Council Business Meeting

June 16, 2020

Agenda Item	Update on City Hall, Community Center, and Pioneer Hall	
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SUMMARY

With the defeat of the Public Facilities Bond Measure on the ballot of the May 19, 2020 election, Council requested an update and summary of the three facilities (City Hall, Pioneer Hall and Community Center) to determine appropriate next action steps in achieving the intended purpose of developing funding sources and timelines to adequately renovate the three facilities to ensure their availability as safe and functional community and organizational assets in both the short and long term.

POLICIES, PLANS & GOALS SUPPORTED

City Council Goals (supported by this project):

- Maintain Essential Services
- Continue to leverage resources to develop and/or enhance Value Services: Emergency Preparedness

CEAP Goals:

1. Reduce Ashland's contribution to global carbon pollution by reducing greenhouse gas emissions associated with City, residential, commercial, and industrial activities.
2. Prepare the city's communities, systems, and resources to be more resilient to climate change impacts.

CEAP Strategic Initiatives: Support climate-friendly land use and management.

Department Goals:

- Maintain existing infrastructure to meet regulatory requirements and minimize life-cycle costs
- Deliver timely life cycle capital improvement projects
- Maintain and improve infrastructure that enhances the economic vitality of the community
- Evaluate all city infrastructure regarding planning management and financial resources

PREVIOUS COUNCIL ACTION

City Hall:

- The 2014 "Ashland 2020" strategic plan identified "Examine City Hall replacement and other facility needs" as a priority goal.
- June 15, 2015 Study Session: Discussion on City Hall replacement process.
- February 1, 2016 Study Session: Presented updated findings of the 2015 seismic evaluation and provided a safe egress retrofit cost.
- January 17, 2017 Council Business Meeting: Presented a consolidated report of actions to date
- April 4, 2017 Council business meeting: appointed an ad hoc City Hall Advisory Committee to review feasible alternatives for the replacement of City Hall.
- October 3, 2017, Council Business Meeting: Presentation from staff including the ad hoc City Hall Advisory Committee's Final Report and Recommendations for the replacement of City Hall.

- December 4, 2017 Study Session: Review Ad Hoc recommendations and develop next steps in selecting a consultant to develop conceptual plans based on the recommendations for City Hall at the current site, at the Civic Center site and to also look at the Briscoe School site.
- July 3, 2018 Council Business Meeting: Award contract to ORW for Phase 1 – Conceptual Design ($97,085).
- February 5, 2019 Study Session: Presented conceptual site plans and estimates for the three alternatives including a Power Point presentation by ORW. Council did not support any of the alternatives and expressed dissatisfaction that a seismic retrofit of the existing City Hall had not been included as a fourth alternative.
- June 3, 2019 Study Session: Presented a conceptual design and cost estimate to complete the seismic and systems upgrade to City Hall, cut short due to other items on the agenda.
- September 30, 2019 Study Session: Review of all four options as shown in the summary on page 1 of this staff report, as well as the risks of not having an adequate plan and the costs relative to the current fiscal climate.
- October 15, 2019 Council Business Meeting: Discussion for next steps associated with the City Hall design. Communication - City Hall Direction.
- December 3, 2019 Council Business Meeting: Request for approval of a professional services contract for final design of City Hall with ORW.
- April 21, 2020 Council Business Meeting: Presentation on seismic rehabilitation in conjunction with historic preservation.

Pioneer Hall and Community Center Council actions are embedded within the background information in the narrative section below.

BACKGROUND AND ADDITIONAL INFORMATION

Public Works staff has worked with consultant firms to provide structural building review, general facility assessments, improvement recommendations and associated cost estimates for both the Community Center and Pioneer Hall.

Community Center

In early 2019, facility staff observed several concerning, relatively new, deformations in the ceiling, walls, and floors of the Community Center. In February 2019, Marquess and Associates, Inc. was hired to conduct a structural investigation to determine the cause and severity of deformations. In addition, Marquess was charged with providing enough information for answering the more immediate question of whether the building was safe for continued public use. Marques produced a structural evaluation report for the City and Building

Upon reviewing the report, the City's Building Official determined that the Community Center was not safe for public use and ordered its indefinite closure. Marquess confirmed that there was no temporary "fix" that would make the building reliably safe for use until permanent repairs could be made. Consequently, the City requested a third-party cost estimate for all repairs identified in the structural evaluation.

Direct construction costs were estimated by ACC Cost Consultants. The total cost to for final engineering/architectural and construction services for the repairs, excluding permitting, is estimated to be between $399,035 and 409,666. The following list outlines, in general, some of the major contributors to these costs.

- Roof demolition
- Exterior north wall demolition
- Jack up subfloor at seven locations and shim beams
- Material disposal

- New headers of three doors
- New wall framing, etc.
- Wood siding for new wall
- Re-insulate new ceiling
- New roofing, including framing, sheathing, and shingles
- Flashing, including gutters
- Caulking and sealants
- Finishes for ceiling
- Refurbish wood floor
- Painting new interior walls
- HVAC work associated with demolition and reconstruction
- Electrical work associated with demolition and reconstruction
- Contractor's contingency, OH and profit, and insurance and bonding costs
- Architectural and Engineering design fees

All the proposed work on the Community Center is directly related to structural strengthening. These costs do not address any accessibility improvements or other areas where the building is not up to code.

Pioneer Hall

In 2017, a local consultant firm provided a structural assessment and code evaluation of the facility. The assessment detailed several deficiencies for Pioneer Hall. The evaluation was presented before Council at the September 19, 2017 Study Session (September 19, 2017 Staff Report).

At the November 6, 2017 Study Session staff presented costs for continuing the evaluation and completing the design and associated engineering drawings (November 6, 2017 Study Staff Report).

The Council authorized a special procurement for architectural and engineering services at the November 21, 2017 Business Meeting (November 21, 2017 Staff Report).

Pioneer Hall improvements were evaluated for two different types of building occupation, Assembly Group A-3 and Residential Group R-1. The occupation standards were evaluated as Pioneer Hall had been utilized as an emergency overnight shelter and if the intent was to continue this use, additional building improvements would be required.

- ❖ Assembly Group A-3 = community hall type uses, no overnight shelter activities
- ❖ Residential Group R-1 = community hall type uses and overnight shelter activities

Staff presented the estimated construction costs at the April 16, 2018 Study Session (April 16, 2018 Staff Report).

The construction cost estimate for option 1 (A-3): $325,409 (2017 dollars)

- Accessibility improvements pursuant to ADA requirements, including egress improvements
- Strengthening the roof and floor where overloading has been identified
- Seismic rehabilitation where major weaknesses have been identified, including replacing stone chimney
- Electrical and plumbing upgrades
- Improvements to the kitchen facility
- Installation of drinking fountain
- Replacing the dated and insufficient HVAC systems to include energy efficient systems

The construction cost estimate for option 2 (R-1): $404,194 (2017 dollars)

- All of the above associated with A-3 improvements

- Addition of fire suppression system
- Addition of fire alarm system

After Council review of the proposed cost, they directed staff to generate a request for solicitation proposal document requesting responses for the use of the facility from both public and private entities.

Staff presented the draft RFS before Council at the July 1, 2018 Study Session (July 1, 2018 Staff Report). Council approved the solicitation document and staff proceeded with the advertisement. After the solicitation period ended and the City received no responses.

City Hall

Subsequent to the bond measure voting results, the City Attorney provided Council with the following updated views on two issues of previously identified concerns.

Regarding a disputable use restriction in the deed by which the City Hall property was donated to the City, that restriction, if applicable at all, does not limit the ability to move City operations elsewhere for the time reasonably necessary to decide how best to utilize that property.

Regarding the legal risk of continuing City operations in the current City Hall (as opposed to immediately moving them elsewhere), the good-faith attempt to obtain voter approval of financing for a renovated City Hall, along with related recent substantive efforts, has reduced that risk, making immediate action to move City Hall functions elsewhere non-urgent – as long as purposeful steps to address the seismic safety concerns are being promptly pursued.

FISCAL IMPACTS

The table below provides a summary of the total expenditures to date for structural review, cost estimates and preliminary design work as well as the current estimated total cost for repair/renovation for each of the three facilities.

Facility	Expenditures to date	Total Renovation Estimated Cost
City Hall	$216,362 (FY16-FY20)	$ 7,200,000
Pioneer Hall	$ 15,838 (FY18)	$ 400,000
Community Center	$ 4,700 (FY19)	$ 325,500 or $ 405,000

In the current 2019-21 biennial budget, approximately $350,000 remains appropriated for facility design and construction able to be utilized for the three facilities as directed by Council.

Staff has included all three projects in a preliminary overall list of Citywide capital projects that have the potential to be eligible candidates for emerging stimulus/economic recovery funding through federal grants and/or low to no interest loans. Additionally, staff continues to have open dialogue with the Ashland Parks and Recreation Commission about creative combined financing opportunities for both Pioneer Hall and the Community Center.

STAFF RECOMMENDATION

While no formal recommendation is offered by staff at this point, a multi-department staff team has been put together to work on potential alternative plans to address each of the three facilities. Before committing these staff resources, direction from Council is needed to develop appropriate timelines and cost estimates for Council's desired next steps.

ACTIONS, OPTIONS & POTENTIAL MOTIONS

N/A

REFERENCES & ATTACHMENTS

Attachment 1: Community Center Structural Investigation Report
Attachment 2: Pioneer Hall Structural Seismic Assessment Report
Attachment 3: Pioneer Hall Building Code Analysis

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Structural Investigation Report

Project:

Ashland Community Center
59 Winburn Way
Ashland, OR 97520

City of Ashland Community Center Structural Investigations

MAI Job No. 19-1082

02 April 2019

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Ashland Community Center: Structural Investigation Report

1. Project Description

1.1. Scope of Work

This report covers an investigation of structural damage and as-built conditions at Ashland Community Center, located at 59 Winburn Way in Ashland, Oregon.

Structural damage refers to excessive deflection in the ceiling on the west end of the Main Hall, near the stage. A member across the width of the Main Hall has deflected downward. The north exterior wall of the Main Hall is also not plumb; there is noticeable deflection of the top plate outward. The floor is also noticeably not level.

Figure 1: Downward Deflection of Ceiling at West End of Main Hall

Figure 2: North Exterior Wall of Main Hall Out-of-Plumb

Figure 3: Concrete Veneer at Crawlspace Pushed Outward

The 1922 building was rehabilitated architecturally and structurally in 1985. This report indicates whether or not the existing rehabilitation work follows the construction drawings from 1985. No original drawings are available.

1.2. Existing Building Description

As stated previously, original drawings of the 1922 timber structure were not found. The rehabilitation drawings from 1985 typically provide adequate information to conduct any assessments of the structure.

The building was physically observed and access into the roof space and crawlspace was provided. It is clear that the existing wood framing is not rotted or degraded, although some structural members are not functioning as intended, or have failed, or have failed and been repaired previously. The concrete foundations appear to be in good condition. There is no spalling or major cracking observed in the concrete.

As can be seen in Figure 6 below, the Main Hall has a curve, vaulted ceiling. This area is of most concern, due to observed ceiling deflections, and deformations in the exterior wall. The floor is also not level in the Main Hall.

Figure 4: Northeast Building Corner

Figure 5: Southeast Building Corner

Figure 6: Main Hall

Figure 7: Roof Structure

2. Investigation of Damages

2.1. Main Hall Ceiling

A visual inspection of the roof framing reveals some issues with the framing arrangement over the Main Hall. Several ceiling joists and hip rafters bear on insignificant structure exactly at the line where downward deflection is occurring in the west end of the Main Hall near the stage. Perhaps at one time there had been a beam or wall here, which is suggested in the 1985 drawings. The roof framing plan shows a line of studs to be put under the rafters, which should bear on new 2x6 ceiling joists, but in the area where the ceiling has deflected down, no ceiling joists were added, because it is a vaulted ceiling. The flat 2x6 joists work in the flat ceiling areas of the building, but there are no 2x6 joists for the studs to bear on in the vaulted area. The photo below shows this condition where ceiling framing and rafters terminate at a point where there is no member on which to bear.

The engineer's notes from 1985 also indicate that some type of support that is not currently existing could or should be installed by a note "Future?". A copy of the sketch is below.

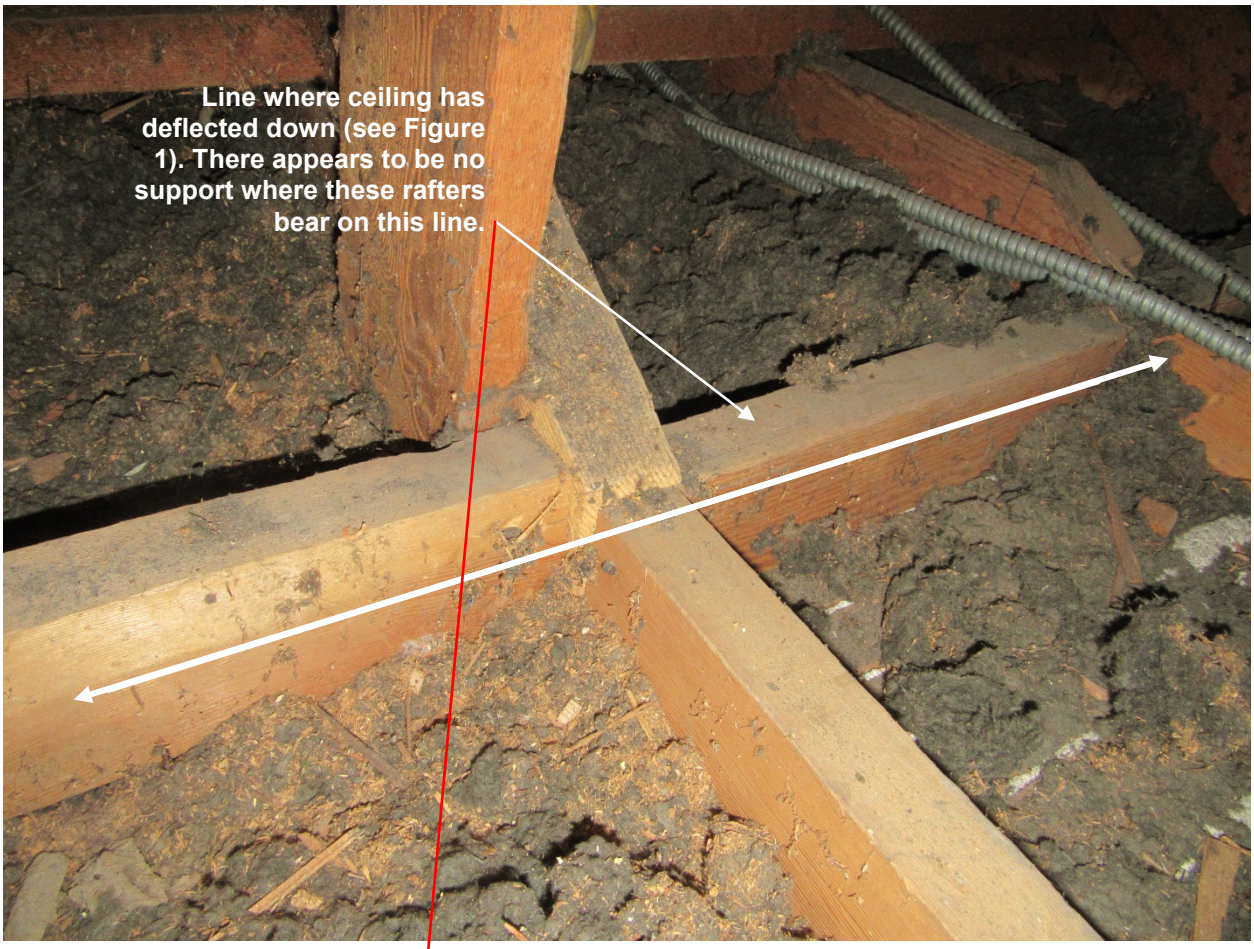


Figure 8: Line of Downward Deflection in Ceiling

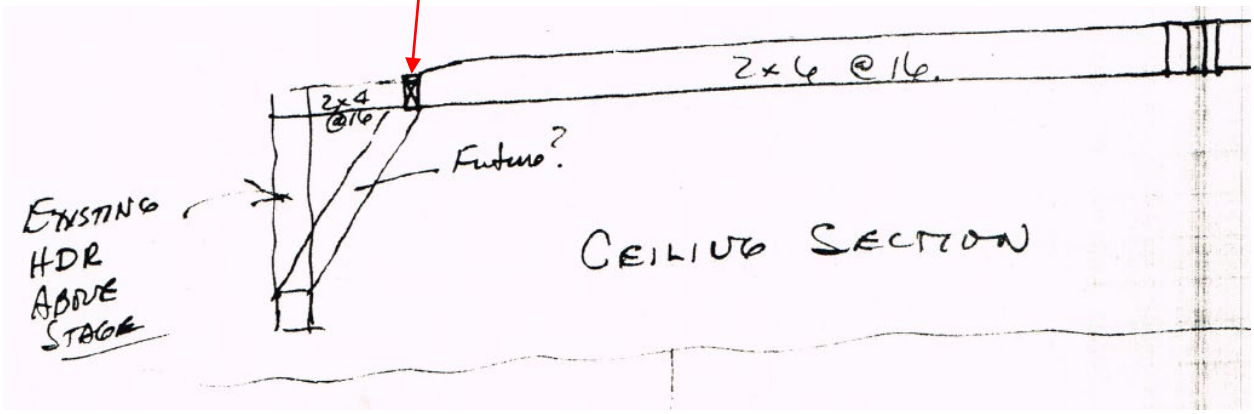


Figure 9: Copy of Sketch from 1985 Engineer's Notes

Figure 10: Photo at Line of Downward Deflection in Ceiling

2.2. Main Hall Out-of-Plumb Wall (north exterior wall)

Figure 2 shows that the exterior north wall of the Main Hall has deflected outward at the top of the wall. This is likely due to the deflection produced by thrust in the main roof trusses. There are tie rods from the 1985 rehabilitation that are intended to remove the thrust from the trusses and prevent further deflection of the top of the wall outward. The 1985 drawings do not indicate that the tie rods should have been tightened to bring the walls back to vertical, so it is likely that they were tightened enough to make them taut, and perhaps the wall had not yet deflected noticeably at that time.

It is also possible that this wall was out-of-plumb in 1985 and was not repaired. It is also possible that the connections in the tie rods have crept and slipped over the years and some extra slack in the tie rod has been taken up by the outward movement at the top of the wall.

2.3. Main Hall Un-level Floor

The floor structure consists of wood joists spanning approximately eight to ten feet between wood beams, which bear on wood posts on square concrete footings. After having a close look under the Main Hall floor in the crawl-space, it is apparent that the existing concrete footings under some of the posts have settled. Since the existing joists span continuously over the beams, a gap has been created where the joist should be bearing on the beam, which requires the joists to span twice the distance.

Some settling over time is normal for foundations. The foundation drainage was improved in 1985, with some minor excavations around the footings and installation of drainage lines and vapor barrier on the crawlspace floor. This work may or may not have affected the moisture properties of the soil.

The settlement has not caused any excessive deflection of the main structure, but it has created an undesirable condition at the interior joist bearing line.

Figure 11: Crawlspace Showing Floor Joists and Beams

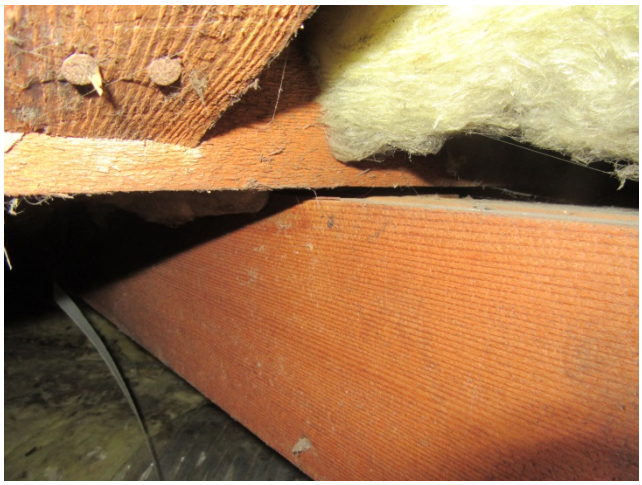


Figure 12: Gap Between Bottom of Floor Joist and Top of Beam

3. Investigation of As-Built Conditions

The building was investigated for compliance with the 1985 drawings of rehabilitation of the structure. Not every structural item on the drawings was checked, but many areas were verified. Mainly, the rehabilitation sought to strengthen the roof structure and improve drainage around the foundations. It is clear that most of the roof rafters were over-spanned before 1985.

New cripple walls under existing rafters were installed per the drawings, as well as extended rafter splices, braces, and posts, which reduce spans.

The tie rods were installed in the Main Hall roof, as indicated by the drawings. The end connections were not observed.

The hip truss top chord failed in the northwest corner of the Main Hall and was repaired by the 1985 construction work, as detailed by the drawings.

Retrofit trenches and drain lines were observed in the crawlspace, as indicated by the 1985 drawings. Some minor structural work was done in the crawlspace, which also appeared to be installed per the drawings.

4. Recommendations

Because strengthening of the gravity systems was completed in 1985, a structural assessment of the gravity systems is not warranted, except as noted below. This report does not guarantee that every connection and member is adequate to resist gravity loads. Due to the complex nature of the roof framing, the entire roof and ceiling structure would have to be exposed in order to conduct a proper assessment.

A. The roof structure above the Main Hall is a poor conglomeration of structural members, some without end support. The roof deflects excessively and consistently. Cracks that form in the ceiling plaster and walls must be painted frequently. Some cracks have recently required filling, which suggests irreversible deformation. The same deformation has caused the exterior wall to move outward at the top.

   While the tie rods and new connectors theoretically provide the necessary structural strength, they do not seem adequate in providing necessary stiffness. Furthermore, as the structure moves down and back up with the snow loads, it is unclear how much stress this imparts to various connections within the roof framing, including the stress caused by the permanent deformations.

   Another strengthening will be quite invasive, and it will be difficult to prove that each connection in the existing structure is sufficient, especially considering some of the main connections in the existing trusses are a single through bolt.

   Conclusion – The best way to address all of these issues over the Main Hall would be to completely remove and replace the existing roof and ceiling structure over the Main Hall with new wood trusses. Each system (roof rafters, trusses, tie rods, and ceiling joists) is too flexible, and it will be very difficult to retroactively stiffen each one. In our opinion, it is not feasible to try and re-use the existing roof structure over the main hall.

   The north wall of the Main Hall should be brought into plumb after the roof framing has been removed. The current condition is unacceptable. If more outward deflection occurs at the top of the wall because of a failed member or slipping connections, it could cause a total collapse of the building. Wood structures are very forgiving and give lots of warning, but only to a point. Trying to bring this wall into plumb with the roof framing still in place will not be safe due to the lack of dependable, repetitive members.

   The concrete veneer that is bowing outward on the north crawlspace wall is not structural. This should be repaired, however, in order to preserve the water resistance of the building and protect the wood structure in the crawlspace.

B. The floor is not level in the Main Hall, likely due to settling in the crawlspace.

   Conclusion – The gap between the bottom of the floor joists and the top of the crawlspace beams should be filled tight with wood shims. The joists can be jacked up slightly near the beam before the shims are installed to remove some of the sagging and it might make the floor more level.

   Another option is to jack up the floor beams and place a filler between the floor beam and the tops of the crawlspace posts.

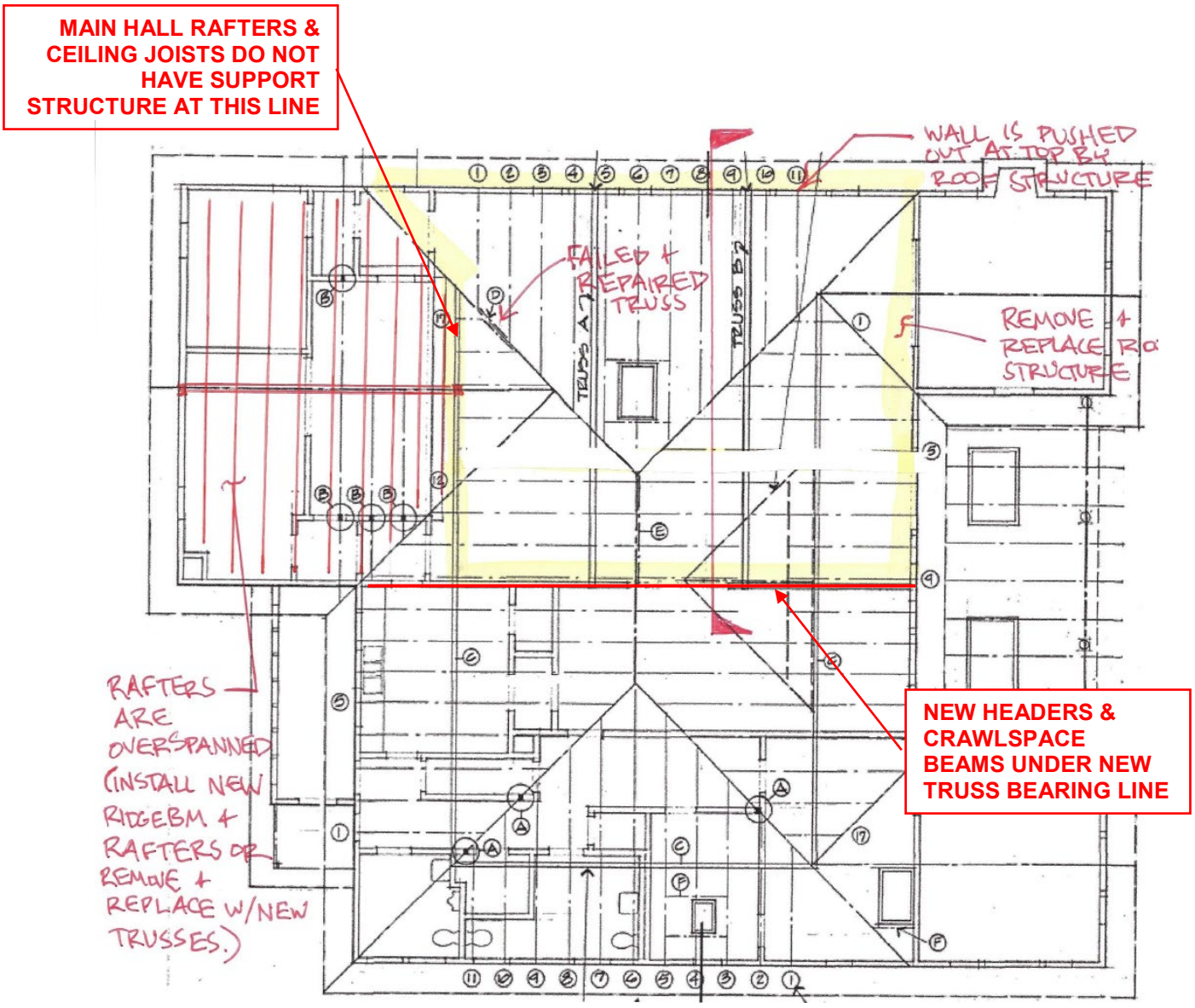
C. The roof rafters over the Stage, Backstage, and Dressing rooms in the northwest corner of the building are over-spanned. There is also no ridge beam, only a continuous, thin rim. The rafters are sagging due to the large span.

Figure 13: Overspanned Rafters and Ridge at Northwest Corner of Building

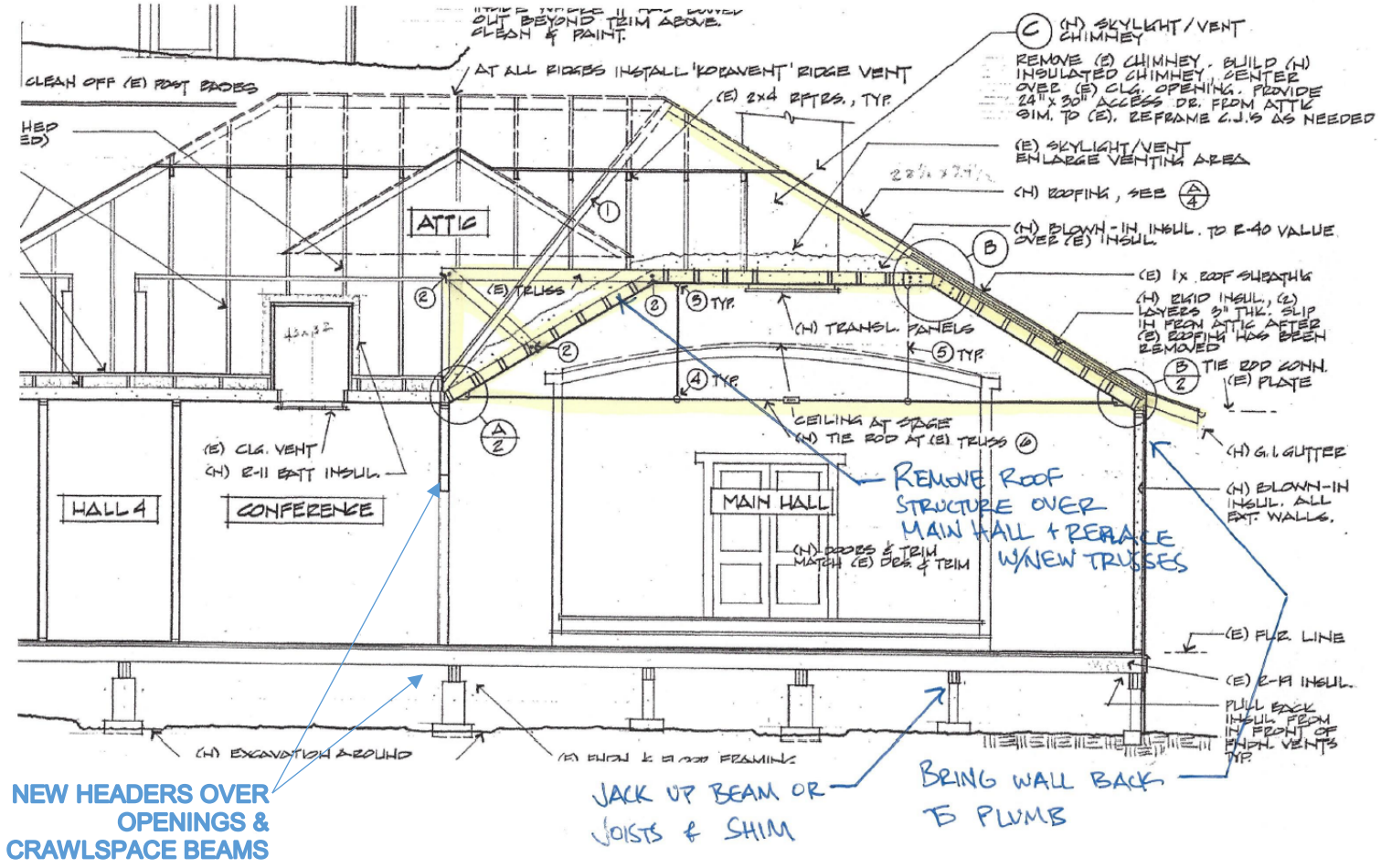
Conclusion – A ridge beam with posts could be installed at the apex of the roof. New rafters should be installed that frame into the new ridge beam. Alternatively, the roof could be completely removed, as suggested over the Main Hall and new trusses could be installed.

5. Conceptual Strengthening

The following plan sketch indicates extents of the recommended work.



COPY OF ROOF FRAMING FROM 1985 DRAWINGS WITH EXTENTS OF WORK INDICATED



COPY OF BUILDING SECTION FROM 1985 DRAWINGS WITH EXTENTS OF WORK INDICATED

If there are any structural questions regarding this investigation report for the Ashland Community Center, please do not hesitate to contact Marquess and Associates.

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Structural Seismic Assessment Report

Project:

Pioneer Hall
73 Winburn Way
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City of Ashland Pioneer Hall Seismic Assessment

MAI Job No. 17-1214

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Pioneer Hall: Structural Assessment Report

1. Project Description

1.1. Scope of Work

This report covers a condition assessment, gravity assessment, and Tier 1 and Tier 2 seismic assessment of Pioneer Hall located at 73 Winburn Way, Ashland, Oregon. The report also includes a description of possible seismic strengthening of the components found to be deficient with a plan sketch at the end of the report that shows the extent of the work.

1.2. Existing Building Description

There are no original drawings for Pioneer Hall, so field measurements were taken to confirm shear wall lengths and heights and to confirm construction type. New architectural drawings are included at the end of this report.

From information provided by the facilities manager, the log structure was constructed in 1890, the kitchen/bathroom addition a few years later, and the south addition (Conference room) was built in 1988.

The building was physically observed and access into the roof spaces was provided. It is clear that the existing wood framing is in good condition.

Figure 1: Building Corner

Figure 2: Building Corner

Figure 3: Meeting Hall

Figure 4: Attic Space

2. Condition Assessment

A visual inspection of the logs, floor framing, and roof framing show that there is no apparent wood rot. The treated logs below grade are in good condition. The foundation stem walls below the exterior walls of the additions do not have significant cracking or spalling. The roof framing nails show no signs of corrosion.

The roof above the meeting hall does sag significantly, but this is most likely due to creep over several years rather than material degradation.

We were unable to access the roof framing of the Conference room addition. Only a portion of areas such as the crawlspace and buried bottom sill log were able to be viewed, so the condition assessment is representative of the entire structure and may not account for small, concealed instances of degradation.

There is a partition at the office that is separating from the ceiling at the top. This wall is located at the exterior wall of the previous addition, so there is a concrete footing below it. If it continues to settle, the issue should be addressed, but because it is at a rigid foundation, there is not a strengthening that could be implemented that will not involve significant foundation work.

Figure 5: Settling Wall

3. Basis of Design

The basis of design, design criteria, design loads, etc. can be found in the Design Summary at the beginning of the calculations.

4. Gravity Assessment Results and Recommendations

The following items were found to be deficient by the vertical load analysis.

A. Floor joists under both additions are overloaded under floor dead loads plus an 80 psf live load.

Conclusion – Floor joists under both additions require strengthening. This might be achieved by installing four new beams with crawlspace footings at mid-span of the joists to reduce the span length of the joists by half.

This would require removal and replacement of floor finishes and sheathing to access the floor framing.

If the live load is reduced to 60 psf, then the floor joists under the kitchen/restroom addition do not require strengthening. In that case, we recommend posting a live load limit of 60 psf.

B. Floor beams supporting the joists under both additions are overloaded under floor dead loads plus an 80 psf live load.

Conclusion – Similarly for the floor joists, the load on the floor beams can be reduced significantly if new beams with footings were installed between the existing beams to reduce the tributary area.

This will require removal and replacement of floor finishes and sheathing to access the floor framing.

If the live load is reduced to 60 psf, then the floor beams under both additions do not require strengthening. In that case, we recommend posting a live load limit of 60 psf.

C. There is a long header above the double door entrance to the Conference room. This header is overloaded under snow loads and we recommend strengthening the existing wood header by installing a new 2x8 on the interior face of the existing header.

Conclusion – Confirm the size and type of existing header during construction works. Add to the cross section of the existing header by installing a new 2x8 to the interior face of the existing header. The ends of the new 2x8 should extend past the opening and nail to the king stud.

D. Pole rafters in the roof above the log structure are sagging significantly and they are overloaded under snow loads. It appears that efforts have been made to support them mid-span with new framing at the ceiling level, or the new framing was installed to support the ceiling. Regardless, the pole rafters are still overloaded, even with the new framing.

Conclusion – Install a new ridge beam to span length-wise between the exterior walls on to a new wood post and beam frame that can span over the doorways at both walls. Put new double 4x rafters between the existing pole rafters to span between the new ridge beam and the exterior walls.

This work will be quite challenging if the ceiling is not able to be removed prior and replaced.

E. The stick-framed trusses at the roof above the kitchen/bathroom addition have lapped and nailed joints. Web members were face-nailed to the truss chords with three nails typically. These joints are not sufficient to resist the tension and compression loads in the truss members.

Conclusion – We recommend installing plywood gussets at each truss joint opposite the web with a 2x spacer between the gusset and the web. The gusset would be lag-screwed into the chord and the web.

5. Seismic Assessment Results and Recommendations

The building was assessed at the Life Safety level, with non-structural items categorized as “Life Safety”. More information on the Risk Category and Level of Seismicity can be found in the Design Summary at the beginning of the calculations.

The following items were found to be deficient by the Tier 2 Seismic Analysis.

A. The existing short logs between openings in the walls do not have adequate strength to resist in-plane seismic lateral loads.

   Conclusion – Connect the short logs between openings together along their length top and bottom with long lag screws or steel plates to the inside face, which is sawn flat.

B. There is no edge blocking at the wall/roof edge above the log structure, which is required at this diaphragm because it is 40 feet long.

   Conclusion – Provide new blocking between the roof plywood and the top log with steel clips to attach to the bottom of the roof plywood and the top of the log.

C. Ties do not exist at the major return corner of the building, making the diaphragm chord and drag continuous between buildings.

   Conclusion – Install new steel ties from the addition wall top plates to the original log walls (see the conceptual strengthening plan for locations).

D. It is assumed that there is no steel connector at the end of the beam separating the Conference room from the Kitchen.

   Conclusion – Confirm that there is no positive steel connection from this beam to the column at each end. Install a new Simpson angle bracket to the bottom of the existing beam to connect to the existing column.

E. It is assumed that there are not sufficient sill anchors and hold-downs at both addition exterior walls.

   Conclusion – Confirm the type and spacing of exterior wall sill plate anchor bolts. Install new anchor bolts at 4’-0” on center and hold-downs where indicated in the conceptual strengthening plan.

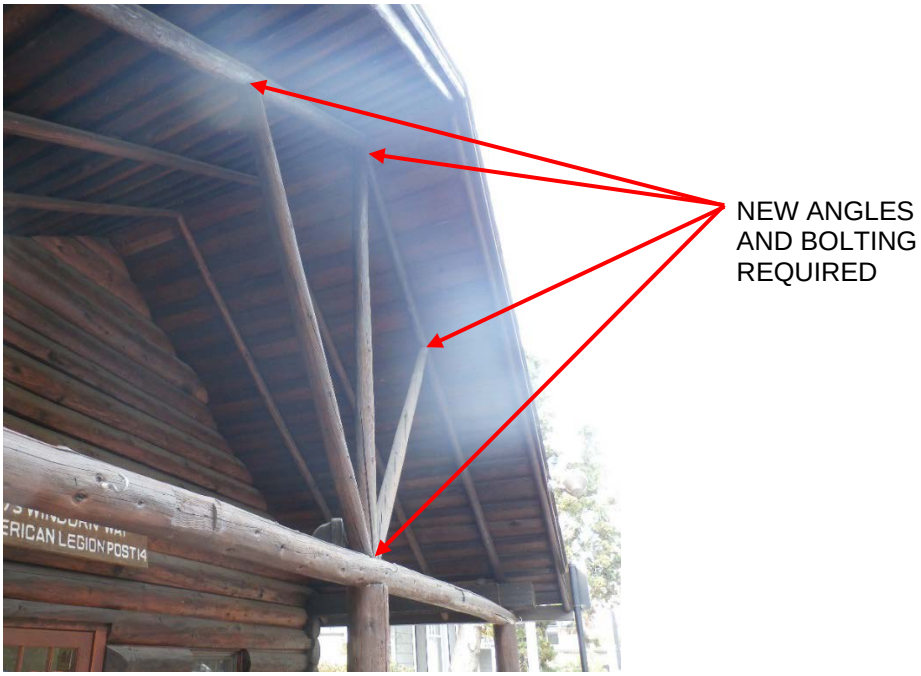
The following non-structural items require lateral support.

A. The stone chimney is a falling hazard.

   Conclusion – The chimney is required to remain for historic purpose. The most economical means of strengthening the chimney is to replace it with a reinforced core. It may be possible to keep the top brick core with new internal or external reinforcing

B. It is unknown if the members of the log truss at the front of the building under the canopy have substantial end connections. It is anticipated that the cantilevered diaphragm at the canopy will deflect a fair amount, which could put a lot of stress into those end connections of the log web members.

   Conclusion – Create new positive connections between the canopy log truss web members and the chords with steel angles and bolting.

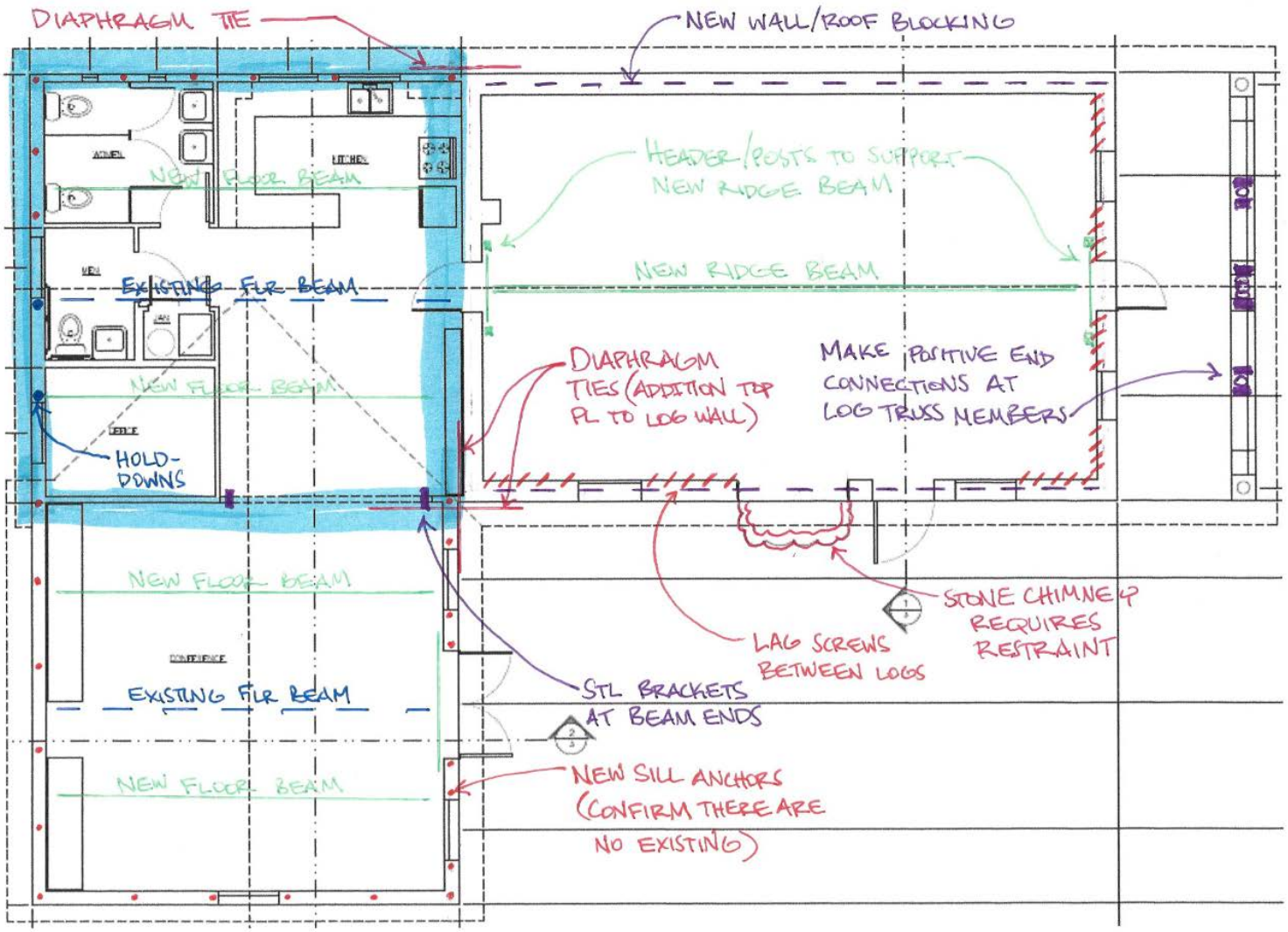


C. There are several tall cabinets in the Conference room that should be restrained to prevent a falling hazard.

   Conclusion – Use light gage steel angles and long screws to fasten the tops of the cabinets to the wall studs.

6. Conceptual Seismic Strengthening

The following plan sketch indicates extents of the work required for a seismic upgrade.



If there are any structural questions regarding the seismic assessment and retrofit of Pioneer Hall, please do not hesitate to contact Marquess and Associates.

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STEVE ENNIS ARCHITECT

CITY OF ASHLAND

PIONEER HALL

ASHLAND, OREGON

BUILDING CODE ANALYSIS

October 17, 2017

1. PROJECT OVERVIEW:

a. Building Code Analysis of existing building constructed in 1890 and added onto in 1920's and 1988.
b. Existing building does not have fire sprinklers or fire alarms.

2. BASIS OF CODE REVIEW:

a. Communication with Kaylea Kathol, Project Manager for City of Ashland.
b. Use of the building as a Community Hall, with occasional use as an overnight shelter with a maximum occupancy of 44.
c. Field measurements and as-built drawings dated 9/11/17 (attached to this report).

3. BUILDING CODE REVIEW:

a. Applicable Code: 2014 Oregon Structural Specialty Code.
b. Occupancy (Chapter 3): Group A-3 (Assembly Group A-3).
c. Construction Type (Section 602.2): Type V-B, no Fire Sprinklers.
d. Allowable Height & Building Area (Section 503):
    1) 1 story & 6,000 SF Allowable (Table 503).
    2) Actual First Floor: 2,345 SF.
    3) The 2,345 SF First Floor less than 6,000 SF allowable area in Table 503.
e. Types of Construction (Chapter 6):
    1) As shown in Table 601, a Type V-B building does not require any of building elements to be rated.
    2) Table 602 lists the Fire-Resistance rating requirements for exterior walls based on Fire Separation Distance. The exterior walls of a Type V-B Building with Group A-3 Occupancy that has a Fire Separation Distance of 10'-0" or more does not have to be fire rated.
    3) The SW Corner of the building is approximately 8'-0" from the south property line. Those portions of the exterior wall that are less than 10'-0" from the south property line must have a 1-Hour fire resistance rating.
    4) The north wall of the building is approximately 8'-0" from the Community Center, which is on the same take lot. The north wall of the building must have a 1-Hour fire resistance rating.
    5) It is unclear if the SW Corner and North Wall of the building are constructed of the required 1-Hour fire resistance rating.
f. Exterior Walls (Section 705):
    1) Unprotected openings in exterior walls of a non-sprinklered building with a Fire Separation Distance of more than 5'-0" but less than 10'-0" can be up to 10% of the wall area (Table 705.8).
    2) There is a window near the SW Corner of the building, but it takes up less than 10% of the south wall.
    3) There are windows on the north wall of the building, but they take up less than 10% of that wall.
g. Automatic Sprinkler Systems (Section 903.2.1.3):
    1) An automatic fire sprinkler system shall be provided in a Group A-3 occupancy where the fire area exceeds 12,000 SF or the fire area has an occupant load of 300 or more.
    2) No fire sprinkler system is required.

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h. Occupant Load (Section 1004 & Table 1004.1.1):
   1) The Occupant Load Factor for the Meeting Hall is 15 Net. The Occupancy Load is 35.
   2) The Occupant Load Factor for the Conference Room is 15 Net. The Occupancy Load is 18.
   3) The Occupant Load Factor for the Kitchen is 5 Net. The Occupancy Load is 5.
   4) The Occupant Load Factor for the area south of the Kitchen is 15 Net. The Occupancy Load is 7.
   5) The Occupant Load Factor for the Office is 100 Gross. The Occupancy Load is 1.
   6) The Total Occupant Load is 66.

i. Means of Egress Illumination (Section 1006):
   1) The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied (Section 1006.1).
   2) The means of egress and exit discharge will need illumination levels of not less than 1 footcandle (Section 1006.2).
   3) Emergency power for illumination must be provided at the three exterior doors, per Section 1006.3.
   4) Meeting the requirements for Means of Egress Illumination must be verified.

j. Accessible Means of Egress (Section 1007):
   1) Accessible spaces shall be provide with not less than one accessible means of egress (Section 1007.1).
   2) Given the occupancy load and configuration of the building, there needs to be one accessible means of egress from the Meeting Hall and one from the Conference Room.
   3) The south door to the Meeting Hall meets the requirement for an accessible means of egress from that space, so the east door does not need to be made accessible.
   4) The west door to the Meeting Room is accessible, but the concrete landing outside that door has a slope that exceeds code allowances (Section 1008.1.5). **This concrete landing and the brick adjacent to it would need to be renovated in order to meet the code requirements.**

k. Accessibility (Chapter 11 & ICC A117.1-2009):
   1) The existing Kitchen does not meet the following accessibility requirements:
      a. Work Surface: The existing kitchen counter is 36" above the floor. **A portion of that counter would need to be set at 34" above the floor to meet code requirements** (Section 804.3 of ICC A117.1-2009).
      b. Sink: **The existing kitchen sink would need to be lowered from 36" to 34" and the cabinet below it altered to provide knee and toe clearance** (Section 804.4 of ICC A117.1-2009).
      c. Cooktop: **The existing cooktop would have to be replaced by one that does not require reaching across the burners to access the controls** (Section 804.5.4.3 of ICC A117.1-2009).

l. Minimum Plumbing Fixtures Table 2902.1): (See Item 3, h. above for the Occupant Load)
   1) 66 Occupants Total.
   2) 33 Male's and 33 Female's.
   3) Male's water closets @ 1/125 = 1 required and one provided.
   4) Female's water closets @ 1/65 = 1 required and two provided.
   5) Male's lavatories @ 1/200 = 1 required and one provided.
   6) Female's lavatories @ 1/200 = 1 required and two provided.
   7) Drinking Fountain = 1 required and none provided.
   8) The existing restrooms meet the plumbing fixture requirements, although a Drinking Fountain would have to be added to fully meet the current code. Also note that although the restrooms appear to have met the code requirements when they were renovated in 2003, they are missing the vertical grab bars at the water closets required by the current code.

m. Accessibility for Existing Buildings (Section 3411):
   1) Where an alteration includes alterations to an entrance, and the facility has an accessible entrance, the altered entrance is not required to be accessible, unless required by Section 3411.7. Signs complying with Section 1110 shall be provided (Exception to 3411.8.1). **If alterations are pursued, a sign will need to be added to the east door of the Meeting Room directing people to the nearest accessible entrance, which is the south door to the Meeting Room.**