained in more detail in the accessibility recommendations section. The interior staircase will need to be rebuilt with a new landing. A ramp will need to be installed on the second floor to provide access between the different finished floor elevations of the two buildings, or one of the floors may be reframed or furred-up so that the upper floor elevations match. Since the current exterior staircase is located too close to the internal staircase to be considered a legal second exit, our recommendation is to remove the current exterior staircase and rebuild a new exterior staircase at the rear of the building connecting to the rear landing.

A Fire Sprinkler System will need to be designed and installed to serve all proposed tenant spaces.

## ACCESSIBILITY

PRELIMINARY OBSERVATIONS: The existing buildings do not meet accessibility code requirements. Both the Confidence Building and the Emigrant Building have issues involving path of travel, entrance and egress, restroom accommodations, and parking. The following items need to be addressed prior to leasing the tenant spaces:

### CONFIDENCE BUILDING:

- 1) Accessible Entrance and Egress:
  - a. Main Street Entrance:
    - i. Lip greater than ½ inch.
    - ii. Elevation change at entrance.
    - iii. Insufficient maneuvering space.
  - b. Rear entrance:
    - i. Elevation change at entrance.
    - ii. Insufficient maneuvering space.
- 2) Accessible Restroom Accommodations:
  - a. Currently a restroom is provided on the main level but it does not meet accessibility standards.
- 3) Parking:
  - a. Accessible parking is provided in the public parking lot but it does not comply with current accessibility standards.
- 4) Path of Travel:
  - a. Exterior:
    - i. The exterior path of travel from the parking spaces is not identified.
    - ii. The path of travel along Main Street via the public sidewalk is non-compliant because of excessive slope.
    - iii. There is also a step up to the entrance alcove that is non-compliant.
    - iv. There is no current accessible path of travel to the rear entrance of the Confidence Building because of excessive slope issues and the current brick landing with a vertical change greater than a ½ inch.
  - b. Interior:
    - i. Travel between the two buildings does not comply because of the change in level from one building to the next.
    - ii. The current staircase is non-compliant because of the current riser height, the handrails, and the lack of warning striping.

## EMIGRANT JANE BUILDING:

- 1) Accessible Entrance and Egress:
  - a. Main Street Entrance:
    - i. Lip greater than ½ inch.
    - ii. Insufficient maneuvering space.
  - b. Side entrance:
    - i. Upon visual observation it appears to be a compliant entrance. Measurements were not taken to confirm compliance.
  - c. Rear entrance
    - i. Lack of landing at the stairs.
    - ii. Insufficient maneuvering space.
- 2) Accessible Restroom Accommodations:
  - a. Both the men's and women's restrooms do not have sufficient space for compliance.
- 3) Parking:
  - a. Accessible parking is provided in the public parking lot but it does not comply with current accessibility standards.
- 4) Path of Travel:
  - a. Exterior Path of Travel:
    - i. No identified path of travel from parking spaces.
    - ii. Excessive slope along path of travel to front entrance via public sidewalk.
    - iii. Step up to the entrance alcove along Main Street.
    - iv. There is a marked path of travel to the side door of the Emigrant Building but the door itself is marked with a no-entrance sign. There is no detectable warning tile between the path of travel and the drive aisle.
    - v. There is no accessible path of travel to the rear entrance of the Emigrant Building because of the non-compliant staircase to the door.
    - vi. The exterior staircase located along the side of the Emigrant Building is also non-compliant because the width is insufficient, the risers are too high, warning striping is not present, and the handrails are not compliant.
  - b. Interior Path of Travel
    - i. Non-compliant change in level between the two buildings.
    - ii. Less than 36" minimum width in hallway.



## ACCESSIBILITY CODE REFERENCES:

Listed below are the relevant code sections from which we based our opinions:

**Historic Buildings:** Defined by the 2013 California Building Code as, “Buildings that are listed or eligible for listing in the National Register of Historic Places or designated as historic under an appropriate state or local law. CCR Title 24 Part 8

**Basic Provisions:** Defined by the 2013 California Historic Code, “8-602.2 Alternative provisions. If the historical significance or character-defining features are threatened, alternative provisions for access may be applied pursuant to this chapter...”

**Alternatives:** Defined by the 2013 California Historic Code, “8-603.1 Alternative minimum standards. The alternative minimum standards for alterations of qualified historic building or facilities are contained in Section 4.1.7(3) of ADA Standards for Accessible Design, as incorporated and set forth in federal regulation 28 C.F.R. pt. 36.”

**Entry:** Defined by the 2013 California Historic Code, “8-603.2 Entry. These alternatives do not allow exceptions for the requirement of level landings in front of doors, except as provided in Section 8-603.4. 1) Access to any entrance used by the general public and no further than 200 ft. from the primary entrance 2) Access at any entrance not used by the general public but open and unlocked with directional signs at the primary entrance and as close as possible to, but no further than 200ft from, the primary entrance. 3) The accessible entrance shall have a notification system. Where security is a problem, remote monitoring may be used.

**Toilet Rooms:** Defined by the 2013 California Historic Code, “8-603.5 Toilet Rooms. In lieu of separate-gender toilet facilities as required in the regular code, an accessible unisex toilet facility may be designated.”

**Elevator:** Defined by the 2013 California Building Code, “11B-206.2.3 Multi-story buildings and facilities, At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.” There are exceptions to this code, but they only apply to privately funded buildings. Since this project will be owned and leased by a public entity it does not fall under any of the exceptions and therefore must have an elevator to provide access to the second floors.

**RECOMMENDATIONS:** Our recommendation is to keep the Main Street entrance as-is, so as not to diminish the historic character of the building as viewed from Main Street. We suggest creating an accessible entrance in the rear of the Confidence building where the current entrance door exists. We suggest building a patio so the area can serve as an exit for both the Confidence Building and the Emigrant Building by creating a new entrance door along the rear side of the building. We have provided a Conceptual Site Plan (Sheet A1, included in the

following pages of this report) to illustrate these recommendations as one possible accessibility alternative. Signage will need to be provided at the Main Street entrance to inform disabled patrons the accessible entrance is located elsewhere. We have included costs for a civil engineer to survey the current parking lot and then reconfigure the space to include accessible parking located along an accessible path to Main Street and to the rear entrances of the buildings. A ramp would need to be installed from the new patio to the accessible parking spaces. A new bathroom will need to be configured as part of the tenant buildout/ tenant improvements for both buildings.

Conceptual Main and Upper Level Floor Plans (Sheets A2 and A3, found on the following pages of this report) are included to illustrate the accessibility issues and provide a possible alternative to bring the buildings in compliance with current building code accessibility requirements. There are many solutions to the non-compliance issues, all of which are highly dependent upon the type of businesses that will occupy the tenant space. Accessibility requirements are a function of the Occupancy of the space.



Site Level - Notes	
Key	Note
S.1	Accessible Path of Travel.
S.2	Ramp (Parking level to new brick landing @ Confidence Engine Building "City Hall" Entrance.
S.3	Confidence Engine Building "City Hall" Landing.
S.4	Ramp (Confidence Engine Bldg to Emigrant Jane Bldg),
S.5	New Exterior Exit Stair.
S.5.1	New Exterior Exit Stair. (Alternate location).
S.6	Existing door and stair from Main level to parking to be removed.
S.7	Existing accesible Path of Travel to side door to be abandon. (Alternative to make improvments providing a curb or detectable warning between vehicular and pedestrian paths).
S.8	Eisting exterior stairs to Upper Level of Emigrant Jane Building to be removed (if rear stair is added) or reconstructed if exterior stair is added to side of Confidence Engine Bldg).
S.9	New "Van" accessible parking space.
S.10	Recontour, pave, and stripe parking lot.



"City Hall" Doors



1  
A1

Site Plan

1" = 20'-0"

LRS...Architecture

LEWIS R. SPRINGER, III  
ARCHITECT - License # C-15138  
3704 Harvey Road, Cameron Park, CA 95682  
(916) 882-4750

Project:  
  
Old City Hall Building  
  
Placerville CA

Project Number:  
15F01

Date:  
12/30/15

Set:  
Feasibility Study

Sheet Title:  
Site Plan

Sheet Number:  
A1



LRS...Architecture

LEWIS R. SPRINGER, III  
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3704 Harvey Road, Cameron Park, CA 95682  
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Project:

Old City Hall Building

Placerville CA

Project Number:

15F01

Date:

12/31/15

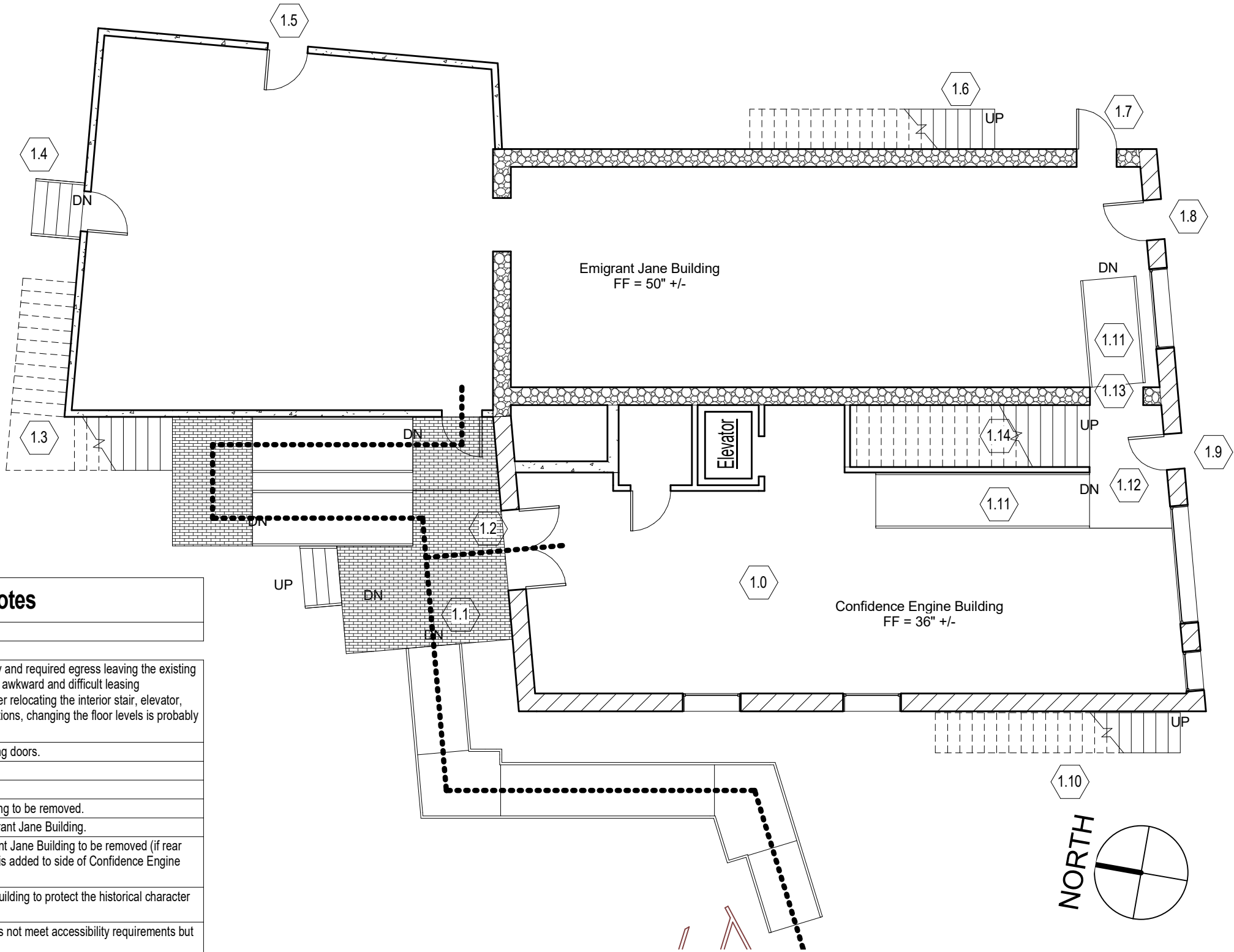
Set: Feasibility Study

Sheet Title: Main Level Floor Plan

Sheet Number:

A2

Main Level - Notes	
Key	Note
1.0	This conceptual layout considered accessibility and required egress leaving the existing location of the interior stair. This layout creates awkward and difficult leasing opportunities. During the design phase, consider relocating the interior stair, elevator, and ramps. Due to the nature of the site conditions, changing the floor levels is probably not an option.
1.1	New brick landing with flush transition to existing doors.
1.2	Exsiting "City Hall" doors.
1.3	New Exterior Exit Stair.
1.4	Existing door and stair from Main level to parking to be removed.
1.5	Existing door and accessible entrance to Emigrant Jane Building.
1.6	Eisting exterior stairs to Upper Level of Emigrant Jane Building to be removed (if rear stair is added) or reconstructed if exterior stair is added to side of Confidence Engine Bldg).
1.7	New accessible entrance. Located on side of building to protect the historical character of the Main Street facade.
1.8	Existing door from sidewalk at Main Street does not meet accessibility requirements but not used for egress requirements.
1.9	Existing door from sidewalk at Main Street does not meet accessibility requirements. Permanently seal door to construct new interior landing.
1.10	New Exterior Exit Stair. (Alternate location).
1.11	New interior ramp to provide egress from Cofidnece Engine Bldg to new side entrance.
1.11	New interior ramp to provide egress from Cofidnece Engine Bldg to new side entrance.
1.12	New landing.
1.13	Remove existing interior stairs.
1.14	Construct new stairs in existing location.



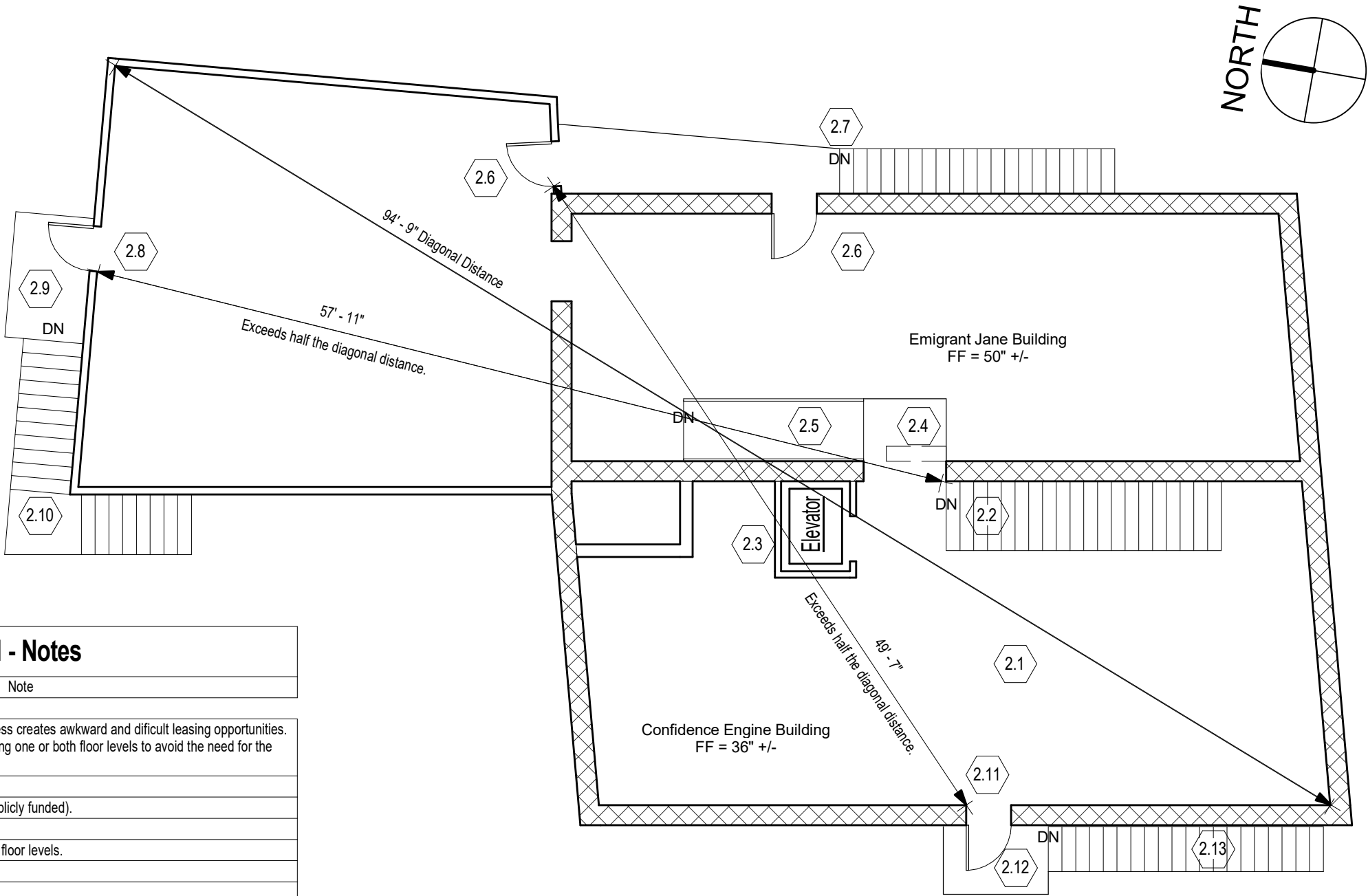
P1

A2

# Main Level Floor Plan

1/8" = 1'-0"

Upper Level - Notes	
Key	Note
2.1	This conceptual layout to provide required egress creates awkward and difficult leasing opportunities. During the design phase, consider reconstructing one or both floor levels to avoid the need for the internal ramp.
2.2	Construct new stairs in existing location.
2.3	New elevator. (required because building is publicly funded).
2.4	Existing stairs to bew removed.
2.5	New interior ramp for access bewteen differing floor levels.
2.6	Existing door.
2.6	Existing door.
2.7	Eisting exterior stairs to Upper Level of Emigrant Jane Building to be removed (if rear stair is added) or reconstructed if exterior stair is added to side of Confidence Engine Bldg).
2.8	New door to new egress.
2.9	New exterior landing.
2.10	New Exterior Exit Stair.
2.11	New door to new egress. (Alternate location).
2.12	New exterior landing.
2.13	New Exterior Exit Stair. (Alternate location).



## MECHANICAL/ELECTRICAL/PLUMBING (MEP)

PRELIMINARY OBSERVATIONS: The buildings currently have HVAC equipment. It is located in the attic of the Confidence Building and in the basement and attic of the Emigrant Building.

The electrical panels serving both buildings and the public restrooms are located in the northeast corner of the Emigrant Building.

RECOMMENDATIONS: Our assumption is that all interior walls will be removed to facilitate the seismic retrofit construction and therefore all new electrical will be run from the main service panels to the new locations under the scope of the tenant improvement. Existing mechanical units should be evaluated to ensure they meet the needs of the new tenants and may need to be replaced. All plumbing will be new from the point of connection; cost to be deferred until tenant improvement.

## INSULATION

PRELIMINARY OBSERVATIONS: From the second floor of the Emigrant Building there is a small staircase leading to the attic. The attic has been insulated with batt insulation and the batt insulation has been installed with direct contact to the roof sheathing, with no 1 inch air space as required by code.

RECOMMENDATIONS: Existing fiberglass insulation in the attic needs to be completely removed. New spray foam insulation needs to be installed directly to the underside of the roof sheathing. The exterior walls and floors should receive new insulation to comply with the requirements of current CA Title 24 Energy Requirements, at the time of the tenant improvements.

## HAZARDOUS MATERIALS

PRELIMINARY OBSERVATIONS: An environmental consultant visited the buildings with the purpose of observing the potential presence of hazardous materials. No testing was performed under the scope of this study, but it was observed that asbestos and lead paint are most likely present in the wall and floor finishes.

RECOMMENDATIONS: Asbestos and Lead Paint are required to be removed, contained, and disposed of by licensed professionals under strict regulatory provisions. The cost for the testing, removal, containment, and disposal of these hazardous materials is included in our Construction Cost Estimate. The cost of the required oversight of removal operations is also included in the item cost.

## **STRUCTURAL PLANS, SPECIFICATIONS & ESTIMATE (PS&E)**

If the City chooses to proceed with the structural rehabilitation of the Old City Hall Building, a detailed analysis of the structure will be required. The masonry will need to be tested for strength prior to and after the repointing efforts. The floor and wall coverings will need to be tested to confirm the presence of hazardous materials. After the selection of the preferred structural rehabilitation alternative, complete plans, technical specifications and an estimate for the structures construction items will need to be prepared. We have included the cost of an independent peer review in the cost of this item of work.

## **ARCHITECTURAL PS&E**

Architectural PS&E, including a CASp (Certified Access Specialist program) report, will need to be prepared as part of the construction documents for the rehabilitation of Old City Hall. There are many varying solutions to the accessibility issues, all of which are dependent upon the proposed occupancy of the tenant space. The accessibility components may need to be deferred until the tenant improvement phase as the occupancy type and associated occupant loads determine the required number of exits as well as the number and restroom facilities. The cost of this item of work is based on development of the PS&E documents with a predetermined occupancy of the tenant space. If the accessibility design is deferred to the tenant improvement phase it may impact the cost of this item.

## COST ESTIMATE FOR NON-STRUCTURAL REHABILITATION

The cost of the Non-Structural Rehabilitation items of work is included below. A 25% contingency has been added to the total due to the preliminary nature of this cost estimate.

*Table 2 - Itemized Cost of Non-Structural Items of Work*

Item of Work	Cost
<b>Fire and Life Safety</b>	
Interior Stairs	\$ 20,000
Exterior Stairs	\$ 35,000
Fire Sprinklers	\$ 24,000
<b>Accessibility</b>	
Elevator	\$ 100,000
Ramps	\$ 80,000
Rear Landing/Patio	\$ 20,000
Parking Lot Improvements	\$ 45,000
<b>MEP Design and Installation</b>	\$ 300,000
<b>Insulation</b>	\$ 24,000
<b>Hazardous Material Abatement</b>	\$ 115,000
<b>Structural PS&amp;E</b>	\$ 80,000
<b>Architectural PS&amp;E</b>	\$ 130,000
<b>Contingency (25%)</b>	\$ 243,000
<b>TOTAL</b>	<b>\$ 1,220,000</b>

The above cost estimate is based on one possible design concept. The Occupancy (type of business) of the tenants can have a significant impact on the exiting requirements for Fire and Life Safety and also on the required number and configuration of restroom facilities. Our purpose was to identify all areas that need to be improved or updated to bring the buildings into compliance with the current CA Building Code in order for the spaces to be leased. The final design may change the overall price and/or each individual line item cost. During the design phase a licensed architect must be hired and it is advised that a Certified Access Specialist consult on the design.



## TOTAL COST FOR REHABILITATION

The total estimated cost for the rehabilitation of the Old City Hall building is included in Table 3 below. The cost for the Structural Rehabilitation is based on that of the URM Alternative. The items of work included will prepare the building for proposed future tenant improvements. This cost includes basic Mechanical/Electrical/Plumbing (MEP), but not tenant-specific ducting or any specialty equipment or fixtures. It does not include interior partition walls, or wall and floor finishes. It does not include sheetrock, since this will be specific to the wall layout. A 25% contingency is included in the total due to the preliminary nature of this cost estimate.

*Table3 - Itemized Cost of all Items of Work, Including 25% Contingency*

Item of Work	Cost
Structural Rehabilitation (URM Alternative)	\$ 1,010,000
Non-Structural Rehabilitation	\$ 1,220,000
<b>TOTAL</b>	<b>\$ 2,230,000</b>

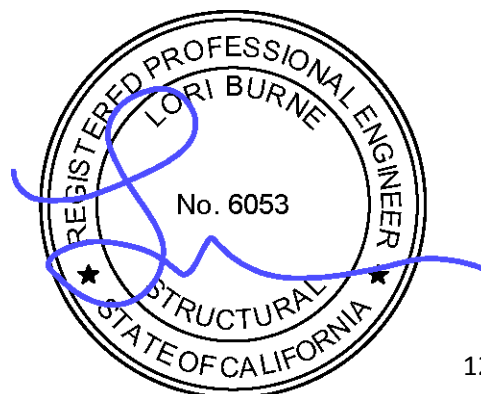
It is important to reiterate that the above cost estimate is based on one possible design concept. The upstairs space is assumed to be Business Group B Occupancy (office space) and the main level space is assumed to be an Assembly Occupancy, which would include restaurants, bars, museums, or art galleries. During the design phase of the project, the hired architect may deem it appropriate to take a different course of action which could result in a different cost estimate than that presented in this phase of the study. This estimate is intended to give the City of Placerville an overall idea of the costs associated with updating the building to a leasable condition. It is our opinion that the final cost of any standard design should be in this range.

We appreciate the opportunity to prepare this report and are available to meet and discuss our findings with the City. Please call (530) 672-1600 or email me at [Lori@BurneEngineering.com](mailto:Lori@BurneEngineering.com) to set up a time for us to discuss this Feasibility Study in detail.

Respectfully,  
BURNE ENGINEERING



Lori Burne, SE  
President



12-31-15

## Structural Report

**From:** "Jon Westphal" <[jon@jnwarchitect.com](mailto:jon@jnwarchitect.com)>  
**Date:** May 14, 2012 3:52:57 PM PDT  
**To:** "Mike Murray" <[mikelmurray@ymail.com](mailto:mikelmurray@ymail.com)>  
**Subject: FW: Old Placerville City Hall Building**

Mike-

I have forwarded you the response I received from Jim (see below)

From my observations today, I have the following comments:

The brick wall along the western part of the structure is severely bowed outward and cracked. It has substantial fire damage to the inset wood pieces and the bricks and mortar are old and have fire damage. Using this wall for any structural support would essentially not be possible as it would not meet today's stricter building codes. An interior steel frame system would most likely be the best solution to obtain the code's lateral and vertical load requirements and avoid opening the "Pandora's Box" that is the wall altogether. This comment would most-likely also apply to the 150+ year-old concrete blocks in the Jane building. I would suggest that if any laboratory testing is done on the walls that it includes both buildings.

The cracking and bowing of the wall is of serious concern since the public parking area directly below is at risk. My immediate recommendation would be to fence off the area between the public restrooms and this building to prevent injury, damage or loss of life should the wall collapse. Considering that much of the interior loads are being transferred to this wall, roof framing is pulling away and the connections between the wall & floor/roof systems are inadequate; I believe that as it sits right now the building is a major public safety hazard. Some workable solutions may be found to 'save' this wall and allow you to continue with your project. However, such recommendations are outside my expertise.

Please feel free to contact me if you have any additional questions.

Sincerely;  
Jon Westphal

**From:** Jim Dillingham [<mailto:jdillingham@dz-engineering.com>]  
**Sent:** Monday, May 14, 2012 1:12 PM  
**To:** 'Jon Westphal'  
**Subject:** Old Placerville City Hall Building

Hi Jon,

To recap what was found at during the site visit today I wanted to list the items of concern with the structure.

The building is a 2 story un-reinforced masonry building with structural integrity problems with the walls. The mortar and brick will crumble in your hand when touched and there is sever cracking in the wall that you can see daylight thru. If this building were to be made safe it would need a new interior steel structural frame that would support both gravity and lateral loads. According to the historical code the brick and mortar would have to meet a tested compressive strength in order for it to be kept as the building facade. This building is unsafe until it is either demoed or goes thru an extensive and expensive historical retrofit. The slightest earth tremor could cause a building collapse. I question if the brick walls can be saved. It might make sense to try to save the front facades and rebuild the rest of the structures. Let me know if there is anything I can do further for you.

Sincerely,

Jim Dillingham, P.E.  
D&Z Structural Engineering, Inc.  
3389 Mira Loma Drive #3  
Cameron Park, CA 95682  
[530-677-0900](tel:530-677-0900)

# MEMORANDUM

To: Director of Community Development  
From: Building Official  
Date: October 9, 1986  
Subject: City Hall Structural Rehab

The City Council authorized a preliminary structural analysis of City Hall in August, 1986. Gary Gates, the engineer preparing the analysis, will be submitting his report immediately. We had hoped that in testing the older masonry walls, that they would have the capacity to assume lateral loads (earthquake, etc.). However, in our discussions with Mr. Gates, the tests on the masonry walls in the front portion of the building indicate that they have extremely low values, making them incapable of carrying such lateral loads. The rear, northeasterly addition appears to have walls strong enough to assume such loads. Mr. Gates' recommendations will include the installation of a completely new structural framework for the front portion of the building. The costs for such reconstruction are usually very expensive.

Since the City presently does not have the funds for such a major reconstruction, we should address a possible alternative until such a time as money may be available in the future.

We could continue with the non-structural rehabilitation as well as addressing structural deficiencies in the basement area (inadequate support for floors and walls above, moisture, etc.). Such basement reconstruction should be designed to accommodate the future new, structural frame for the front portion of the building. Further, the basement reconstruction would provide storage space critically needed now. Without having a plan for the reconstruction of the basement area, it is difficult to estimate construction costs, but using nationally recognized construction costs for basement garages, the estimate would be \$40,000 to \$50,000.


Lastly, the question was raised, would we be in violation of current codes or state laws if we used such an alternate approach? The current Building Code has a provision for existing and historic buildings which states, "Buildings in existence at the time of adoption of this code may have their existing use or occupancy continued, ....., provided

such continued use is not dangerous to life. Historic Buildings - Repairs, alterations and additions necessary for the preservation, restoration, rehabilitation or continued use of a building or structure may be made without conformance to all the requirements of this code, provided:

1. The building or structure has been officially designated as having special historical or architectural significance.
2. Any unsafe conditions are corrected.
3. The restored building or structure will be no more hazardous based on life safety, fire safety and sanitation than the existing building."

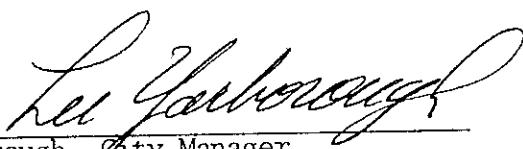
The above citations of the Building Code seem to permit us to use the alternate approach noted above. Upcoming state legislation may require us to address the non-reinforced masonry buildings constructed prior to 1933. Possibly, such legislation will, in the future, carry some sort of funding as was done for schools several years ago.

Based on the facts noted above, I would recommend that we use the alternate approach (non-structural rehabilitation and basement reconstruction). This recommendation is made with the consideration that future planning would include a structural rehabilitation of City Hall.

  
AA  
Jack Atkins  
Building Official

SS

Approved for submittal to City Council:

  
Lee Yarborough, City Manager

# GARRY GATES CONSULTING CIVIL ENGINEER

P.O. BOX 675  
EL DORADO, CALIFORNIA 95623

October 8, 1986

Mr. Jack Atkins  
Building Official  
City of Placerville  
Placerville, CA 95667

RE: Placerville City Hall Renovation

Dear Jack:

As proposed by my letter of July 21, 1986, and as authorized by the City Council through you, I have undertaken Phase I of the engineering required to bring the City Hall building complex within the minimum standards of the Uniform Code for Building Conservation (UCBC), 1985 edition. This is to apprise you of my preliminary findings regarding the feasibility of structural rehabilitation of the City Hall buildings.

Capitol Engineering Laboratories of Roseville, California, has tested the the outside layer (wythe) of the exterior masonry walls of the buildings in three (3) locations and has also tested three (3) cores taken from exterior concrete or plaster walls of the buildings (see enclosure 1). The test results and observations indicate that the strength of the material tested is variable and of poor quality, and also that the inner masonry wythes (not tested) would have only about 10% to 20% of the strength of the outside wythes in resisting seismic forces.

When the criteria established by the UCBC is applied to the test results, I find the masonry walls tested (composed of three wythes) to have insufficient strength to qualify for use in resisting seismic loads (see enclosure 2). Consequently, I conclude, for purposes of analysis, that the existing masonry walls will provide no resistance to the seismic loads specified by the UCBC. I also conclude that the entire structure now supported by masonry walls will need to be supported against seismic forces by means of an independent structural system, such as a structural steel or reinforced concrete framework either inside or outside the building.


Since a complete, new structural framework, requiring extensive engineering, design, and detail work, would have to be installed and connected to the existing building, rehabilitation costs would be much higher than those indicated in my letter of July 21. I project rehabilitation costs for an independent structural system to be in the order of \$500,000 to \$1,000,000, and engineering costs would be from \$25,000 to \$50,000. It is likely that the City Hall buildings, or at least major portions of them, will have to be vacated for long periods of time during the rehabilitation process.

Mr. Jack Atkins  
Page 2  
October 8, 1986

Because the preliminary findings indicate that the existing structure cannot be utilized to resist seismic loads (contrary to my expectations upon which I based my proposal of July 21), a detailed analysis of the existing structure is not now warranted. I recommend against proceeding with the "structural analysis of the existing structure" proposed in my letter of July 21, and I recommend that Phase I described in that letter be terminated.

If I may be of further service, please call me.

Sincerely,

  
Garry Gates



Enclosures

1. letter from Capitol Engrg. Labs
2. calculations

My License Expires  
June 30, 1989

cc Capitol Engrg. Labs





## CAPITOL ENGINEERING LABORATORIES, INC.

Materials Testing • Inspection • Crane Certification

CHARLES L. FRIES, President  
HOWARD K. ANDERSON, V.P.

File 62710  
September 15, 1986

Garry Gates Consulting Civil Engineers  
P.O. Box 675  
El Dorado, California 95623

Attention: Garry Gates

Project: Placerville City Hall

Gentlemen,

On September 10, 1986, Capitol Engineering Laboratories conducted an investigation of the strength and make-up of the exterior walls of the Placerville City Hall Building. This investigation included testing the shear resistance of the masonry walls and the sampling of the materials in the three buildings by coring. The following are the findings of each location where testing occurred:

Masonry Test #1 Main Bldg. - West Wall 25' ± from bldg. front. Test location 20" below window sill.

Found firm unweathered exterior mortar. (May have been treated with a weather proofing agent.)

Interior mortar soft and easily crumbled. Mortar is lime mortar pink to tan in color.

A second wythe behind the exterior has good bed joints and fair-to-non-existent head joints. Poor interwythe mortar. The contribution to shear resistance by the inner wythe should be about 10% to 20% of the exterior Values.

Test results: First yield 1790 lb force. Ultimate 2350 lb force.

Masonry Test #2 Main Bldg. - East Wall 38' ± from bldg front. Test location 16" below window sill.

Findings as in #1 above.

Test Results: First yield 2125 lb force. Ultimate 2125 lb force.

## CAPITOL ENGINEERING LABORATORIES

Masonry Test #3 Main Bldg. - North Wall 6'  $\pm$  from West Wall between corner and City Hall back door.

Findings same as #1 and #2 above.

Test results: First yield 5030 lb force. Ultimate 5030 lb force.

NOTE: Brick area is 64 sq. in. (both top and bottom faces).

Core #1 Main Bldg. - Southwest corner cored into the front pilaster 2"x6" deep 5'  $\pm$  above the sidewalk

Found solid plaster type material, a chaulky white for the entire depth.

Compression test results            7540 psi

Core #2 East Bldg. - Southeast corner 2" diameter x 11" deep at 18'  $\pm$  above sidewalk.

Found solid chaulky white plaster type material to 7" with a 1" mortar layer behind and a soft red brick wall behind the mortar. The mortar is of the same type found in the other brick wall investigation, it being of a lime mortar that is soft and easily crumbled.

Compression test results            4920 psi

Core #3 North wing - West wall 2" diameter x 6" deep at 3'-4" above AC parking lot.

Found soft concrete behind 1/4" mortar exterior facia. Encountered old twisted reinforcing steel possibly 1900 - 1924 vintage at 4-1/2" depth. Wall is 6" thick. Noted back side of fired interior wall. Core taken at elevation of sill plate.

Compression test results            1850 psi

All test areas were patched with mortar mix and trowled flush with the building face. The bricks that were removed were also mortared into place.

Please feel free to contact our office if there are any questions.

Respectfully submitted,

CAPITOL ENGINEERING LABORATORIES

  
Clayton L. Soules

09156.613

# CAPITOL ENGINEERING LABORATORIES

## CAPITOL ENGINEERING LABORATORIES

### CORE DATA SHEET

JOB NAME: PLACERVILLE CITY HALL  
 JOB NUMBER: 62710

LABORATORY NO: 560-33  
 REPORT DATE: 09/11/

SPECIMEN NUMBER	DIAMETER INCHES	AREA INCHES	HEIGHT IN INCHES	Uncapped	Capped	L/D	Cf	TOTAL LOAD POUNDS	F'C (psi)	CORRECTED F'C	REMARKS (AGE AT TEST)
1	2"	3.14	3.6"	1.8	.984	24,050	7660	7540			VERY BRITTLE
2	2"	3.14	3.5	1.8	.98	15,750	5020	4920			
3	2"	3.14	3.8	1.9		5,800	1850	1850			

**GARRY GATES  
CONSULTING CIVIL ENGINEER**

P.O. Box 675  
EL DORADO, CALIFORNIA 95623  
(916) 626-3020

JOB PLACERVILLE CITY HALL REHAB

SHEET NO 1 OF       

CALCULATED BY GJG DATE 10/3/86

CHECKED BY        DATE       

SCALE       

Analysis of In-Place Masonry Test Results.-

Reference: Capitol Engineering Laboratories letter dated Sept. 9, 1986.

Since the City Hall Building complex is an essential facility (UBC Sec. 2312(k)), the structure must be evaluated under the provisions of the Uniform Code for Building Conservation, Sections A106 & A107.

The "Net Yield Shear Resistance" is determined according to UCBC Sec. A107(d)3.:

$$\text{Net Yield Shear Resistance} = \text{Actual Mortar Resistance} - \text{Axial Stress}$$

Weight of masonry (1 wythe, 4" thick) = 35 psf

Load on 4" x 8" =  $(35 \times 8)/12 = 23.3$  lbs per ft. of wall height

Analysis:

Masonry Test #1 (Outside wythe)-

Actual mortar resistance  $1290/64 = 28\text{psi}$

Axial stress  $23.3 \times 20"/(12 \times 4 \times 8) = 1\text{psi}$

Net Yield Shear Resistance =  $27\text{psi}$

Effective Net Yield Shear Resistance for all 3 Wythes (assume inner wythes @ 20% of outer)

$$27 \times (2 \times 0.2 + 1)/3 = 12.6 \text{ psi} < 30 \text{ psi}$$

Masonry Test #2 (Outside wythe)-

Actual mortar resistance  $2125/64 = 33\text{psi}$

Axial stress  $23.3 \times 16"/(12 \times 4 \times 8) = 1\text{psi}$

Net Yield Shear Resistance (N. Y. S. R.) =  $32\text{psi}$

Effective N. Y. S. R. for all 3 Wythes,  $32 \times (2 \times 0.2 + 1) = 28\text{psi} < 30\text{psi}$

Masonry Test #3 (Outside wythe)-

Actual mortar resistance  $5030/64 = 79\text{psi}$

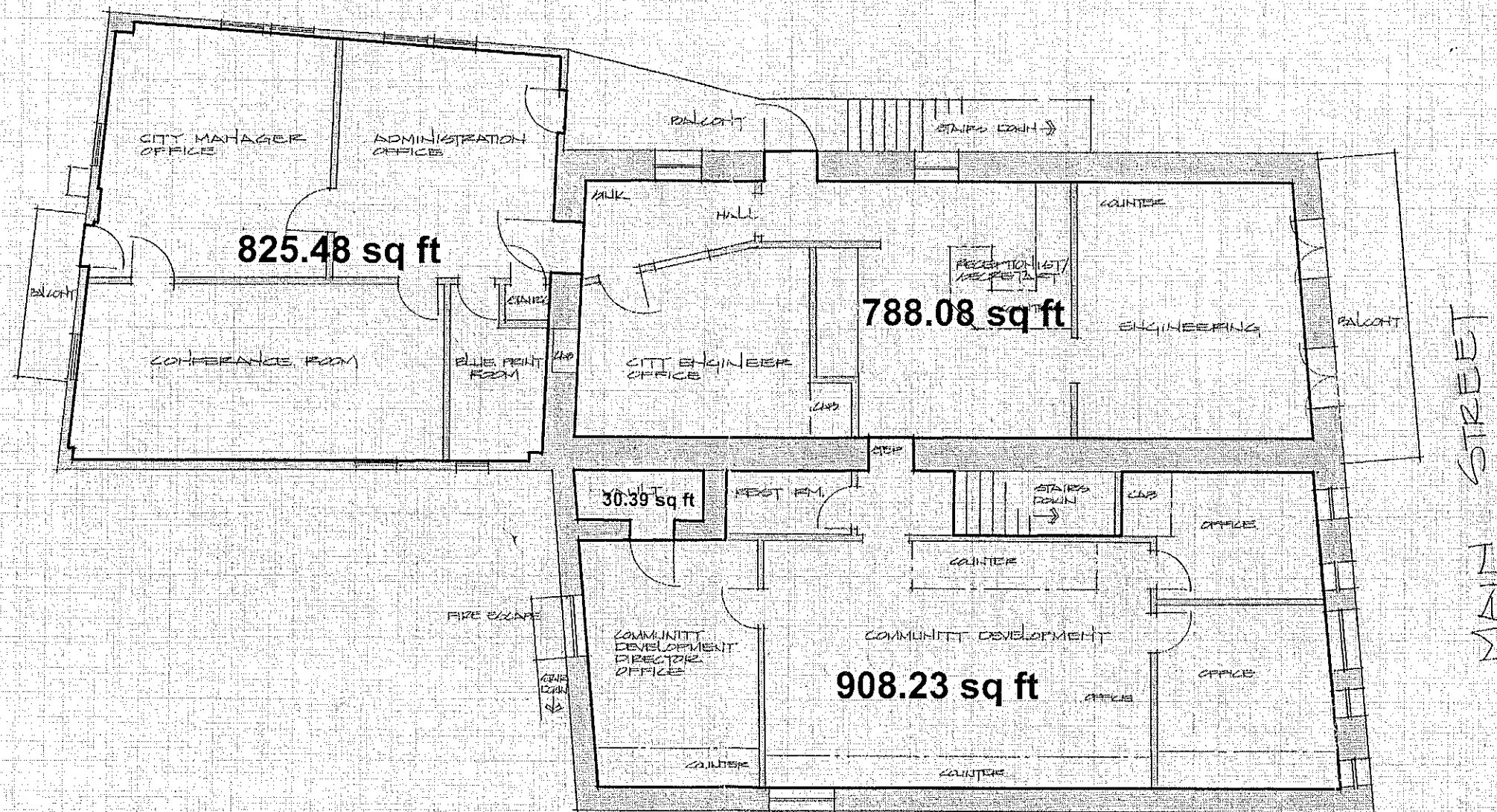
Axial stress  $23.3 \times 24/32 = 18\text{psi}$

N. Y. S. R. =  $61\text{psi}$

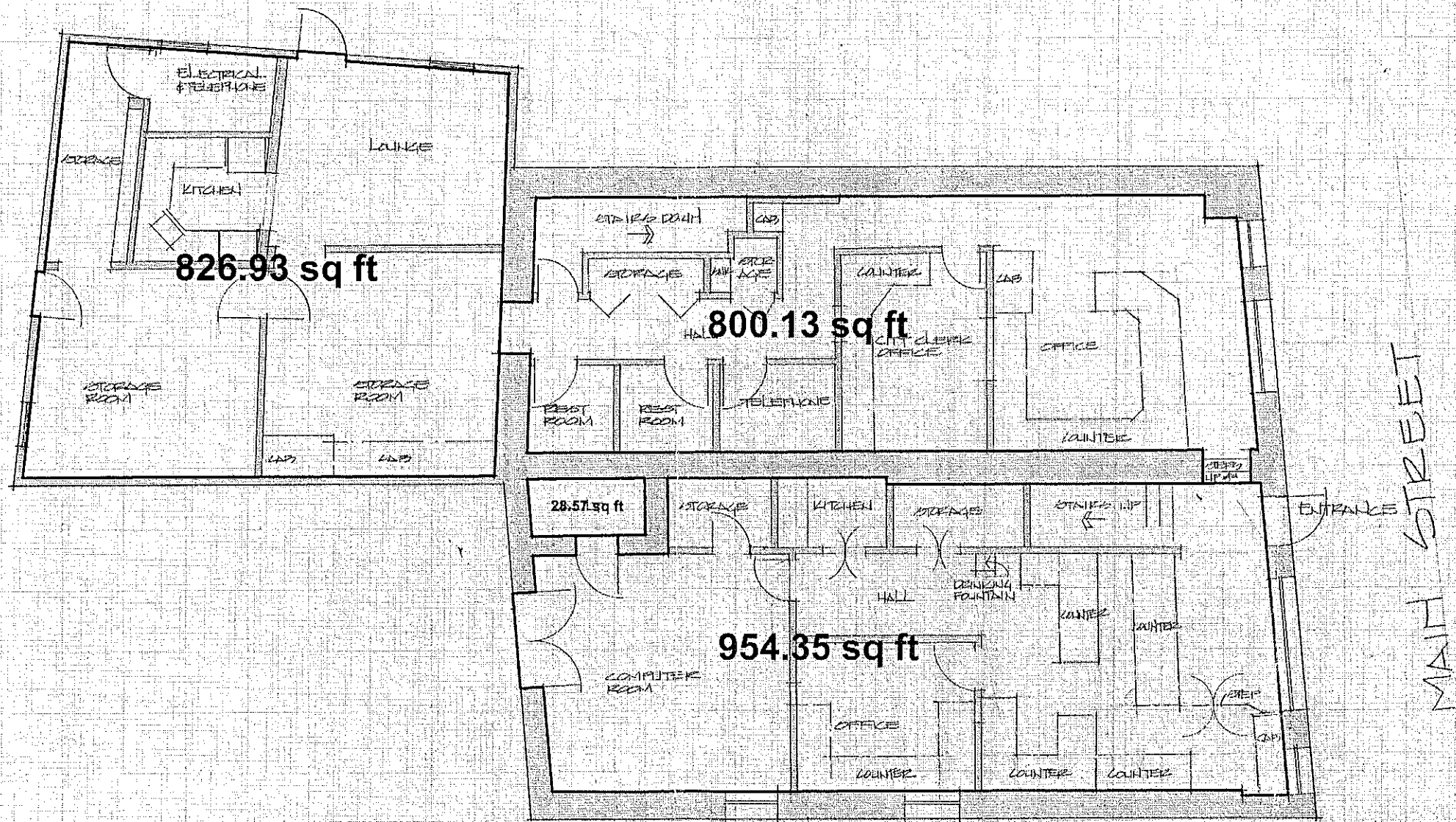
Effective N. Y. S. R. for all 3 Wythes,  $61 \times (2 \times 0.2 + 1) = 28\text{psi} < 30\text{psi}$

Since the effective net yield shear resistance is less than 30psi for all tested walls, the masonry does not qualify for use to resist seismic loads per UCBC Sec. A107(d)3.

## Old City Hall Drawing



CITY HALL  
 2ND FLOOR PLAN  
 SCALE: 1/4" = 1'  
 DATE: FEB. 1, 1997  
 PL



CITY HALL  
 1ST FLOOR PLAN  
 SCALE: 1/4" = 1'  
 DATE: FEB. 1, 1997  
 PL